

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 3 <sup>rd</sup> March 2017	
<b>Attendees:</b> Mr Zaheer Kadri (London Borough of Hounslow), Mr Demetrius 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>Tanks 1A –3A: All tanks were empty and free of effluent, all hoppers had been completely drained down however the tanks needed a sweep as there was left over grit at the hopper end of the tanks. Tank 3B was in the same condition however hopper 1 required over pumping. There were no signs of odour.</p> <p>Tanks 4a, 4b, 5a &amp; 5b are covered and odour controlled.</p> <p>Tanks 6A – 8B: All tanks were empty and did not require flushing however most of them needed a sweep due to build-up of grit at the hopper end of the tanks. Hoppers in 6B and 8A needed draining down all other hoppers in tanks were at a low level. There was no signs of odour here.</p> <p><b><u>Storm Water Channel</u></b></p>	

The storm feed channels serving STW's 1A-8B were low however looked sludgy. There was no noticeable odours. The sludge in these channels was dark and murky in colour.

### **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. 12:04).

Monitor 1	0.004	ppm
Monitor 2	0.003	ppm
Monitor 3	0.006	ppm
Monitor 4	0.004	ppm
Monitor 5	0.006	ppm
Monitor 6	0.004	ppm
Monitor 7	0.003	ppm
Monitor 8	0.006	ppm
Monitor 9	0.006	ppm
Monitor 10	0.005	ppm
Monitor 11	0.005	ppm
Monitor 12	-0.000	ppm
Monitor 13	0.007	ppm

### **Complaints**

**The Council received 1 complaint via telephone and no complaints via e-mail or complaints via MRAG in the previous week.**

On the 24<sup>th</sup> of February 2017 at 12.00 a telephone call was received from a resident of Grimwood Road TW1 in L B of Richmond upon Thames complaining of odour from Mogden. The Duty officer called the complainant back and advised them that a visit would not be made and

that they should contact Richmond Council to lodge the complaint because they resided outside of the Borough boundary. The odour log for the AM shift on that day showed that there were no odour issues on site and there was nothing to report on trends. The storm tank log for the same period showed that none of the uncovered tanks were in use and that none of the hoppers required over pumping. The digester log for the AM shift on the same day showed that there was no spillage of sludge around the annular seals of the digesters and that the pressure relief valves were not releasing gas. It has not been possible on this occasion to identify the source of odour complained of by the resident on this occasion.

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

**Thursday 23<sup>rd</sup> February 2017**

**AM** – No odour issues on site – Nothing to report on trends

**PM** – OM6 spiked at 19:50 – Max 0.037 large sludge spill at Pasteurisation – Day Operatives cleared up the spillage called in tanker via LMC to assist

**Friday 24<sup>th</sup> February 2017**

**AM** – No odour issues on site – Nothing to report on trends

**PM** – No odour issues on site – Nothing to report on trends

**Saturday 25<sup>th</sup> February 2017**

**AM** – No odour issues on site – Nothing to report Trends

**PM** – No odour issues on site – Nothing to report Trends

**Sunday 26<sup>th</sup> February 2017**

**AM** – No odour spikes showing on trends

**PM** – OM 8 one spike max 0.016ppm less than a minute duration. No other odour problems.

**Monday 27<sup>th</sup> February 2017**

**AM** – OM2 – one spike max 0.034 under 15 minute duration (11:39)

OM6 – one spike max 0.034 under 15 minute duration (06:35)

OM6 – one spike max 0.029 under 15 minute duration (11:21).

**PM** – OM8 – Two spikes max 0.015 under 15 minute duration

OM8 – One spike lasted 55 minutes- Odour investigated – no odours found.

**Tuesday 28<sup>th</sup> February 2017**

**AM** – OM6- one spike max 0.025 at 01:20 lasted less than 15 minutes

OM8 – max spike 0.021 at 10:20 lasted less than 15 minutes

**PM** – No odour issues on site – nothing to report on Trends

**Wednesday 1<sup>st</sup> of March 2017**

**AM** – No odour issues on site – nothing to report on Trends

**PM** – No odour issues on site – nothing to report on Trends

### **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					
24/2/2017	0	1793	0	1793	11661	13454
27/2/2017	435	1800	0	2235	12634	14869
01/3/2017	0	1842	0	1842	10275	12117

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 120m<sup>3</sup> per day of sludge imports in the last week.

### **Digesters**

Digesters 1-4 are permanently out of use.

Digester 13, 16 and 19 were out of use at the time of inspection.

All of the other digesters which were in use had good seals.

Digester 7 had some noticeable gassing and there was evidence of sludge spillage on the coping stone, even during the inspection the digester was erupting and gassing heavily on one side. This was reported to the TW officer at time of inspection to take action.

The housekeeping around the digesters has improved and the area around the digesters had been swept and were well maintained at time of inspection.

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually as required to all operational digesters. Digesters 14 and 18 clearly had pellets in use.

**Return Activated Sludge Channel**

The RAS channel (which runs in the ground between FST's 61-64 & 65-67) were free flowing, there were no deposits or sludge.

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

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation with no noticeable issues and no algae build up.

**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 7 tanks were in operation

and tank number 78 was out of action. All 8 tanks have hose and sprinkler systems fitted onto the sweeper bridges. Thames Water confirmed that there were currently no issues with these tanks. There was no sign of algae build up. Tank 78 not in service.

### **East Side Screen House**

The screen house now has new doors fitted, both pairs of which were closed at the time of the inspection. Thames Water confirmed all screens were in operation. There were no skips outside the screen house.

### **Skips**

#### **East side**

4 x Bulk carriers covered and hatches closed (Screening House)  
1 x 16 yard skip – full and covered with tarpaulin (Grit skips ¼ full)

#### **West side**

1 x 16 yard skip empty but covered (tarpaulin pulled over)  
1 x 6 yard skip carrier – empty and uncovered

### **Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection with no reported problems.

### **Section 106 agreement**

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

<p><b><u>West Side Aeration Lanes (Old)</u></b></p> <p>No issues appeared evident and looked as if they were operating effectively.</p>			
<p><b><u>New Works (West Side)</u></b></p> <p>West side aeration lanes seemed to have a lot of sludge and rag that had collected in part of the lane . The TW officer had explained that MTS regularly are on site to draw out the rag and allow free flow of effluent. Thames confirmed that crews would be on site to clear this out manually.</p> <p><b><u>New Inlet Works (West Side)</u></b></p> <p>There were no reported issues on this part of the site.</p> <p><b>Odour Control Unit (OCU) performance monitoring – 11/01/2017</b></p>			
<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station outlet	0.000(av)	0.2	Yes
East OCU	0.001(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.000(av)	0.6	Yes
Pasteurization plant outlet (OCU 12)	0.000(av)	0.5	Yes
Transfer PS outlet	0.0(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes
# Jerome reading			



