



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 3 <sup>rd</sup> November 2016	
<b>Attendees:</b> Anthony Robinson (L B Hounslow) & Mr Manzoor 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 - 3B were empty &amp; clean and all hoppers were completely drained down.</p> <p>Tanks 4A, 4B, 5A &amp; 5B are covered and odour controlled.</p> <p>Tanks 6A and 6B were empty &amp; clean, the hoppers were approximately 1/3 full of clear effluent.</p> <p>Tanks 7A and 7 B were empty and clean and all the hoppers were approximately 1/2 full, the tanks were being back filled to flush the hoppers.</p> <p>Tanks 8A and 8B were empty and clean, the hoppers were all approximately 3/4 full with effluent which had an oily film on the surface, no odour was noted.</p> <p><b><u>Storm Water Channel</u></b></p> <p>The storm feed channel serving STW's 1A-8B was very low and relatively clean.</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. 13:07).

Monitor 1	0.005	ppm
Monitor 2	0.005	ppm
Monitor 3	0.000	ppm
Monitor 4	0.003	ppm
Monitor 5	0.000	ppm
Monitor 6	0.005	ppm
Monitor 7	0.000	ppm
Monitor 8	0.003	ppm
Monitor 9	0.004	ppm
Monitor 10	0.003	ppm
Monitor 11	-0.000	ppm
Monitor 12	0.005	ppm
Monitor 13	0.003	ppm

### Complaints

The Council received no odour complaints by telephone or e-mail in the preceding week.

The Council received no complaints via MRAG in the previous week.

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

#### **Thursday 27<sup>th</sup> October 2016**

**AM** Odour monitor 2 spiked 16:26 – 16:38. Area checked and all OK.

**PM** OM 3 spike 03:00 for 1 hour to 0.043ppm. Area around East PST's checked. No 11 OCU running ok. No suspicious odours found.

#### **Friday 28<sup>th</sup> October 2016**

**AM** Sheet blank

**PM** Sheet blank

#### **Saturday 29<sup>th</sup> October 2016**

**AM** Sheet blank

**PM** Sheet blank

**Sunday 30<sup>th</sup> October 2016**

**AM** Sheet blank

**PM** Sheet blank

**Monday 31<sup>st</sup> October 2016**

**AM** Sheet blank

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

**Tuesday 1<sup>st</sup> November 2016**

**AM** OM 2 – spike = 0.024 from 8.41 – 8.53pm.

OM8 – spike = 0.023 from 05:01 – 05:13am.

**PM** Monitor 4 spiking – New CHP3 running . Exhaust fumes spiking meter.

Monitor 8 – two spikes – 07:00 – 07:55 0.023ppm

No odours detected after investigation.

**Wednesday 26<sup>th</sup> October 2016**

**AM** Sheet blank

**PM** Sheet blank

## **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					
27/10/2016	40	783	0	823	4428	5251
31/10/2016	0	1467	0	1467	4084	5551
02/11/2016	20	740	0	760	3947	4707

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 11 imports of sludge received in 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 13, 16 and 19 were out of use for maintenance.

Seals were generally good on all digesters with clear evidence of pellets and antifoam being used to reduce gassing. The dome heights on digesters 7 and 8 were high and there was evidence of a previous spillage around the North side of digester 7.

**Return Activated Sludge Channel**

The RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clean and free flowing at the time of the inspection. Thames confirmed a tanker is cleaning this out on a weekly basis.

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

Rectangular PSTs are now covered and odour controlled.

PST 9 is still currently out of service. Circular PSTs 10, 11 and 12 were all in operation and clear of scum / sludge.

**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 8 tanks were in operation.

All 8 tanks have hose and sprinkler systems fitted onto the sweeper bridges that were operating.

**East Side Screen House**

Both sets of doors were closed.

**Skips**

1 covered skip next to the East side screen house.

There was one 6yd skip by the temporary centrifuge (located near to the entrance to the digesters), this was covered with a thick tarpaulin.

There was one 6yd skip at the entrance to the digesters which was covered.

On the West side were no skips in the washpactor / grit handling area.

**Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection. Thames confirmed 10 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 reported issues.

**New Works (West Side)**

The mixed liquor feed channel serving aeration lanes 21-25 was relatively clear with some patches of rag and debris.

The majority of the surface of the aeration lanes was covered with a fluffy layer of scum. The sprinklers were all operating normally at the time of the inspection.

Thames confirmed tanker crews are cleaning the mixed feed liquor channel out on a weekly basis.

**New Inlet Works (West Side)**

No reported issues at inlet works.

**Odour Control Unit (OCU) performance monitoring – 02/11/2016**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.004(av)	0.2	Yes
East OCU	0.015(av)	0.05	Yes
West inlet	0.004(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.08(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.04(av)	0.6	Yes
New West OCU 11 outlet	0.035(av)	0.6	Yes

# Jerome reading