



**Mogden Sewage Treatment Works**

**TW Site Inspection**

<b>Date of inspection:</b> 18 <sup>th</sup> August 2021	
<b>Attendees:</b> Mr Steven Maunders and Mr Dan Grady (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 – Hopper 1 approx. 25% full, Hoppers 2 &amp; 3 empty – requires draining/over-pumping.</p> <p><b>Tank 1B</b> – Tank empty – approximately 40% of tank covered by grit and sludge – requires further flushing – Hopper 1 approx. 40% full, Hoppers 2 &amp; 3 approx. 10% full – requires draining/over-pumping.</p> <p><b>Tank 2A</b> – Tank in use – 1x Amajet working - requires draining/over-pumping.</p> <p><b>Tank 2B</b> – Tank in use – 1x Amajet working - requires draining/over-pumping.</p> <p><b>Tank 3A</b> – Tank empty – 100% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 50% full – requires draining/over-pumping.</p> <p><b>Tank 3B</b> – Tank empty – approximately 60% of tank covered by grit and sludge – requires further flushing – All Hoppers full – requires draining/over-pumping.</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 empty – approximately 25% of tank covered by grit and sludge – requires further flushing – Hoppers 1, 2 & 3 approx. 75% full.

**Tank 6B** – Tank empty – approximately 20% of tank covered by grit and sludge – requires further flushing – Hopper 1 full, Hoppers 2 & 3 approx. 20% full.

**Tank 7A** – Tank backfilling due to faulty return valve – approx. 70% of surface covered in effluent.

**Tank 7B** – Tank empty – 100% of tank covered by grit and sludge – requires further flushing – All Hoppers full.

**Tank 8A** – Tank empty – backfilling due to faulty return valve – approx. 15% of surface covered in effluent.

**Tank 8B** – Tank empty – approximately 75% of tank covered by grit and sludge – requires further flushing – All Hoppers full.

**Feed Channel** - The level of effluent in both feed channels was approximately 20% capacity - no local odours.

### Complaints

The Council directly received no complaints by telephone in the preceding week.

The Council directly received one complaint by email in the preceding week – 14/08/21 (13:19) from area of Weavers Close – historic trace data checked for OMU's in vicinity of Weavers Close: OMU 1/3/4/5 = .000 and OMU 2 = .001 ppm. TW Odour Log

**details complaint received 17:30 “Checked around site and Trends – no spikes or abnormal sources of odour found.”**

**The Council received no complaints by email from MRAG.**

***Thames Water controller advised that they had received no direct 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	13:36
Monitor 2	001	ppm	13:36
Monitor 3	000	ppm	13:36
Monitor 4	000	ppm	13:36
Monitor 5	000	ppm	13:36
Monitor 6	000	ppm	13:36
Monitor 7	000	ppm	13:36
Monitor 8	000	ppm	13:36
Monitor 9	000	ppm	13:36
Monitor 10	000	ppm	13:36
Monitor 11	000	ppm	13:36
Monitor 12	000	ppm	13:36
Monitor 13	000	ppm	13:36
Wind Speed	10.9	mph	13:36
Wind Direction	254°		13:36

**Odour Log (Thames):**

**Wednesday 11<sup>th</sup> August 2021:**

**AM** – Warm – Cloudy with Sunny Spells.

All OMU's in use.

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

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

**Actions:** No data.

**PM** – Cool – Clear Night.

All OMU's in use.

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

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

**Actions:** No data.

**Thursday 12<sup>th</sup> August 2021:**

**AM** – Cool – Cloudy.

All OMU's in use.

**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.

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

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

**Actions:** No data.

**Friday 13<sup>th</sup> August 2021:**

**AM** – Cool – Cloudy with 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 – Overcast Night.

All OMU's in use.

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

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

**Actions:** No data.

**Saturday 14<sup>th</sup> August 2021:**

**AM** – Warm – Sunny with Patchy Clouds.

All OMU's in use.

**Observations/Complaints:** "Customer complaint received via WOCC from Mr Taylor."

**Operational Issues/Causes:** No data.  
**Actions:** “Checked around site and Trends – No spikes or abnormal sources of odour found.”  
**PM** – Warm – Clear Night.  
All OMU’s in use.  
**Observations/Complaints:** “No odour issues.”  
**Operational Issues/Causes:** No data.  
**Actions:** No data.

**Sunday 15<sup>th</sup> August 2021:**

**AM** – Cloudy with Sunny Spells.  
All OMU’s in use.  
**Observations/Complaints:** “No odour issues.”  
**Operational Issues/Causes:** No data.  
**Actions:** No data.  
**PM** – Warm – Clear Night.  
All OMU’s in use.  
**Observations/Complaints:** “No odour issues.”  
**Operational Issues/Causes:** No data.  
**Actions:** No data.

