



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 18 <sup>th</sup> January 2018	
<b>Attendees:</b> Mr L Phillips (L B Hounslow) & 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 but had sludge at the bottom end of the tank. Hoppers 1, 2 &amp; 3 had all been drained down.</p> <p>Tank 1B was empty &amp; clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 2A was empty &amp; clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 2B was empty &amp; clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 3A was empty &amp; clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 3B was empty &amp; 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 &amp; clean. Hoppers 1, 2 &amp; 3 were all drained down.</p> <p>Tank 6B was empty &amp; clean. Hoppers 1, 2 &amp; 3 all approx &lt;math&gt;\frac{1}{4}&lt;/math&gt; full and required needed draining down.</p> <p>Tank 7A was empty &amp; clean. Hoppers 1, 2 &amp; 3 (shallow hoppers) were all drained down but clogged with grit.</p> <p>Tank 7B was empty &amp; clean. Hoppers 1, 2 &amp; 3 were drained down.</p>	

Tank 8A was empty but had sludge at the top end of the tank. Hopper 1 was full and hoppers 2 & 3 were both <math>\frac{1}{4}</math> full and required draining down.

Tank 8B was empty but had grit across a lot of the surface area. Hoppers 1, 2 & 3 were all drained down.

### **Storm Water Channel**

The storm feed channel serving STW's 1A-8B was empty of effluent and only had a shallow level of water (<math><5\%</math>) 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 13:24).

Monitor 1	0.005	ppm
Monitor 2	0.008	ppm
Monitor 3	0.000	ppm
Monitor 4	0.009	ppm
Monitor 5	0.007	ppm
Monitor 6	0.009	ppm
Monitor 7	0.007	ppm
Monitor 8	0.009	ppm
Monitor 9	0.008	ppm
Monitor 10	0.009	ppm
Monitor 11	0.009	ppm
Monitor 12	0.005	ppm
Monitor 13	0.008	ppm

### **Complaints**

The Council received no complaints in the preceding week.

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

**Thursday 11<sup>th</sup> January 2018:**

**AM** No odour issues no spikes on trends.

**PM** No odour issues on site.

**Friday 12<sup>th</sup> January 2018:**

**AM** no odour spikes no spikes on trends.

**PM** O/M2 Spiked to 0.023PPM at 21:30 less than 15 minutes.

**Saturday 13<sup>th</sup> January 2018:**

**AM** No odour issues no spikes on trends.

**PM** No odour issues no spikes on trends.

**Sunday 14<sup>th</sup> January 2018:**

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

**PM** No odour issues nothing to report on trends.

**Monday 15<sup>th</sup> January 2018:**

**AM** Odour Monitor 7 (0.016 PPM) at 16:23 -16:53 spill of sludge on imported sludge day works called to clean up.

**PM** Spillage at imported sludge cleaned. No odour spikes on trends.

**Tuesday 16<sup>th</sup> January 2018:**

**AM** No odour spikes. No other issues.

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

**Wednesday 17<sup>th</sup> January 2018:**

**AM** Odour spike No 7 monitor 0.017PPM 16:25-16:35 No odours found.

**PM** Monitor 6 one spike 03:57- 04:58 0.016PPM. No other issues on site. Siloxane Plant regenerating strong smell of gas around storm tank area wind to North-East.

**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					
12/01/18	1421	2382	1908	5711	5430	11141
15/01/18	1305	3192	1636	6133	5100	11233
17/01/18	1043	1922	1866	4831	5245	10706

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 of sludge over the last week, each import containing 30m<sup>3</sup> of sludge.

**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 were both in use but had a very wet seals that were bubbling off gas.

Digester 7 was in use but had a very wet seal that was bubbling off

gas. It was noted that the bell height was very high and sludge was almost to the top of the coping stones.

Digesters 8 & 9 were both in use but had a very wet seals that were bubbling off gas.

Digester 10 was in use with a major sludge spillage occurring at the time of the inspection. Sludge was pouring over the top of the coping stones around the tank.

Digesters 11 & 12 were both in use but had very wet seals that were bubbling off gas.

Digester 13 is currently out of use.

Digester 14 was in use and had a good dry seal.

Digester 15 was in use but had a very wet seal that was bubbling off gas.

Digester 16 is currently out of use.

Digester 17, 18, 19 & 20 were in use but had very wet seals that were all bubbling off gas.

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.

### **Return Activated Sludge Channel**

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was relatively free flowing but was clogged along one third of its length on the nearside with thick dry sludge at the time of the inspection.

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

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation at the time of the inspection, all had clean fat free surfaces.

## **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).

At the time of the inspection all tanks except 71 were in operation.

### **East Side Screen House**

The screen house doors were closed at the time of the inspection. Thames confirmed all screens are in operation but undergoing cleaning work.

Outside the building was an uncovered open bulk carrier that was approx ½ full of rag.

### **Skips**

On the East side there was one open bulk carrier that was empty.

On the West side there was one 16yd skip that was empty.

### **Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection. The TW officer confirmed all 12 streams were running.

### **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)**

The mixed liquor feed channel serving aeration lanes 24 & 25 (E Battery) was clogged with rag and other floating debris.

The surface of the aeration are much improved and are now free flowing again.

The sprinkler system for the aeration lanes was in use and all sprinklers appeared to be working at the time of the inspection.

**New Inlet Works (West Side)**

No issues appeared evident at the new inlet works.

**Odour Control Unit (OCU) performance monitoring – 18/01/2018**

<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