

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 7 th November 2019	
Attendees: Mr Steven Maunders and Miss Charlotte Page (Thames Water	er)
LB Hounslow Observation	Thames Water Action / Response
Storm Water Storage Tanks (SWST)	
Tank 1A – Tank approximately 50% full – all Amajets in use.	
Tank 1B – Tank approximately 50% full – all Amajets in use.	
Tank 2A – Tank approximately 50% full – all Amajets in use.	
Tank 2B – Tank approximately 50% full – all Amajets in use.	
Tank 3A – Tank full – all Amajets in use.	
Tank 3B – Tank full – all Amajets in use.	
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 approximately 75% full – all Amajets in use.	
Tank 6B – Tank approximately 75% full – all Amajets in use.	

Tank 7A - Tank approximately 50% full - all Amajets in use.

Tank 7B - Tank approximately 50% full - all Amajets in use.

Tank 8A - Tank approximately 50% full - all Amajets in use.

Tank 8B – Tank approximately 50% full – all Amajets in use.

Feed Channel - The level of effluent in both feed channels was approximately 50% - 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

The odour readouts (H_2S) for all of the monitors, which were providing data at time of inspection:

Monitor 1	0.007	ppm	12:30
Monitor 2	0.006	ppm	12:30
Monitor 3	0.000	ppm	12:30
Monitor 4	0.004	ppm	12:30
Monitor 5	0.015	ppm	12:30

Monitor 6	No Data	ppm	12:30
Monitor 7	No Data	ppm	12:30
Monitor 8	0.006	ppm	12:30
Monitor 9	0.005	ppm	12:30
Monitor 10	0.005	ppm	12:30
Monitor 11	0.000	ppm	12:30
Monitor 12	0.006	ppm	12:30
Monitor 13	0.000	ppm	12:30
Wind Speed	11.7	mph	
Wind Direction	260°		

Odour Log (Thames):

Thursday 31st October:

AM - Cool - Sunny with Patchy Cloud.

All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.
PM – Cool – Rain.
All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.

Friday 1st November:

AM - Cool - Sunny with Patchy Cloud.

All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.

PM - Cool - Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 2nd November:

AM - Cool - Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "OM2 0.024 05:24-05:41."

Operational Issues/Causes: None noted.

Actions: None noted. **PM** – Cool – Rain. All OMU's in use.

Observations/Complaints: "OM2 0.022ppm 03:56-04:10."

Operational Issues/Causes: "Area checked – no odour detected."

Actions: None noted.

Sunday 3rd November:

AM - Cool - Cloudy with Sunny spells.

All OMU's in use.

Observations/Complaints: "OM1 0.016 13:27-13:32, OM8 0.017 14:41-14:46, OM2 0.027 11:55-12:12, OM2 0.103 07:34-08:04."

Operational Issues/Causes: "Area checked no source found."

Actions: None noted.

PM - Cool - Rain.

All OMU's in use.

Observations/Complaints: "OM2 0.024ppm 18:23-19:02."

Operational Issues/Causes: "East inlet area checked. Skip area

hosed down."

Actions: None noted.

Monday 4th November 2019:

AM – Cool – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "OM2 spiked at 07:26-07:38 & 10:30-

10:42 <15 mins duration max 0.029."

Operational Issues/Causes: "No odours detected in vicinity of East

Inlet. "

Actions: None noted. **PM** – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."
Operational Issues/Causes: None noted.

Actions: None noted.

Tuesday 5th November 2019:

AM – Cool – Cloudy. All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.

PM - Cool - Clear Night.

All OMU's in use.

Observations/Complaints: "OM8 0.018 02:40-02:52."

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 6th November 2019:

AM – Cool – Cloudy. All OMU's in use.

Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted.

Actions: None noted.

PM - Cool - Rain.

All OMU's in use.

Observations/Complaints: "OM2 0.056 21:47-22:01 <15 mins."
Operational Issues/Causes: "Area checked no source found."

Actions: None noted.

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					
01/11/19	79	1491	183	1753	2561	4314
05/11/19	0	1158	824	1982	2737	4719

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m³) 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.

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.

Digester 5 - In use - seal level approx. 1ft below coping stones - seal weak and bubbling.

Digester 6 - In use - seal level approx. 3ft below coping stones - seal weak and bubbling.

Digester 7 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 8 - In use - seal level approx. 4ft below coping stones - seal weak and bubbling.

Digester 9 - In use - seal level approx. 1ft below coping stones - seal weak and bubbling.

Digester 10 - In use - seal level approx. 2ft below coping stones - seal weak and bubbling.

Digester 11 - In use - seal level approx. 1ft below surface of coping stones - seal weak and bubbling.

Digester 12 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 13 - In use - seal level approx. 1ft below coping stones - seal weak and bubbling - evidence of prior spill requiring clean-up.

Digester 14 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 15 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 16 - In use - seal level approx. 1ft below coping stones - seal weak and bubbling.

Digester 17 - In use - seal level approx. 2ft below coping stones - seal weak and bubbling.

Digester 18 - Out of use - empty and clean - contractor on site undertaking maintenance.

Digester 19 - In use – seal level approx. 3ft below coping stones - seal weak and bubbling.

Digester 20 - In use - seal level approx. 3ft below coping stones - seal weak and bubbling.

GENERAL

Sludge Screening House

All doors closed at time of inspection.

Imported Sludge

Approx. 12 imports 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).

<u>Skips</u>

1x large open skip (1x (8 yard) open skip (containing rag covered with tarpaulin), 1x (8 yard) general waste skip & 1x covered skip (8 yard) located in Service Road by Storm Water Tanks.

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

2x empty enclosed container skips in Service Road by PST's 9-12.

Pasteurisation Plant

Pasteurisation plant 10 streams running.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 90% obstructed in one channel – requires jetting.

West side primary settlement tanks (PST)

Rectangular PSTs - no issues

Circular PST's 10, 11 & 12 in use. Tank 9 drained and out of use.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 completely clear.

"Fluffy" coverage across surface broken down completely since previous visit – visible churn across entirety of tank.

Odour Control Unit (OCU) performance monitoring – (04/11/19)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.05	Unknown	Unknown
	0.05		
	0.05		
Main pumping station outlet	0.00	0.2	Yes
	0.00		
	0.00		
East OCU	0.00	0.05	Yes
	0.00		
	0.00		
West inlet OCU	0.01	0.05	Yes
	0.01		
	0.01		
Sludge reception inlet	No data	Unknown	Unknown
Sludge reception outlet	No data	0.8	Yes

Thickening plant inlet	No data	Unknown	Unknown	
Thickening plant outlet	0.00	0.6	Yes	
	0.00			
	0.00			
Transfer PS inlet	No data	Unknown	Unknown	
Transfer PS outlet	0.00	0.6	Yes	
	0.00			
	0.00			
New West inlet (OCU 11)	0.00	0.5	Yes	
	0.00			
	0.00			
Pasteurisation Plant (OCU	0.00	0.5	Yes	
12)	0.00			
	0.00			