



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 5 <sup>th</sup> January 2017	
<b>Attendees:</b> Mr A Devine, Mr D Kalamantis (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>Tank 1A was empty, drained down and clean – all hoppers were empty.</p> <p>Tank 1B was empty, drained down and clean. Hopper 2 required over pumping.</p> <p>Tank 2A – was empty, drained down and clean – all hoppers were empty.</p> <p>Tank 2B was empty, drained down and clean. Hoppers 1, 2 and 3 were approximately 1/3 full and required draining down and over pumping.</p> <p>Tank 3A - was empty, drained down and clean. Hopper 1 required over pumping.</p> <p>Tank 3B was empty, drained down and clean. Hopper 1 required over pumping</p> <p>Tanks 4A, 4B, 5A &amp; 5B are covered and odour controlled.</p> <p>Tanks 6A &amp; 6B were empty, drained down and clean. In both tanks Hoppers 1, 2 and 3 were approximately 1/4 full and required draining down and over pumping. Localised odour was noted at tank 6A.</p>	

Tank 7 was returning during inspection. Amajets 1, 2 and 3 were on. The tanks was approximately 10% to 20% full.

Tank 7B was empty, drained down and clean – all hoppers were empty.

Tank 8A was empty, drained down and clean. Hoppers 1, 2 and 3 were approximately 1/2 full and required draining down and over pumping.

Tank 8B was empty, drained down and clean. Hoppers 1, 2 and 3 were approximately 1/2 full and required draining down and over pumping.

### **Storm Water Channel**

The level of effluent in storm feed channels serving STW's 1A-8B was very low. The sludge in these channels was very dark.

### **Odour Monitors**

The odour readouts (H<sub>2</sub>S) for all of the monitors, which were providing data at the time of inspection (approx. 13:57).

Monitor 1	0.004	ppm
Monitor 2	0.003	ppm
Monitor 3	0.004	ppm
Monitor 4	0.008	ppm
Monitor 5	0.009	ppm
Monitor 6	0.000	ppm
Monitor 7	0.003	ppm
Monitor 8	0.011	ppm
Monitor 9	0.007	ppm
Monitor 10	0.005	ppm
Monitor 11	0.008	ppm
Monitor 12	0.006	ppm
Monitor 13	0.104*	ppm

\*Thames Water advised during 15<sup>th</sup> December inspection that there was a fault with unit and it was logged for repair. During this inspection the same reading was shown and the time stamp was incorrect.

## **Complaints**

The Council received no complaints via telephone or e-mail in the previous 14 days.

### **Odour Log (Thames) - Photocopies of log entries taken:**

#### **Thursday 22<sup>nd</sup> December 2016**

**AM** – Odour monitor 5 – 2 spikes both under 15 minutes (max 0.03ppm).

**PM**– No odour problems.

#### **Friday 23<sup>rd</sup> December 2015**

**AM** – Odour monitor 1 to 5 – no odours. Odour monitor 6 0.019ppm from 9:17am to 9:29am.

**PM** – Odour monitor 1 on trigger level (0.015ppm) fro just under an hour. No odours found.

#### **Saturday 24<sup>th</sup> December 2016**

**AM** – Odour monitors 1 to 13 – no spikes.

**PM** – No odour issues found or reported. No spikes on trends.

#### **Sunday 25<sup>th</sup> December 2016**

**AM** – Odour monitor 5 – 0.015ppm between 9:06am to 9:18am. Odour monitors 6 to 13 no odour spikes.

**PM** – Odour monitor 3 flatlining. Odour monitor 5 spiked at 00:50am for less than 15 minutes (max 0.015ppm)

#### **Monday 26<sup>th</sup> December 2016**

**AM** – No odours discovered or reported. No spikes on trends.

**PM** – No information recorded.

#### **Tuesday 27<sup>th</sup> December 2016**

**AM** – Odour monitor 5 spiking at 0.025ppm at 16:49pm. Coming from drain cover.

**PM** – Odour monitors 1 to 13 no spikes.

#### **Wednesday 28<sup>th</sup> December 2016**

**AM** – Odour monitor 5 spiked to 0.024ppm at 15:04pm to 16:04pm.

**Actions Taken** – Odours coming from drain cover on main drive.

**PM** – No information recorded

**Thursday 29<sup>th</sup> December 2016**

**AM** – Odour monitor 5 – 1 spike less than 15 minutes (max 0.016ppm).  
No other odour issues.

**PM** – Odour monitor 5 – 1 spike 0.0155ppm for 10 minutes.

**Friday 30<sup>th</sup> December 2015**

**AM** – Odour monitor 5 – 1 spike 0.015ppm for 50 minutes. Manhole venting.

**PM** – No odour issues, nothing of note on trends.

**Saturday 31<sup>st</sup> December 2016**

**AM** – Odour monitor 5 – 2 spikes max 0.023ppm. Manhole on main drive venting. Odour monitor 13 still flatlining at 0.104ppm.

