

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 11 <sup>th</sup> May 2017	
<b>Attendees:</b> Mr Anthony Robinson (London Borough of Hounslow), Mr Dimitrios 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>All storm water storage tanks were empty.</p> <p>Hopper 1 in tank 3A and hopper 1 in tank 3B were <math>\frac{3}{4}</math> full and needed over pumping. Thames water advised that a fault on the pump was causing a problem with back filling.</p> <p>Hopper 3 in tank 6a was half full and needed over pumping, the other hoppers were low. All hoppers in tanks 8A and 8B were half full and needed over pumping.</p> <p><b><u>Storm Water Channel</u></b></p> <p>The level in the storm feed channels serving STW's 1A-8B was very low.</p>	

### **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. 13:23).

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

### **Complaints**

The Council received 1 complaint via telephone in the previous week and no complaints via e-mail.

On 11<sup>th</sup> May at approximately 14:11 a resident called to report odour in the area of Crofters Close, Isleworth (South West side of the works) over the last few weeks. The duty officer called the resident back and left a message. The weekly inspection was being undertaken at the time the resident called and no odour issues were identified while on site between 13:00 and 14:30 (approx). The digesters are part of the site closest to the resident and no issues were identified with the digesters at the time

of the inspection and are not likely to be the source of odour complained of by the resident. The odour traces for the previous seven days were analysed and no odour incidents were identified. On this occasion it has not been possible to identify any potential source of odour to the resident.

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

**Thursday 4<sup>th</sup> May 2017**

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

**PM** – OM 1-5 no spikes. 6-13 no spikes.

**Friday 5<sup>th</sup> May 2017**

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

**PM** – No odour issues. Nothing to report on trends.

**Saturday 6<sup>th</sup> May 2017**

**AM** – No odour issues on site.

**PM** – No odour issues. Nothing to report on trends.

**Sunday 7<sup>th</sup> May 2017**

**AM** – Monitor 9 – two spikes up to 0.023ppm both under 15 minutes. OCU Fans running in hand because of final effluent supply issue to quench tower.

**PM** – No odour issues. Nothing to report on trends.

**Monday 8<sup>th</sup> May 2017**

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

**PM** – No odour issues on site. No spikes on trends.

**Tuesday 9<sup>th</sup> May 2017**

**AM** – OM 1 to 5 = no spikes. OM 6 to 13 = no spikes

**PM** – Monitor 3 – one spike 0.016ppm – 10 minute duration. No other odour issues on site.

**Wednesday 10<sup>th</sup> May 2017**

**AM** – No odour issues. No spikes.

**PM** – No odour issues. No spikes 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	<b>500</b>					
05/05/2017	0	1398	122	1520	4281	<b>5801</b>
08/05/2017	59	1055	61	1175	3272	<b>4447</b>
10/05/2017	59	1491	61	1611	3419	<b>5030</b>

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.

### Imported Sludge

There have been 8 deliveries per day of imported sludge each of 30m<sup>3</sup> in the last week.

### Digesters

Digesters 1-4 are permanently out of use.

Digester 13, 16 and 19 were out of use at the time of inspection.

All of the remaining digesters were in use and had good seals with no evidence of gassing.

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.

**Return Activated Sludge Channel**

The RAS channel (which runs in the ground between FST's 61-64 & 65-67) were free flowing, there were no deposits or sludge.

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

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 11 & 12 were all in operation with no noticeable issues and no algae build up. The bridge on PST 10 had failed on the day of the inspection and sludge had begun to build up. LBH requested Thames to ensure any sludge was broken down or removed to prevent potential odour issues.

**GENERAL**

**Final Settlement Tanks East Side of Works**

Tanks 71-78 were all in operation with sprinklers and hoses operating as normal. There was no sign of sludge build up or fatty deposits.

### **East Side Screen House**

The screen house doors were all closed at the time of the inspection. Thames Water confirmed all screens were in operation. There were no skips outside the screen house.

### **Skips**

#### **East side**

1 x 16 yard skip – empty and uncovered

#### **West side**

1 x 6 yard skip – empty and uncovered.

1 x 16 yard skip – empty.

### **Pasteurisation Plant**

Ten of 12 pasteurisation plant streams were in service at the time of the inspection with no reported problems. Work to replace activated carbon in OCU 12 is now complete.

### **Section 106 agreement**

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

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

No reported issues

**New Works (West Side)**

The West side aeration lanes feed channel contained a moderate amount of rag and sludge although there did not appear to be an associated odour problem. The surface of the lanes had improved over previous conditions.

**New Inlet Works (West Side)**

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

**Odour Control Unit (OCU) performance monitoring – 08/05/2017**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.000(av)	0.2	Yes
East OCU	0.003(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.004(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.000(av)	0.5	Yes
Transfer PS outlet	0.000(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes

# Jerome reading