



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 20 June 2023	
<b>Attendees:</b> Kumail Haider (London Borough of Hounslow) and Jack Telfer (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> – Tank empty and flushed clean – Hoppers 70% full require draining/over-pumping.</p> <p><b>Tank 1B</b> – Tank empty – Approx. 20% of tank covered by grit and sludge – requires further flushing</p> <p><b>Tank 2A</b> – Tank empty – Approx. 10% of tank covered by grit and sludge – requires further flushing – Hoppers. 70% full requires draining/over pumping</p> <p><b>Tank 2B</b> – Tank empty – Approx. 20% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 80% full - requires draining/over-pumping.</p> <p><b>Tank 3A</b> – Tank empty – 30% of tank covered by grit and sludge – requires further flushing</p>	

**Tank 3B** — Tank 40% covered by grit and sludge- Hoppers 40% 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. 80% full - requires draining/over-pumping.

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

**Tank 7A** – Tank empty – 60% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers approx. 80% full - requires draining/over-pumping.

**Tank 7B** – Tank empty – Approx. 50% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers empty - 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 60% full - requires draining/over-pumping.

**Feed Channel** - The level of effluent in both feed channels was approximately 20% capacity.

**Sludge Dip Records**

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
<b>All units in m<sup>3</sup></b>						
<b>OMP limit</b>	<b>500</b>					
16/06/23	0	1195	824	2019	2722	4741
19/06/23	0	1068	473	1541	2713	4254
21/06/23	20	1467	473	1960	3050	5010

### 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 **8** online complaints in the preceding week.

- 17/6/2023 @14.03 Heather Close TW7 7PR (OM 11-13 data reviewed no spikes identified for further investigation)
- 18/06/2023 @ 09.38 Heather Close TW7 7PR (OM 11-13 data reviewed no spikes identified for further investigation)
- 18/06/2023 @ 12.18 Sussex Avenue TW7 6LB (OM 1-2 data reviewed no spikes identified for further investigation)

- 18/06/2023 @ 15.58 Sussex Avenue TW7 6LB (OM1-2 data reviewed no spikes identified for further investigation)
- 18/06/2023 @ 18.15 Tolson Road TW7 7AE (OM1-2 data reviewed no spikes identified for further investigation)
- 19/06/2023 @ 18.46 Sussex Avenue TW7 6LB (OM1-2 data reviewed no spikes identified for further investigation)
- 19/06/2023 @ 22.53 Weavers Close TW7 6ET (OM1-2 data reviewed no spikes identified for further investigation)
- 20/06/2023 @ 00.03 Twickenham Road TW7 7DL (OM1-2 data reviewed no spikes identified for further investigation)

### **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	13.12
Monitor 2	.006	ppm	↑ ↓
Monitor 3	.000	ppm	
Monitor 4	.000	ppm	
Monitor 5	.000	ppm	
Monitor 6	.000	ppm	
Monitor 7	.000	ppm	
Monitor 8	.005	ppm	
Monitor 9	.000	ppm	
Monitor 10	.004	ppm	
Monitor 11	.000	ppm	
Monitor 12	.003	ppm	
Monitor 13	.000	ppm	
Wind Speed	5.57	mph	
Wind Direction	216.18°		

**Odour Log (Thames):**

**Tuesday 13 June 2023:**

**AM** – Hot – Sunny.

OMU 4 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 4 out of service - All other OMU's in use.

**Observations/Complaints:** No odour issues

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

**Actions:** No data.

**Wednesday 14 June 2023:**

**AM** – Hot – Sunny.

OMU 4 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** – Cool – Clear Night.

OMU 4 out of service - All other OMU's in use.

**Observations/Complaints:** OM10 0.016ppm 02.08-02.22 & OM5 0.023ppm 01.35-01.50

**Operational Issues/Causes:** Area checked no odour issues on site.

**Actions:** No data.

**Thursday 15 June 2023:**

**AM** – Hot –Sunny.

OMU 4 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 4 out of service - All other OMU's in use.

**Observations/Complaints:** OM3 0.023 02.18 – 02.34 , 0.023ppm 03.33-03.48

**Operational Issues/Causes:** area checked OCU 11 discharging high odour from stack.

**Actions:** No data.

**Friday 16 June 2023:**

**AM** – Hot –Sunny.

OMU 4 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 4 out of service - All other OMU's in use.

**Observations/Complaints:** OM3 0.038 ppm max, showing odours all shift.

**Operational Issues/Causes:** area checked OCU 11 discharging high odour from stack.

**Actions:** No data.

**Saturday 17 June 2023:**

**AM** – Hot –Sunny.

OMU 4 out of service - All other OMU's in use.

**Observations/Complaints:** No odour issues

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

**Actions:** No data.

**PM** – Warm – Overcast Night.

OMU 4 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 18 June 2023:**

**AM** – Hot – Sunny.

OMU 4 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 4 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.

**Monday 19 June 2023:**

**AM** – Hot – Sunny.



OMU 4 out of service - All other OMU's in use.

**Observations/Complaints:** "No odour issues."

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

**Actions:** No data.

**PM** – Warm – Clear Night.

OMU 4 out of service - All other OMU's in use.

**Observations/Complaints:** OM3 0.027max @ 01.50-02.18

**Operational Issues/Causes:** OCU11 discharging high odours from stack.

**Actions:** Area checked and no odours found.

**Tuesday 20 June 2023:**

**AM** – Hot – Rain w/Sunny Spells.

OMU 4 out of service - All other OMU's in use.

**Observations/Complaints:** "No odour issues."

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

**Actions:** No data.

**PM** – Warm – Clear Night.

OMU 4 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

**Digesters**

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

**Digester 5** – In use – seal level approx. 3ft below coping stones – Good Seal.

**Digester 6** - In use – seal level approx. 3ft below coping stones – Good Seal –

**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.

**Digester 8** - In use – seal level approx. 3ft 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. 3ft below coping stones - Seal weak– Bell high requiring draw down of Biogas.

**Digester 11** - In use – seal level approx. 3ft below coping stones – Seal weal and bubbling.

**Digester 12** - In use – seal level approx. 1ft below coping stones - Seal good.

**Digester 13** - In use – seal level approx. 2ft below coping stones – Good Seal

**Digester 14** – Out of use.

**Digester 15** – Out of use.

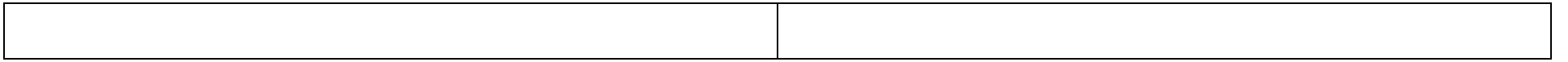
**Digester 16** – Out of use.

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

**Digester 18**- In use – seal level approx. 4ft 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. 2ft 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**

No issues.

**Pasteurisation Plant**

Streams 7, 8,10 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.

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

**Odour Control Unit (OCU) performance monitoring – 20/06/23**

<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	0.006 0.006 0.005	0.2	Yes
East OCU	0.007 0.006 0.006	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	0.023 0.023 0.023	0.6	Yes
Transfer PS inlet	0.313 0.386 0.332	Unknown	Unknown
Transfer PS outlet	0.003 0.004 0.004	0.5	Yes
New West inlet (OCU11)	0.016 0.022 0.023	0.5	Yes
Pasteurisation Plant (OCU12)	0.004 0.004 0.004	0.5	Yes
GBT Plant OCU Outlet	0.000 0.000 0.000	Unknown	Unknown