

# Mogden Sewage Treatment Works

**TW Site Inspection** 

Date of inspection: 13th February 2020	
Attendees: Mr Phillips and Miss Charlotte Page (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
Storm Water Storage Tanks (SWST)	
Tank 1A – Was in use completely full. All amajets were in operation.	
Tank 1B – Was in use completely full. All amajets were in operation.	
Tank 2A – Was in use completely full. All amajets were in operation.	
Tank 2B – Was in use completely full. All amajets were in operation.	
Tank 3A – Was in use completely full. All amajets were in operation.	
Tank 3B – Was in use completely full. All amajets were in operation.	
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 – Was in use completely full. All amajets were in operation.	
Tank 6B – Was in use completely full. All amajets were in operation.	

Tank 7A – Was in u	use comple	etely full. All a	amajets were in op	eration.
Tank 7B – Was in u	use comple	etely full. All a	amajets were in op	eration.
Tank 8A – Was in u	use comple	etely full. All a	amajets were in op	eration.
Tank 8B – Was in u	use comple	etely full. All a	amajets were in op	eration.
Feed Channel - Tapproximately 50%			in both feed cha	nnels was
<u>Complaints</u>				
The Council direct preceding week.	tly receive	ed no com	plaints by telepho	one in the
The Council direct preceding week.	ctly recei	ved no co	mplaints by em	ail in the
The Council receiv	ved no cor	nplaints by	email from MRAC	Э.
Thames Water cor complaints in the J			they had received	l no direct
Odour Monitors				
The odour readouts	s (H₂S) for	all of the m	onitors which were	e providina
data at time of inspe				e prensuig
Monitor 1	0.010	nnm	12:32	1
Monitor 2	0.010	ppm ppm	12:32	
Monitor 3	0.000	ppm	12:32	
Monitor 3	0.000	ppm	12:32	
Monitor 5	0.004	ppm	12:32	
	0.007	PP'''	12.02	(
Monitor 6	0.006	ppm	12:32	

				r		 		 
Monitor 7	0.006	ppm	12:32					
Monitor 8	0.007	ppm	12:32					
Monitor 9	0.009	ppm	12:32					
Monitor 10	0.009	ppm	12:33					
Monitor 11	0.005	ppm	12:33					
Monitor 12	0.007	ppm	12:33					
Monitor 13	0.006	ppm	12:33					
Wind Speed	0.325	mph	1					
Wind Direction	233	deg	14:05					
Odour Log (Thar								
Thursday 6th Feb	ruary 2020:	-						
AM								
Temp: Cool.								
Weather: Cloudy \ All OMU's in use.	/v/ Sunny s	Jelis.						
<b>Time:</b> 17:30.								
Observations/Co	mplaints:	OM2 0.105		34: OM10	)			
0.018ppm 12:39 -				, – –				
Operational Issu	ies/Causes			detected.	-			
Confirmed doors/ I		closed in scre	een house.					
Actions: None not	ted.							
PM Temp: Freezing.								
Weather: Clear nig	aht							
All OMU's in use.	9.11.							
<b>Time:</b> 05:30.								
Observations/Co								
Operational Issue		Area checked	d no source disco	vered.				
Actions: None not	ted.							
Friday 7 <sup>th</sup> January	<u>y 2020:</u>							
AM								
Temp: Cold.						 		 

Weather: Cloudy W/ Sunny spells. All OMU's in use. Time: 17:30 Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted. Actions: None noted. PM Temp: Cool. Weather: Overcast Night. All OMU's in use. Time: 05:30. Observations/Complaints: "No odour issues." Operational Issues/Causes: None noted. Actions: None noted. Saturday 8<sup>th</sup> February 2020: AM Temp: Cool. Weather: Sunny W/ patch clouds. All OMU's in use. Time: 17:30. Observations/Complaints: "OM5 0.019PPM 07:52 - 08:07; OM2 0.039PPM 10:38 - 11:01. Operational Issues/Causes: Area checked no odour detected. Actions: None noted. PM Temp: Cool. Weather: Cloudy. All OMU's in use. Time: 05:30. Observations/Complaints: No odour issues. Operational Issues/Causes: "No odour identified. Actions: None noted. Sunday 9<sup>th</sup> February 2020: AM Temp: Cool. Weather: Storms.

