



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 03 October 2023	
Attendees: Kumail Haider (London Borough of Hounslow) ,Emma McDonald (Thames Water) and Chantelle Dixon (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A - All Hoppers 60% full requires draining/over-pumping</p> <p>Tank 1B - Tank 20% covered in grit requires draining/over-pumping</p> <p>Tank 2A - Tank 10% covered in grit , all hoppers 20% full requires draining/over-pumping</p> <p>Tank 2B - Tank requires flushing 40% covered in grit/sludge requires draining/over-pumping</p> <p>Tank 3A - Tank 40% covered by grit and sludge, all hoppers 70% full - requires draining/over-pumping</p> <p>Tank 3B - Tank 20% covered by grit and sludge, all hoppers full - requires draining/over-pumping.</p>	<p>Programme of cleaning on-going, all hoppers will be drained.</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 requires flushing draining/over-pumping

Tank 6B - Tank requires flushing draining/over-pumping

Tank 7A - Tank 100 covered by effluent, amajets not in operation requires draining/over-pumping

Tank 7B - Tank 60% covered by effluent, grit and sludge – requires draining/over-pumping

Tank 8A - Tank 70% covered by effluent, grit and sludge – requires further flushing. All Hoppers full requires draining/over-pumping

Tank 8B - Tank 50% covered by effluent, grit and sludge – requires further flushing – All Hoppers 60% draining/over-pumping

Feed Channel - The level of effluent in both feed channels was approximately 15% 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	500					

limit						
27/09/23	20	473	1762	2255	4043	6298
29/09/23	0	923	824	1747	3369	5116
02/10/23	20	1996	1012	3028	4043	7071

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 **5** online complaints in the preceding week.

- 26/09/2023 @ 22.25 Twickenham Road TW7 7DL (OM1- 0.000, OM2- 0.002 & OM3- 0.004, data reviewed no spikes identified for further investigation)
- 28/09/2023 @ 15.19 Mill Plat Avenue TW7 6RD (OM1- 0.000, OM2- 0.002 & OM3- 0.004, data reviewed no spikes identified for further investigation)
- 29/09/2023 @18.46 Sussex Avenue TW7 6LB (OM1- 0.000, OM2- 0.001 & OM3- 0.004, data reviewed no spikes identified for further investigation)
- 01/10/2023 @ 17.23 Twickenham Road TW7 7DL (OM1- 0.000, OM2- 0.003 & OM3- 0.004, data reviewed no spikes identified for further investigation)

Thames Water received no complaints directly.

- 02/10/2023 @ 22.43 Talbot Road TW7 7HG (OM1- 0.005, OM2- 0.002, OM4- 0.000 & OM5- 0.016 data reviewed no spikes identified for further investigation)

*ppm

Odour Monitors

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

Monitor 1	.000	ppm	13.18
Monitor 2	.001	ppm	↑ ↓
Monitor 3	.003	ppm	
Monitor 4	.000	ppm	
Monitor 5	.000	ppm	
Monitor 6	.000	ppm	
Monitor 7	.000	ppm	
Monitor 8	.003	ppm	
Monitor 9	.000	ppm	
Monitor 10	.000	ppm	
Monitor 11	.000	ppm	
Monitor 12	-0.025	ppm	
Monitor 13	.004	ppm	
Wind Speed	9.17	mph	
Wind Direction	242.95°		

Odour Log (Thames):

Tuesday 26 September 2023:

AM – Warm – Sunny w/Patchy Clouds.

All OMU's in use except OM 11.

Observations/Complaints: OM3 0.024ppm 05.37-05.52 & 0.022ppm 07.21-07.37

Operational Issues/Causes: OCU 11 poor performance.

Actions: No data.

PM – Cool- Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data

Actions: No data.

Wednesday 27 September 2023:

AM – Warm –Cloudy.

All OMU's in use except OM11.

Observations/Complaints: OM3 two spikes throughout shift peaking at 0.018ppm. Both less than 15 minute duration

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool- Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data

Actions: No data.

Thursday 28 September 2023:

AM – Warm –Cloudy w/Sunny Spells

All OMU's in use except OM 11.

Observations/Complaints: OM3 spiked at 06.05-06.22 max 0.025ppm

Operational Issues/Causes: OCU No 11 not performing.

