



# London Borough of Hounslow

## Mogden Sewage Treatment Works

### TW Site Inspection

<b>Date of inspection:</b> Tuesday 18 <sup>th</sup> May 2021 (13:00pm)	
<b>Attendees:</b> Mr Zaheer Kadri (London Borough of Hounslow) and Mr Tom Costin (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><b>Tank 1A - Tank 3B</b> Tanks were all over 50% full of effluent due to high rainfall in proceeding days- All Amajets were observed and were in operation.</p> <p><b>Storm Feed Channel</b> - The level of effluent in the feed channels were higher than usual at approx. 20% in depth along its entire length and murky and black in colour. some fatty deposits observed.</p> <p><b>Tanks 4A, 4B, 5A &amp; 5B</b> - All tanks are covered and odour controlled. Unable to gauge condition as lighting system still not working.</p> <p><b>Tank 6A – Tank 8B</b> Tanks were all over 50% full of effluent due to high rainfall in proceeding days- All Amajets were observed and were in operation.</p> <p><b>Storm Feed Channel</b> - The level of effluent in the feed channels were higher than usual at approx. 20% in depth along its entire length and murky and black in colour. some fatty deposits observed.</p> <p>There were no observation of malodour at this locality of the works.</p>	

## **Complaints**

The Council directly received ONE complaint via telephone in the preceding week.

**A15221-** A complaint was received via telephone at 16:40 on the 6<sup>th</sup> of May 2021 from the Worton Road area of Isleworth. The out of hour s officer responded to the call at approx. 17:22. A monitoring visit was made at 17:50 – Unable to carry out a H25 readings due to heavy rain-subjective assessment made not deemed a nuisance.

The Council directly received THREE complaints via online method in the preceding week.

**A14939-** Online complaint received on the 11th of May 2021 from a resident in the Sussex Avenue area of Isleworth. The complainant was written to on the 14<sup>th</sup> of May advising them to call the out of hours service as and when the odour is apparent.

**A14997-** A complaint was received from the Weavers close area of Isleworth. On the 12<sup>th</sup> of May 2021. A letter was sent to the complaint on the 14<sup>th</sup> of May 2021 encouraging the complainant to use the out of hours service.

**A15097** – A complaint was received from Harlequin Close on the 14<sup>th</sup> of May 2021. In response a letter was sent to the complaint encouraging them to call the Mogden dedicated service.

### Odour Monitors

The odour readouts (H<sub>2</sub>S) for all monitors that were providing data on 18/05/2021 at the time of the inspection are below.

Monitor 1	0.000	ppm	13:27pm
Monitor 2	0.050	ppm	13:27pm
Monitor 3	0.000	ppm	13:27pm
Monitor 4	0.000	ppm	13:27pm
Monitor 5	0.003	ppm	13:27pm
Monitor 6	0.000	ppm	13:27pm
Monitor 7	0.000	ppm	13:27pm
Monitor 8	0.005	ppm	13:27pm
Monitor 9	0.004	ppm	13:27pm
Monitor 10	0.000	ppm	13:27pm
Monitor 11	0.000	ppm	13:27pm
Monitor 12	0.000	ppm	13:27pm
Monitor 13	0.003	ppm	13:27pm
Wind Speed	10.321	mph	13:27pm
Wind Direction	274.511		13:27pm

### Odour Log (Thames)

#### Wednesday 12<sup>th</sup> May 2021

#### **DAY SHIFT**

**Temp.** Warm

**Weather.** Sunny Patchy with Clouds

**Odour Readings** All Odour monitors are in operation except OM2 & 13.

**Time:** Blank.

#### **Observations / Customer Complaint.**

No odour issues

#### **Operational issues / causes observed.**

No obvious odours coming from works informed Roxy of observations

#### **NIGHT SHIFT**

**Temp.** Cool

**Weather.** Overcast night .  
**Odour Readings.** All Odour monitors are in operation except OM2 & 13  
**Time:** Blank  
**Observations / Customer Complaint.**  
No odour issues found or reported.  
**Operational issues / causes observed.** Blank.

