

# **Mogden Sewage Treatment Works**

# **TW Site Inspection**

Date of inspection: 2 <sup>nd</sup> May 2023  Attendees: L. Phillips (L.B. Hounslow) and Miss Emma McDonald (Thames Water)				
Storm Water Storage Tanks (SWST)				
<b>1A</b> – Tank empty clean - All hoppers full require draining/over-pumping.				
<b>1B</b> - Tank empty – Slight grit in tank top end of tank requires flushing-All hoppers full and require draining/over-pumping.				
<b>2A</b> - Tank empty- Slight grit in top end of tank requires flushing –All hoppers full and require draining/over-pumping.				
<b>2B</b> - Tank empty – slight grit/sludge at top end of tank requires flushing- All hoppers full and require draining/over-pumping.				
<b>3A</b> - Tank empty - 50% covered by grit/sludge requires further flushing – All Hoppers approx. 50% full - requires draining/over-pumping.				
<ul><li>3B – Tank empty - 20% covered by grit/sludge requires further flushing</li><li>All hoppers backfilling requires draining/over-pumping.</li></ul>				

**Tanks 4A, 4B, 5A & 5B** are covered, and odour controlled, were all in use - unable to measure condition as lighting system still not working.

- $\mathbf{6A}$  Tank empty clean All hoppers full require draining/over-pumping.
- **6B** Tank empty clean All hoppers full require draining/over-pumping.
- **7A** Returning.
- **7B** Tank empty- 90% covered by grit/sludge requires further flushing. Hopper's backfilling requires draining/flushing.
- **8A** -Tank empty 30% covered by grit/sludge requires further flushing. All Hoppers full and requires draining/over-pumping.
- **8B** Tank empty 90% covered grit/sludge requires further flushing All Hoppers full and requires draining/over-pumping.

**Feed Channel** - The level of effluent in both feed channels was approximately 20% capacity.

### **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					
26/04/2023	0	1528	122	1650	1140	2790
28/04/2023	0	1382	122	1504	1242	2744
01/05/2023	20	1383	267	1670	2418	4088

Incorrect figures total should be 2746.

# Complaints preceding week.

The Council received no complaints by email from MRAG in the

Thames Water controller advised that they had received no direct complaints in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received 0 online complaints.

The Council received 1 out of hour calls during the preceding week.

The Council received a complaint by telephone at 18:32 on 8<sup>th</sup> of May 2023 regarding odour around Sussex Avenue, Isleworth. The duty Officer visited the area at approximately 19:25 and took Hydrogen Sulphide (H<sub>2</sub>S) readings. The average H<sub>2</sub>S reading was 0.000 ppm and below the agreed 0.015 H<sub>2</sub>S ppm threshold, a subjective assessment confirmed that nuisance was not being caused. The Thames Water odour traces for odour monitor 1 was used as Sussex Avenue is located north-east of the site the monitor displayed 0.00 ppm for the 8<sup>th</sup> of May.

# **Odour Monitors**

The odour readouts (H<sub>2</sub>S) for all monitors which were providing data at time of inspection 02/05/2023:

Monitor 1	0.004	ppm	14:48
Monitor 2	0.001	ppm	14:48
Monitor 3	0.005	ppm	14:48
Monitor 4	0.000	ppm	14:48
Monitor 5	0.004	ppm	14:48
Monitor 6	0.005	ppm	14:48
Monitor 7	0.000	ppm	14:48
Monitor 8	0.006	ppm	14:48
Monitor 9	0.000	ppm	14:48
Monitor 10	0.005	ppm	14:50
Monitor 11	0.005	ppm	14:50
Monitor 12	0.006	ppm	14:50
Monitor 13	0.004	ppm	14:50
Wind Speed	0.218	MPH	14:50
Wind Direction	55.541	DEG	14:50

O Lead of (Therese)	
Odour Log (Thames):	
Wednesday 26 <sup>th</sup> April 2023 DAY SHIFT Temp. Cool. Weather. Cloudy. Odour Readings. All OMU's in operation. Time: 17:30. Observations / Customer Complaint. No odour issues found or reported. Operational issues / causes observed. Blank. Actions Taken. Blank.	
NIGHT SHIFT Temp. Cool. Weather Clear night. Odour Readings. All OMU's in operation. Time: 05:30. Observations / Customer Complaint. No odour issues. Operational issues / causes observed. Blank. Actions Taken. Blank.	
Thursday 27 <sup>th</sup> April 2023 DAY SHIFT Temp. Cool. Weather. Rain. Odour Readings. All OMU's in operation. Time: 17:30. Observations / Customer Complaint. No odour log. Operational issues / causes observed. Blank. Actions Taken. Blank.	

**NIGHT SHIFT** 

Temp. Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** 

No odour issues.

Operational issues / causes observed. Blank

Actions Taken. Blank

### Friday 28th April 2023

DAY SHIFT

Temp. Cool. Weather. Rain.

Odour Readings. All OMU's in operation.

**Time:** 17:30.

**Observations / Customer Complaint.** 

No odour issues.

