



## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 8 <sup>th</sup> March 2018	
<b>Attendees:</b> Mr Phillips (London Borough of Hounslow) and Mr Dimitrios Kalmantis (Thames Water)	
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b><u>Storm Water Storage Tanks</u></b></p> <p><b>Tank 1A</b> – Tank empty and clean – Hoppers 1, &amp; 3 need draining. Hopper 2 drained down to lowest point.</p> <p><b>Tank 1B</b> – Tank empty and clean - Hoppers 2 &amp; 3 require draining. Hopper 1 drained to lowest point.</p> <p><b>Tank 2A</b> – Tank empty and clean – Hoppers 1, 2 &amp; 3 all require draining as all full.</p> <p><b>Tank 2B</b> – Tank empty and clean – All hoppers drained down to lowest point.</p> <p><b>Tank 3A</b> – Tank empty slight grit build up in tank – All hoppers drained down to lowest point.</p> <p><b>Tank 3B</b> – Tank empty and clean – All hoppers require draining.</p> <p><b>Tanks 4A, 4B, 5A &amp; 5B</b> which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not working.</p> <p><b>Tank 6A</b> – Tank empty and clean – All hoppers require draining.</p>	

**Tank 6B** – Tank empty and clean - All hoppers drained down to lowest point.

**Tank 7A** – Tank empty clean. However all hoppers require draining.

**Tank 7B** – Tank empty and cleaned all hoppers require action. Thames Water advised that this is down to an issue with faulty subterranean non-return valve allowing back filling of hoppers requires repair or replacement.

**Tank 8A** – Tank empty and clean – All hoppers require draining.

**Tank 8B** - Tank empty and clean – All hoppers require draining.

**Feed Channel** - The level of effluent in both feed channels was low – approximately 5-10% - almost bottomed out in places – some grit and sludge – no local odour.

### 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 Monitors

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

Monitor 1	0.010	ppm	10:27
Monitor 2	0.009	ppm	10:27
Monitor 3	0.010	ppm	10:27
Monitor 4	0.009	ppm	10:27
Monitor 5	0.004	ppm	10:27
Monitor 6	0.011	ppm	10:27
Monitor 7	0.010	ppm	10:27
Monitor 8	0.009	ppm	10:27
Monitor 9	0.009	ppm	10:27
Monitor 10	0.008	ppm	10:27
Monitor 11	0.004	ppm	10:27
Monitor 12	0.006	ppm	10:27
Monitor 13	0.009	ppm	10:27
Wind Speed	-	mph	10:27
Wind Direction	-	mph	10:27

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

**Thursday 1<sup>st</sup> March 2018:**

**AM** No odour issues.

**PM** Monitor No 4 multiple spikes between 18:30-19:45 0.027ppm. Monitor No7 spiked between 18:53- 19:53 0.022ppm. Monitor No12 spiked 22:43- 23:43 0.022ppm. Monitor No4 spiked 02:30 – 03:30 0.017ppm. Standby generators running for NGR stor-exhaust gases being blown in direction of monitor No4.

**Friday 2<sup>nd</sup> March 2018:**

**AM** No odour issues.

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

**Saturday 3<sup>rd</sup> March 2018:**

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

**PM** OM5 spiked to 0.030 at 20:12 less than 15 minutes.

**Sunday 4<sup>th</sup> March 2018:**

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

**PM** Odour monitor 6 1:45 am-02:45am (0.016ppm) PAS back running area checked and no odours found.

**Monday 5<sup>th</sup> March 2018:**

**AM** No odour spikes lots of spillages in PAS area spillage at imported sludge McKeely temp screen.

**PM** Monitor No6 from 03:00-03:45 (0.019 ppm) area checked and no odours found.

**Tuesday 6<sup>th</sup> March 2018:**

**AM** 0.015 OM5 05:12- 06:10 no other issues.

**PM** No odour issues icons trends very slow.

**Wednesday 7<sup>th</sup> March 2018:**

**AM** OM1 0.019 13:36- 13:46, 0.016 10:36- 10:39. Om6 0.018 16:31- 17:30 no other issues. Line setting PAS area no other source found.

**PM** Monitor No 1 spiking at 05:57 (08/03/18) but 15 mins duration (max 0.018).

### 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					
02/03/18	1740	1879	928	4547	8254	12801
05/03/18	1740	2254	1448	5442	7921	13363
07/03/18	1070	1860	2343	5273	10275	15548

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.

### Digesters

**Digesters 1-4** – Out of use permanent.

**Digester 5** - Was in use had a weak sloppy seal. No evidence of spillage

**Digester 6** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 7** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 8** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 9** Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 10** – Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 11** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 12** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 13** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 14** – Out of use.

**Digester 15** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 16** - Out of use

**Digester 17** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 18** - Was in use had a good seal pellets in use. No evidence of spillage.

**Digester 19** - Was in use had a weak sloppy seal. No evidence of spillage.

**Digester 20** - Was in use had a weak sloppy seal. No evidence of spillage.

There was evidence of anti-foaming agent in use and TW advised that this is applied daily to all of the digesters that are operational.

**GENERAL**

**Sludge Screening House**

Shutter doors closed at time of inspection - no local odours.

**Imported Sludge**

Twelve imports of 35m<sup>3</sup> daily for preceding seven days.

### **Final Settlement Tanks East Side of Works**

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78). All tanks in service no issues to report.

### **Skips**

1x empty large loader skip located at Grit house. – empty  
1x small open skip covered tarpaulin no odour issues. Service Road by Pasteurisation plant .

1x small open skip approximately 50% full of mixture of rag and timber offcuts located by West side Inlet Works.

### **East Side Screen House**

All doors closed.

### **Pasteurisation Plant**

The pasteurisation plant is in service and fully operational.

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

Rectangular PSTs – no issues

Circular PST's 9, 10, 11 & 12 all in use.

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

Battery C aeration feed channel approximately 30% obstructed in one channel – requires jetting.

**New Works (West Side)**

Feed Channel for Aeration Lanes 20 & 22 – 25 clear. Aeration Lane 21 approximately 30% obstructed – Tanker onsite at time of visit clearing up blockage.

**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 – 08/03/2018**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.007(av)	0.2	Yes
East OCU	0.004(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.06(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.02(av)	0.5	Yes
Transfer PS outlet	0.02(av)	0.6	Yes
New West OCU 11 outlet	0.007(av)	0.6	Yes

# Jerome reading