**Thursday 13<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** War,

**Weather.** Rain with sunny spells .

**Odour Readings.** All Odour monitors are in operation except OM2 & 13

**Time:** 17:30

**Observations / Customer Complaint.**

No odour issues found or reported.

**Operational issues / causes observed.** Blank.

**NIGHT SHIFT**

**Temp.** Cool

**Weather.** Overcast night .

**Odour Readings.** All Odour monitors are in operation except OM2 & 13

**Time:** Blank

**Observations / Customer Complaint.**

No odour issues reported

**Operational issues / causes observed.** Blank.

**Friday 14<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** Warm

**Weather.** Cloudy with sunny spells .

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 17:30

**Observations / Customer Complaint.**

No odour issues found or reported.

**Operational issues / causes observed.** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Overcast night.

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 05:30.

**Observations / customer Complaint.**

No odour issues found or reported

**Operational issues / causes observed.** Blank.

**Saturday 15<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** Warm .

**Weather.** Rain with sunny spells

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 17:30.

**Observations / Customer Complaint.**

No odour issues found or reported.

**Operational issues / causes observed.** Blank.

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Rain.

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 05:30.

**Observations / Customer Complaint.**

OM5 spiked to 0.016ppm duration less than 15 minute

**Operational issues / causes observed.**

Blanks

**Sunday 16<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** Cool

**Weather.** Rain

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 17:30.

**Observations / Customer Complaint.**

No odour issues found or reported

**Operational issues / causes observed.** Blank

**NIGHT SHIFT**

**Temp.** Cool

**Weather.** Rain

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 05:30.

**Observations / Customer Complaint.**

OM7 spiked to 0.065ppm 23:35 duration less than 15 minute  
**Operational issues / causes observed.** Blank.

**Monday 17<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** Warm

**Weather.** Rain with sunny spells

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 17:30.

**Observations / Customer Complaint.**

No odour issues found .

**Operational issues / causes observed.** Blank

**NIGHT SHIFT**

**Temp.** Cool.

**Weather.** Patchy Rain

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 05:30.

**Observations / Customer Complaint.**

No odour issues found or reported

**Operational issues / causes observed.** Blank

**Tuesday 18<sup>th</sup> May 2021**

**DAY SHIFT**

**Temp.** Warm

**Weather.** Rain with sunny spells.

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 17:30

**Observations / Customer Complaint.**

No odour issues

**Operational issues / causes observed.** Blank

**NIGHT SHIFT**

**Temp.** Cool

**Weather.** Rain.

**Odour Readings.** All Odour monitors are in operation except OM2

**Time:** 05:30

**Observations / Customer Complaint**

No odour issues .

**Operational issues / causes observed.** Blank

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### **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					
12/05/2021	0	824	2156	2980	1240	4220
14/05/2021	0	1134	2156	3290	1720	5010
17/05/2021	0	1007	2156	3163	1720	4883

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.

### **Imported Sludge**

There has been an average of 0 import of sludge per day.

### **No.5 Pumping Station**

The doors of No.5 pumping station were closed at the time of the inspection.

### **Sludge Import Area**

The sludge import area was clean & tidy. No odours detected at time of inspection. TW advised they are frequently hosing this area down.

### **Raw Sludge Screening House**



The large roller shutter door of the Raw Sludge Screening building was closed at the time of inspection.

### **Digesters**

**Digesters 1-4** Out of use (permanent).

Thames advised of a long term project currently initiated to bring these units back into service that will require significant investment.

**Digester 5** was in service and had a low thick sludgy seal approx. 3ft below the coping stone – there were no signs of a previous spillage. Good seal.

**Digester 6** was in service and had a high thick sludgy seal approx. 1ft below the coping stone – there were no signs of a previous spillage on coping stones which were all clean. This was a good seal.

**Digester 7** was in service and had a high thick sludgy seal approx. 1ft below the coping stone – there were no signs of a previous spillage on coping stones which were all clean. One side of the digester was erupting and very gassy. This was a good seal.