**Monday 16<sup>th</sup> August 2021:**

**AM** – Warm – Cloudy with Sunny Spells.  
All OMU’s in use.  
**Observations/Complaints:** “No odour issues.”  
**Operational Issues/Causes:** No data.  
**Actions:** No data.  
**PM** – Warm – Clear Night.  
All OMU’s in use.  
**Observations/Complaints:** “Storm Tanks have several Amajets faulty.”  
**Operational Issues/Causes:** No data.  
**Actions:** No data.

**Tuesday 17<sup>th</sup> August 2021:**

**AM** – Warm – Sunny with Patchy Clouds.  
All OMU’s in use.

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

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

**Actions:** No data.

**PM** – Warm – Patchy Rain.

All OMU's in use.

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

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

**Actions:** No data.

### 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>						
<b>OMP limit</b>	<b>500</b>					
11/08/21	0	1279	1030 (Data missing from copy supplied).	2309	1240	3549
13/08/21	0	1424	885 (Data missing from copy supplied).	2309	912	3221
16/08/21	0	1279	1030	2309	1088	3397

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m<sup>3</sup>) for all of the dates for which data has been provided.

There are no limits for the East side primary settlement tanks as these are covered and odour controlled. Thames is required by the terms of the abatement notice agreed in 2005 to notify LBH on the next working day of any such exceedance and notify LBH within three working days of any appropriate remedial measure taken.

### Digesters

**Digesters 1-4** – Out of use (permanent) – noticeable quantity of water accumulated to the brim of these tanks which is thick with algae –

requires draining. Long term project currently initiated to bring these units back into service – will require significant investment.

**Digester 5** – Out of use.

**Digester 6** - In use – seal level approx. 3ft below coping stones – seal weak and bubbling.

**Digester 7** - In use – seal level approx. 4ft below coping stones - seal weak and bubbling vigorously – ongoing spill requiring anti-foam and clean-up – Bell height high requiring draw down of Biogas.

**Digester 8** - In use – seal level approx. 4ft below coping stones - seal weak and bubbling vigorously – Bell height high requiring draw down of Biogas.

**Digester 9** - In use – seal level approx. 3ft below coping stones – good seal.

**Digester 10** - In use – seal level approx. 4ft below coping stones - seal weak and bubbling.

**Digester 11** - In use – seal level approx. 3ft below coping stones – good seal.

**Digester 12** - In use – seal level approx. 4ft below coping stones - seal weak and bubbling.

**Digester 13** - In use – seal level approx. 18” below coping stones - seal weak and bubbling.

**Digester 14** - In use – seal level approx. 3ft below coping stones - seal weak and bubbling vigorously.

**Digester 15** – Out of use.

**Digester 16** - In use – seal level at level of coping stones – seal weak and bubbling – ongoing spill requiring anti-foam and clean-up – Bell height high requiring draw down of Biogas.



**Digester 17** - In use – seal level approx. 4ft below coping stones – good seal.

**Digester 18** – Out of use.

**Digester 19** – Out of use.

**Digester 20** - In use – seal level approx. 3ft below coping stones – seal weak and bubbling.

## **GENERAL**

### **Sludge Screening House**

All doors closed at the time of inspection.

### **Imported Sludge**

Average of fifteen imports daily for 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) – Tank 75 = 75% of surface covered in “duck weed”.

### **Skips**

1x open container grit skip (50 % full) uncovered, 1x 8 yard general waste skip (partially covered), 1x 8 yard General Waste skip (uncovered), 2x 6 yard covered rag skips at rear of Pasteurisation Plant (covered), 1x enclosed container skip (empty) in Service Road at rear of Sludge Screen House. 1x enclosed container skip (empty) & 1x open container skip in Service Road alongside PST's 9-12.

**East Side Raw Sludge Screen House**

Doors closed at time of inspection – facility currently out of service – contractors on site undertaking maintenance.

**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).

**Pasteurisation Plant**

Ten streams running.

**West side primary settlement tanks (PST)**

Rectangular PSTs – no issues.

Circular PST's 9, 10 & 11 in use, Number 12 drained down.

**New Works (West Side) Battery E**

Feed Channel for Aeration Lanes – contractor on site jetting lanes at time of inspection. Tank performance progressively improving.

**Odour Control Unit (OCU) performance monitoring – 11/08/21**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	0.14 0.14 0.14	Unknown	Unknown

Main pumping station outlet	0.02 0.02 0.02	0.2	Yes
East OCU	0.04 0.04 0.04	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	0.01 0.01 0.01	0.6	Yes
Transfer PS inlet	No data	Unknown	Unknown
Transfer PS outlet	0.04 0.04 0.04	0.5	Yes
New West inlet (OCU11)	0.05 0.04 0.05	0.5	Yes
Pasteurisation Plant (OCU12)	0.05 0.05 0.05	0.5	Yes
GBT Plant OCU Outlet	No data	Unknown	Unknown