

# **Mogden Sewage Treatment Works**

# **TW Site Inspection**

Date of inspection: 18th June 2020	
Attendees: Mr L Phillips and Mr Tom Costin (Thames Water) Time: 11:19	
LB Hounslow Observation	Thames Water Action / Response
Storm Water Storage Tanks (SWST)	
Tank 1A – Tank full.	
Tank 1B –Tank full.	
Tank 2A – Tank full.	
Tank 2B – Tank full.	
Tank 3A – Tank full.	
Tank 3B – Tank full.	
Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all full - unable to gauge condition as lighting system still not working.	
Tank 6A – Tank full.	
Tank 6B – Tank full.	
Tank 7A – Tank full.	

Tank 7B – Tank full.	
Tank 8A – Tank full.	
Tank 8B – Tank full.	
Feed Channel - Both feed channels low - approx. 10% - no local odours.	
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	
No data available for any contemporary or historical odour data as entire system down whilst undergoing "Microsoft updates".	
Odour Log (Thames)	
Thursday 11th June 2020: DAY SHIFT: Temp: Cool.	
Weather: Rain W/ Sunny spells.	

Odour Readings: All OMU's in operation.

**Time:** 18:00.

Observations / Customer Complaint: OM2 0.103ppm 06:33 – 07:27

OM2 0.039ppm 12:06 – 12:24.

Operational issues / causes observed: East inlet skip changes

possibly causing odour.

Actions Taken: East inlet area hosed down.

NIGHT SHIFT: Temp: Cool. Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM2 - spike to 0.041 from

18:25 – 18:57.

Operational issues / causes observed: Skip liquor most probably

cause.

Actions Taken: Area hosed down.

## Friday 12th June 2020:

DAY SHIFT: Temp: Cool. Weather: Rain.

**Odour Readings:** All OMU's in operation.

**Time:** 17:30.

Observations / Customer Complaint: OM2 one spike 0.050ppm less

than 15minutes.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

NIGHT SHIFT: Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in use.

**Time:** 05:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

#### Saturday 13th July 2020

DAY SHIFT: Temp: Hot.

Weather: Sunny.

Odour Readings: All OMU's in operation.

**Time:** 17:30.

Observations / Customer Complaint: OM2 0.033ppm 09:44 - 12:50

0.022ppm 12:36 - 12:50.

Operational issues / causes observed: East inlet screenings wet.

Actions Taken: Skips washed down.

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.

#### Sunday 14th July 2020

DAY SHIFT: Temp: Hot. Weather: Sunny.

Odour Readings: All OMU's in operation.

**Time:** 17:30.

Observations / Customer Complaint: OM2 0.025ppm 13:41 – 12:37

0.031ppm 08:32 - 08:57.

Operational issues / causes observed: Blank.

Actions Taken: Skips washed down. Confirmed all hatches and doors

are East OCU running with two fans.

NIGHT SHIFT: Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

**Time:** 05:30.

Observations / Customer Complaint: OM2 0.033ppm 18:42 – 19:37.

Operational issues / causes observed: Blank.

Actions Taken: East inlet area checked nothing abnormal found.

Monday 15th July 2020:

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: 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.

## Tuesday 16th July 2020

DAY SHIFT Temp: Warm.

Weather: Rain W/ Sunny patches.

Odour Readings: All OMU's in operation.

**Time:** 17:30.

Observations / Customer Complaint: OM2 @ 12:14 - 12:27 Max

0.022ppm.

Operational issues / causes observed: East inlet checked and hosed

down.

Actions Taken: Blank.

NIGHT SHIFT: Temp: Warm.

Weather: Clear night.

Odour Readings: All OMU's in operation.

**Time:** 05:30.

**Observations / Customer Complaint:** OM2 0.27ppm 18:34 - 18:51. OM2 also spike a couple more times throughout the night but for less

than 15 minutes.

Operational issues / causes observed: Gayle Thomas reporting in

odour complaint from Weavers Close.

Actions Taken: East inlet skip washed down.

