



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 18 th July 2023	
Attendees: Mr Steven Maunders (London Borough of Hounslow) 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 – Hopper 1 approx. 95% full, Hoppers 2 & 3 approx. 80% full - requires draining/over-pumping.</p> <p>Tank 1B – Tank empty – Approx. 40% of tank covered by grit and sludge – requires further flushing – Hopper 1 approx. 40% full, Hopper 2 approx. 10% full, Hopper 3 approx. 50% full - requires draining/over-pumping.</p> <p>Tank 2A – Tank empty – Approx. 30% of tank covered by grit and sludge – requires further flushing – Hopper 1 approx. 40% full, Hoppers 2 & 3 approx. 25% full.</p> <p>Tank 2B – Tank empty – Approx. 70% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 60% full - requires draining/over-pumping.</p>	

Tank 3A – Tank empty – Approx. 80% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 65% full - requires draining/over-pumping.

Tank 3B — Tank empty – Approx. 80% of tank covered by grit and sludge – requires further flushing – All Hoppers 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 – Approx. 10% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 90% full - requires draining/over-pumping.

Tank 6B – Tank empty – Approx. 10% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 40% full.

Tank 7A – Tank empty – 100% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers full - requires draining/over-pumping.

Tank 7B – Tank empty – 100% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers empty.

Tank 8A – Tank empty - Approx. 25% of tank covered by grit and sludge – requires further flushing – All Hoppers full – requires draining/over-pumping.

Tank 8B – Tank empty – Approx. 75% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 80% full - requires draining/over-pumping.

Feed Channel - The level of effluent in both feed channels was approximately 10% capacity.

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					
14/07/23	0	1012	389	1401	1216	2617

Complaints

The Council received no complaints by email from MRAG in the preceding week.

Thames Water controller advised that they had received no direct complaints in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received no calls to the out of hours service.

Odour Monitors

The odour readouts (H₂S) for all monitors which were providing data at time of inspection:

Monitor 1	.000	ppm	13:11
Monitor 2	.001	ppm	13:11
Monitor 3	-.001*	ppm	13:11
Monitor 4	.000	ppm	13:11
Monitor 5	.000	ppm	13:11
Monitor 6	.003	ppm	13:11
Monitor 7	.000	ppm	13:11
Monitor 8	.004	ppm	13:11
Monitor 9	.000	ppm	13:11
Monitor 10	.004	ppm	13:11
Monitor 11	.000	ppm	13:11
Monitor 12	.004	ppm	13:11
Monitor 13	.000	ppm	13:11
Wind Speed	4.3	mph	13:11
Wind Direction	212°		13:11

Odour Log (Thames):

Wednesday 12th July 2023:

AM – Hot – Sunny.

All OMU's in use.

Observations/Complaints: “Multiple spikes on OMU3 max 0.041ppm.”

Operational Issues/Causes: “OCU No. 11 not performing.”

Actions: No data.

PM – Warm – Clear Night.

All OMU's in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: No data.

Actions: No data.

Thursday 13th July 2023:

AM – Warm – Cloudy with Sunny Spells.

All OMU's in use.

Observations/Complaints: “OM3 Spiked max 0.034ppm @10:20-10:34.”

Operational Issues/Causes: “OCU No. 11 not performing.”

Actions: No data.

PM – Warm – Clear Night.

All OMU's in use.

Observations/Complaints: "OM3 0.063 18:03-18:21."

Operational Issues/Causes: "OCU No. 11 poor performance."

Actions: No data.

Friday 14th July 2023:

AM – Warm – Rain.

All OMU's in use.

Observations/Complaints: "OM3 0.016ppm @15:51-16:06 + 16:22-16:34."

Operational Issues/Causes: "OCU No. 11 not performing."

Actions: No data.

PM – Warm – Overcast Night.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM2 flat-lining."

Operational Issues/Causes: No data.

Actions: No data.

Saturday 15th July 2023:

AM – Warm – Cloudy with Sunny Spells.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM3 0.06ppm @ 13:06-13:19."

Operational Issues/Causes: "OCU No. 11 not performing."

Actions: No data.

