



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 22 nd September 2020	
Attendees: Mr Steven Maunders and Mr Tom Costin (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. 60% full, Hopper 2 approx. 10% full – requires draining/over-pumping.</p> <p>Tank 1B – Tank empty - approximately 25% of tank covered by grit – requires further flushing – Hoppers 1, 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 75% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 25% full.</p> <p>Tank 3A – Tank empty - approximately 50% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 25% full.</p> <p>Tank 3B – Tank empty – recently returned - 100% of tank covered by</p>	

grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 40% 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 15% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 25% full – requires draining/over-pumping.

Tank 6B – Tank empty – recently returned - 75% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 20% full – requires draining/over-pumping.

Tank 7A - Tank empty – recently returned 80% of tank covered by grit/sludge – requires further flushing - Hoppers 1, 2 & 3 full – requires draining/over-pumping.

Tank 7B – Tank empty – 60% of tank covered by grit/sludge – requires further flushing. Hoppers 1, 2 & 3 empty.

Tank 8A – Tank empty and flushed clean – Hoppers 1 & 3 approx. 60% full, Hopper 2 approx. 80% – requires draining/over-pumping.

Tank 8B – Tank empty – approximately 40% of tank still covered with grit/sludge – requires further flushing. Hoppers 1, 2 & 3 approx. 25% full – requires draining/over-pumping.

Feed Channel - The level of effluent in both feed channels was approx. 25% 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	.006	ppm	13:15
Monitor 2	.007	ppm	13:15
Monitor 3	.000	ppm	13:15
Monitor 4	.006	ppm	13:15
Monitor 5	.005	ppm	13:15
Monitor 6	.005	ppm	13:15
Monitor 7	.007	ppm	13:15
Monitor 8	.005	ppm	13:15
Monitor 9	.007	ppm	13:15
Monitor 10	.008	ppm	13:15
Monitor 11	.000	ppm	13:15
Monitor 12	.005	ppm	13:15
Monitor 13	.005	ppm	13:15
Wind Speed	1.8	mph	13:15
Wind Direction	214°		

Odour Log (Thames):

Wednesday 16th September 2020:

AM – Sunny with Patchy Clouds.

All Omu's in use.

Observations/Complaints: "No odour spikes".

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: "East Inlet washed down.

Thursday 17th September 2020:

AM – Warm and Sunny.

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: "OM10 spiked at 02:40 – 03:36 max 0.015ppm".

Operational Issues/Causes: "Digester No.16 blowing seal, only 2 CHP's available".

Actions: None noted.

Friday 18th September 2020:

AM – Warm and Sunny.

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: "OM10 03:10 – 03:24".

Operational Issues/Causes: None noted.

Actions: "West Inlet checked.

Saturday 19th September 2020:

AM – Warm and Sunny.

All OMU's in use.

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

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.

Sunday 20th September 2020:

AM – Warm and Sunny with Patchy Clouds.

All OMU's in use.

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

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool Overcast Night.

All OMU's in use.

Observations/Complaints: "OM5 0.022 23:09 – 23:24, OM10 0.017 23:54 – 00:53".

Operational Issues/Causes: "Digester 16 blowing seal. Flare running".

Actions: None noted.

Monday 21st September 2020:

AM – Warm and Sunny with Patchy Clouds.

All OMU's in use.

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

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool Clear Night.

All OMU's in use.

Observations/Complaints: "OM2 0.022 01:53 – 02:11, Multiple spikes between 17:40 – 00:26, 0.016 – 0.083 max peak".

Operational Issues/Causes: "Area checked. No obvious source".

Actions: "Area hosed down".

Tuesday 22nd September 2020:

AM – Warm and Cloudy with Sunny Spells.

All OMU's in use.

Observations/Complaints: "OM2 peak at 0.025ppm Between 07:00 – 07:25".

Operational Issues/Causes: "No.1 rag skip being changed".

Actions: None noted.

PM – Warm Overcast Night.

All OMU's in use.

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

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					
18/09/20	0	412	305	717	2898	3615
21/09/20	88	389	244	721	1929	2650

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. 18” below coping stones – good seal.

Digester 6 - In use – seal level approx. 1ft below coping stones – seal weak and bubbling – evidence of previous 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. 1ft below coping stones - seal weak and bubbling – evidence of previous spill requiring anti-foam and clean-up.

Digester 9 - In use – seal level approx. 2ft below coping stones – good seal – evidence of previous spill requiring anti-foam and clean-up.

Digester 10 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling – evidence of previous spill requiring anti-foam and clean-up.

Digester 11 - In use – seal level approx. 2ft below coping stones – good seal – evidence of previous spill requiring anti-foam and clean-up.

Digester 12 - In use – seal level approx. 3ft below coping stones – good seal – evidence of previous spill requiring anti-foam and clean-up.

Digester 13 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling – evidence of previous spill requiring anti-foam and clean-up.

Digester 14 – In use – seal level approx. 3ft below coping stones - seal weak and bubbling.

Digester 15 - Out of use – empty and clean – contractor on site undertaking maintenance.

Digester 16 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling – ongoing vigorous spill requiring anti-foam and clean-up.

Digester 17 - In use – seal level approx. 4ft below coping stones – good seal.

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

Digester 19 - Out of use – requires draining.

Digester 20 - In use – seal level approx. 6ft below coping stones – seal weak and bubbling.

GENERAL

Sludge Screening House

All doors closed at the time of inspection.

Imported Sludge

Average of seven (7) 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 and 1x enclosed container skip (empty) in Service Road at rear of Screen House.

1x enclosed 8 yard skip containing general waste in Service Road adjacent to Raw Sludge Screen House.

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).

Pasteurisation Plant

Seven streams running.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues.

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

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 approximately 25% blocked – requires jetting.

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

Odour Control Unit (OCU) performance monitoring – No data

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	No data	0.2	Unknown
East OCU	No data	0.05	Unknown
West inlet OCU	No data	0.05	Unknown
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	No data	0.6	Unknown
Transfer PS inlet	No data	Unknown	Unknown
Transfer PS outlet	No data	0.5	Unknown
New West inlet (OCU11)	No data	0.5	Unknown
Pasteurisation Plant (OCU12)	No data	0.5	Unknown