All OMU's in use. Time: 17:30. Observations/Complaints: "OM2 0.026ppm 08:54 - 09:14. Operational Issues/Causes: No odour identified. Actions: None noted. РМ Temp: Cool. Weather: Storms. All OMU's in use. Time: 05:30. Observations/Complaints: No odour issues. Operational Issues/Causes: None noted. Actions: None noted. Monday 10<sup>th</sup> February 2020: AM Temp: Cold. Weather: Sunny W/ patch Clouds. All OMU's in use. Time: 17:30. Observations/Complaints: No odour issues. Operational Issues/Causes: None noted. Actions: None noted. ΡM Temp: Cool. Weather: Overcast Night. All OMU's in use. Time: 05:20. Observations/Complaints: No odour issues. Operational Issues/Causes: None Noted. Actions: None noted. Tuesday 11<sup>th</sup> February 2020: AM Temp: Cold. Weather: Sunny W/ Patch Clouds. All OMU's in use. Time: 17:30.

Observations/Complaints: OM2 0.013 at 16:42 – 17:16. Operational Issues/Causes: No odour identified. Actions: None noted. PM Temp: Cold. Weather: Clear Night.	
All OMU's in use.	
Time: 05:30.	
<b>Observations/Complaints:</b> OM6 0.018ppm 22:37 – 23:37. <b>Operational Issues/Causes:</b> Occasional odour detected from PAS area no spills identified and no streams venting from. <b>Actions:</b> None noted.	
Wednesday 12 <sup>th</sup> February 2020:	
AM	
Temp: Cold	
Weather – Sunny.	
All OMU's in use.	
Time: 17:20.	
Observations/Complaints: No odour issues	
Operational Issues/Causes: None noted. Actions: None noted.	
PM	
Temp: Cool.	
Weather: Rain.	
All OMU's in use.	
Time: 05:30	
Observations/Complaints: OM2 0.104ppm 19:28- 20:04. Operational Issues/Causes: No odour identified. 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 m <sup>3</sup>		
OMP limit	500					
07/02/2020	20	473	534	1027	3041	4068
10/02/2020	20	267	412	699	4562	5261
12/02/2020	0	516	661	1177	3054	4231

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m<sup>3</sup>) 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 - weak seal no evidence of spill.

Digester 6 - In use - weak seal no evidence of spill.

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

Digester 8 - In use - weak seal no evidence of spill.

Digester 9 - In use - weak seal no evidence of spill.
Digester 10 - In use - weak seal no evidence of spill.
Digester 11 - In use - weak seal no evidence of spill.
Digester 12 - In use - weak seal no evidence of spill.
Digester 13 - In use - weak seal no evidence of spill.
<b>Digester 14</b> - Out of use - empty and clean - contractor on site undertaking maintenance.
<b>Digester 15</b> - Out of use - empty and clean - contractor on site undertaking maintenance.
<b>Digester 16</b> - In use - weak seal no evidence of spill. Gassing slightly.
Digester 17 - In use - weak seal no evidence of spill.
<b>Digester 18</b> - Out of use - empty and clean - contractor on site undertaking maintenance
Digester 19 - In use - weak seal no evidence of spill.
Digester 20 - In use - weak seal no evidence of spill.
GENERAL
Sludge Screening House
All doors closed at time of inspection.
Imported Sludge

Approx.	10 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 16 yard partially filled small grit skips by Sludge Screening House.

1x enclosed container skips containing rag awaiting collection by West Side PST's.

#### Pasteurisation Plant

Pasteurisation plant 9 streams running.

### East Side Raw Sludge Screen House

Doors closed at time of inspection.

#### West Side Aeration Lanes (Old)

Clear no issues to report.

#### 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 approxir	nately clear
throughout.			
"Fluffy" coverage across surfac significant quantity of material by			uild up, also
Significant quantity of material by	ypassing scre	eener.	
Odour Control Unit (OCU) perf	formance mo	<u>onitoring – (1</u>	3/02/20)
Plant	Reading	Action	Compliant
	(ppm)	Level (ppm)	
Main pumping station inlet	0.00 0.00	Unknown	Unknown
Main pumping station outlet	0.00	0.2	Yes
Main pumping station outlet	0.000 0.000 0.000	0.2	Tes
	0.000		
	(converted		
	from ppb figures		
	provided)		
East OCU	0.00	0.05	Yes
	0.00 0.00		
West inlet OCU	0.00	0.05	Yes
	0.00		
	0.00		
Sludge reception inlet	0.00 0.00	Unknown	Unknown
	0.00		
Sludge reception outlet	0.00	0.8	Yes
Sludge reception outlet	0.00 0.00 0.00	0.8	Yes

Thickening plant outlet	0.212 0.269 0.257 0.246 (converted from ppb figures provided)	0.6	Yes
Transfer PS inlet	0.00 0.00 0.00	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.5	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation Plant (OCU 12)	0.00 0.00 0.00	0.5	Yes