

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Monday 23 rd December 2019 (10:00)	
Attendees: Mr Zaheer Kadri (LBH) and Ms Charlotte Page (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A - 3B were all at approximately 80% full of effluent due to prior rainfall. There were no observations of odour within the locality of the SWT. The amajets were said to be all in normal working operation (all in order).</p> <p>Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not working.</p> <p>Tank 6A - 8B were all at approximately 80% full of effluent due to prior rainfall. There were no observations of odour within the locality of the SWT. The amajets were said to be all in normal working operation (all in order).</p> <p>Feed Channel - The level of effluent in both feed channels was at 20% high - in places it was murky with fatty deposits visible. Most of the channel was free flowing and odourless. No local odours rags, fats or solids.</p>	

Complaints

The Council received (1) complaint by telephone in the preceding week.

On the 18th of December 2019 at approx 16:22 a telephone call was passed to the Enforcement Team of Odours allegedly emanating from TW site. The complaint was received from the James Street area of Hounslow TW3 1SP. A visit was made on the 23rd of December 2019 for the routine site inspection. There were no abnormalities or significant spikes in the Trends when observing Odour Monitors 2, 3 and 13. The weather at the time of the complaint was wet and rainy hence no objective assessment was taken at the time. The complainant was notified of the action taken and updated. The Flare reference for this complaint has been logged under 992022.

The Council 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:

Monitor 1	0.005	ppm	10:10
Monitor 2	0.004	ppm	10:10

Monitor 3	0.000	ppm	10:10
Monitor 4	0.005	ppm	10:10
Monitor 5	0.006	ppm	10:10
Monitor 6	0.007	ppm	10:10
Monitor 7	0.006	ppm	10:10
Monitor 8	0.006	ppm	10:10
Monitor 9	0.004	ppm	10:10
Monitor 10	0.004	ppm	10:10
Monitor 11	0.004	ppm	10:10
Monitor 12	0.008	ppm	10:10
Monitor 13	0.006	ppm	10:10
Wind Speed	5.936	mph	10:10
Wind Direction	231.610	Deg	10:10

Odour Log (Thames) - Photocopies of log entries taken:

Thursday 19th December 2019

AM – Cool temperature with Rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: No odours.

Actions: None noted.

PM – Cool temperature with Rain.

All OMU's in use.

Time: 05:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour issues.

Actions: None noted.

Friday 20th December 2019

AM – Cool temperature with Rain.

All OMU's in use.

Time: 17:30

Observations/Complaints: OM5 spiked to 0.017ppm max (<15).

Operational Issues/Causes: No odour issues reported.

Actions: None noted.

PM – Cool temperature with Rain.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No Odour issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 21st December 2019

AM – Cool temperature with Rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour issues.

Actions: None noted.

PM – Cool temperature with Rain.

All OMU's in use.

Time:05:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour identified.

Actions: None Noted.

Sunday 22nd December 2019

AM – Cool temperature with Rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour issues.

Actions: None Noted.

PM – Cool/ clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour issues.

Actions: None noted.

Monday 23th December 2019

AM – Cool / Rain with sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour issues.

Actions: None.

PM – Cool with Rain.

All OMU's in use.

Time: 05:30

Observations/Complaints. OM2 spiked to 0.044ppm at 00:00 (<15)

Operational Issues/Causes: Rag skip area hosed down.

Actions: No odour issues.

Tuesday 24th December 2019

AM – Cool and cloudy

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: No odours found.

Actions: none noted.

PM – Cold clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: OM8 spiked to 0.024ppm at 01:10 (<15).

Operational Issues/Causes: None odours found.

Actions: None noted.

Wednesday 25th December 2019

AM – Cool overcast night.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: None odours found.

Actions: None noted.

PM – Cool clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: All areas checked.

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					
23/12/2019	0	389	328	717	2570	3287

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 - good seal thick in texture.

Digester 6 - in use - seal level approx. 1ft below coping stones - good seal slightly gassy.

Digester 7 - Out of service.

Digester 8 - Out of service.

Digester 9 - in use - seal level approx. 1ft below coping stones - good seal dry and thick.

Digester 10 - in use - seal level approx. 1ft below coping stones - good seal.

Digester 11 - in use - seal level approx. 1ft below coping stones - good seal slightly watery in places.

Digester 12 - in use - seal level approx. 1ft below coping stones - good seal.

Digester 13 - in use - seal level approx. 1ft below coping stones - good seal.

Digester 14 - out of use.

Digester 15 - out of use.

Digester 16 - in use - seal level approx. 1ft below coping stones - good seal.

Digester 17 - in use - seal level approx. 1ft below coping stones - good seal.

Digester 18 - in use - seal level approx. 1ft below coping stones - good seal.

<p>Digester 19 - in use - seal level approx. 1ft below coping stones - good seal thick.</p> <p>Digester 20 - in use - seal level approx. 1ft below coping stones - good seal thick in texture.</p> <p>No odour in the area observed at times of inspection</p>	
<p><u>GENERAL</u></p> <p><u>Sludge Screening House</u></p> <p>All doors closed at time of inspection No odours observed.</p> <p><u>Imported Sludge</u></p> <p>Imports were closed – No deliveries made.</p> <p><u>Final Settlement Tanks East Side of Works</u></p> <p>The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78). All jets and hoses were in operation and no excessive build-up of algae.</p> <p><u>Skips</u></p> <p>No Skips present at the East side screening House- All clear. Eastside Grit House- 2 x 12 yard skips full with general waste / NO covers No Skips present at the West Side gritting house. - All clear.</p>	

No odour detected at both locations.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West side primary settlement tanks (PST)

Rectangular PSTs – No issues noticed at time of inspection

Circular PST's 9 and 10 were in use and all hoses were in operation. Circular PST number 11 and 12 had been drained down and out of service. No Odours observed.

Pasteurisation Plant

Pasteurisation plant had ten streams in service fully operational.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 100% clear of any obstruction- effluent is flowing with ease NO rags or build up noticed..

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 free flowing no obstructions or odours.

The “Fluffy” coverage (obscured internal dividing walls within tank) that had been observed on previous visits had lightened in texture revealing

the dividing walls within the tank. There were no concerning odours around this area.

Odour Control Unit (OCU) performance monitoring – (NO RECORD AVAILABLE DUE TO CHRISTMAS)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.00 0.00 0.00 Ave: 0.00	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00 Ave: 0.00	0.2	Yes
East OCU	0.00 0.00 0.00 Ave: 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00 Ave: 0.00	0.05	Yes
Sludge reception inlet	0.00 0.00 0.00 Ave: 0.00	Unknown	Unknown
Sludge reception outlet	0.00 0.00 0.00 Ave: 0.00	0.8	Yes

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