



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Thursday 15 st August 2019 (12:22)	
Attendees: Mr Leroy Phillips (LBH) Mr Manzoor Hussain (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A Was in use, full flushing during inspection, all Amajets in operation.</p> <p>Tank 1B Was in use, full flushing during inspection, all Amajets in operation.</p> <p>Tank 2A was empty and clean however some dry grit on the surface of the Tank (Hopper end). Hoppers 1, 2, and 3 were full and required draining.</p> <p>Tank 2B was empty and clean however some dry grit on the surface of the Tank (Hopper end). Hoppers 1, 2, and 3 were full and required draining.</p> <p>Tank 3A Was in use and full.</p> <p>Tank 3B Was in use and full.</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. Hoppers 1, 2, and 3 were half full and required draining down.

Tank 6B was empty and clean. Hoppers 1 and 3 were full and required draining. However, hopper 2 had been drained to its lowest point.

Tank 7A was in use and full.

Tank 7B was empty and clean. Shallow hoppers 1, 2 and 3 were full and required draining down.

Tank 8A was empty and clean. Hopper 1 was full, hoppers 2 and 3 were drained down to the bottom.

Tank 8B was empty and clean, however there was some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down (2 and 3 were completely full).

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

Feed Channel - The level of effluent in both feed channels was low – almost bottomed out in places. Dark and murky throughout the channel– 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: 13:23pm.

Monitor 1	0.004	ppm	13:23
Monitor 2	0.000	ppm	13:23
Monitor 3	0.000	ppm	12:56
Monitor 4	0.004	ppm	12:56
Monitor 5	0.003	ppm	12:56
Monitor 6	0.000	ppm	12:56
Monitor 7	0.004	ppm	12:56
Monitor 8	0.005	ppm	12:56
Monitor 9	0.003	ppm	12:56
Monitor 10	0.004	ppm	12:56
Monitor 11	0.004	ppm	12:56
Monitor 12	0.004	ppm	12:56
Monitor 13	0.000	ppm	12:56
Wind Speed	0.569	mph	12:56
Wind Direction	317.954	Deg	12:56

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

Thursday 8th August 2019

AM

Temp: Warm.

Weather: Sunny w/ patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: OM2 0.029 055:30 - 06:33 0.036 06:48 - 07:08.

Operational Issues/Causes: No source discovered.

Actions: None noted.

PM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 17:40.

Observations/Complaints. No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 9th August 2019

AM

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: OM2 0.053 - 08:00 - 08:24.

Operational Issues/Causes: No source identified.

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.

Saturday 10th August 2019

AM

Temp: Warm.

Weather: Sunny W/Patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints. OM2 0.070 9:17 - 9:41.

Operational Issues/Causes: No source identified.

Actions: None noted.

PM

Weather: Cool.

Temp: Clear Night.

All OMU's in use:

Time: 05:30

Observations/Complaints: OM2 one spike 15 mins 0.018ppm 04:41 - 04:49.

Operational Issues/Causes: None noted.

Actions: None Noted.

Sunday 11th August 2019

AM

Weather: Warm.

Temp: Sunny.

All OMU's in use:

Time: 17:20.

Observations/Complaints: OM2 0.047ppm 12:18 - 02:39, 0.020ppm 08:23 - 08:35, 0.015ppm 06:00.

Operational Issues/Causes: No obvious source.

Actions: None Noted.

PM

Temp: Cool.

Weather: Clear night.

All OMU's in use:

Time: None noted.

Observations/Complaints: OM3 0.063ppm 22:03 - 20:19. OM5 0.016ppm 22:41 - 22:55.

Operational Issues/Causes: OCU 11 chemical dosing out of range. No odour detected around west PST'S. No odour identified. Spike less than 15 minutes.

Actions: None noted.

Monday 12th August 2019

AM

Temp: Cool.

Weather: Sunny W/ Patchy clouds.

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: Clear night.

All OMU's in use:

Time: 05:30.

Observations/Complaints: OM2 two spikes 0.021ppm - 21:22 - 21:35
0.024ppm 03:19 03:40.

Operational Issues/Causes: East inlet area checked and skip area washed down. No odour detected.

Actions: None noted.

Tuesday 13th of August 2019

AM

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

All OMU's in use:

Time: 17:30.

Observations/Complaints: No 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: OM2 0.018ppm 04:10 – 04:17, OM5
0.017ppm 22:26 - 22:40.

Operational Issues/Causes: No source identified.

Actions: None noted.

Wednesday 14th August 2019

AM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 18:00.

Observations/Complaints: OM2 multiple spikes 0.026ppm 06:33 – 06:54 0.033ppm 7.02 – 0.26 0.040ppm 09:40 – 10:30 0.058ppm 11:10 – 11:55.

Operational Issues/Causes: Day ops washing down east inlet area. No odour detected in the area.

Actions: None noted.

PM

Temp: Cool.

Weather: Rain.

All OMU's in use.

Time: 05:20.

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					
12/08/19	0	244	183	427	2746	3173
14/08/19	0	595	183	778	2081	2859

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 seal no evidence of spillage.

Digester 7 - in use – weak seal no evidence of spillage

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

Digester 9 - in use - seal level approx. 1ft below surface of coping stones - good seal.

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

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

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

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

Digester 14 - out of use.

Digester 15 - out of use.

Digester 16 - out of use.

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

Digester 18 - in use - weak seal no evidence of spillage.

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

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

I noted no odour in the area observed at times of inspection

GENERAL

Sludge Screening House

All doors were closed during the inspection. However in the previous visits to the site the doors have been left open to avoid condensation build up – TW advised that doors being left open to create air flow is a Management decision to improve internal working environment for staff – odour monitors deployed in vicinity to determine whether local odours increase as a consequence. No odours observed.

Imported Sludge

Estimated average of 10 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). 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.
2 x 6yd skips were located at the East side grit House. These were empty and covered TW advised they would be used for general waste.
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 12 were in use and all hoses were in operation.
Circular PST number 10 and 12 had been drained down and out of service. No odours observed during inspection.

Pasteurisation Plant

Pasteurisation plant had six streams that were out of service. - All remaining pasteurisation plant in service fully operational.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 90% 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 “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. Celvac were on site at time of inspection.

Odour Control Unit (OCU) performance monitoring – (14st August 2019)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.00 0.00 0.00 Ave: 0.00	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00 Ave: 0.00	0.2	Yes
East OCU	0.00 0.00	0.05	Yes

	0.00 Ave: 0.00		
West inlet OCU	0.00 0.00 0.00 Ave: 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 Ave: 0.00	0.6	Yes
Transfer PS inlet	No Data	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00 Ave: 0.00	0.6	Yes
New West inlet (OCU 11)	0.008 0.007 0.07 Ave: 0.007	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00 Ave: 0.00	0.5	Yes