Operational issues / causes observed. Blank

Actions taken. Blank

#### **NIGHT SHIFT**

Temp. Cool.

Weather. Clear Night.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** No odour issues found or reported.

Operational issues / causes observed. Blank

Actions taken. Blank.

# Saturday 29th April 2023

DAY SHIFT

Temp. Warm. Weather. Sunny.

Odour Readings. All OMU's in operation.

Time: 17:30.

**Observations / Customer Complaint.** 

No odour issues.

Operational issues / causes observed. Blank.

Actions taken. Blank.

**NIGHT SHIFT** 

Temp. Cool.

Weather. Clear Night.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** 

OM5 peaked to max 0.022ppm 23:33 – 00:48.

Operational issues / causes observed.

Main drive and surrounding area checked no obvious odours found.

Actions taken. Blank.

### Sunday 30th April 2023

DAY SHIFT

Temp. Warm.

Weather. Sunny w/ Patchy Clouds.

Odour Readings. All OMU's in operation.

**Time:** 17:30.

**Observations / Customer Complaint.** 

No odour issues.

Operational issues / causes observed. Blank.

Actions taken. Blank.

**NIGHT SHIFT** 

Temp. Cool.

Weather. Overcast Night.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** 

No odour issues found or reported.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

### Monday 1st May 2023

**DAY SHIFT** 

Temp. Warm.

Weather. Rain W/ Sunny Spells.

Odour Readings. All OMU's in operation.

**Time:** 17:30.

**Observations / Customer Complaint.** 

No odour issues found or reported.

Operational issues / causes observed.

Digester 12 sludge spill.

Actions taken. Tanker arranged for Tuesday.

#### **NIGHT SHIFT**

Temp. Cool.

Weather. Overcast Night.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** 

No odour issues found or reported.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

## Tuesday 2<sup>nd</sup> May 2023

**DAY SHIFT** 

Temp. Warm.

Weather. Sunny W/ Patchy Clouds.

Odour Readings. All OMU's in operation.

**Time:** 17:30.

**Observations / Customer Complaint.** 

No odour issues found or reported.

Operational issues / causes observed.

Blank

Actions taken.

Digester 12 sludge spill cleaned up.

#### **NIGHT SHIFT**

Temp. Cool.

Weather. Clear Night.

Odour Readings. All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint.** 

No odour issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank

<u>Digesters</u>
<u>Digesters</u>
Digesters 1-4 – Out of use (permanent).
Digester 5 – In use –Good thick seal- No evidence of spillage
Digester 6 – In use –Good thick seal- No evidence of spillage.
Digester 7 In use –Good thick seal- No evidence of spillage.
Digester 8 - In use –Good thick seal- No evidence of spillage.
Digester 9 - In use- Weak seal - No evidence of sludge spill.
Digester 10 - In use- Weak seal - No evidence of sludge spill.
Digester 11 - In use –Good thick seal- No evidence of spillage.
Digester 12 – In use- Weak seal - No evidence of sludge spill.
Digester 13 – Out of use
Digester 14 – Out of use.
Digester 15 – Out of use.
Digester 16 – Out of use.
Digester 17 - In use- Weak seal - No evidence of sludge spill.
Digester 18 – In use- Weak seal - No evidence of sludge spill.
Digester 19 – In use –Good thick seal- No evidence of spillage.
Digester 20 - In use- Weak seal - No evidence of sludge spill.

## **GENERAL**

### **Sludge Screening House**

Door closed at time of inspection.

# **Imported Sludge**

104m<sup>2</sup>.

### Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – no issues.

### East Side Raw Sludge Screen House

Doors closed at time of inspection.

### West Side Aeration Lanes (Old)

Battery C aeration feed channel 100% obstructed in one channel (left) – requires jetting (TW advise that there is continuing flow below surface).

# West side primary settlement tanks (PST)

Rectangular PSTs – no issues.

Circular PST's 9-11 in use and 12 drained down out of service.

### New Works (West Side) Battery E

E-battery aeration lane blockage.

# **Pasteurisation Plant**

Streams 2, 7, 8, 10 and 11 and 12.

<u>Skips</u>	
1x 6 -Yard East Side – empty.	

# Odour Control Unit (OCU) performance monitoring: 02/05/2023

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Not provided	Unknown	Unknown
Main pumping station outlet	0.053	0.2	No
	0.051		
	0.052		
East OCU	0.121	0.05	No
	0.116		
	0.116		
West inlet	0.00	0.05	Yes
	0.00		
	0.00		
Sludge reception inlet	-	-	-
Sludge reception outlet	-	-	
Thickening plant inlet	-	-	-
Thickening plant outlet	0.065	0.6	Yes
	0.066		
	0.068		
New West inlet (OCU 11)	0.082	0.5	Yes
	0.086		
	0.089		
Pasteurization (OCU 12)	0.998	0.5	No
	1.087		
	0.978		
Transfer PS inlet	0.428	-	-
	0.433		
	0.458		
Transfer PS outlet	0.026	0.6	Yes
	0.025		
	0.027		
GBT Plant OCU Outlet	0.00	-	-
	0.00		
	0.00		