



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 29 th June 2021	
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 – All Hoppers approx. 10% full – requires draining/over-pumping.</p> <p>Tank 1B – Tank empty – approximately 40% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 20% full – requires draining/over-pumping.</p> <p>Tank 2A – Tank empty – approximately 10% of tank covered by grit – requires further flushing – All Hoppers approx. 10% full – requires draining/over-pumping.</p> <p>Tank 2B – Tank empty – recently returned - approximately 40% of tank covered by sludge and grit – requires further flushing – All Hoppers approx. 25% full – requires draining/over-pumping.</p> <p>Tank 3A – Tank in process of being returned – All Amajets in use.</p> <p>Tank 3B – Tank full and awaiting return – All Amajets in use.</p>	

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 full and awaiting return – All Amajets in use.

Tank 6B – Tank full and awaiting return – All Amajets in use.

Tank 7A – Tank full and awaiting return – All Amajets in use.

Tank 7B – Tank full and awaiting return – All Amajets in use.

Tank 8A – Tank full and awaiting return – All Amajets in use.

Tank 8B – Tank full and awaiting return – All Amajets in use.

Feed Channel - The level of effluent in both feed channels was approximately 40% 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 were not available as SCADA system “locked out” - software licensing issue awaiting

resolution.

Monitor 1	N/A	ppm	N/A
Monitor 2	N/A	ppm	N/A
Monitor 3	N/A	ppm	N/A
Monitor 4	N/A	ppm	N/A
Monitor 5	N/A	ppm	N/A
Monitor 6	N/A	ppm	N/A
Monitor 7	N/A	ppm	N/A
Monitor 8	N/A	ppm	N/A
Monitor 9	N/A	ppm	N/A
Monitor 10	N/A	ppm	N/A
Monitor 11	N/A	ppm	N/A
Monitor 12	N/A	ppm	N/A
Monitor 13	N/A	ppm	N/A
Wind Speed	N/A	mph	N/A
Wind Direction	N/A		N/A

Odour Log (Thames):

Wednesday 23rd June 2021:

No data.

Thursday 24th June 2021:

AM – Warm – Sunny with patchy clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Overcast Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

Friday 25th June 2021:

AM – Warm – Sunny with Patchy Clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: "No odours issues non reported (sic)."

Operational Issues/Causes: No data.

Actions: No data.

Saturday 26th June 2021:

AM – Warm – Sunny with Patchy Clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Overcast Night.

All OMU's in use.

Observations/Complaints: "No odour issues non reported (sic)."

Operational Issues/Causes: No data.

Actions: No data.

Sunday 27th June 2021:

AM – Warm – Sunny with Patchy Clouds.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "No odour issues non reported (sic)."

Operational Issues/Causes: "Storm Tanks filling."

Actions: No data.

Monday 28th June 2021:

AM – Warm – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues (sic)."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Overcast Night.

All OMU's in use.

Observations/Complaints: "No odour issues non reported (sic)."

Operational Issues/Causes: "Storm Tanks returning."

Actions: No data.

Tuesday 29th June 2021:

AM – Cool – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues (sic)."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

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					
23/06/21	0	1297	1218	2515	1720	4235 (TW figure 4238)
25/06/21	0	946	1406	2352	2048	4400

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 - Out of use.

Digester 6 - In use - seal level approx. 4ft below coping stones - seal weak and bubbling.

Digester 7 - In use - seal level approx. 4ft below coping stones - seal

weak and bubbling vigorously - ongoing spill requiring anti-foam and clean-up - Bell height high requiring draw down of Biogas.

Digester 8 - In use - seal level approx. 6ft below coping stones - seal weak and bubbling.

Digester 9 - In use - seal level approx. 3ft below coping stones - good seal.

Digester 10 - In use - seal level approx. 5ft below coping stones - seal weak and bubbling.

Digester 11 - In use - seal level approx. 4ft 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 - ongoing spill requiring anti-foam and clean-up.

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

Digester 15 - Out of use.

Digester 16 - In use - seal level approx. 18" below coping stones - seal weak and bubbling - ongoing spill requiring anti-foam and clean-up - Bell height high requiring draw down of Biogas.

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

Digester 18 - Out of use.

Digester 19 - Out of use.

Digester 20 - In use - seal level approx. 3ft below coping stones - seal weak and bubbling.

GENERAL

Sludge Screening House

All doors open at the time of inspection - contractors on site working on screens.

Imported Sludge

Average of eight 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) - Tank 75 = 100 of surface covered in "duck weed".

Skips

1x open container grit/rag skip (50 % full) uncovered, 1x 8 yard general waste skip (uncovered), 1x 8 yard grit rag skip (full) covered with tarpaulin, 1x enclosed container skip (empty) in Service Road at rear of Sludge Screen House. 1x enclosed container skip (empty) in Service Road alongside PST's 9-12.

East Side Raw Sludge Screen House

Doors closed at time of inspection - facility currently out of service - contractors on site undertaking maintenance.

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) Battery E

Feed Channel for Aeration Lanes 75% obstructed – requires jetting.
Large thick crust evident across majority of tank.

Odour Control Unit (OCU) performance monitoring – No data provided

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
GBT Plant OCU Outlet	No data	Unknown	Unknown