Actions: No data.

PM – Cool –Patchy Rain.

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data

Actions: No data.

Friday 29 September 2023:

AM –Warm-Sunny

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: OM5 0.019ppm 23.50-00.05 & 0.017ppm
04.50-05.50

Operational Issues/Causes: No issues onsite

Actions: No data.

Saturday 30 September 2023:

AM – Warm- Sunny w/patchy clouds

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: OCU 11 poor performance

Operational Issues/Causes: No data.

Actions: No data.

Sunday 01 October 2023:

AM – Warm – Sunny w/Patchy Clouds.

All OMU's in use except OM 11.

Observations/Complaints: No odour issues found or reported

Operational Issues/Causes: No data

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: OM5 0.020ppm 19.05-19.19 & 0.021ppm
01.05-01.20

Operational Issues/Causes: No issues found onsite.

Actions: No data.

Monday 02 October 2023:

AM – Warm- Patchy Rain.

All OMU's in use except OM 11.

Observations/Complaints: OM3 spiked at 16.35-16.52 max
0.027ppm

Operational Issues/Causes: OCU 11 not performing

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use except OM 11.

Observations/Complaints: OM3 0.028ppm 17.51-18.08

Operational Issues/Causes: OCU11 poor performance

Actions: No data.

Tuesday 03 October 2023:

AM – Warm- Sunny w/Patchy Clouds.

All OMU's in use except OM 11.

Observations/Complaints: OM3 multiple spikes throughout day max 0.043ppm

Operational Issues/Causes: OCU not performing

Actions: No data.

PM – Cool – Overcast Night.

All OMU's in use except OM 11.

Observations/Complaints: OM5 0.018ppm 01.05-01.20, 0.022ppm 02.05-03.20 & 0.021ppm 03.35-03.50.

Operational Issues/Causes: Main drive man hole venting

Actions: No data.

<p><u>Digesters</u></p> <p>Digesters 1-4 – Out of use (permanent).</p> <p>Digester 5 – In use – seal level approx. 1.5ft below coping stones – Good Seal.</p> <p>Digester 6 - In use – seal level approx. 1ft below coping stones – Good Seal</p> <p>Digester 7 - In use – seal level approx. 2ft below coping stones - Seal Good- Bell height high requires draw down of Biogas and spillage over coping stone.</p> <p>Digester 8 - In use – seal level approx. 1.5ft below coping stones – Good Seal - Bell height high requires draw down of Biogas</p> <p>Digester 9 - In use – seal level approx. 1ft below coping stones – Good Seal.</p> <p>Digester 10 - In use – seal level approx. 2.5ft below coping stones - Seal weak– Bell high requiring draw down of Biogas.</p> <p>Digester 11 - In use – seal level approx. 1.0ft below coping stones – Seal weal and bubbling.</p>	<p>PCE will action as appropriate.</p>

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 – In use – seal level approx. 0.5ft below coping stones – Good Seal.

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. 2.5ft below coping stones - Seal weak and bubbling.

Digester 19 - In use – seal level approx. 1ft 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.

Imported Sludge

1165m³

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.

All doors have been closed, the management team continues to enforce this, where doors cannot be closed for works that are happening for instance East Side Raw Sludge screen house, where we have screen upgrades currently underway we have put a Odour Suppressant unit to resolve any issues.

Pasteurisation Plant

Streams 2, 7, 8, and 12 out of service.

Skips

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

Odour Control Unit (OCU) performance monitoring – 03/10/23

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.028 0.020 0.016	0.2	Yes
East OCU	0.025 0.026 0.026	0.05	Yes
West inlet OCU	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	No data		
Sludge reception outlet	No data	0.8	Unknown
Thickening plant inlet	No data		Unknown
Thickening plant outlet	0.126 0.037 0.037	0.6	Yes
Transfer PS inlet	1.715 1.452 1.486	Unknown	Unknown
Transfer PS outlet	0.003 0.00 0.00	0.6	Yes
New West inlet (OCU11)	0.219 0.250 0.280	0.5	Yes
Pasteurisation Plant (OCU12)	0.011 0.011 0.011	0.5	Yes
GBT Plant OCU Outlet	0.000 0.000 0.000	Unknown	Unknown