## Wednesday 17th July 2020

DAY SHIFT: Temp: Warm.

Weather: Sunny W/ Patchy.

Odour Readings: All OMU's in operation.

**Time:** 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Action 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.

#### **Sludge Dip Records**

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
			All uni	its in m³		
OMP limit	500					
12/06/2020	0	1054	805	1859	5237	*7097 (7096)
15/06/2020	39	328	618	985	2072	3057

<sup>\*</sup> Incorrect grand total, the correct amount should be 7096. However, the amount entered by Thames is 7097.

#### **Digesters**

**Digesters 1-4** – Out of use (permanent) – noticeable quantity of water accumulated to the brim of these tanks which is thick with algae – requires draining. Long term project currently initiated to bring these units back into service – will require significant investment.

<u>Digester 5</u> - In use – Weak sloppy seal - seal level approx.2ft below coping stones – No evidence of any spillages.

<u>Digester 6</u> - In use – Weak sloppy seal- Seal level approx. 2ft below coping stones – No evidence of any spillages.

**Digester 7** – Out of use.

<u>Digester 8</u> - In use – Weak sloppy seal- Seal level approx. 18" below coping stones – No evidence of any spillages – Bell height high requiring draw down of Biogas.

<u>Digester 9</u> - In use — Weak sloppy seal - Seal level approx. 18" below coping stones - No evidence of any spillages.

<u>Digester 10</u> - In use – Weak sloppy seal - Seal level approx. 2ft below

coping stones - No evidence of any spillages - Bell height high requiring draw down of Biogas.

<u>Digester 11</u> - In use – Weak sloppy seal- Seal level approx. 1ft below coping stones – No evidence of any spillages.

<u>Digester 12</u> - In use – Weak seal - seal level approx. 2ft below coping stones - No evidence of any spillages.

<u>Digester 13</u> - In use – Weak seal - Seal level approx. 6" below coping stones - No evidence of any spillages.

Digester 14 - Out of use.

Digester 15 - Out of use.

<u>Digester 16</u> - In use – Weak seal - Seal level approx. 1ft below coping stones – ongoing spill requiring clean-up and anti-foam – Bell height high requiring draw down of Biogas

<u>Digester 17</u> - In use – Weak seal - seal level approx. 2ft below coping stones - No evidence of any spillages.

Digester 18 - Out of use.

<u>Digester 19</u> - In use – Weak seal - Seal approx. 3ft below coping stones – No evidence of any spillages.

<u>Digester 20</u> - In use - Weak seal - Seal approx. 3ft below coping stones - No evidence of any spillages.

## **GENERAL**

## **Sludge Screening House**

All doors closed at time of inspection.

## **Imported Sludge**

There have been an average of 10 imports of sludge per day in the preceding week.

## **Final Settlement Tanks East Side of Works**

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78).

#### **Skips**

1x partially filled small grit skips by Sludge Screening House.

## **Pasteurisation Plant**

The pasteurisation plant is in service. TW advised 10 streams are currently operational.

## East Side Raw Sludge Screen House

Doors closed at time of inspection.

## **West Side Aeration Lanes (Old)**

Battery C aeration feed channel 75% obstructed in one channel (right) – requires jetting.

## West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 10, 11 & 12 in use. Tank 9 currently being brought back into service.

## New Works (West Side)

Feed Channel for Aeration Lanes 21-24 approximately 50% blocked – requires jetting.

"Fluffy" coverage across surface has again begun to significantly build up and thicken; also significant quantity of material bypassing screener.

## dour Control Unit (OCU) performance monitoring - 18/06/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	No data	0.2	Unknown
East OCU	0.00 0.00 0.00	0.05	Unknown
West inlet OCU	0.00 0.00 0.00	0.05	Unknown
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	0.03 0.03 0.03	0.6	Unknown
Transfer PS inlet	No data	Unknown	Unknown
Transfer PS outlet	0.00	0.5	Unknown
	0.00 0.00		
New West inlet (OCU11)	0.00 0.00 0.00	0.5	Unknown

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