



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 9 th February 2021	
Attendees: Mr Steven Maunders and Mr Tom Costin (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank full.</p> <p>Tank 1B – Tank full.</p> <p>Tank 2A – Tank full.</p> <p>Tank 2B – Tank full.</p> <p>Tank 3A – Tank full.</p> <p>Tank 3B – Tank full.</p> <p>Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all in use - unable to gauge condition as lighting system still not working.</p> <p>Tank 6A – Tank full.</p> <p>Tank 6B – Tank full.</p>	

Tank 7A – Tank full.

Tank 7B – Tank full.

Tank 8A – Tank full.

Tank 8B – Tank full.

Feed Channel - The level of effluent in both feed channels was approximately 75% capacity - 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 monitors which were providing data at time of inspection:

Monitor 1	.000	ppm	13:29
Monitor 2	.006	ppm	13:29
Monitor 3	.000	ppm	13:29
Monitor 4	.000	ppm	13:29
Monitor 5	.007	ppm	13:29
Monitor 6	.005	ppm	13:29
Monitor 7	.000	ppm	13:29

Monitor 8	.007	ppm	13:29
Monitor 9	.000	ppm	13:29
Monitor 10	.000	ppm	13:29
Monitor 11	.000	ppm	13:29
Monitor 12	.000	ppm	13:29
Monitor 13	.000	ppm	13:29
Wind Speed	16.8	mph	13:29
Wind Direction	71°		13:29

Odour Log (Thames):

Wednesday 3rd February 2021:

AM – Cold and Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

PM – Cool - Clear Night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

Thursday 4th February 2021:

AM – Cold and Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "OM6 0.025ppm 16:31-16:47."

Operational Issues/Causes: "Storm Tanks spilling to River."

Actions: No data.

PM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

Friday 5th February 2021:

AM – Cool and Cloudy with Sunny Spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

PM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

Saturday 6th February 2021:

AM – Cold – Cloudy with Sunny Spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

PM – Cold - Rain.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

Sunday 7th February 2021:

AM – Freezing – Rain with Sunny spells.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

PM – Freezing - Clear Night.

All OMU's in use.

Observations/Complaints: "OM5 0.015ppm 21:12-22:11."

Operational Issues/Causes: "No odour issues found."

Actions: No data.

Monday 8th February 2021:

AM – Cold and Cloudy.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: "Storm Tanks full."

Actions: No data.

PM – Freezing – Clear night.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: None noted.

Actions: No data.

Tuesday 9th February 2021:

AM – Cold and Cloudy.

All OMU's in use.

Observations/Complaints: "OM8 spiked at 15:48-16:02 <15 mins duration max 0.020ppm."

Operational Issues/Causes: "Storm Tanks returning early during shift. Stopped at 10:00."

Actions: No data.

PM – Freezing – Clear Night.

All OMU's in use.

Observations/Complaints: "OM5 0.017 19:11-20:11."

Operational Issues/Causes: "No odour source located."

Actions: No data.

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					
03/02/21	0	1368	885	2253	912	3165
05/02/21	0	1368	885	2253	912	3165
08/02/21	0	993	2198	3191	1449	4640

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. 3ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 6 – Out of use.

Digester 7 - In use – seal level approx. 6ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 8 - In use – seal level approx. 4ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 9 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 10 - In use – seal level approx. 4ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 11 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 12 - In use – seal level approx. 4ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 13 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 14 - In use – seal level approx. 4ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 15 - Out of use.

Digester 16 - In use – seal level approx. 4ft below coping stones - seal weak and bubbling – ongoing spill requiring anti-foam and clean-up.

Digester 17 - In use – seal level approx. 3ft below coping stones – seal weak and bubbling.

Digester 18 - Out of use.

Digester 19 - Out of use.

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

Operatives working around Digesters hosing down and applying anti-foam at time of inspection.

GENERAL

Sludge Screening House

Doors open at the time of inspection.

Imported Sludge

Average of three (3) 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).

Skips

2x large open skip 1x empty & 1x general waste in Service Road at rear of Sludge Screen House.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West Side Aeration Lanes (Old)

Battery C aeration feed channel 100% obstructed in one channel (left) – requires jetting (TW advise that there is continuing flow below surface).

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 9, 10 & 12 in use, Number 11 drained down.

Pasteurisation Plant

Seven streams running.

New Works (West Side)

Feed Channel for Aeration Lanes 50% obstructed – requires jetting.

Odour Control Unit (OCU) performance monitoring – 08/02/21

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
East OCU	0.00 0.00 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00	0.05	Yes
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	1.012 1.008 1.001	0.6	No
Transfer PS inlet	1.096 1.087 1.077	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.5	Yes
New West inlet (OCU11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation Plant (OCU12)	0.00 0.00 0.00	0.5	Yes