



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 15 <sup>th</sup> February 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 just over half full. Amajet 1 was not working but Amajets 2 &amp; 3 were in operation.</p> <p>Tank 1B was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 2A was just over half full. None of the Amajets were in operation.</p> <p>Tank 2B was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 3A was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 3B was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tanks 4A, 4B, 5A &amp; 5B are covered and odour controlled.</p> <p>Tank 6A was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 6B was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 7A was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 7B was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p> <p>Tank 8A was just over half full. Amajets 1, 2 &amp; 3 were all in operation.</p>	

Tank 8B was just over half full. Amajets 1, 2 & 3 were all in operation.

**Storm Water Channel**

The storm feed channel serving STW's 1A-8B was just over half full along its entire length and returning water from the storm tanks into the works.

**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 13:33).

Monitor 1	0.007	ppm
Monitor 2	0.000	ppm
Monitor 3	0.000	ppm
Monitor 4	0.008	ppm
Monitor 5	0.005	ppm
Monitor 6	0.009	ppm
Monitor 7	0.010	ppm
Monitor 8	0.009	ppm
Monitor 9	0.008	ppm
Monitor 10	0.008	ppm
Monitor 11	0.000	ppm
Monitor 12	0.007	ppm
Monitor 13	0.009	ppm

**Complaints**

The Council received no complaints in the preceding week.

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

**Thursday 8<sup>th</sup> February 2018**

**AM** OM5 0.017ppm 08:25-08:40. OM6 0.016ppm 17:14-17:25 (less than 15 minutes). No other issues

**PM** No odour spikes.

**Friday 9<sup>th</sup> February 2018**

**AM** OM5 0.020ppm 13:56-14:10 (less than 15 minutes). No other issues.

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

**Saturday 10<sup>th</sup> February 2018**

**AM** OM5 0.023ppm 9:56-10:10, then 0.032ppm 7:56-8:10 (less than 15 minutes). No source found, suspect from PAS area.

**PM** Monitor 5 – 0.066ppm spike 22:11-22:26 15 minute spike unable to locate source.

**Sunday 11<sup>th</sup> February 2018**

**AM** OM5 0.018ppm 16:25-16:40 (less than 15 minutes). No other problems. No source found.

**PM** Monitor 12 – one spike 0.018ppm 23:57-00:57.

**Monday 12<sup>th</sup> February 2018**

**AM** Monitor No:1 spiked at 13:52 but <15 mins duration (max 0.016ppm).

Monitor No:3 spiked at 15:29 but <15 mins duration (max 0.016ppm).

**PM** Monitor 6 - two spikes (0.016ppm) 18:29-18:44, 23:14-23:29.

Monitor 10 - one spike (0.017ppm) 18:54-19:09.

Monitor 5 – one spike (0.016ppm) 23:11-23:26.

All spike 15 minutes or less.

**Tuesday 13<sup>th</sup> February 2018**

**AM** Odour monitor No:2 spiked at 08:17 but <15 mins duration (max 0.044ppm).

Monitor No:5 spiked at 13:00 but <15 mins duration (max 0.020ppm) & at 15:44 15 mins (max 0.017ppm).

Grit channel cleaning works ongoing.

**PM** No odour spikes. No other issues.

**Wednesday 14<sup>th</sup> February 2018**

**AM** Monitor No:5 spiked @ 13:40 but <15 mins notice.

**PM** No odour spikes. No other issues.

### 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					
09/02/18	0	1443	595	2038	4897	6935
12/02/18	0	946	928	1874	946* (could be 3575?)	5449
13/02/18	394	1360* (should be 1299)	595	5442	4576	6925* (should be 6864)

\* Figures entered in red are as stated on TW Sludge Dip Record Sheet (TW Management Checked) which are incorrect. Figures entered in brackets are (where possible) correctly totalled PST amounts.

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 70 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, 7 & 8 were all in use but had a very wet seals that were bubbling off small amounts of gas.

Digester 9 was out of use.

Digesters 10, 11 & 12 were all in use but had a very wet seals that were bubbling off small amounts of gas.

Digesters 13 & 14 were out of use.

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

Digester 16 was out of use.

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

Automatic dosing of anti-foaming agent in 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 approx <1/4 of its length on the nearside with thick 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 Water advised screens 1 & 3 were out of service due to maintenance.

### **Skips**

On the East side there were two 8yds skips full of liquid & material which had been pumped from the screen house maintenance operation.

There was also one empty 12yds skip and one 20yds open bulk carrier which contained general rubbish from the site (not water treatment waste).

No odour was present in the area.

On the West side there was one 8yds skip which contained general rubbish & timber from the site (not water treatment waste) & one 20yds open bulk carrier that was empty.

No odour was present in the area.

### **Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection.

The Thames Water officer confirmed 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)**

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

The surface of the aeration lanes 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 – 09/02/2018**

<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	
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