**Digester 8** was in service and had a low wet seal approx. 3ft below the coping stone – there were no signs of a previous spill.

**Digester 9** was in service and had a low wet seal approx. 2ft below the coping stone – there were no signs of a previous spillage.

**Digesters 10 & 11** were both in service and had low wet seal approx. 2ft below the coping stone – there were no signs of a previous spillage on coping stones which were all clean and tidy.

**Digester 12** was in service and had a low thick sludgy seal approx. 3ft below the coping stone. A good seal.

**Digester 13** was in service and had a low wet seal approx. 2ft below the coping stone – there were no signs of a previous spillage on coping stones which were all clean.

**Digester 14** was in service and had a low thick sludgy seal approx. 2ft below the coping stone. Good seal all round.

**Digester 15** was out of service.

**Digester 16** was in service and had a good thick seal. There were no signs of previous spillages. Level of sludge was high approx. 1ft below coping stone and in some places higher.

**Digester 17** was in service and had a low wet seal all the way around that was approx. 3ft below coping stones.

**Digesters 18 & 19** were both out of service.

**Digester 20** was in service and had a good thick seal approx. 2ft below coping stones. No sign of previous spillages.

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**

### **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/sprinklers were in operation at the time of the inspection. Surfaces were mostly clear and free of any build-up of fatty/mossy deposits. The water hoses/sprinklers were breaking up any remainder residue across the surface.

### **Skips**

1x large open grit skip (full) – covered with tarpaulin  
1x 8 yard grit/rag skip (full) - covered with tarpaulin  
1x 8 yard general waste in the Service yard of the Sludge Screen House which was empty and uncovered

No other skips observed on site.

### **East Side Screen House**

All the doors at the screen house were open at the time of the inspection contractors working at site at time of inspection. Advised TW these doors must remain closed.

### **Return Activated Sludge Channel**

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was free flowing and clear.

The far side channel nearest the road was clogged along approx. 80% of its length, there were visibly crusty areas and a number of weeds were growing out of it (No change from previous visit on 20<sup>th</sup> April 2021)

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

Rectangular PSTs are now covered and odour controlled. TW advised no concerns or issues. No noticeable odours at time of inspection.

PST's 9, 10 and 11 were all in service and had relatively fat free surfaces. Circular PST 12 has been drained down and is currently out of service.

### **Pasteurisation Plant**

The pasteurisation plant is in service. TW advised 8 streams are currently operational.

### **Section 106 agreement**

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

### **West Side Aeration Lanes**

All lanes appeared to be free flowing with the internal dividing walls being visible again in some areas. However it was noted that a thick fluffy foam is again starting to build up across the entire tanks surface area same as previous weeks.

Most of the sprinklers were back in operation and a lot of floating of debris was noticeable (rag and a number of floating discarded face masks).

The mixed liquor feed channel serving the aeration lanes of E-Battery was free flowing along its entire length, although thick foam appeared to be starting to build up by lane 22.

### **New Inlet Works (West Side)**

No issues appeared evident at the new inlet works and everything appeared to be in a good tidy order.

### **Odour Control Unit (OCU) performance monitoring: 17<sup>th</sup> May 2021**

<b>Plant</b>	<b>Reading (ppm)</b>	<b>Action Level (ppm)</b>	<b>Compliant</b>
Main pumping station inlet	NO DATA	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Unknown
East OCU	0,02 0.02 0.02 Ave:0.02	0.05	YES
West inlet OCU	0.01 0.01	0.05	YES

	0.01 Ave:0.01		
Sludge reception inlet	NO DATA	Unknown	Unknown
Sludge reception outlet	NO DATA	0.8	Unknown
Thickening plant inlet	NO DATA	Unknown	Unknown
Thickening plant outlet	0.00 0.00 0.00	0.6	YES
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation (OCU 12)	0.00 0.00 0.00	0.5	YES
Transfer PS inlet	0.00 0.00 0.00	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes