



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

**Date of inspection:** 31<sup>st</sup> May 2018

**Attendees:** Mr L Phillips (London Borough of Hounslow) and Mr M Hussain (Thames Water)

#### LB Hounslow Observation

#### Thames Water Action / Response

#### **Storm Water Storage Tanks (SWST)**

**Tank 1A** Tank empty slight sludge build up tank requires flushing. Hoppers 1, 2 & 3 all drained down to lowest point.

**Tank 1B** Tank empty and clean. Hoppers 1, 2 & 3 all drained down to lowest point.

**Tank 2A** Tank empty and flushed clean. Hoppers 1, 2 & 3 drained down to bottom level.

**Tank 2B** Tank empty and clean. Hoppers 1, 2 & 3 all drained down to lowest point.

**Tank 3A** Tank full. No odours, amajets not active.

**Tank 3B** Tank full. No odours, amajets not active.

**Tanks 4A, 4B, 5A & 5B** - which are covered and odour controlled were all empty. Unable to gauge condition as lighting system still not working.

**Tank 6A** Tank empty and clean. Hoppers 1, 2 & 3 all drained down to lowest point.

**Tank 6B** Tank empty needs flushing sludge in tank. Hoppers 1, 2 & 3 require draining no odours detected.

**Tank 7A** Tank empty needs flushing. Hoppers 1 & 2 need draining.

**Tank 7B.** Tank empty and clean. Hoppers 1, 2 & 3 all drained down to lowest point.

**Tank 8A.** Tank empty and flushed clean. Hoppers 1, 2 & 3 full of effluent water, surface of green algae, no odour detected.

**Tank 8B** Tank empty and clean. Hoppers 1, 2 & 3 all drained down to lowest point.

**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: (approx 12:30 on 31<sup>st</sup> May 2018).

Monitor 1	0.005	ppm	12:30
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Monitor 2	0.004	ppm	12:30
Monitor 3	0.000	ppm	12:32
Monitor 4	0.000	ppm	12:32
Monitor 5	0.004	ppm	12:33
Monitor 6	0.005	ppm	12:33
Monitor 7	0.005	ppm	12:33
Monitor 8	0.006	ppm	12:34
Monitor 9	0.005	ppm	12:34
Monitor 10	0.000	ppm	12:34
Monitor 11	0.002	ppm	12:34
Monitor 12	0.004	ppm	12:34
Monitor 13	0.005	ppm	12:34

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

**Wednesday 23<sup>rd</sup> May 2018:**

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

**Actions:** None noted.

**PM** – No odour issues.

**Actions:** None noted.

**Thursday 24<sup>th</sup> May 2018:**

**AM** – No odour issues.

**Actions:** None noted.

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

**Actions:** None noted.

**Friday 25<sup>th</sup> May 2018:**

**AM** – No odour issues reported or found. No spikes on trends.

**Actions:** None noted.

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

**Actions:** None noted.

**Saturday 26<sup>th</sup> May 2018**

**AM:** No odour issues found or reported. No spikes on trends.

**Actions:** None noted.

**PM:** Not provided.

**Actions:** N/A.

**Sunday 27<sup>th</sup> May 2018:**

**AM:** No odour issues.

**Actions:** None noted.

**PM:** Odours showing on monitors 1 and 5 areas checked. Smell coming from storm tanks. All tanks full after storm.

**Actions:** Storm tanks full and returning.

**Monday 28<sup>th</sup> May 2018:**

**AM:** No odour spikes. No other issues.

**Actions:** None noted.

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

**Actions:** Storm tanks returning.

**Tuesday 28<sup>th</sup> May 2018:**

**AM:** 0.017 OM9 11:18-11:31 no other issues.

**Actions:** None noted.

**PM:** No odour issues.

**Actions:** None noted.

**Wednesday 16<sup>th</sup> May 2018:**

**AM:** No odour spikes. No other issues.

**Actions:** None noted.

**PM:** Odour monitor No5 2 spikes 17:58 at 0.017ppm but 15 mins duration. 22:43 at 0.018ppm but 15 mins duration. Odour monitor No9 spiked at 19:30 but 15 minutes duration max 0.020ppm.

**Actions:** None noted.

## **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					
25/05/18	1377	1776	595	3748	2931	6679
26/05/18	1374	2048	450	3872	3752	7624
30/05/18	1295	1588	450	3333	1592	4925

The sludge stock levels for the West side circular primary settlement tanks were compliant with the OMP trigger level (500m<sup>3</sup>) for all of the dates for which data has been provided.

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 gassing off slightly.

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 Out of use, empty and clean. Contractor on site undertaking maintenance.

Digester 14 Out of use, empty and clean. Contractor on site undertaking maintenance.

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

Digester 16 Out of use, empty and clean. Contractor on site undertaking maintenance.

Digester 17 Was in use. Good seal pellets in use. No evidence of spillage.

Digester 18 Was in use. Good seal pellets in use. No evidence of spillage.

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

Digester 20 Was in use and 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**

Four 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 and no issues to report.

**Skips**

1x large skips covered general waste skip.

1x small open skip empty covered.

**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 60% obstructed in one channel, requires jetting.

**New Works (West Side)**

Feed Channel for Aeration Lanes 23-25 totally obstructed and Aeration Lane 21 approximately 75% obstructed – requires jetting.

Approximately 100% of tanks have again developed “fluffy” coverage across surface, worsened since previous inspection. Quantity of physical detritus in tank that has bypassed screener has decreased significantly.

**Odour Control Unit (OCU) performance monitoring – (17/05/18)**

<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