



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

**Date of inspection: 20<sup>th</sup> July 2017**

**Attendees:** Mr Z KADRI (L B Hounslow) & Mr Dimitrius Kalamantis (Thames Water).

#### LB Hounslow Observation

#### Thames Water Action / Response

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

Tank 1A to 3B had a small amount of dried grit near the hopper end which needed a sweep and quick tidy up- no odours were apparent at time of inspection. Hoppers 1, 2 & 3 of all tanks were drained down and had some light crust forming on the surface. The Amajets were all in working order.

Tanks 4A, 4B, 5A & 5B are covered and odour controlled.

Tank 6A and 6B were both empty & clean. Hoppers 1, 2 and 3 had been drained down and empty. There was a light grit that had formed near the hopper end that needed a sweep.

Tank 7A and 7B were both empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down.

Tank 8A was being over pumped at the time of inspection in addition the tank was empty , dry and clear of any grit. Tank 8B was empty & clean. Hoppers 1, 2 and 3 were both empty.

It was reported that the general condition of Amajets were all in good working order.

### **Storm Water Channel**

The storm feed channel serving STW's 1A to 4B had a very small amount of dark water (effluent) at the base. The feed channel serving STW's 5A-8B was empty of effluent along its entire length.

### **Odour Monitors**

The odour readouts (H<sub>2</sub>S) for all of the monitors, which were providing data at the time of inspection (approximately 12:50).

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

### **Complaints**

The Council received complaints via e-mail from MRAG and no complaints were received via telephone over the last week.

#### **E-mail**

An email was received on the 18<sup>th</sup> July 2017 at 13:07 from MRAG regarding odours from Thames Water being detected in the Saville Road (TW1 4BQ) area. This location is out of the Borough boundary nevertheless the trends were checked for odour that allegedly occurred

on Sunday the 16<sup>th</sup> July 2017 however there were no spikes or irregularities in the trends.

An email was received on the 18<sup>th</sup> July 2017 at 13:07 from MRAG regarding odours from Thames Water being detected in Heathfield South area which is outside of the Borough boundary. There were no faults or spikes in trends for the possible time odours were dispersing.

An email was received on the 18<sup>th</sup> July 2017 at approx 13: 25 from MRAG regarding odours from Thames Water being detected in Heathfield South area which is located to the South of the works. Even though this area is out of the Borough boundary the trends for the possible times that odour may have occurred were identified but no significant if any irregularities were noticed on the trends overview.

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

##### **Thursday 13<sup>th</sup> July 2017**

**AM** No odour issues on site.

**PM** No odour issues on site- storm tanks returning

##### **Friday 14<sup>th</sup> July 2017**

**AM** No odour issues on site (13:38 customer odour complaint received- (Site wide survey conducted no anomalies found)

**PM** No odour issues. Nothing of note on trends.(Odour Monitor 13 stuck at 0.014PPM- defect raised)

##### **Saturday 15<sup>th</sup> July 2017**

**AM** No odour issues on site..

**PM** No odour issues on site .(Odour Monitor 13 stuck at 0.023PPM- defect raised)

##### **Sunday 16<sup>th</sup> of July 2017**

**AM** No odour issues on site

**PM** Odour monitor 5 spiked to 0.017ppm lasted 12 minutes- no odours detected

**Monday 17<sup>th</sup> of July 2017**

**AM** No odour issues on site

**PM** No odour spike. Nothing to report on site.

**Tuesday 18<sup>th</sup> July 2017**

**AM** No odour spikes. No odour issues.

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

**Wednesday 19<sup>th</sup> July 2017**

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

**PM** No odour spikes. No odour problems

### **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					
14/07/17	0	0	305	305	2303	2608
17/07/17	0	638	183	821	3283	4104
19/07/17	59	970	305	1334	4617	5951

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.

### **Imported Sludge**

There have been 10 imports of sludge per day over 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 and No skips in the area.

### **Digesters**

Digesters 1-4 are permanently out of use.

Digester 5 was in use and had a good dry seal.

Digester 6 was in use and had a good dry seal.

Digester 7 was in use and had a good dry seal.

Digester 8 was in use and had a good dry seal.

Digester 9 was in use and had a good dry seal.

Digester 10 was in use and had a good dry seal.

Digester 11 was in use and had a good dry seal.

Digester 12 was in use and had a good dry seal.

Digester 13 was OUT OF USE

Digester 14 was in use and had a good dry seal (Pellets used)

Digester 15 was OUT OF USE.

Digester 16 was OUT OF USE.

Digester 17 was in use and had a good dry seal (Pellets used)

Digester 18 was in use and had a good dry seal (Pellets used)

Digester 19 was OUT OF USE..

Digester 20 was in use and had a good dry seal. No sign of previous spillages

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually at least twice a day to all operational digesters. Thames Water advised that immediate remedial action would be taken with regard to digester 7.

**Return Activated Sludge Channel**

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clogged along the three quarters of its length with thick

dry sludge at the time of the inspection. Thames advised a tanker is cleaning this out on a weekly basis.

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

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 11 & 12 were all in operation at the time of the inspection. PST 10 is currently out of service and drained down. Hoses were spraying into PT 10 at the time of the inspection.

## **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 out of 8 tanks were in operation and appeared to be working fine however there was algae growth on all surfaces. Tank 77 was out of operation.

### **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 confirmed all screens were in operation. No skips were on site at this location

### **Skips**

On the East side there was 1 open low level bulk carrier on site that was empty and no odour was present.

On the West side there was one open low level bulk carrier that was uncovered and empty.

A small 6 yard skip was placed at the entrance to the Digester Plant. This was for general use and covered

**Pasteurisation Plant**

The pasteurisation plant was in service at the time of the inspection. TW confirmed all 9 out of 12 streams were operating at the time of the inspection.

**Section 106 agreement**

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

**West Side Aeration Lanes (Old)**

No issues appeared to be evident.

**New Works (West Side)**

The mixed liquor feed channel serving aeration lanes 21-25 (E Battery) was clogged with rag & debris along more than half its length. This had a scum on the surface and was noted to be locally slightly odorous

The surface of the tanks appeared much improved and was visibly flowing again.

The sprinkler system for the aeration lanes should be in permanent use but a number of sprinklers were not working properly at the time of the inspection, being clogged with pondweed.

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

**New Inlet Works (West Side)**



No issues appeared evident at the new inlet works.

**Odour Control Unit (OCU) performance monitoring –20/07/2017**

<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	0.000(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.006(av)	0.6	Yes
Pasteurization plant outlet (OCU 12)	0.000(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