



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 22 August 2023	
Attendees: Kumail Haider (London Borough of Hounslow) ,Emma McDonald (Thames Water) and Emma (Thames Water Apprentice)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty and flushed clean – Hoppers 90% full require draining/over-pumping.</p> <p>Tank 1B – Tank empty – Approx. 20% of tank covered by grit and sludge – requires further flushing, Hopper 1&3 70% requires draining/over-pumping</p> <p>Tank 2A – Tank empty – Approx. 10% of tank covered by grit and sludge – requires further flushing requires draining/over pumping</p> <p>Tank 2B – Tank empty – Approx. 20% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 30% full - requires draining/over-pumping.</p> <p>Tank 3A – Tank empty – 30% of tank covered by grit and sludge – requires further flushing, all hoppers 30% full requires draining/over pumping</p>	

Tank 3B — Tank 40% covered by grit and sludge- Hoppers 100% 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. 40% full - requires draining/over-pumping.

Tank 6B – Tank empty – Approx. 10% of tank covered by grit and sludge – requires further flushing

Tank 7A – Tank 50% – returning to works

Tank 7B – Tank empty – Approx. 50% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers full - requires draining/over-pumping.

Tank 8A – Tank empty - Approx. 50% of tank covered by grit and sludge – requires further flushing – Hoppers full requires draining/over-pumping.

Tank 8B – Tank empty - 50% of tank covered by grit and sludge – requires further flushing – Hoppers 50% 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					
No data						
No data						
No data						

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.

The Council received **3** online complaints in the preceding week.

- 19/08/2023 @ 19.28 Sussex Avenue TW7 6LB (OM1- 0.000, & OM2- 0.000, data reviewed no spikes identified for further investigation)
- 20/08/2023 @ 13.19 Twickenham Road TW7 7DL (OM1- 0.001, & OM2- 0.002, data reviewed no spikes identified for further investigation)
- 22/08/2023 @ 07.47 Worples Road TW7 7AT (OM1- 0.000 & OM2- 0.001 data reviewed no spikes identified for further investigation)

Odour Monitors

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

Monitor 1	.003	ppm	11.13
Monitor 2	.001	ppm	
Monitor 3	.000	ppm	
Monitor 4	.000	ppm	
Monitor 5	.000	ppm	
Monitor 6	.010	ppm	
Monitor 7	.000	ppm	
Monitor 8	.000	ppm	
Monitor 9	.000	ppm	
Monitor 10	.004	ppm	
Monitor 11	.000	ppm	
Monitor 12	.004	ppm	
Monitor 13	.000	ppm	
Wind Speed	4.69	mph	
Wind Direction	216.83°		

Odour Log (Thames):

Wednesday 16 August 2023:

AM – Hot – Sunny.

All OMU's in use except OM 2.

Observations/Complaints: No odour issues

Operational Issues/Causes: No data.

Actions: No data.

PM – No data.

All OMU's in use except OM 2.

Observations/Complaints: No data

Operational Issues/Causes: No data

Actions: No data.

Thursday 17 August 2023:

AM – Hot – Sunny w/Patchy Clouds.

All OMU's in use except OM 2.

Observations/Complaints: OM3 0.018 07.51-08.07, 0.031 08.22-08.37 , 0.025 14.05-14.22 & 0.016 16.22-16.37.

Operational Issues/Causes: OCU 11 not performing.

Actions: No data.

PM – No data.

All OMU's in use except OM 2.

Observations/Complaints: No data

Operational Issues/Causes: No data

Actions: No data.

Friday 18 August 2023:

AM – Hot –Sunny w/Patchy Clouds

All OMU's in use except OM 2.

Observations/Complaints: OM3 0.030 06.23-07.08, 0.015 10.53-11.05, 0.022 11.23-12.07 & 0.030 13.22-13.38

Operational Issues/Causes: OCU 11 not performance.

Actions: No data.

PM – Warm – Rain.

All OMU's in use except OM 2.

Observations/Complaints: OM 3 0.026ppm 19.36-20.08

Operational Issues/Causes: OCU 11 discharging odour from stack

Actions: No data.

Saturday 19 August 2023:

AM –Hot- Sunny w/Patchy

All OMU's in use except OM 2.

Observations/Complaints: No odour issues

Operational Issues/Causes: No odour issues.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 2.

Observations/Complaints: No odour issues

Operational Issues/Causes: No odour issues

Actions: No data.

Sunday 20 August 2023:

AM – No data.

All OMU's in use except OM 2.

Observations/Complaints: No data

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 2.

Observations/Complaints: OM 6 0.040ppm 18.50-19.20, 0.028ppm 20.50-21.21, 0.021ppm 02.50-03.50.

Operational Issues/Causes: No odour detected wind direction to the south west away from monitor 6.

Actions: No data.

Monday 21 August 2023:

AM – Warm – Sunny w/Patchy.

All OMU's in use except OM 2.

Observations/Complaints: OM 6 spiked at 07.20-08.40 Max 0.025ppm

Operational Issues/Causes: No obvious signs of odour found

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: OM 6 0.019ppm 20.06-20.34, 0.020ppm 01.04-01.20, 0.028ppm 02.50-03.05

Operational Issues/Causes: Nothing out of the ordinary found onsite.

Actions: No data.

Tuesday 22 August 2023:

AM – No data.

All OMU's in use except OM 2.

Observations/Complaints: No data

Operational Issues/Causes: No data

Actions: No data.

PM – Warm – Clear Night.

All OMU's in use except OM 2.

Observations/Complaints: OM6 0.025 18.19-18.35, 0.034 18.49-19.05

Operational Issues/Causes: No data

Actions: No data.

Digesters

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

Digester 5 – In use – seal level approx. 1ft below coping stones – Good Seal.

Digester 6 - In use – seal level approx. 2ft below coping stones – Good Seal – historic spillage on walkway outside D6

Digester 7 - In use – seal level approx. 1ft below coping stones - Seal Good- Bell height high requires draw down of Biogas and spillage over coping stone.

Digester 8 - In use – seal level approx. 1ft below coping stones – Good Seal

Digester 9 - In use – seal level approx. 2ft below coping stones – Good Seal.

Digester 10 - In use – seal level approx. 1.5ft below coping stones - Seal weak– Bell high requiring draw down of Biogas.

Digester 11 - In use – seal level approx. 2ft below coping stones – Seal weak and bubbling.

Digester 12 - In use – seal level approx. 1.5ft below coping stones - Seal good.

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. 1ft below coping stones – Good Seal.

Digester 18- In use – seal level approx. 3ft below coping stones - Seal weak and bubbling.

Digester 19 - In use – seal level approx. 2ft below coping stones – Good Seal.

Digester 20 - In use – seal level approx. 1.5ft below coping stones – Good Seal.

GENERAL

Sludge Screening House

Small doors 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 –Number 12 drained down (long term out of service).

New Works (West Side) Battery E

5 x sprinklers out causing blockage along stream.

Pasteurisation Plant

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

Skips

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 – 22/08/23

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.014 0.013 0.012	0.2	Yes
East OCU	0.176 0.119 0.049	0.05	No
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	Unknown
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	0.114 0.107 0.106	0.6	Yes
Transfer PS inlet	High High High	Unknown	Unknown
Transfer PS outlet	0.024 0.023 0.023	0.6	Yes
New West inlet (OCU11)	0.357 0.390 0.441	0.5	Yes
Pasteurisation Plant (OCU12)	0.171 0.126 0.102	0.5	Yes
GBT Plant OCU Outlet	0.000 0.000 0.000	Unknown	Unknown