



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 21 <sup>st</sup> June 2018	
<b>Attendees:</b> Mr I Inman (L B Hounslow) & Mr M 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>Tank 1A was empty and clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 1B was empty and clean. Hopper 1 was drained down, hoppers 2 &amp; 3 were approx ¼ full.</p> <p>Tank 2A was empty and clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 2B was empty and clean. Hopper 1 was approx ¼ full, hoppers 2 &amp; 3 were drained down.</p> <p>Tank 3A was empty and clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 3B was empty and clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tanks 4A, 4B, 5A &amp; 5B are covered and odour controlled.</p> <p>Tank 6A was empty and clean. Hoppers 1, 2 &amp; 3 were all approx &lt;¼ full.</p> <p>Tank 6B was empty and clean. Hoppers 1, 2 &amp; 3 were all drained</p>	

down.

Tank 7A was empty and clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but had large amounts of grit in them.

Tank 7B was empty and clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but had large amounts of grit in them.

Tank 8A was empty and clean. Hopper 1 was 1/3 full, hoppers 2 & 3 were full. Over pumping to empty the hoppers was taking place at the time of the inspection by TW staff.

Tank 8B was empty and clean. Hoppers 1, 2 & 3 were all full at the time of the inspection and were due to be over pumped the same day.

**Storm Water Channel**

The storm feed channel serving STW's 1A-8B was virtually empty with only a shallow level of clean water along its entire length.

**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 12:49 on 21<sup>st</sup> June 2018 2018).

Monitor 1	0.000	ppm
Monitor 2	0.000	ppm
Monitor 3	0.000	ppm
Monitor 4	0.000	ppm
Monitor 5	0.000	ppm
Monitor 6	0.000	ppm
Monitor 7	0.005	ppm
Monitor 8	0.004	ppm
Monitor 9	0.004	ppm
Monitor 10	0.000	ppm
Monitor 11	0.005	ppm
Monitor 12	0.000	ppm
Monitor 13	0.000	ppm

## **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 14<sup>th</sup> June 2018**

#### **AM**

**Observations** No odour spikes, no other issues.

**Actions:** None.

#### **PM**

**Observations** No odour issues.

**Actions:** None.

### **Friday 15<sup>th</sup> June 2018**

#### **AM**

**Observations** OM8 spiked 0.020ppm between 09:29-09:44 (15 mins).

No other issues

**Actions:** None.

#### **PM**

**Observations** No odour issues. No spikes on trends.

**Actions:** None.

### **Saturday 16<sup>th</sup> June 2018**

#### **AM**

**Observations** No odour spikes. No other issues.

**Actions:** None.

#### **PM**

**Observations** No odour issues on site.

**Actions:** None.

**Sunday 17<sup>th</sup> June 2018**

**AM**

**Observations** No odour issues. Nothing to report on trends.

**Actions:** None.

**PM**

**Observations** No odour issues. Nothing to report on trends.

**Actions:** None.

**Monday 18<sup>th</sup> June 2018**

**AM**

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

**Actions:** None.

**PM**

**Observations** No odour issues. Nothing to report on trends.

**Actions:** None.

**Tuesday 19<sup>th</sup> June 2018**

**AM**

**Observations** No odour issues.

**Actions:** None.

**PM**

**Observations** Nothing to note on trends. No odour issues overnight

**Actions:** None.

**Wednesday 20<sup>th</sup> June 2018**

**AM**

**Observations** No odour issues found or reported. Nothing spiking on trends.

**Actions:** None.

**PM**

**Observations** No odour spikes. No other issues.

**Actions:** None.

### **Sludge Dip Records**

Date	West PSTs	West PSTs	West PSTs	West Total	East PSTs	Grand Total
	1	2	3			
	All units in m <sup>3</sup>					
OMP limit	500					
15/06/18	20	1008	0	1028	1440	2468
18/06/18	0	511	1405	1916	912	2828
25/04/18	20	1321	0	1341	1112	2453

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 3 imports of sludge over the last week.

### **Sludge Screening House**

The large roller shutter door of the Raw Sludge Screening building was closed at the time of the inspection.

### **Digesters**

Digesters 1-4 are permanently out of use.

Digesters 5, 6, 7, 8 & 9 were all in use and had good dry crusty seals.

Digesters 10 & 11 were in use and had wet seals but were only bubbling off minimal amounts of gas.

<p>Digester 12 was in use and had a good dry crusty seal.</p> <p>Digesters 13 &amp; 14 were both out of use.</p> <p>Digester 15 was in use and had a good dry crusty seal.</p> <p>Digester 16 was out of use.</p> <p>Digesters 17 &amp; 18 were both in use and had good dry crusty seals.</p> <p>Digesters 19 &amp; 20 were both in use and had wet seals but were only bubbling off minimal amounts of gas.</p> <p>All digesters and bell heights just below the half way mark.</p> <p>Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually at least twice a day to all operational digesters.</p>	
<p><b><u>Return Activated Sludge Channel</u></b></p> <p>The nearside RAS channel (which runs in the ground between FST's 61-64 &amp; 65-67) was relatively free flowing along its length.</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 at the time of the inspection, all had clean fat free surfaces.</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 settlement tanks (71-78). At the time of the inspection all tanks were in operation.</p>	

**East Side Screen House**

The screen house doors were closed at the time of the inspection. Thames Water advised that some of the screens were out of service (possibly 1 & 3) due to maintenance.

**Skips**

On the East side there was one 12yds skip which contained a small amount of general rubbish and one 20yds open bulk carrier that was empty.

On the West side there was one 40yds closed bulk carrier & two 20yds open bulk carriers that were both empty.

**Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection. Thames Water advised 9 of the 12 streams were in operation.

**Section 106 agreement**

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

**West Side Aeration Lanes (Old)**

No issues appeared evident.

**New Works (West Side)**

All of the aeration tanks have again developed a thick “fluffy” coverage across their entire surface. However, the surface appears much improved and free flowing. Almost all the sprinklers were in operation at the time of the inspection and appeared to be functioning correctly.

The mixed liquor feed channel serving aeration lanes 24-25 (E Battery)

was clogged on the surface along its entire length with and thick sludge that appeared crusty in places.

The channel serving aeration lanes 22 & 23 were free flowing but the channel serving lane 21 was clogged with thick crusty sludge.

Odour was noticeable in places along the mixed liquor feed channel and a tanker crew were on site undertaking clearance of the clogged areas.

**New Inlet Works (West Side)**

No issues appeared evident at the new inlet works.

**Odour Control Unit (OCU) performance monitoring – 20/06/2018**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.00(av)	0.2	Yes
East OCU	0.00(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)	0.00(av)	0.5	Yes
Transfer PS outlet	0.00(av)	0.6	Yes
New West OCU 11 outlet	0.00(av)	0.6	Yes

# Jerome reading