



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 1 st December 2020	
Attendees: Mr L Phillips 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 empty – slight grit build up at hopper end of the tank. All hoppers full and require draining / over pumping.</p> <p>Tank 1B – Tank empty clean – All hoppers full and require draining / over pumping.</p> <p>Tank 2A – Tank empty and flushed clean – All hoppers drained to lowest point.</p> <p>Tank 2B – Tank empty – recently returned - Tank covered by sludge – Tank requires further flushing – All Hoppers full and requires draining / over pumping.</p> <p>Tank 3A – Tank empty clean – All hoppers drained to lowest point.</p> <p>Tank 3B – Tank empty clean – All hoppers full and requires draining / over pumping.</p> <p>Tanks 4A, 4B, 5A & 5B - which are covered and odour controlled were</p>	

all in use - unable to gauge condition as lighting system still not working.

Tank 6A – Tank empty clean – All hoppers drained to lowest point.

Tank 6B – Tank empty – recently returned - Tank covered by sludge – Tank requires further flushing – All Hoppers full and requires draining / over pumping.

Tank 7A – Tank empty – recently returned - Tank covered by sludge – Tank requires further flushing – All Hoppers full and requires draining / over pumping.

Tank 7B – Tank empty – recently returned - Whole of tank covered by sludge – requires further flushing – All hoppers full and requires draining / over pumping.

Tank 8A – Tank empty and flushed clean – all Hoppers full – requires draining/over-pumping.

Tank 8B – Tank empty clean – All hoppers full and require draining / over pumping.

Feed Channel - The level of effluent in both feed channels was approximately 10% 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	0.007	ppm	15:23
Monitor 2	0.005	ppm	15:23
Monitor 3	0.000	ppm	15:23
Monitor 4	0.008	ppm	15:23
Monitor 5	0.003	ppm	15:23
Monitor 6	0.006	ppm	15:24
Monitor 7	0.007	ppm	15:24
Monitor 8	0.007	ppm	15:24
Monitor 9	0.000	ppm	15:24
Monitor 10	0.008	ppm	15:24
Monitor 11	0.006	ppm	15:24
Monitor 12	0.006	ppm	15:24
Monitor 13	0.006	ppm	15:24
Wind Speed	0.202	mph	15:24
Wind Direction	341.586		

Odour Log (Thames)

Wednesday 25th November 2020

DAY SHIFT:

Temp: Cool.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues found or reported.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

NIGHT SHIFT:

Temp: Cold.
Weather: Clear night.
Odour Readings: All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint: No odour issues.
Operational issues / causes observed: Blank.
Actions Taken: Blank.

Thursday 26th November 2020

DAY SHIFT:

Temp: Cool.
Weather: Cloudy.
Odour Readings: All OMU's in operation.
Time: 17:30.
Observations / Customer Complaint:
No odour issues.
Operational issues / causes observed: Blank.
Actions Taken: Blank.

NIGHT SHIFT:

Temp: Freezing.
Weather: Clear night.
Odour Readings: All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint: No odour issues.
Operational issues / causes observed: Blank
Actions Taken: Blank.

Friday 27th November 2020

DAY SHIFT:

Temp: Cold.
Weather: Cloudy.
Odour Readings: All OMU's in operation.
Time: 17:30.
Observations / Customer Complaint: No odour issues.
Operational issues / causes observed: Blank.
Actions taken: Blank.

NIGHT SHIFT:

Temp: Cold.

Weather: Cloudy.
Odour Readings. All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint: No odour issues.
Operational issues / causes observed: Blank
Actions taken: Blank.

Saturday 28th November 2020

DAY SHIFT:

Temp: Cool.

Weather:Cloudy.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues found or reported.

Operational issues / causes observed: Blank.

Actions taken: Blank.

Sunday 29th November 2020

DAY SHIFT:

Temp: Cool.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Cloudy.

Odour Readings: All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint: No odour issues found or reported.
Operational issues / causes observed: Blank.
Actions Taken: Blank.

Monday 30th November 2020

DAY SHIFT:

Temp: Cool.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues found or reported.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

Tuesday 01st December 2020

DAY SHIFT:

Temp: Cold.

Weather: Sunny.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:

Temp: Cold

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

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					
25/11/20	117	534	740	1391	608	1999
27/11/20	117	679	595	1391	1240	2631
30/11/20	117	244	595	956	912	1868

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 - Seal level approx. 6” below coping stones – No evidence of any spills.

Digester 6 - In use – Weak sloppy seal - Seal level at surface of coping stones – No evidence of any spills.

Digester 7 - In use – Weak sloppy seal - Seal level approx. 2ft below coping stones - ongoing spill requiring anti-foam and clean-up.

Digester 8 - In use – Weak sloppy seal - Seal level approx. 18” below coping stones – No evidence of any spills.

Digester 9 - In use – Weak Sloppy seal - Seal level approx. 18” below coping stones – No evidence of any spills.

Digester 10 - In use – Weak Sloppy seal - Seal level approx. 6” below coping stones – No evidence of any spills.

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

Digester 12 - In use – Weak sloppy seal - Seal level approx. 2ft below coping stones – No evidence of any spills.

Digester 13 - In use – Weak sloppy seal - Seal level approx. 3ft below coping stones - No evidence of any spills.

Digester 14 - In use – Weak sloppy seal - Seal level approx. 2ft below coping stones - No evidence of any spills.

Digester 15 - Out of use.

Digester 16 - In use – Weak sloppy seal - Seal level approx. 3ft below coping stones - ongoing spill requiring anti-foam and clean-up.

Digester 17 - In use – Weak sloopy seal - Seal level approx. 4ft below coping stones – No evidence of any spills.

Digester 18 - Out of use.

Digester 19 - Out of use.

Digester 20 - In use – Weak sloppy seal - Seal level approx. 5ft below coping stones – No evidence of any spills.

GENERAL

Sludge Screening House

All doors closed at the time of inspection.

Imported Sludge

Average of nine 8 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

1x container skip containing general waste in Service Road at rear of Sludge Screen House.

1x enclosed container skip & 1 x open container skip (empty) by circular PST's.

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, PST 11 drained down.

Pasteurisation Plant

Nine streams running.

New Works (West Side)

Feed Channel for Aeration Lanes completely obstructed – requires jetting.

“Fluffy” coverage across surface and quantity of material bypassing screener has reduced.

Odour Control Unit (OCU) performance monitoring – 01/12/20

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	0.89 0.75	0.6	Yes

	0.62			
Transfer PS inlet	15.79 15.05 14.78	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	