



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 31 October 2023	
<b>Attendees:</b> Kumail Haider (London Borough of Hounslow) and Chantelle Dixon (Thames Water)	
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b><u>Storm Water Storage Tanks (SWST)</u></b></p> <p><b>Tank 1A</b> - All Hoppers 80% full requires draining/over-pumping</p> <p><b>Tank 1B</b> - Tank 50% covered in grit requires draining/over-pumping</p> <p><b>Tank 2A</b> - Tank 10% covered in grit requires draining/over-pumping</p> <p><b>Tank 2B</b> - Tank requires flushing 40% covered in grit/sludge, all hoppers 70% full requires draining/over-pumping</p> <p><b>Tank 3A</b> - Tank 40% covered by grit and sludge requires draining/over-pumping</p> <p><b>Tank 3B</b> - Tank 50% covered by grit and sludge, all hoppers full - requires draining/over-pumping.</p>	<p>Hoppers are being drained this week.</p> <p>Maintenance programme ongoing – weather conditions have meant this has not been possible.</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 20% covered in grit/sludge requires flushing draining/over-pumping

**Tank 7A** – Tank full all amajets in use, returning to works.

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

**Tank 8A** - Tank 40% covered by effluent, grit and sludge – requires further flushing. All Hoppers full requires draining/over-pumping

**Tank 8B** - Tank 60% covered by effluent, grit and sludge – requires further flushing – All Hoppers 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	West PSTs	West PSTs	West Total	East PSTs	Grand Total
	1	2	3			
	All units in m <sup>3</sup>					
OMP	500					

<b>limit</b>						
26/10/23	79	2192	1012	3283	3883	7166
27/10/23	39	1297	679	2015	2376	4391
29/10/23	147	2130	661	2938	4387	7325

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

### Odour Monitors

The odour readouts (H<sub>2</sub>S) for all monitors which were providing data at time of inspection:

Monitor 1	.000	ppm	13.01
Monitor 2	.001	ppm	↑
Monitor 3	.000	ppm	
Monitor 4	.000	ppm	
Monitor 5	.000	ppm	
Monitor 6	.000	ppm	
Monitor 7	.000	ppm	
Monitor 8	.004	ppm	
Monitor 9	.003	ppm	
Monitor 10	.004	ppm	
Monitor 11	.000	ppm	
Monitor 12	.000	ppm	
Monitor 13	.000	ppm	
Wind Speed	0.44	mph	
Wind Direction	263.07°		↓

### Odour Log (Thames):

#### Wednesday 25 October 2023:

**AM** – Cool – Sunny w/Patchy Clouds.

All OMU's in use

**Observations/Complaints:** OM3 0.020ppm 14.24-14.40, 0.018ppm 15.24-15.39 & OM11 11.02-12.03

**Operational Issues/Causes:** OCU 11 tripped off.

**Actions:** No data.

**PM** – Cool- Patchy Rain.

All OMU's in use except OM 11.

**Observations/Complaints:** OM3 spiked at 19.24-20.10 max 0.021ppm & 21.24-21.40 max 0.027ppm

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

**Actions:** No data.

**Thursday 26 October 2023:**

**AM** – Cool –Cloudy w/Sunny Spells

All OMU's in use

**Observations/Complaints:** No odour issues found or reported

**Operational Issues/Causes:** No data.

**Actions:** No data.

**PM** – Cool- Patchy Rain

All OMU's in use

**Observations/Complaints:** OM5 spiked at 19.10-19.20 max 0.017ppm but <15 minutes duration

**Operational Issues/Causes:** Odour coming from manhole on main drive

**Actions:** No data.

**Friday 27 October 2023:**

**AM** – Warm –Cloudy w/Sunny Spells

All OMU's in use

**Observations/Complaints:** No odour issued found or reported

**Operational Issues/Causes:** No odour issues.

**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.

**Saturday 28 October 2023:**

**AM** –Cool- Patchy Rain

All OMU's in use

**Observations/Complaints:** No odour issues found or reported

**Operational Issues/Causes:** No data.

**Actions:** No data.

**PM** – Cool – Rain.

All OMU's in use

**Observations/Complaints:** OM3 0.030 21.09-21.40

**Operational Issues/Causes:** OCU 11 not performing

**Actions:** No data.

**Sunday 29 October 2023:**

**AM** – Cool- Rain w/Sunny Spells

All OMU's in use

**Observations/Complaints:** No odour issues found or reported

**Operational Issues/Causes:** No data.

**Actions:** No data.

**PM** – Cool – Rain.

All OMU's in use

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data.

**Actions:** No data.

**Monday 30 October 2023:**

**AM** – Cool – Patchy Rain.

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:** OM3 0.036 01.54-03.09

**Operational Issues/Causes:** OCU11 not performing.

**Actions:** No data.

**Tuesday 31 October 2023:**

**AM** – Cool- Patchy Rain.

All OMU's in use

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data

**Actions:** No data.

**PM** – Cool – Patchy Rain.

All OMU's in use

**Observations/Complaints:** No odour issues found or reported

**Operational Issues/Causes:** No data

**Actions:** No data.



<p><b><u>Digesters</u></b></p> <p><b>Digesters 1-4</b> – Out of use (permanent).</p> <p><b>Digester 5</b> – In use – seal level approx. 1.0ft below coping stones – Good Seal.</p> <p><b>Digester 6</b> - In use – seal level approx. 1.0ft below coping stones – Good Seal. Bell high requiring draw down of Biogas</p> <p><b>Digester 7</b> - In use – seal level approx. 1.0ft below coping stones - Seal Good. Bell height high requires draw down of Biogas and spillage over coping stone.</p> <p><b>Digester 8</b> - In use – seal level approx. 1.5ft below coping stones – Good Seal - Bell height high requires draw down of Biogas</p> <p><b>Digester 9</b> - In use – seal level approx. 1ft below coping stones – Good Seal.</p> <p><b>Digester 10</b> - In use – seal level approx. 1.5ft below coping stones - Seal weak– Bell high requiring draw down of Biogas.</p> <p><b>Digester 11</b> - In use – seal level approx. 2.0ft below coping stones – Seal weak and bubbling.</p> <p><b>Digester 12</b> - In use – seal level approx. 1.0ft below coping stones - Seal good.</p> <p><b>Digester 13</b> – Out of use</p> <p><b>Digester 14</b> – Out of use</p>	

**Digester 15** – In use – seal level approx. 1.5ft below coping stones – Good Seal. Bell high requiring draw down of Biogas

**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** – Out of use

**GENERAL**

**Sludge Screening House**

Small doors open at time of inspection.

**Imported Sludge**

2293m<sup>3</sup>

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, contractors working and additional odour controls deployed.

**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.

These have been closed and we will continue to closely monitor.

Doors are open due to ongoing screen replacement works, odour suppressant unit has been deployed when doors and shutters are open.

**Pasteurisation Plant**

Streams 2, 3, 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 – 31/10/23**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.110 0.110 0.110	0.2	Yes
East OCU	0.024 0.024 0.029	0.05	Yes
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 0 0	0.6	Yes
Transfer PS inlet	0.036 0.036 0.036	Unknown	Unknown
Transfer PS outlet	0 0 0	0.6	Yes
New West inlet (OCU11)	0.094 0.094 0.094	0.5	Yes
Pasteurisation Plant (OCU12)	0.230 0.230 0.236	0.5	Yes
GBT Plant OCU Outlet	0.298 0.298 0.298	Unknown	Unknown