**PM** – No odour issues, nothing of note on trends.

**Sunday 01<sup>st</sup> January 2017**

**AM** – Odour monitor 5 – 1 spike 0.016ppm less than 15 minutes.  
Odour monitor 9 – 1 spike 0.030ppm less than 15 minutes.

**PM** – No odour problems. Nothing of note on trends.

**Monday 02<sup>nd</sup> January 2017**

**AM** – No odour problems.

**PM** – No odour issues. Spikes from odour monitor 5 but less than 15 minutes.

**Tuesday 03<sup>rd</sup> January 2017**

**AM** – No odour spikes. No odour problems.

**PM** – No odour spikes. No odour detected whilst out on site.

**Wednesday 04<sup>th</sup> January 2017**

**AM** – Odour monitor 4 showing high odours (No.7 PAS unit very smelly) water valves shut. Small spike on odour monitor 9.

**Actions Taken** –

**PM** – No odour spikes showing on trends.

### **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					
23/12/2016	0	824	0	824	4237	5061
28/12/2016	0	1698	0	1698	5282	6980
30/12/2016	79	2592	787	3458	4942	8400
04/01/2017	0	1467	0	1467	4425	5892

Thames Water advised that sludge dip records were not provided on the 26<sup>th</sup> December due resource issues and on the 2<sup>nd</sup> January due to Bank Holiday.

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 and which has been complied with in this instance

### **Imported Sludge**

There have been 28 imports each of 30m<sup>3</sup> of sludge between 22<sup>nd</sup> December to 28<sup>th</sup> December.

There have been 51 imports each of 30m<sup>3</sup> of sludge between 29<sup>nd</sup> December to 04<sup>th</sup> January.

<p><b><u>Digesters</u></b></p> <p>Digesters 1-4 are permanently out of use.</p> <p>Digester 13, 16 and 19 were out of use.</p> <p>All of the other digesters which were in use had weak seals. Digesters 12, 14 and 15 had very high seals (nearly at the level of the copping stones). A historic spill was noted at digester 7 and between digesters 8 and 10. Thames Water advised that this would be dealt with today.</p> <p>Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually as required to all operational digesters.</p>	
<p><b><u>Return Activated Sludge Channel</u></b></p> <p>The RAS channel (which runs in the ground between FST's 61-64 &amp; 65-67) was generally free flowing however sludge build up was noted at the start of the channel.</p> <p><b><u>West side primary settlement tanks (PST)</u></b></p> <p>Rectangular PSTs are now covered and odour controlled.</p> <p>Circular PSTs 9, 10, 11 &amp; 12 were all in operation with no reported problems.</p>	
<p><b><u>GENERAL</u></b></p> <p><b><u>Final Settlement Tanks East Side of Works</u></b></p> <p>The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78). At the time of the inspection all 8 tanks were in operation. All 8 tanks have hose and sprinkler systems fitted onto the sweeper bridges. Thames Water confirmed that there were currently no issues with these tanks.</p>	

**East Side Screen House**

The screen house doors were all closed.

**Skips**

**East side**

3 16yd skips – 2 empty, 1 containing grit was covered.

**West side**

There were two skips – 1 16yd empty uncovered and 1 bulk container.

**Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection with no reported problems.

**Section 106 agreement**

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

**West Side Aeration Lanes (Old)**

No access due to engineering works.

**New Works (West Side)**

No access due to engineering works.

**New Inlet Works (West Side)**

There were no reported issues on this part of the site.

**Odour Control Unit (OCU) performance monitoring – 28/12/2016**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.045(av)	0.2	Yes
East OCU	0.007(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.00(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.00(av)	0.6	Yes
New West OCU 11 outlet	0.003(av)	0.6	Yes

# Jerome reading

**Odour Control Unit (OCU) performance monitoring – 04/01/2017**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.12(av)	0.2	Yes
East OCU	0.011(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.032(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.005(av)	0.6	Yes
New West OCU 11 outlet	0.004(av)	0.6	Yes

# Jerome reading