

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Thursday 03 th October 2019 (12:37)	
Attendees: Mr L. Phillips (LBH) and Ms Charlotte Page (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty and clean however slight grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 had all been drained down to lowest point.</p> <p>Tank 1B was empty and clean however slight grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 had all been drained down to lowest point.</p> <p>Tank 2A was empty and clean. Hoppers 1, 2 and 3 had all been drained down to lowest point.</p> <p>Tank 2B was empty and clean however some slight grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 requires draining.</p> <p>Tank 3A & Tank 3B were both being flushed at time of inspection—effluent was 30% high and amajets were fully operational.</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.

Tank 6A was empty and clean however some slight grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 requires draining.

Tank 6B was empty and clean however slight grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 had all been drained down to lowest point.

Tank 7A was empty and clean however some grit build up on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 had all been drained down.

Tank 7B was empty and clean however some wet sludge residue on the surface of the Tank (Hopper end). Hoppers 1, 2 and 3 full and require draining.

Tank 8A was empty and clean. All hoppers were full and required draining.

Tank 8B was empty and clean. All hoppers full and require draining.

Amajets No reports of any faults with amajets. All in working order.

Feed Channel - The level of effluent in both feed channels was at 20% high - in places it was murky with fatty deposits visible. Most of the channel was free flowing and odourless. No local odours rags, fats or solids.

Complaints

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

The Council 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	0.004	ppm	12:57
Monitor 2	0.006	ppm	12:57
Monitor 3	0.000	ppm	12:57
Monitor 4	0.003	ppm	12:57
Monitor 5	0.007	ppm	12:58
Monitor 6	0.006	ppm	12:58
Monitor 7	0.004	ppm	12:58
Monitor 8	0.004	ppm	12:58
Monitor 9	0.004	ppm	12:59
Monitor 10	0.005	ppm	12:59
Monitor 11	0.000	ppm	12:59
Monitor 12	0.005	ppm	12:59
Monitor 13	0.005	ppm	12:59
Wind Speed	No data	mph	12:59
Wind Direction	No data	Deg	12:59

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

Thursday 26th September 2019

AM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Cool

Weather: Clear night.

All OMU's in use.

Time: 05:20.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 27th September 2019

AM

Temp: Cool.

Temp: Rain W/ sunny spells.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Cool.

Weather: Cloudy.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No odour issues.
Operational Issues/Causes: None noted.
Actions: None noted.

Saturday 28th September 2019

AM

Temp: Cool.
Weather: Cloudy W/ Sunny spells.
All OMU's in use.
Time: 17:30.

Observations/Complaints. No odour issues.
Operational Issues/Causes: None noted.
Actions: None noted.

PM

Temp: Cool.
Weather: Rain.
All OMU's in use.
Time: 05:30.

Observations/Complaints. OM 5 spiked at 19:14- 19:27 15 minutes duration max 0.020 ppm. OM 2 spiked at 22:35 – 22:55 max 0.020ppm.
Operational Issues/Causes: No odours found in vicinity of monitors.
Actions: None Noted.

Sunday 29nd September 2019

AM

Temp: Cool.
Weather: Rain.
All OMU's in use.
Time: 17:30.

Observations/Complaints.
OM5 0.021 at 0.58 – 08.13 odour from PAS area.
Operational Issues/Causes: None noted.
Actions: None Noted.

PM

Temp: Cool.

Weather: Rain with W/ Sunny spells.

All OMU's in use.

Time: 05:30.

Observations/Complaints.

OM2 spiked at 05:25 – 5:37 max 0.020 but 15 minutes duration.

Operational Issues/Causes: None noted.

Actions: None noted.

Monday 30th September 2019

AM

Temp: Warm.

Weather: Sunny W/ Patchy Clouds.

All OMU's in use.

Time: 17:30

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Warm.

Weather: Rain.

All OMU's in use.

Time: 05:00.

Observations/Complaints. OM1 spiked at 00:40 – 0.034ppm

Operational Issues/Causes: Filling storm tanks.

Actions: No odour issues.

Tuesday 1st October 2019

AM

Temp: Warm.

Weather: Rain W/ Sunny spells.

All OMU's in use.

Time: 17:20.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 2nd September 2019

AM

Temp: Warm

Weather: Sunny

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Cold.

Weather: Clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None noted.

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					
01/10/2019	20	534	595	1149	304	1453
-*	-	-	-	-	-	-
-*	-	-	-	-	-	-

* **Thames Water only provided one sludge dip record.**

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 seal no evidence of spillage.

Digester 6 - in use – weak sloppy seal no evidence of spillage.

Digester 7 - Out of service.

Digester 8 - in use – weak sloppy seal no evidence of spillage.

Digester 9 - in use – weak sloppy seal no evidence of spillage.

Digester 10 - in use – weak sloppy seal no evidence of spillage.

Digester 11 - in use – weak sloppy seal no evidence of spillage.

Digester 12 - in use – weak sloppy seal no evidence of spillage.

Digester 13 - in use – weak sloppy seal no evidence of spillage.

Digester 14 - out of use.

Digester 15 - out of use.

Digester 16 - in use – weak sloppy seal no evidence of spillage.

Digester 17 - in use – weak sloppy seal no evidence of spillage.

Digester 18 - out of use.

Digester 19 - in use – weak sloppy seal no evidence of spillage.

Digester 20 - in use – weak sloppy seal no evidence of spillage.

GENERAL

Sludge Screening House

All doors closed at time of inspection. No odours observed.

Imported Sludge

There have been 10 imports of sludge per day.

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 jets and hoses were in operation and no excessive build-up of algae.

Skips

No Skips present at the East side screening House - All clear.
Eastside Grit House had 1 x 12 yard skip empty.
No Skips present at the West Side gritting house, all clear.
No odour detected.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West side primary settlement tanks (PST)

Rectangular PSTs – No issues noticed at time of inspection.

Circular PST's 9 and 10 were in use and all hoses were in operation.
Circular PST number 11 and 12 had been drained down and out of service. No odour detected during inspection.

Pasteurisation Plant

Pasteurisation plant had four streams (1, 8, 9 and 12) that were out of service. All remaining pasteurisation plant in service fully operational.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 100% clear of any obstruction- effluent is flowing with ease no rags or build up noticed.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 free flowing no obstructions or odours. The contractor Celvac now only attends intermittently or when needed.

The “Fluffy” coverage (obscured internal dividing walls within tank) that had been observed on previous visits had lightened in texture revealing the dividing walls within the tank. There were no concerning odours around this area.

Odour Control Unit (OCU) performance monitoring – (11th September 2019)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	- No data - no data - No data - No data	Unknown	Unknown

Main pumping station outlet	0.00 0.00 0.00 Ave: 0.00	0.2	Yes
East OCU	0.00 0.00 0.00 Ave: 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00 Ave: 0.00	0.05	Yes
Sludge reception inlet	0.00 0.00 0.00 Ave: 0.00	Unknown	Unknown
Sludge reception outlet	0.00 0.00 0.00 Ave: 0.00	0.8	Yes
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	0.00 0.00 0.00 Ave: 0.00	0.6	Yes
Transfer PS inlet	10.33 7.66 5.33 Ave: 19.7	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00 Ave: 0.00	0.6	Yes
New West inlet (OCU 11)	0.00	0.5	Yes

	0.00 0.00 Ave: 0.00			
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00 Ave: 0.00	0.5	Yes	