



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 14 th March 2019	
Attendees: Mr L. Phillips and Mr Manzoor Hussein (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank full, amajets 1 and 2 in use. No odour detected.</p> <p>Tank 1B – Tank full, all amajets in use. No odour detected.</p> <p>Tank 2A – Tank full, amajets not in use. No odour detected.</p> <p>Tank 2B – Tank full, amajets not in use. No odour detected.</p> <p>Tank 3A – Tank full, all amajets in use. No odour detected.</p> <p>Tank 3B – Tank full, all amajets in use. No odour detected.</p> <p>Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not working.</p> <p>Tank 6A – Tank full, all amajets in use. No odour detected.</p> <p>Tank 6B – Tank full, all amajets in use. No odour detected.</p>	

Tank 7A – Tank full, amajets not in use. No odour detected.

Tank 7B – Tank full, amajets not in use. No odour detected.

Tank 8A – Tank full, amajets not in use. No odour detected.

Tank 8B – Tank full, amajets not in use. No odour detected.

Feed Channel - The level of effluent in both feed channels was low – almost bottomed out.

Complaints

The Council directly received one complaint by telephone in the preceding week.

The Council received a complaint from a resident of Mogden Lane on 14th March 2019 at approximately 11:03 complaining of odour from Mogden over the last hour. However the call was received while the Duty Officer was conducting the inspection. This Complaint will be picked up and checked in next week's inspection.

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 (although this contradicts Odour Log).

Odour Monitors

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

Monitor 1	0.000	ppm	13.02
Monitor 2	0.010	ppm	13.01
Monitor 3	0.000	ppm	13:02
Monitor 4	0.009	ppm	13:02
Monitor 5	0.009	ppm	13:02
Monitor 6	0.007	ppm	13:03
Monitor 7	0.010	ppm	13:03
Monitor 8	0.009	ppm	13:03
Monitor 9	0.007	ppm	13:03
Monitor 10	0.009	ppm	13:03
Monitor 11	0.008	ppm	13:03
Monitor 12	0.009	ppm	13:03
Monitor 13	0.008	ppm	13:03
Wind Speed	18.5	mph	13:03
Wind Direction	244°		13:03

Odour Log (Thames) - Photocopies of log entries taken

Thursday 07th March 2019

AM

Temp: Cool.

Weather: Sunny W/ Patchy clouds.

All OMU's in use.

Time: 17:45.

Observations/Complaints: None noted.

Operational Issues/Causes: No odour issues onsite. Nothing of note on trends.

Actions: None noted.

PM

Temp: Cool.

Weather: Rain.

Time: 05:30.

All OMU's in use.

Observations/Complaints: None noted.

Operational Issues/Causes: OM5 0.022 at 04:51-05:30, OM8 0.015 at 18:49-19:47, OM8 0.019 at 21.19-22:17. PAS area smelly.

Actions: None noted.

Friday 08th March 2019

AM

Temp: Cool.

Weather: Rain W / sunny spells.

All OMU's in use.

Time: 17:30

Observations/Complaints: None noted.

Operational Issues/Causes: OM5 0.019ppm 07:23–07:38, 0.035ppm
08:51–9:08.

Actions: No action required unable to identify source of odour.

PM

Temp: Cool.

Weather: Overcast night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: No odour issues.

Actions: None noted.

Saturday 09th March 2019

AM

Temp: Cold.

Weather: Rain W/ sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM8 0.023ppm 16:02–16:18.

Actions: No odour identified.

PM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: No odour issues.

Actions: None noted.

Sunday 10th March 2019

AM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM5 0.018ppm 07:07-07:22, OM6 0.050ppm 12:32-12:48.

Actions: Occasionally strong smell/odour from PAS. No spills over overflows identified.

PM

Temp: Cold.

Weather: Rain.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM7 spiked to max of 0.019 from 00:35 - 01:36.

Actions: No obvious odours found but storm tanks full weiring to river.

Monday 11th March 2019

AM

Temp: Warm.

Weather: Sunny w/ Patchy Clouds.

All OMU's in use.

Time: 17:30

Observations/Complaints: None noted.