PM – Warm – Clear Night.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Sunday 16th July 2023:

AM – Warm – Cloudy.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

PM – Warm – Patchy Rain.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM3 spiked at 22:05-22:20 max 0.032ppm."

Operational Issues/Causes: "OCU No. 11 not performing."

Actions: No data.

Monday 17th July 2023:

AM – Hot – Sunny with Patch Clouds.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

PM – Warm – Clear Night.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM810 spiked at 18:25-19:00 max 0.026ppm."

Operational Issues/Causes: "PAS type odour on the breeze but unable to find source before spike dissipated."

Actions: No data.

Tuesday 18th July 2023:

AM – Hot – Sunny with Patchy Clouds.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

PM – Warm – Clear Night.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM3 0.022 03:21-03:36."

Operational Issues/Causes: "OCU 11 poor performance."
No data.

Actions: No data.

Digesters

Digesters 1-4 – Out of use (permanent).

Digester 5 – In use – seal level approx. 3ft below coping stones – Good Seal. Bell height high requiring draw down of Biogas.

Digester 6 - In use – seal level approx. 2ft below coping stones – Good Seal – although visible quantity of litter contained within seal. Bell height high requiring draw down of Biogas.

Digester 7 - In use – seal level approx. 4ft below coping stones - Seal weak and bubbling vigorously – Tank noticeably gassing off - Bell height high requiring draw down of Biogas. Ongoing spill requires anti-foam and clean-up.

Digester 8 - In use – seal level approx. 4ft below coping stones – Good Seal – Bell height high requiring draw down of Biogas. Evidence of previous spill requiring clean-up.

Digester 9 - In use – seal level approx. 3ft below coping stones – Good Seal.

Digester 10 - In use – seal level approx. 2ft below coping stones - Seal weak and bubbling – Bell height high requiring draw down of Biogas. Ongoing spill requires anti-foam and clean-up.

Digester 11 - In use – seal level approx. 1ft below coping stones – Good Seal.

Digester 12 - In use – seal level approx. 2ft below coping stones - Seal weak and bubbling – receiving over-pumping from Tank 14.

Digester 13 – Out of use.

Digester 14 – Out of use.

Digester 15 – Out of use.

Digester 16 – Out of use.

Digester 17 - In use – seal level approx. 2ft below coping stones –
Good Seal.

Digester 18- In use – seal level approx. 18” below coping stones –
Good Seal.

Digester 19 - In use – seal level approx. 4ft below coping stones –
Good Seal.

Digester 20 - In use – seal level approx. 2ft below coping stones –
Good Seal.

GENERAL

Sludge Screening House

One small door open at time of inspection. Roller shutter recently replaced – small gap at top – flagged for further works.

Imported Sludge

No data.

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – currently hoses being used to break up sludge on surface of all tanks.

East Side Raw Sludge Screen House

Doors open 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, 10 & 11 in use – all have large fat deposits and algae on surface – requires hoses to break-up. Number 12 drained down (long term out of service).

New Works (West Side) Battery E

No issues.

Pasteurisation Plant

Streams 2, 7, 8 and 10 out of service.

Skips

2x small (blue) skips – rear of sludge screen house both empty – quantity of rag on ground in surrounding area that requires clean-up.

1x open container grit skip (empty) uncovered and 1x 10-Yard Rag skip (covered) at rear of Sludge Screening House.

1x 10-Yard enclosed General Waste skip in Service Road at rear of East Raw Sludge Screening House.

Odour Control Unit (OCU) performance monitoring – No data

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	No data	Unknown
Main pumping station outlet	No data	No data	Unknown
East OCU	No data	No data	Unknown
West inlet OCU	No data	No data	Unknown
Sludge reception inlet	No data	No data	Unknown
Sludge reception outlet	No data	No data	Unknown
Thickening plant inlet	No data	No data	Unknown
Thickening plant outlet	No data	No data	Unknown
Transfer PS inlet	No data	No data	Unknown
Transfer PS outlet	No data	No data	Unknown
New West inlet (OCU11)	No data	No data	Unknown
Pasteurisation Plant (OCU12)	No data	No data	Unknown
GBT Plant OCU Outlet	No data	No data	Unknown