



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 14 <sup>th</sup> June 2023	
<b>Attendees:</b> Mr Steven Maunders (London Borough of Hounslow) and Miss Emma McDonald, Mr David Chowings, Ms Lena Wallin, Mr Joshua Callaway (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 – All Hoppers approx. 80% full - requires draining/over-pumping.</p> <p><b>Tank 1B</b> – Tank empty – Approx. 25% of tank covered by grit and sludge – requires further flushing – All Hoppers drained down completely.</p> <p><b>Tank 2A</b> – Tank empty – Approx. 30% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 80% full.</p> <p><b>Tank 2B</b> – Tank empty – Approx. 70% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 95% full - requires draining/over-pumping.</p> <p><b>Tank 3A</b> – Tank empty – 80% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 30% full - requires draining/over-pumping.</p>	

**Tank 3B** — Tank recently returned – 75% of tank covered by grit and sludge – requires further flushing – All Hoppers 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 and flushed clean. All Hoppers approx. 50% full - requires draining/over-pumping.

**Tank 6B** – Tank empty – Approx. 25% of tank covered by grit and sludge – requires further flushing – All Hoppers 25% full - requires draining/over-pumping.

**Tank 7A** – Tank Full – All Amajets operating.

**Tank 7B** – Tank empty – Approx. 60% of tank covered with thick layer of grit and sludge – requires further flushing – All Hoppers empty.

**Tank 8A** – Tank empty - Approx. 75% of tank covered by grit and sludge – requires further flushing – All Hoppers full - requires draining/over-pumping.

**Tank 8B** – Tank empty – Approx. 75% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 90% 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 <sup>3</sup>						
OMP limit	500					
09/06/23	0	1195 (TW figure 1213)	679	1874	1568	3442 (TW figure 3460)
12/06/23	0	1073	328	1401	2561	3962
14/06/23	0	1485	824	2309	3059	5368

### 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	11:10
Monitor 2	.006	ppm	11:10
Monitor 3	.006	ppm	11:10
Monitor 4	.006	ppm	11:10
Monitor 5	.005	ppm	11:10
Monitor 6	.004	ppm	11:10
Monitor 7	.000	ppm	11:10
Monitor 8	.006	ppm	11:10
Monitor 9	.004	ppm	11:10
Monitor 10	.006	ppm	11:10
Monitor 11	.004	ppm	11:10
Monitor 12	.006	ppm	11:10
Monitor 13	.004	ppm	11:10
Wind Speed	0.5	mph	11:10
Wind Direction	35.7°		11:10

## 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 received no calls to the out of hours service.

The Council directly received one complaint by email in the preceding week.

08/06/23 17:47 from Whitton Dene – corresponding OMU data below:

Monitor 1	.000	ppm	17:47
Monitor 2	.001	ppm	17:47
Monitor 3	.003	ppm	17:47
Monitor 4	.004	ppm	17:47
Monitor 5	.003	ppm	17:47
Monitor 6	.005	ppm	17:47
Monitor 7	.000	ppm	17:47
Monitor 8	.006	ppm	17:47
Monitor 9	.003	ppm	17:47
Monitor 10	.007	ppm	17:47
Monitor 11	.005	ppm	17:47
Monitor 12	.006	ppm	17:47
Monitor 13	.004	ppm	17:47
Wind Speed	8.2	mph	17:47
Wind Direction	67.3°		17:47

**Odour Log (Thames):**

**Wednesday 7<sup>th</sup> June 2023:**

**AM** – Warm – Sunny.

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

**Observations/Complaints:** No data.

**Operational Issues/Causes:** “No. 6 OM being worked on by Pollution Monitors”.

**Actions:** No data.

**PM** – Cool – Clear Night.

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

**Observations/Complaints:** “OW3 0.023 max 21:18-21:34.”

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

**Actions:** No data.

**Thursday 8<sup>th</sup> June 2023:**

**AM** – Warm – 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** – Cool – Clear Night.

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

**Observations/Complaints:** "OM3 0.018 20:34-20:49."

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

**Actions:** No data.

**Friday 9<sup>th</sup> June 2023:**

**AM** – Hot – Sunny.

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

**Observations/Complaints:** "OM3 0.017ppm 06:04-06:18."

**Operational Issues/Causes:** "No odour issues on site".

**Actions:** No data.

**PM** – Cool – 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.

**Saturday 10<sup>th</sup> 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:** "OM4 spiked max 0.02ppm 04:04-04:59, OM10 spiked max 0.032ppm 04:37-05:30."

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

**Actions:** No data.

**Sunday 11<sup>th</sup> June 2023:**

**AM** – Hot – Storms.

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.

**Monday 12<sup>th</sup> June 2023:**

**AM** – Hot – Storms.

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 – Overcast Night.

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

**Observations/Complaints:** "OM10 spiked max 0.02ppm 01:51-02:23."

**Operational Issues/Causes:** "Nothing of note found in area."

**Actions:** No data.

**Tuesday 13<sup>th</sup> 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<sup>th</sup> 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 – n codour issues on site.”

**Actions:** No data.

## **Digesters**

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

**Digester 5** – In use – seal level approx. 4ft below coping stones – Good Seal.

**Digester 6** - In use – seal level approx. 4ft below coping stones – Good Seal – although visible quantity of litter and detritus contained within seal.

**Digester 7** - In use – seal level approx. 5ft below coping stones – Good Seal - Bell height high requiring draw down of Biogas.

**Digester 8** - In use – seal level approx. 18” below coping stones – Good Seal – Bell height high requiring draw down of Biogas.

**Digester 9** - In use – seal level approx. 6” below coping stones – Good Seal.

**Digester 10** - In use – seal level approx. 1ft below coping stones – Good Seal.

**Digester 11** - In use – seal level approx. 18” below coping stones – Good Seal.

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

**Digester 13** - In use – seal level approx. 1ft 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. 18” below coping stones –  
Good Seal.

**Digester 18-** In use – seal level approx. 6” below coping stones –  
Good Seal.

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

**Digester 20** - In use – seal level approx. 1ft below coping stones –  
Good Seal.

## **GENERAL**

### **Sludge Screening House**

Both small closed at time of inspection. Roller shutter recently replaced – small gap at top – flagged for further works.

### **Imported Sludge**

There were 107m<sup>3</sup> imports in preceding seven days.

### **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 – all have large fat deposits on surface – requires hoses to break-up. 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**

2x small (blue) skips – rear of sludge screen house both empty – quantity of rag on ground in surrounding area that requires clean-up.

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 – No Data**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	No data	No data	Unknown
Main pumping station outlet	No data	No data	Unknown
East OCU	No data	No data	Unknown
West inlet OCU	No data	No data	Unknown
Sludge reception inlet	No data	No data	Unknown
Sludge reception outlet	No data	No data	Unknown
Thickening plant inlet	No data	No data	Unknown
Thickening plant outlet	No data	No data	Unknown
Transfer PS inlet	No data	No data	Unknown
Transfer PS outlet	No data	No data	Unknown
New West inlet (OCU11)	No data	No data	Unknown
Pasteurisation Plant (OCU12)	No data	No data	Unknown
GBT Plant OCU Outlet	No data	No data	Unknown