

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 31 th October 2019 Attendees: Mr L Phillips and Ms Charlotte Page (Thames Water)			
Storm Water Storage Tanks (SWST)			
Tank 1A - Tank empty clean - All hoppers drained to lowest point.			
Fank 1B - Tank empty clean - Hoppers 1 & 2 had been fully drained. Hopper 3 required draining approx. 25% full.			
Fank 2A - Tank empty and flushed clean - All hoppers required draining approx. 50% full.			
Fank 2B - Tank empty clean - All hoppers full & require draining.			
Fank 3A - Tank empty clean - All hoppers full & require draining.			
Tank 3B - Tank empty with slight grit build up approximately 30% of tank covered by grit requires further flushing. All Hoppers require draining approx. 60% full.			
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 empty clean - All hoppers full & require draining.

Tank 6B - Tank empty slight grit build up approximately 20% of tank covered by grit tank requires further flushing. Hoppers 1 & 2 require draining, approximately 50% full. Hopper 3 approximately 30% full & requires draining.

Tank 7A - Tank in use and in process of being retuned - All Amajets in use.

Tank 7B - Tank recently returned - approx. 90% of tank still covered.

Tank 8A - Tank empty and flushed clean. Hoppers 1, 2 & 3 full, requires draining.

Tank 8B - Tank empty and flushed clean. Hoppers 1, 2 & 3 full, requires draining.

Feed Channel - The level of effluent in both feed channels was low – 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 (H₂S) for all of the monitors, which were providing

data at time of inspection	12:20 31/10/2019 :
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Monitor 1	0.004	ppm		12:21
Monitor 2	0.005	ppm		12:21
Monitor 3	0.000	ppm		12:21
Monitor 4	0.003	ppm		12:21
Monitor 5	0.005	ppm		12:21
Monitor 6	-		-	=
Monitor 7	-		-	-
Monitor 8	0.004	ppm		12:22
Monitor 9	0.004	ppm		12:22
Monitor 10	0.004	ppm		12:22
Monitor 11	0.000	ppm		12:22
Monitor 12	0.004	ppm		12:22
Monitor 13	0.000	ppm		12:22
Wind Speed	3.3	mph		
Wind Direction	260°			

Odour Log (Thames)

Thursday 24th October: AM –

Temp: Cool. Weather: Rain. 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: Cloudy. All OMU's in use. Time: 05:30.

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

Actions: None noted.

Friday 25th October:

AM -

Temp: Cool. Weather: Cloudy. 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: Rain. All OMU's in use.

Time: 17:30

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

Actions: None noted.

Saturday 26th October

AM -

Temp: Warm. Weather: Rain. All OMU's in use.

Time: 17:30.

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

Actions: None noted.

PM -

Temp: Cold Weather: Rain. All OMU's in use. Time: 05:30

Observations/Complaints: OM4 0.025 AT 23:01 – 23:58.

Operational Issues/Causes: Engine exhaust.

Actions: None noted.

Sunday 27th October:

AM -

Temp: Cold. Weather: Sunny. All OMU's in use. Time: 17:30.

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

Actions: None noted.

PM -

Temp: Freezing.
Weather: Clear night.
All OMU's in use.

Time: 05:30.

Observations/Complaints: OM4 0.017 at 21:02 – 21:58 OM5 – 0.017

AT 22:31 – 22:44.

Operational Issues/Causes: None noted.

Actions: None noted.

Monday 28th October 2019:

 $\overline{\mathsf{AM}}$ –

Temp- Cold.

Weather: Sunny with patch clouds.

All OMU's in use. Time: 17:30.

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

Actions: None noted

PM -

Temp: Cold.

Weather: Overcast night.

All OMU's in use.

Time: 05:30.

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

Actions: None noted.

Tuesday 29th October 2019:

AM –

Temp: Cold.

Weather: Cold Sunny with Patchy Clouds.

All OMU's in use.

Time:

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

Actions: None noted.

PM -

Temp: Cool.

Weather: Clear night. All OMU's in use.

Time: 05:30

Observations/Complaints: OM9 – 0.017 at 22:22 – 22:31.

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 30th October 2019:

AM -

Temp: Cool.

Weather: Sunny with patchy clouds.

All OMU's in use. Time: 17:30.

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

Actions: None noted.

PM-

Temp: Cold. Weather: Clear. All OMU's in use.

Time: 05:30.

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

Actions: None noted.

Sludge Dip Records

Date	West PSTs 1	West PSTs 2	West PSTs 3	West Total	East PSTs	Grand Total
	All units in m ³					
OMP limit	500					
28/10/2019	0	970	183	1153	2737	3890
30/10/2019	0	970	0	970	2400	3370

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 - weak sloppy seal no evidence of spillage.

Digester 6 - In use - weak sloppy seal no evidence of spillage.

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

Digester 8 - In use - weak sloppy seal no evidence of spillage.

Digester 9 - In use - weak sloppy seal no evidence of spillage.

Digester 10 - In use - weak sloppy seal no evidence of spillage.	
Digester 11 - In use - weak sloppy seal no evidence of spillage.	
Digester 12 - In use - weak sloppy seal no evidence of spillage.	
Digester 13 - In use - weak sloppy seal no evidence of spillage.	
Digester 14 - Out of use - empty and clean - contractor on site undertaking maintenance.	
Digester 15 - In use - weak sloppy seal no evidence of spillage.	
Digester 16 - Out of use - empty and clean - contractor on site undertaking maintenance	
Digester 17 - In use - good thick crusty seal no evidence of spillage.	
Digester 18 - Out of use - empty and clean - contractor on site undertaking maintenance	
Digester 19 - In use - weak sloppy seal no evidence of spillage.	
Digester 20 - In use - weak sloppy seal no evidence of spillage.	
<u>GENERAL</u>	
Sludge Screening House	
All doors closed at time of inspection.	
Imported Sludge	
Approx. 14 imports daily for preceding seven days.	
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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 (8 yard) open skip empty covered with tarpaulin. 1x empty skips in Service Road located by the PST's 9-12.

Pasteurisation Plant

Pasteurisation plant 1, 9, 10 & 12 currently out of service.

East Side Raw Sludge Screen House

Doors open at time of inspection. Skip recently changed – door closed by DC – he confirmed that skip drive should shut upon completion of change.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 70% 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 – (23/10/19)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.00	Unknown	Unknown
	0.00		
	0.00		
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	0.00	0.05	Yes
	0.00		
	0.00		
Sludge reception inlet	0.00	Unknown	Unknown
	0.00		
	0.00		
Sludge reception outlet	0.00	0.8	Yes
	0.00		
	0.00		
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	No data	0.6	Yes
Transfer PS inlet	0.00	Unknown	Unknown
	0.00		
	0.00		
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			