



**Mogden Sewage Treatment Works**

**TW Site Inspection**

**Date of inspection:** 10<sup>h</sup> August 2017

**Attendees:** Mr Steven Maunders (London Borough of Hounslow) and Mr Manzoor Hussain (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 full.</p> <p><b>Tank 1B</b> – Tank full.</p> <p><b>Tank 2A</b> – Tank full.</p> <p><b>Tank 2B</b> – Tank full.</p> <p><b>Tank 3A</b> – Tank full.</p> <p><b>Tank 3B</b> – Tank full.</p> <p><b>Tanks 4A, 4B, 5A &amp; 5B</b> which are covered and odour controlled were all full.</p> <p><b>Tank 6A</b> – Tank full.</p> <p><b>Tank 6B</b> – Tank full.</p> <p><b>Tank 7A</b> – Tank full.</p>	

**Tank 7B** – Tank full.

**Tank 8A** – Tank full.

**Tank 8B** – Tank full.

**Feed Channel** - The level of effluent in both feed channels was high - no local odour.

Currently storming to River.

**Odour Monitors**

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

Monitor 1	0.003	ppm	13:18
Monitor 2	0.005	ppm	11:20
Monitor 3	0.000	ppm	13:34
Monitor 4	0.000	ppm	13:35
Monitor 5	0.000	ppm	13:35
Monitor 6	0.003	ppm	13:35
Monitor 7	0.004	ppm	13:35
Monitor 8	0.004	ppm	13:35
Monitor 9	0.000	ppm	13:16
Monitor 10	0.005	ppm	13:19
Monitor 11	0.000	ppm	13:34
Monitor 12	-0.000	ppm	13:34
Monitor 13	-0.024	ppm	13:34
Wind Speed	7	mph	
Wind Direction	46°		

**Complaints**

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

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

**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 Log (Thames) - Photocopies of log entries taken**

**Thursday 3<sup>rd</sup> August 2017**

**AM** – Warm with Sun and heavy cloud.

All OMU's in use.

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

**Actions:** None noted.

**PM** – Cool with Sun and partial cloud.

All OMU's in use.

**Observations:** "No odour issue. Nothing to report on Trends"

**Actions:** None noted.

**Friday 4<sup>th</sup> August 2017**

**AM** – Warm with Sun and light cloud.

All OMU's in use.

**Observations:** "No odour issues & No spikes on Trends."

**Actions:** None noted.

**PM** – None noted.

All OMU's in use.

**Observations:** "Odour monitor No.4 spiked 02:40-02:53. No other odour spikes. Silicone filter regenerating?"

**Actions:** None noted

**Saturday 5<sup>th</sup> August 2017**

**AM** – Warm with Sun, heavy cloud and rain.

All OMU's in use.

**Observations:** "No odour issues found or reported. No spikes on Trends."

**Actions:** None noted.

**PM** – None noted.

All OMU's in use.

**Observations:** "No odour spikes. No odour problems."

**Actions:** None noted.

### **Sunday 6<sup>th</sup> August 2017**

**AM** – Warm with Sun and heavy cloud.

All OMU's in use.

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

**Actions:** None noted.

**PM** – None noted.

All OMU's in use.

**Observations:** "No odour spikes. No odour problems."

**Actions:** None noted.

### **Monday 7<sup>th</sup> August 2017**

**AM** – Cool/Warm with Sun, heavy cloud and rain.

OMU - All OMU's in use.

**Observations:** "OM 1-5 No spikes. OM 6-13 No spikes."

**Actions:** None noted.

**PM** – None noted.

All OMU's in use.

**Observations:** "No odour spikes. No odour problems."

**Actions:** None noted.

### **Tuesday 8<sup>th</sup> August 2017**

**AM** – Cool with Sun and heavy cloud.

All OMU's in use.

**Observations:** "1-5 No spikes. 6-13 No spikes."

**Actions:** None noted.

**PM** – Cool with Sun and heavy cloud.

All OMU's in use.

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

**Actions:** None noted.

**Wednesday 9<sup>th</sup> August 2017**

**AM** – Cool with Sun and heavy cloud.

All OMU's in use.

**Observations:** "No odour spikes."

**Actions:** None noted.

**PM** – Cool with heavy cloud and rain.

All OMU's in use.

