



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 24 th October 2019	
Attendees: Mr Steven Maunders and Mr David Chowings (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty and flushed clean - Hoppers 1, 2 & 3 approx. 30% full.</p> <p>Tank 1B – Tank empty - approximately 20% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 25% full – requires draining/over-pumping.</p> <p>Tank 2A – Tank empty and flushed clean - Hoppers 1, 2 & 3 approx. 50% full - requires draining/over-pumping.</p> <p>Tank 2B – Tank empty - approximately 30% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 60% full – requires draining/over-pumping.</p> <p>Tank 3A – Tank empty and flushed clean - Hoppers 1, 2 & 3 approx. 60% full – requires draining/over-pumping.</p> <p>Tank 3B – Tank empty - approximately 40% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 60% full – requires draining/over-pumping.</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 – Tank empty and flushed clean - Hoppers 1, 2 & 3 approximately 25% full - requires draining/over-pumping.

Tank 6B – Tank empty - approximately 20% of tank covered by grit/sludge – requires further flushing - Hoppers 1, 2 & 3 approximately 30% full - requires draining/over-pumping.

Tank 7A – Tank in use and in process of being retuned – All Amajets in use.

Tank 7B – Tank recently returned – approx. 90% of tank still covered.

Tank 8A – Tank empty and flushed clean – Hopper 1 full, Hoppers 2 & 3 approx. 75% full – requires draining/over-pumping.

Tank 8B – Tank empty and flushed clean – Hoppers 1, 2 & 3 full – requires draining/over-pumping.

Feed Channel - The level of effluent in both feed channels was low – no local odours.

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	12:30
Monitor 2	0.003	ppm	12:30
Monitor 3	0.000	ppm	12:30
Monitor 4	0.000	ppm	12:30
Monitor 5	0.004	ppm	12:30
Monitor 6	0.009	ppm	12:30
Monitor 7	0.011	ppm	12:30
Monitor 8	0.003	ppm	12:30
Monitor 9	0.000	ppm	12:30
Monitor 10	0.000	ppm	12:30
Monitor 11	0.000	ppm	12:30
Monitor 12	0.004	ppm	12:30
Monitor 13	0.000	ppm	12:30
Wind Speed	3.3	mph	
Wind Direction	260°		

Odour Log (Thames):

Thursday 17th October:

AM – Cool – Sunny with Patchy Cloud.

All OMU's in use.

Observations/Complaints: "OM2 spiked to max 0.021ppm between 06:58 to 07:48."

Operational Issues/Causes: "East Inlet Area checked – no obvious odours found."

Actions: None noted.

PM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "OM6 spiking at 04:55-05:10 max

0.021ppm.”

Operational Issues/Causes: “Filling Storm Tanks.”

Actions: None noted.

Friday 18th October:

AM – Cool – Sunny with Patchy Cloud.

All OMU’s in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool – Overcast Night.

All OMU’s in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 19th October:

AM – Cool – Rain with Sunny spells.

All OMU’s in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes:

None noted.

Actions: None noted.

PM – Cool – Overcast Night.

All OMU’s in use.

Observations/Complaints: “OM2 0.019 01:32-01:37, 0.020 22:58-23:16, 0.017 18:46-18:51. OM5 0.017 22:00-22:15, 0.021 18:45-19:15.”

Operational Issues/Causes: “Area checked – no obvious odour found.”

Actions: None noted.

Sunday 20th October:

AM – Cool – Cloudy.

All OMU’s in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: None noted.

Actions: None noted.

PM –Cool – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted

Actions: None noted

Monday 21st October 2019:

AM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

Tuesday 22nd October 2019:

AM – Cool – Sunny with Patchy Clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool – Overcast Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 23rd October 2019:

AM – Cool – Cloudy with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool – Overcast Night.

All OMU's in use.

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					
18/10/19	0	473	122	595	1088	1683
21/10/19	0	909	61	970	2561	3531
23/10/19	0	976 (TW Figure 970)	595	1571	1601	3172

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 – seal level approx. 1ft below coping stones – good seal.

Digester 6 - In use – seal level approx. 2ft below coping stones – good seal.

Digester 7 – Out of use – empty and clean – contractor on site undertaking maintenance.

Digester 8 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling vigorously.

Digester 9 - In use – seal level approx. 6” below coping stones - seal weak and bubbling.

Digester 10 - In use – seal level approx. 18” below coping stones - seal weak and bubbling.

Digester 11 - In use – seal level approx. 1ft below surface of coping stones – good seal.

Digester 12 - In use – seal level approx. 1ft below coping stones – good seal.

Digester 13 - In use – seal level approx. 6” below coping stones – seal weak and bubbling – evidence of prior spill requiring clean-up.

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. - In use – seal level approx. 1ft below coping stones – seal weak and bubbling.

Digester 17 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling.

Digester 18 - Out of use – empty and clean – contractor on site undertaking maintenance.

Digester 19 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling.

Digester 20 - In use – seal level approx. 3ft below coping stones – seal

weak and bubbling.

GENERAL

Sludge Screening House

All doors closed at time of inspection.

Imported Sludge

Approx. 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).

Skips

1 x (8 yard) open skip (containing rag covered with tarpaulin) & 1x covered skip (8 yard) located in Service Road by Storm Water Tanks.
1 x partially filled small grit slips by Sludge Screening House.
2 x empty skips in Service Road by PST's 9-12.

Pasteurisation Plant

Pasteurisation plant 1, 9, 10 & 12 currently out of service.

East Side Raw Sludge Screen House

Doors open at time of inspection. Skip recently changed – door closed by DC – he confirmed that skip drive should shut upon completion of change.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 90% obstructed in one channel – requires jetting.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 10, 11 & 12 in use. Tank 9 drained and out of use.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 completely clear.

“Fluffy” coverage across surface broken down completely since previous visit – visible churn across entirety of tank.

Odour Control Unit (OCU) performance monitoring – (23/10/19)

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

Sludge reception inlet	0.00 0.00 0.00	Unknown	Unknown	
Sludge reception outlet	0.00 0.00 0.00	0.8	Yes	
Thickening plant inlet	No data	Unknown	Unknown	
Thickening plant outlet	0.00 0,00 0,00	0.6	Yes	
Transfer PS inlet	0.00 0.00 0.00	Unknown	Unknown	
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes	
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes	
Pasteurisation Plant (OCU 12)	0.00 0.00 0.00	0.5	Yes	