



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> 31 <sup>st</sup> March 2017	
<b>Attendees:</b> L. Phillips (LB 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 8A and 8B were full and needed over pumping.</p> <p>Tanker and crew on site during inspection over pumping the hoppers.</p> <p>All other tanks and hoppers were empty and clear with Hoppers drained down.</p> <p><b><u>Storm Water Channel</u></b></p> <p>The storm feed channel serving STW's 1A-8B was low with no significant build-up of sludge.</p>	
<p><b><u>Odour Monitors</u></b></p> <p>The odour readouts (H<sub>2</sub>S) for all of the monitors, which were providing data at the time of inspection (approx. 13:49).</p>	

Monitor 1	0.005	ppm
Monitor 2	0.004	ppm
Monitor 3	0.004	ppm
Monitor 4	0.004	ppm
Monitor 5	0.010	ppm
Monitor 6	0.008	ppm
Monitor 7	0.005	ppm
Monitor 8	0.006	ppm
Monitor 9	0.006	ppm
Monitor 10	0.000	ppm
Monitor 11	0.004	ppm
Monitor 12	0.007	ppm
Monitor 13	0.008	ppm

**Complaints**

The Council received no complaints by telephone in the preceding week.

The Council did not receive any complaints via MRAG.

The Council received one complaints by e-mail.

On 27<sup>th</sup> March at 20.41 the Council received an e-mail from a resident of Park Close, Hounslow advising that “ there has been a foul sickly sewage odour here for the last 5 days. It is very strong and really horrible. The odour from Mogden was terrible last year, and despite complaining and being assured that the situation would be rectified, it wasn’t, and now I am very concerned that this odour will be allowed to spoil another Spring and Summer. We are quite far from the sewage works (Park Close) and don’t expect to have this smell lingering around our immediate area - it is unacceptable”. Park Close is located to the west of the sewage works. The odour log for that day showed that on the AM shift there were no odour spikes on trends and on the PM shift Monitor 5(located in the centre of the works) showed one spike 09.48/10:14pm at 0.016PPM but no odour was detected and there were no other issues on site. On the previous day on the AM shift monitor 8 located on the west side of the works had one spike under 15 minutes with a maximum reading of

0.017ppm and there were no odour issues on site and on the PM shift there were no odour issues on site. On 25<sup>th</sup> March on both AM and PM shifts there were no odour issues on site. The digesters are located on the south west side of the works and part of the works that may cause issues for residents on the west side of the works. The logs for 27<sup>th</sup> March taken at 11.30 and 18.30 showed that there was no foam in the sludge seals of the digesters, no spillage of sludge through the annular seals was noted and none of the pressure relief valves were releasing gas. The logs for 26<sup>th</sup> March showed that on the evening log taken at 19.00 there was foam in the seals of some of the digesters but otherwise no other issues were identified. On 25<sup>th</sup> March the log for the evening shift taken at 19.00 showed that there was foam in some of the seals of the digesters but otherwise no other issues were identified. It has not been possible to identify the source of odour complained of by the resident on this occasion.

### **Odour Log (Thames Water)**

#### **Thursday 23<sup>rd</sup> March 2017**

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

**PM** OM 1-5 – No spikes 6-13- no spikes.

#### **Friday 24<sup>th</sup> March 2017**

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

**PM** OM5 spike to 0.017 at 19:30 till 20:30. Digester domes No1 gas compressor tripping on low oil pressure. Waste gas burner failed reset dome heights brought down.

#### **Saturday 25<sup>th</sup> March 2017**

**AM** No odour issues on site no spike on trends.

**PM** No odour spikes nothing to report.

#### **Sunday 26<sup>th</sup> March 2017**

**AM** Monitor 8 one spike under 15 minutes max 0.017ppm. No odour issues.

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

#### **Monday 27<sup>th</sup> March 2017**

**AM** No odour spikes on trends.

**PM** Monitor 5- one spike 09.48/10:14pm 0.016PPM no odour detected

no other issues on site.

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

**AM** No odour spikes no odour problems.

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

**Wednesday 29<sup>th</sup> March 2017**

**AM** Trends showing no odour spikes no odour problems..

**PM** Monitor 5 one spike 0.016PPM under fifteen minutes. No other odour issue on site.

### 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					
24/03/2017	0	2217	305	2522	14656	17178
27/03/2017	0	2216	122	2338	12301	14639
29/03/2017	0	2592	0	2592	9946	12538

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 which was not necessary in this instance.

### Imported Sludge

There has been no imported sludge over the last 7 days.

### Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was closed. Moderate odour was present at the crossroads outside the sludge screening house.

### Digesters

Digesters 1 - 4 are permanently out of use.

Digesters 13, 16 and 19 were all out of use

Digester 5 –In use weak sloppy seal no evidence of spillage.

Digester 6- In use weak sloppy seal no evidence of spillage.

Digester 7- In use weak sloppy seal no evidence of spillage.  
Digester 8 – In use weak sloppy seal no evidence of spillage.  
Digester 9 – In use weak sloppy seal no evidence of spillage.  
Digester 10- In use weak sloppy seal no evidence of spillage.  
Digester 11 - In use weak sloppy seal no evidence of spillage.  
Digester 12- In use weak sloppy seal no evidence of spillage.  
Digester 14- In use weak sloppy seal no evidence of spillage  
Digester 15- In use weak sloppy seal no evidence of spillage.  
Digester 17- In use weak sloppy seal no evidence of spillage  
Digester 18- In use weak sloppy seal no evidence of spillage  
Digester 20- In use weak sloppy seal no evidence of spillage.

Automatic dosing of anti-foaming agent is continuing and there was evidence of the use of pellets to thicken the digester seals.

**Return Activated Sludge Channel**

The West side RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clogged along the first 1/3 of its length.

**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 scum or sludge 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 all 8 tanks were in operation.

**East Side Screen House**

Both pairs of which were closed at the time of the inspection.

**Skips**

On the East side there were one bulk carrier containing grit and covered with a yellow tarpaulin. Thames advised that contractors were on site shoveling grit into the bulk carrier.

In the West side there were two empty large bulk skips and one area there was one empty 8 yard skip.

**Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection. Thames Water confirmed that the plant is operating normally.

**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 21-25 (E Battery) was filled with rag and sludge along part of the channel and was being hosed and sucked out by a tanker crew at the time of the inspection.

A number of sprinklers were clogged with algae and not working 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 the new inlet works.

**Odour Control Unit (OCU) performance monitoring – 13/03/2017**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.0000(av)	0.2	Yes
East OCU	0.003(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.00(av)	0.8	Yes
Thickening plant outlet	0.000(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.000(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes

# Jerome reading