



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 18th April 2019	
Attendees: Mr L. Phillips. (LBH) with Mr Channi Varsani (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty but slight grit build up at the end of the hoppers. Hoppers 1, 2 & 3 require draining.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 require draining.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 require draining.</p> <p>Tank 2B was empty & clean. Slight grit build up in all hoppers.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 require draining.</p> <p>Tank 3B was empty & clean. Hoppers 1 & 3 drained to lowest point, hopper 2 requires draining.</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 was empty with some grit in rear of tank near hoppers. Hoppers 2 & 3 were all full and needed draining down. Hopper 1 had been drained to lowest point.</p>	

Tank 6B was empty & clean with some residual grit. Hoppers 1, 2 & 3 required draining.

Tank 7A was empty & clean. Slight grit build up by hoppers. Hoppers 1 & 2 require draining, hopper 3 drained to its lowest point.

Tank 7B was empty & clean. All hoppers drained down to lowest point.

Tank 8A was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 8B was empty & clean. Hoppers 1, 2 & 3 were all empty.

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.

Complaints

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

The Council received no complaint 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	0.006	ppm	11:47
Monitor 2	0.007	ppm	11:48
Monitor 3	0.000	ppm	11:48
Monitor 4	0.005	ppm	11:48
Monitor 5	0.004	ppm	11:48
Monitor 6	0.007	ppm	11:48
Monitor 7	0.007	ppm	11:48
Monitor 8	0.007	ppm	11:48
Monitor 9	0.006	ppm	11:48
Monitor 10	0.007	ppm	11:49
Monitor 11	0.007	ppm	11:49
Monitor 12	0.008	ppm	11:49
Monitor 13	0.006	ppm	11:49
Wind Speed	9.897	mph	11:49
Wind Direction	98.195	Deg	11:49

Odour Log (Thames) - Photocopies of log entries taken

Thursday 11th April 2019

AM

Temp: Warm.

Weather: Sunny W/patchy clouds.

All OMU's in use.

Time: Left black.

Observations/Complaints: None noted.

Operational Issues/Causes: None noted.

Actions: None noted.

PM

Temp: Cold.

Weather: Clear Night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted.

Operational Issues/Causes: OM3 0.024 max 04:36 – ongoing. OM8 0.022 19:49–20:51.

Actions: Spillage in pas area early morning. No source discovered.

Friday 12th April 2019

AM

Temp: Cool.

Weather: Sunny W/patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: OM3 spiked to 0.023ppm (stopped spiking at 06:21).

Operational Issues/Causes: no obvious source found.

Actions: None noted.

PM

Temp: Cool.

Weather: Clear night.

All OMU's in use.

Time: No time noted left blank.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: None noted left blank.

Actions: None noted left blank.

Saturday 13th April 2019

AM

Temp: Cool.

Weather: Sunny W/patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: OM3 0.027 MAX 05:05–06:36. OM3 0.021 max 06:51–07:21.

Actions: No obvious source found.

PM

Temp: Cold.

Weather: Clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: OM3 spiked at 05:05–05:19 max 0.021ppm but less than 15 minutes duration.

Actions: None Noted.

Sunday 14th April 2019

AM

Temp: Cool.

Weather: Cloudy W/sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: OM3 0.023 max 06:06–06:21.

Actions: No obvious source found.

PM

Temp: Cool.

Weather: Overcast night.

All OMU's in use.

Time: 05:00.

Observations/Complaints: None noted.

Operational Issues/Causes: No odour issues found or reported.

Actions: None noted.

Monday 15th April 2019 14th March 2019

AM

Temp: Warm.

Weather: Cloudy W/ sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: No odour issues.

Actions: None noted left blank.

PM

Temp: Cool.

Weather: Overcast night.

All OMU's in use.

Time: 05:00.

Observations/Complaints: None noted.

Operational Issues/Causes: **Area:** Monitor No:3 spiking at 04:00 present time max 0.027ppm.

Actions: Investigated area around this monitor no odour sources found.

Tuesday 16th April 2019

AM

Temp: Warm.

Weather: Cloudy W/ Sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: No odour issues.

Actions: None noted left blank.

PM

Temp: Cool.

Weather: Clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: OM11 – 0.020 at 20:12 – 20:49.

Actions: No obvious sources found.

Wednesday 17th April 2019

AM

Temp: Warm.

Weather: Cloudy W/ Sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: No odour issues.

Actions: None noted left blank.

PM

Temp: Cool.

Weather: Clear night.

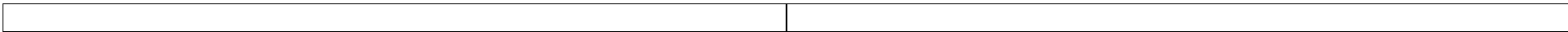
All OMU's in use.

Time: 05:30.

Observations/Complaints: None noted left blank.

Operational Issues/Causes: OM7 0.025ppm at 20:41–21:39, OM12 0.018ppm at 01:38–02:36.

Actions: No obvious source found.



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					
12/04/2019	909	59	394	1362	2081	3443
13/04/2019	59	1303	394	1756	1753	3509
14/04/2019	59	1303	516	1878	1753	3631

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 - Ongoing spitting/spill – requires anti-foam and clean-up.

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 - seal level approx. 1ft below surface of coping stones.

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.

Digester 15 - Out of use - empty and clean.

Digester 16 - Out of use - empty and clean.

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.

No Odours in the area observed at times of inspection

GENERAL

Sludge Screening House

All doors closed at time of inspection. 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 screening House- All clear.
No Skips present at the East side grit 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

Circular PST's 9, 10, 11 & 12 all in use. Currently installing trial of odour control "mistlers" on Tank 10 – pipe installed around tank top tail with nozzle sprays at regular intervals which can be utilised to create a plume of deodoriser (same as current mobile units on site) – intention to roll this out to all "odorous areas" on site if proves effective during trial period – initial testing has proven successful to date – trial ongoing. At time of inspection these mistlers were not in operation. No Odours observed.

Pasteurisation Plant

Pasteurisation plant 1/4/8/9 currently out of service - All remaining pasteurisation plant in service and fully operational.

West Side Aeration Lanes (Old)

Battery C aeration feed channel clear of any obstruction- effluent is flowing with ease NO rags or build up noticed. Contractors on site at time of inspection.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 free flowing no obstructions or odours. Contractors on site at time of inspection.

Slight “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 - (15th April 2019)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.04 0.04 0.04 0.04	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	No data	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	0.6	Yes

	0.00		
Transfer PS inlet	No Data	Unknown	Unknown
Transfer PS outlet	0.04 0.04 0.04 0.04	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00	0.5	Yes