



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 10 th November 2020	
Attendees: Mr Steven Maunders and Mr Dan Grady (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty - approximately 5% of tank covered by grit – requires further flushing – Hoppers 1 & 3 approx. 85% full, Hopper 2 approx. 20% full – requires draining/over-pumping.</p> <p>Tank 1B – Tank empty - approximately 25% of tank covered by grit – requires further flushing – Hopper 1 full, Hoppers 2 & 3 approx. 20% full – requires draining/over-pumping.</p> <p>Tank 2A – Tank empty and flushed clean – Hoppers 1, 2 & 3 approx. 25% full – requires draining/over-pumping.</p> <p>Tank 2B – Tank empty – recently returned - approximately 55% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 85% full – requires draining/over-pumping.</p> <p>Tank 3A – Tank empty - approximately 20% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 35% full.</p> <p>Tank 3B – Tank empty – recently returned – approximately 90% of</p>	

tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 90% full – requires draining/over-pumping.

Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all in use - unable to gauge condition as lighting system still not working.

Tank 6A – Tank empty - approximately 20% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 35% full – requires draining/over-pumping

Tank 6B – Tank empty – recently returned – 100% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 30% full – requires draining/over-pumping.

Tank 7A - Tank full – Amajets in use.

Tank 7B – Tank full – Amajets in use.

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

Tank 8B – Tank empty – recently returned - Hoppers 1, 2 & 3 full – tank back-filling - requires draining/over-pumping.

Feed Channel - The level of effluent in both feed channels was approximately 20% capacity - 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 monitors which were providing data at time of inspection:

Monitor 1	.005	ppm	13:29
Monitor 2	.000	ppm	13:29
Monitor 3	.000	ppm	13:29
Monitor 4	.003	ppm	13:29
Monitor 5	.003	ppm	13:29
Monitor 6	.000	ppm	13:29
Monitor 7	.005	ppm	13:29
Monitor 8	.006	ppm	13:29
Monitor 9	.006	ppm	13:29
Monitor 10	.000	ppm	13:29
Monitor 11	.004	ppm	13:29
Monitor 12	.005	ppm	13:29
Monitor 13	.004	ppm	13:29
Wind Speed	1.4	mph	13:29
Wind Direction	182°		

Odour Log (Thames):

Wednesday 4th November 2020:

AM – Sunny with patch Clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

Thursday 5th November 2020:

AM – Sunny.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 6th November 2020:

AM – Cloudy with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 7th November 2020:

AM – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear Night.

All OMU's in use.

Observations/Complaints: "OM2 spike to 0.015 for less than 13 mins."

Operational Issues/Causes: None noted.

Actions: None noted.

Sunday 8th November 2020:

AM – Cloudy.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Rain.

All OMU's in use.

Observations/Complaints: "OM10 0.025 @ 01:53 to 02:19."

Operational Issues/Causes: "Area checked around monitor – no obvious odours detected."

Actions: None noted.

Monday 9th November 2020:

AM – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

Tuesday 10th November 2020:

AM – Cloudy with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear 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					
04/11/2020	117	412	595	1124	912	2036
06/11/2020	0	534	740	1274	1905	3179
09/11/2020	117	722	885	1724	760	2484

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. 6” below coping stones – seal weak and bubbling – evidence of previous spill requiring anti-foam and clean-up.

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

Digester 7 - In use – seal level approx. 6” below coping stones – seal

weak and bubbling – Bell height high requiring draw down of Biogas.

Digester 8 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling – Bell height high requiring draw down of Biogas.

Digester 9 - In use – seal level approx. 18” below coping stones – seal weak and bubbling.

Digester 10 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling – Bell height high requiring draw down of Biogas.

Digester 11 - In use – seal level approx. 1ft below coping stones – seal weak and bubbling.

Digester 12 - In use – seal level approx. 3ft below coping stones – seal weak and bubbling.

Digester 13 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling vigorously – evidence of previous spill requiring anti-foam and clean-up.

Digester 14 – In use – seal level approx. 2ft below coping stones - seal weak and bubbling – Bell height high requiring draw down of Biogas.

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. 18” below coping stones – seal weak and bubbling.

Digester 18 - Out of use.

Digester 19 - In use – seal level approx. 18” below coping stones – seal weak and bubbling.

Digester 20 - In use – seal level approx. 2ft below coping stones – seal weak and bubbling.

GENERAL

Sludge Screening House

All doors closed at the time of inspection.

Imported Sludge

Average of ten (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 12 yard skip containing general waste in Service Road at rear of Sludge Screen House.

1x enclosed container skip (empty) by circular PST's

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West Side Aeration Lanes (Old)

Battery C aeration feed channel 100% obstructed in one channel (left) – requires jetting (TW advise that there is continuing flow below surface).

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 9, & 11 in use, Numbers 10 & 12 drained down.

Pasteurisation Plant

Nine streams running.

New Works (West Side)

Feed Channel for Aeration Lanes completely clear.

“Fluffy” coverage across surface and quantity of material bypassing screener has reduced.

Odour Control Unit (OCU) performance monitoring – 09/11/20

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
East OCU	0.195 0.138 42.33	0.05	No
West inlet OCU	1.693 1.077 1.063	0.05	No
Sludge reception inlet	No data	Unknown	Unknown
Sludge reception outlet	No data	0.8	Unknown

Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	4.57 106.2 3.92	0.6	No
Transfer PS inlet	4.517 4.050 3.545	Unknown	Unknown
Transfer PS outlet	4.09 0.00 0.00	0.5	No
New West inlet (OCU11)	1.910 1.341 0.169	0.5	No
Pasteurisation Plant (OCU12)	1.031 1.029 7.77	0.5	No