**Observations:** "No odour issues. Storm Tanks full. Storming to River all shift."

**Actions:** None noted.

### 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					
03/08/17	0	1054	0	1054	3131	4185
07/08/17	205	1509	737	2451	3915	6366
09/08/17	435	1286	122	1843	4764	6607

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 dates on 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 within three days.

### Sludge Screening House

Shutter doors closed at time of inspection – no local odours.

### Imported Sludge

Approximately six imports of 35m<sup>3</sup> daily for preceding seven days.

### 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.

**Digester 5** - in use – seal level approx. 1ft below coping stones – seal weak and bubbling.

**Digester 6** - in use – seal level approx. 1ft below coping stones – seal weak and bubbling vigorously.

**Digester 7** - in use – seal level approx. 1ft below coping stones – seal weak and bubbling vigorously – ongoing spill being hosed at time of inspection.

**Digester 8** - in use – seal level approx. 2ft below coping stones – seal weak and bubbling – evidence of dry spill requiring clean-up.

**Digester 9** - in use – seal level approx. 2ft below coping stones – seal weak and bubbling vigorously – ongoing spill being hosed at time of inspection.

**Digester 10** - in use – seal level approx. 2ft below coping stones – seal weak and bubbling vigorously – ongoing spill being hosed at time of inspection.

**Digester 11** - in use – seal level approx. 3ft below coping stones – seal weak and bubbling.

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

**Digester 13** - out of use – empty and clean – contractor on site undertaking maintenance.

**Digester 14** - in use – seal level approx. 3ft below coping stones – good seal.

**Digester 15** - in use – seal level approx. 3ft below coping stones – seal weak and bubbling – evidence of dry spill requiring clean-up.

**Digester 16** - out of use – empty and clean – contractor on site undertaking maintenance.

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

weak and bubbling.

**Digester 18** - in use – seal level approx. 3ft below coping stones – seal weak and bubbling.

**Digester 19** - out of use – empty and clean – contractor on site undertaking maintenance.

**Digester 20** - in use – seal level approx. 4ft below coping stones – good seal.

There was evidence of anti-foaming agent in use and TW advised that this is applied daily to all of the digesters that are operational.

2x full, 5x partially filled & 2 empty tanks of anti-foaming agent seen positioned throughout area.

Installation of “auto-dosing” for anti-foam agent to all digesters currently not operational – issue with this process currently that is being investigated.

## **GENERAL**

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

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) all are back in service following maintenance works to scrapers. Tank 77 currently out of service and drained down. Tank 71 surface completely covered in algae. Tank 73 completely blocked with sludge (no local odour)

### **East Side Screen House**

All doors closed.

### **Other Skips**



2x full small grit skip on North/East of site by grit house – covered with “heavy duty” yellow tarpaulin.  
1x large open general waste skip at rear of screen house.  
On the West side there were no skips.

### **Pasteurisation Plant**

The pasteurisation plant is in service and fully operational.

### **Section 106 agreement**

There have been no breaches of the s106 agreement in the last week.

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

Rectangular PSTs – no issues

Circular PST 9 out of use and undergoing maintenance. Circular PST's 10, 11 & 12 all in use.

### **West Side Aeration Lanes (Old)**

Battery C aeration feed channel approximately 60% obstructed – requires jetting.

### **New Works (West Side)**

Feed Channel for Aeration Lanes 20 - 25 approximately 50% obstructed – requires jetting.

Whole of tanks have almost completely removed “fluffy” surface coverage previously observed – still dried crust on caps of all retaining walls – Sprinklers in use. Small quantity of physical detritus in tank still bypassing screener.

**Odour Control Unit (OCU) performance monitoring – (07/08/17)**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	0.01 0.01 0.00	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
East OCU	0.00 0.00 0.00	0.05	Yes
West inlet OCU	0.01 0.02 0.01	0.05	Yes
Sludge reception inlet	No data	Unknown	Unknown
Sludge reception outlet	0.00 0.01 0.00	0.8	Yes
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	0.10 0.00 0.00	0.6	Yes
Transfer PS inlet	0.00 0.00 0.00	Unknown	Unknown
Transfer PS outlet	0.01 0.00 0.01	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.01	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00	0.5	Yes

