



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 08 August 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– 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, Hopper 1&amp;3 70% requires draining/over-pumping</p> <p><b>Tank 2A</b> – Tank empty – Approx. 20% of tank covered by grit and sludge – requires further flushing requires draining/over pumping</p> <p><b>Tank 2B</b> – Tank empty – Approx. 40% of tank covered by grit and sludge – requires further flushing – All Hoppers full - requires draining/over-pumping.</p> <p><b>Tank 3A</b> – Tank empty – 40% of tank covered by grit and sludge – requires further flushing, all hoppers 50% full requires draining/over pumping (tank being cleaned at the time of inspection)</p>	

**Tank 3B** — Tank 60% 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. 20% 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 40% – returning to works

**Tank 7B** – Tank empty – Approx. 60% 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. 70% 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 15% capacity.

**Sludge Dip Records**

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
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	All units in m <sup>3</sup>					
OMP limit	500					
No data (TW unable to complete due to resources issue)						
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 **1** calls to the out of hours service.

The Council received **1** online complaints in the preceding week.

- 04/08/2023 @ 15.47 Mogden Lane TW7 7LH (OM9- 0.000, OM10 0.004 & OM11- 0.000, data reviewed no spikes identified for further investigation)
- 04/08/2023 @ 23.13 Summerwood Road TW7 7QF (OM9- 0.000, OM10 0.001 & OM11- 0.000, 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	13.15
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	.000	ppm	
Monitor 9	.000	ppm	
Monitor 10	.000	ppm	
Monitor 11	.000	ppm	
Monitor 12	.000	ppm	
Monitor 13	.000	ppm	
Wind Speed	1	mph	
Wind Direction	236°		

### Odour Log (Thames):

#### Tuesday 01 August 2023:

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

All OMU's in use except OM 2.

**Observations/Complaints:** No odour issues

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

**Actions:** No data.

**PM** – Warm- Patchy Rain.

All OMU's in use except OM 2.

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

**Operational Issues/Causes:** No data

**Actions:** No data.

**Wednesday 02 August 2023:**

**AM** – Cool – Rain.

All OMU's in use except OM 2.

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

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

**Actions:** No data.

**PM** – Cool-Rain.

All OMU's in use except OM 2.

**Observations/Complaints:** OM 7 spiked at 18.30-18.50 max 0.053ppm

**Operational Issues/Causes:** Filling storm tanks

**Actions:** No data.

**Thursday 03 August 2023:**

**AM** – Warm –Cloudy w/Sunny Spells

All OMU's in use except OM 2.

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

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

**Actions:** No data.

**PM** – Warm – Overcast Night

All OMU's in use except OM 2.

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

**Operational Issues/Causes:** No data

**Actions:** No data.

**Friday 04 August 2023:**

**AM** –Warm- Cloudy w/Sunny Spells

All OMU's in use except OM 2.

**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 2.

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data

**Actions:** No data.

**Saturday 05 August 2023:**

**AM** – Warm-Rain.

All OMU's in use except OM 2.

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

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

**Actions:** No data.

**PM** – Cool – Rain

All OMU's in use except OM 2.

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data

**Actions:** No data.

**Sunday 06 August 2023:**

**AM** – Warm – Cloudy w/Sunny Spells.

All OMU's in use except OM 2.

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

**Operational Issues/Causes:** No data

**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.

**Monday 07 August 2023:**

**AM** – Warm- Sunny w/Patchy Clouds.

All OMU's in use except OM 2.

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data

**Actions:** No data.

**PM** – Cool – Clear Night.

All OMU's in use except OM 2.

**Observations/Complaints:** OM 3 0.031 18.06-18.21

**Operational Issues/Causes:** No data

**Actions:** No data.

**Tuesday 08 August 2023:**



**AM** – Warm- Patchy Rain.

All OMU's in use except OM 2.

**Observations/Complaints:** No odour issues

**Operational Issues/Causes:** No data

**Actions:** No data.

**PM** – Cool – Clear Night.

All OMU's in use except OM 2.

**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. 1ft below coping stones – weak seal, widespread spillage/odorous (maintenance team on site clearing the spillage)

**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. 1.5ft 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. 3ft below coping stones – Good Seal - Bell height high requires draw down of Biogas

**Digester 9** - In use – seal level approx. 1ft below coping stones – Good Seal.

**Digester 10** - In use – seal level approx. 2ft below coping stones - Seal weak– Bell high requiring draw down of Biogas.

**Digester 11** - In use – seal level approx. 1.5ft below coping stones – Seal weak and bubbling.

**Digester 12** - In use – seal level approx. 1ft 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. 2ft below coping stones –

Good Seal.

**Digester 18**- In use – seal level approx. 1.5ft below coping stones -  
Seal weak and bubbling.

**Digester 19** - In use – seal level approx. 0.5ft below coping stones –  
Good Seal.

**Digester 20** - In use – seal level approx. 1ft 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 due to resource issues

### **Final Settlement Tanks East Side of Works**

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) , The hoses on the arms were all rotating and clearing off any remaining deposits. No odours or offensive odours witnessed.

### **East Side Raw Sludge Screen House**

Doors open at time of inspection however not currently in use

### **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**

#### **Skips on the East side:**

There was 1x 20yds open bulk carrier (covered) that was designated for grit – The carrier contained minimal amount of grit. There was a sign stating the skip was designated for “Grit Only”.

There was 1x 14yds skip designated for rag only. The skip had a sign reading “Rag Only” and contained minimal amount of rag at time of inspection. There was a cover (lid) which was covering the skip.

No other skips were present on the East side.

#### **Skips on the West Side:**

There was 1x 14yds skip adjacent to the raw sludge screening building (West of the works) that was designated for general waste only- At time of inspection the skip was full and covered.

There was 2x 20yds open bulk carrier (uncovered) that was full of bulky inert material

There were no other skips observed in the West Side of the works.

**Odour Control Unit (OCU) performance monitoring – 08/08/23**

<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	0.0023 0.0024 0.0023	0.2	Yes
East OCU	0.0018 0.0018 0.0018	0.05	Yes
West inlet OCU	0.0020 0.0021 0.0021	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	0.0034 0.0034 0.0030	0.6	Yes
Transfer PS inlet	0.0026 0.0026 0.0026	Unknown	Unknown
Transfer PS outlet	0.000 0.000 0.000	0.6	Yes
New West inlet (OCU11)	0.0041 0.0047 0.0047	0.5	Yes
Pasteurisation Plant (OCU12)	0.0027 0.0027 0.0027	0.5	Yes
GBT Plant OCU Outlet	0.0014 0.0014 0.0014	Unknown	Unknown