Operational Issues/Causes: OM8 0.018ppm 11:34-11:48, 0.025ppm 14:47-15:04, 0.029ppm 16:33-16:49.

Actions: Occasionally strong smell/odour from PAS. No spills over overflows identified.

PM

Temp: Cool.

Weather: Overcast.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM5 0.018 20:23-20:37. OM5 0.023 18:22-19:22.

Actions: Unable to identify source of odour.

Tuesday 12^h March 2019

AM

Temp: Cool,

Weather: Cloudy.

All OMU's in use.

Time:17:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM5 spiked at 08:08-08:21 max 0.018ppm but <15 mins duration.

Actions: None noted.

PM

Temp: Cool,

Weather: Clear night.

All OMU's in use.

Time: 05:30

Observations/Complaints: None noted.

Operational Issues/Causes: OM3 & OM5 both spike once each. Both spikes less than 15 minutes.

Actions: No odour detected.

Wednesday 13th March 2019

AM

Temp: Cool,

Weather: Cloudy.

All OMU's in use.

Time:17:30.

Observations/Complaints: None noted.

Operational Issues/Causes: No odour issues.

Actions: None noted.

PM

Temp: Cool,

Weather: Rain W / Sunny Spells.

All OMU's in use.

Time:05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM8 0.037ppm 18:18–19:18.

Actions: Odour from PAS area detected. Source of odour not identified.

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					
08/03/19	214	1842	183	2239	6383	8622
10/03/19	20	1570	122	1712	936	2648
11/03/19	215	1303	183	1701	2889	4590

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.

Digesters

Digesters 1-4 - Out of use (permanent) - noticeable quantity of water accumulated to the brim of these tanks which is thick with algae - requires draining. Long term project currently initiated to bring these units back into service - will require significant investment.

Digester 5 - In use – weak sloppy seal – no evidence of recent spill.

Digester 6 - In use – weak sloppy seal – no evidence of recent spill.

Digester 7 - In use – weak sloppy seal – no evidence of recent spill.

Digester 8 – In use – weak sloppy seal – no evidence of recent spill.

Digester 9 - In use – weak sloppy seal – no evidence of recent spill.

Digester 10 - In use – weak sloppy seal – no evidence of recent spill.

Digester 11 - In use – weak sloppy seal – no evidence of recent spill.

Digester 12 - In use – weak sloppy seal – no evidence of recent spill.

Digester 13 - In use – weak sloppy seal – no evidence of recent spill.

Digester 14 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 15 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 16 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 17 - In use –weak sloppy seal – no evidence of recent spill.

Digester 18 - In use –weak sloppy seal – no evidence of recent spill.

Digester 19 - In use –weak sloppy seal – no evidence of recent spill.

Digester 20 - In use –weak sloppy seal – no evidence of recent spill.

GENERAL

Sludge Screening House

All doors closed at time of inspection.

Imported Sludge

Estimated average of three imports 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).

Skips

1x 20 yard skip empty. 1x 8 yard covered general waste skips located in at the east side grit skips.
1x 16 yard empty west side skips.
1x large open empty uncovered skip.

Pasteurisation Plant

Pasteurisation plant 1/4/9 currently out of service - All remaining pasteurisation plant in service and fully operational.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 9, 10, 11 all in use. Circular PST 12 out of use due to a weir problem.

West Side Aeration Lanes (Old)

No issues

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 clear and unobstructed – jetting crew just finished working on area.

“Fluffy” coverage across surface returned across 100% of tank – thickened up so as to obscure internal dividing walls within tank.

Odour Control Unit (OCU) performance monitoring - (12/03/19)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.03 0.02 0.02 0.02	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00 0.00	0.2	Yes
East OCU	0.00 0.00 0.00 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	No data	Unknown	Unknown
Sludge reception outlet	No data	0.8	Yes
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	0.00 0.00 0.00 0.00	0.6	Yes
Transfer PS inlet	No Data	Unknown	Unknown
Transfer PS outlet	0.03 0.03	0.6	Yes

	0.03 0.03			
New West inlet (OCU 11)	0.00 0.00 0.00 0.00	0.5	Yes	
OCU 12 (Pasteurisation Plant)	0.01 0.02 0.02 0.01	0.5	Yes	