



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 5th March 2020

Attendees: Mr Steven Maunders and Miss Charlotte Page (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank full – all Amajets in use.</p> <p>Tank 1B – Tank full – all Amajets in use.</p> <p>Tank 2A – Tank full – all Amajets in use.</p> <p>Tank 2B – Tank full – all Amajets in use.</p> <p>Tank 3A – Tank full – all Amajets in use.</p> <p>Tank 3B – Tank full – all Amajets in use.</p> <p>Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all full - unable to gauge condition as lighting system still not working.</p> <p>Tank 6A – Tank full – all Amajets in use.</p> <p>Tank 6B – Tank full – all Amajets in use.</p> <p>Tank 7A – Tank full – all Amajets in use.</p>	

Tank 7B – Tank full – all Amajets in use.

Tank 8A – Tank full – all Amajets in use.

Tank 8B – Tank full – all Amajets in use.

Feed Channel - Both feed channels 100% full - 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	008	ppm	14:05
Monitor 2	006	ppm	14:05
Monitor 3	003	ppm	14:05
Monitor 4	007	ppm	14:05
Monitor 5	006	ppm	14:05
Monitor 6	007	ppm	14:05
Monitor 7	009	ppm	14:05
Monitor 8	005	ppm	14:05

Monitor 9	007	ppm	14:05
Monitor 10	009	ppm	14:05
Monitor 11	006	ppm	14:05
Monitor 12	006	ppm	14:05
Monitor 13	006	ppm	14:05
Wind Speed	11.0	mph	14:05
Wind Direction	11°		14:05

Odour Log (Thames):

Thursday 27th February 2020:

AM – Cold – Sunny with patch Clouds.

All OMU's in use.

Observations/Complaints: "OM2 0.1 @ 11:37 till 12:31."

Operational Issues/Causes: "Area washed down around skips draining."

Actions: None noted.

PM – Cold – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 28th February 2020:

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 – Rain.

All OMU's in use.

Observations/Complaints: "OM 12 – 0.015 @ 02:21 – 03:19."

Operational Issues/Causes: "No odour source found."

Actions: None noted.

Saturday 29th February 2020:

AM – Cold – Rain with Sunny Spells.”

All OMU's in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cold – Clear Night.

All OMU's in use.

Observations/Complaints: “OM1 0.015 @ 20:07 – 20:21.”

Operational Issues/Causes: “No odour source found.”

Actions: None noted.

Sunday 1st March 2020:

AM – Cool – Sunny.

All OMU's in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: None noted.

Actions: “No odour source found.”

PM – Cold – Rain.

All OMU's in use.

Observations/Complaints: “OM2 18:02 – 18:21 max = 0.073, OM2 23:41-01:06 max spike was 0.103.”

Operational Issues/Causes: “No odour source found.”

Actions: None noted.

Monday 2nd March 2020:

AM – Cool – Sunny with patchy Clouds.

All OMU's in use.

Observations/Complaints: “OM1 0.017ppm 13:15-14:21. OM2 0.073ppm 08:42-09:52.”

Operational Issues/Causes: “Storm Tanks weiring to River all day. No odour detected around East inlet Area.”

Actions: None noted.

PM – No data.

All OMU's in use.

Observations/Complaints: None noted.
Operational Issues/Causes: None noted.
Actions: None noted.

Tuesday 3rd March 2020:

AM – Cool – Rain with Sunny Spells.

All OMU's in use.

Observations/Complaints: "OM10 0.018ppm 16:43-16:58."

Operational Issues/Causes: "CHP's tripped. Bell height in excess of 27 metres until waste gas burner started."

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.

Wednesday 4th March 2020:

AM – Cool – Rain with Sunny Spells.

All OMU's in use.

Observations/Complaints: "OM2 0.018ppm 08:34 – 08:50. OM2 0.047ppm 08:34 – 08:50."

Operational Issues/Causes: "No odour identified."

Actions: None noted.

PM – Cold – Rain.

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					
28/02/20	40	1556 TW Figure 1352.6	1411	3007	2926 TW figure 2930	5933 TW figure 5733.6
02/03/20	Illegible	Illegible	Illegible	?	2880	3637
04/03/20	0	600	534	1134	2393	3527

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.2ft below coping stones – seal weak and bubbling.

Digester 6 - In use – seal level approx. 3ft below coping stones – seal

weak and bubbling – ongoing spill requiring anti-foam and clean-up.

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

Digester 8. - In use – seal level approx. 4ft below coping stones - seal weak and bubbling.

Digester 9 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling.

Digester 10 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling.

Digester 11 - In use – seal level approx. 3ft below coping stones – seal weak and bubbling.

Digester 12 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 13 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and 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. 2ft below coping stones – seal weak and bubbling – Bell height high requiring draw down of Biogas

Digester 17 - In use – seal level approx. 18” 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 approx. 18” 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

Roller shutter door approx. 1ft open - All other 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

1x partially filled small grit skips by Sludge Screening House.

1x large open container skip containing general waste in Service Road at rear of Sludge Screening House

1x enclosed container skips containing rag awaiting collection by West Side PST's.

Pasteurisation Plant

Pasteurisation plant 9 streams running.

East Side Raw Sludge Screen House

Doors open at time of inspection – works ongoing to clear spillage within screening house.

West Side Aeration Lanes (Old)

Battery C aeration feed channel 75% obstructed in one channel (right) – requires jetting.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 10, 11 & 12 in use. Tank 9 currently being brought back into service.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 approximately 75% blocked – requires jetting.

“Fluffy” coverage across surface has again begun to significantly build up and thicken; also material bypassing screener.

Odour Control Unit (OCU) performance monitoring – (02/03/20)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
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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	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	
Transfer PS inlet	No data	Unknown	Unknown	
Transfer PS outlet	0.01 0.01 0.01	0.5	Yes	
New West inlet (OCU 11)	0.03 0.03 0.03	0.5	Yes	
Pasteurisation Plant (OCU 12)	0.00 0.00 0.00	0.5	Yes	