



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 27 <sup>th</sup> July 2017	
<b>Attendees:</b> Mr Anthony Robinson (London Borough of Hounslow) and Mr Dimitrios Kalmantis (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 – 3A</b> were empty and clean. All hoppers were low. Hopper 1 in tank 1A needed draining.</p> <p><b>Tank 3B</b> was empty and clean, all hoppers were full of water and needed draining.</p> <p><b>Tanks 4A, 4B, 5A &amp; 5B</b> are all covered and odour controlled.</p> <p><b>Tank 6A – 8A</b> - Empty and clean. All hoppers were full with water, this had turned green.</p> <p><b>Tank 8B</b> was empty, hopper 1 needed draining.</p> <p><b>Feed Channel</b> – The feed channel level was very low. The base of the channel feeding tanks 5-8 contained some sludge.</p>	

### **Odour Monitors**

The odour readouts (H<sub>2</sub>S) for all of the monitors, which were providing data at time of inspection (1:21pm) are as follows:

Monitor 1	0.003	ppm
Monitor 2	0.000	ppm
Monitor 3	0.000	ppm
Monitor 4	0.004	ppm
Monitor 5	0.000	ppm
Monitor 6	0.000	ppm
Monitor 7	0.004	ppm
Monitor 8	0.004	ppm
Monitor 9	0.000	ppm
Monitor 10	0.003	ppm
Monitor 11	0.000	ppm
Monitor 12	0.000	ppm
Monitor 13	NA	ppm

All readings accessed using Envirosuite which provides data in ppb.

### **Complaints**

**The Council received one complaint by telephone in the preceding week and no complaints via e-mail.**

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

On 26<sup>th</sup> July 2017 at approximately 01:43 a resident of Aces Court, North Drive, Isleworth called to report odour. The historic odour data and observations made on the site odour log show that Monitor 2 (North side) spiked intermittently between 20:49 and 03:24 with the highest peak being 0.022ppm between 02:57 and 03:24. The odour log reports that the liquid from skips was hosed down. The wind direction at this time was South Easterly which may have dispersed odour in the direction of North Drive which is North West from the works. There are a number of potential sources for odour on this occasion but it difficult to conclude which source may have caused excessive off site odour.

**Odour Log (Thames)**

**Thursday 20<sup>th</sup> July 2017**

**AM** - OM 1-5 No spikes, OM 6-13 No spikes

**Odour monitors serviced today**

**PM** – 1-5 – No spikes, 6-13 No spikes

**Friday 21<sup>st</sup> July 2017**

**AM** – OM 1-5 – No spikes, 6-13 – No spikes.

**PM** – No odour issues. High flows leading to East PST's, Spilling into pump pits. Flows relieved.

**Saturday 22<sup>nd</sup> July 2017**

**AM** – OM 1-5 – No spikes, 6-13 – No spikes. Rain on/off. All SWTs full.

**PM** – No odour issues found or reported, storming to river until midnight (ish).

**Sunday 23<sup>rd</sup> July 2017**

**AM** – OM 1-5 – No spikes, 6-13 No Spikes. Siloxane plant smelly when regenerating – 15:30hrs.

**PM** – No odour issues. Storm tanks returning all shift.

**Monday 24<sup>th</sup> July 2017**

**AM** – No odour issues on site, no spikes on trends.

**PM** – Monitor 10 spiked at 19:18 but < 15mins duration & max 0.015ppm.

**Tuesday 25<sup>th</sup> July 2017:**

**AM** – No odour spikes, nothing to report.

**PM** – 22:21 – Odour report from OHC – I. Ruffle.

Monitor 2 @ 22:30 showing 0.013ppm.

OM 1-5

OM 2 = 0.018 @ 20:49 – 21:02

OM 2 = 0.017 @ 21:19 – 21:32

OM 2 = 0.022 @ 00:19 – 00:32

OM 2 = 0.021 @ 00:49 – 01:02

OM 2 = 0.015 @ 03:34 – 03:47

OM 5 = 0.022 @ 02:52 – 03:24.

Actions taken – liquor from skips hosed down.

**Wednesday 26<sup>th</sup> July 2017**

**AM** – No odour spike. Sludge spill at 16:30 – imported sludge.

Day works called out to clean up spillage.

**PM** – OM 1-5 – no spikes, 6-14 – no spikes.

### **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					
21/07/17	305	1303	305	1608	5150	6758
24/07/17	0	1115	183	1298	5765	7063
26/07/17	0	787	1678	2465	1486	7037

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.

### **Imported Sludge**

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

### **Digesters**

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

**Digesters 5, 6, 14, 17 and 18** were all in use and had good seals.

**Digesters 13, 16 and 19** were out of use for maintenance.

**Digester 7** was frothing vigorously. Thames arranged for additional gas to be drawn off from this digester to control the release of gas from the seal.

**Digesters 8, 9, 10, 11, 12, and 15** had weak / sloppy seals, Thames advised that these would be treated with pellets to thicken the seal and prevent gassing.

**Digesters 10 and 11** had slightly weak / sloppy seals.

All other digesters appeared to have good seals with evidence of the use of pellets to thicken the seals and prevent gassing.

## **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. The surfaces of Tanks 71, 77 & 78 were still covered in a thick layer of algae.

### **East Side Screen House**

All doors closed.

### **Other Skips**

1 x 15 yd. open general waste skip at rear of screen house.

### **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's 9, 10, 11 & 12 all in use

**West Side Aeration Lanes (Old)**

Battery C aeration feed channel was clear, contractors were on site clearing the channels further North.

**New Works (West Side)**

Feed Channel for Aeration Lanes 20 - 25  
Fluffy layer across most of the surface with some clear patches.

**Odour Control Unit (OCU) performance monitoring – (25/07/17)**

<b>Plant</b>	<b>Reading (ppm) (Average)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.000	0.2	Yes
East OCU	0.002	0.05	Yes
West inlet OCU	0.000	0.05	Yes
Sludge reception outlet	0.025	0.8	Yes
Thickening plant outlet	0.007	0.6	Yes
Transfer PS outlet	0.000	0.6	Yes

New West inlet (OCU 11)	0.000	0.5	Yes	
OCU 12 (Pasteurisation Plant)	0.000	0.5	Yes	