



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 15 th July 2020	
Attendees: Mr L. Phillips and Miss Charlotte Page (Thames Water) Time: 12:23	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty - approximately 10% of tank covered by grit/sludge – requires further flushing – All hoppers drained to lowest point.</p> <p>Tank 1B – Tank empty - approximately 10% of tank covered by grit/sludge – requires further flushing – All hoppers drained to lowest point.</p> <p>Tank 2A – Tank empty - approximately 10% of tank covered by grit – requires further flushing – Hoppers 1, 2 & 3 approx. 30% full – requires draining/over-pumping.</p> <p>Tank 2B – Tank empty – approximately 40% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 empty.</p> <p>Tank 3A – Tank empty – approximately 20% of tank covered by grit/sludge – requires further flushing – Hoppers 1, 2 & 3 empty.</p> <p>Tank 3B – Tank empty – approximately 60% of tank covered by grit/sludge – requires further flushing – All hoppers full and require</p>	

draining/over-pumping.

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.

Tank 6A – Tank empty - approximately 25% of tank covered by grit – requires further flushing – All hoppers full – requires draining/over-pumping

Tank 6B – Tank empty – All hoppers full - require draining/over-pumping.

Tank 7A - Tank empty – recently returned 75% of tank covered by grit – requires further flushing – All hoppers drained to lowest point.

Tank 7B – Tank empty – recently returned – 100% of tank covered by sludge – requires further flushing. All hoppers drained to lowest point.

Tank 8A – Tank empty clean – All hoppers full requires draining/over-pumping.

Tank 8B – Tank empty clean – All hoppers full requires draining/over-pumping.

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)

Monitor 1	0.000	ppm	13:17
Monitor 2	0.004	ppm	13:17
Monitor 3	0.000	ppm	13:17
Monitor 4	0.000	ppm	13:17
Monitor 5	0.000	ppm	13:17
Monitor 6	0.000	ppm	13:17
Monitor 7	0.004	ppm	13:18
Monitor 8	0.000	ppm	13:18
Monitor 9	0.004	ppm	13:18
Monitor 10	0.000	ppm	13:19
Monitor 11	0.000	ppm	13:19
Monitor 12	0.000	ppm	13:19
Monitor 13	0.000	ppm	13:19
Wind Speed	9.769	mph	13:19
Wind Direction	251.806°		13:19

Odour Log (Thames):

Thursday 9th July 2020:

DAY SHIFT :

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

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: Rain.
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 10th July 2020:

DAY SHIFT:

Temp: Warm.
Weather: Sunny W/ Patchy clouds.
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 use.
Time: 05:00.
Observations / Customer Complaint: OM7 0.038ppm 01:20 – 01:35.
Operational issues / causes observed: No odour detected wind direction to the west.
Actions Taken: Blank.

Saturday 11th July 2020

DAY SHIFT:

Temp: Warm.
Weather: Sunny W/ Patchy clouds.
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: OM5 0.015ppm 00:58 – 01:13
Operational issues / causes observed: Occasional odour detected around monitor 9 from PAS area.
Actions taken: Checked that odour traps on PAS streams are topped up. No sludge spills.

Sunday 12th July 2020

DAY SHIFT:

Temp: Hot.

Weather: Sunny W/ Patchy clouds.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM2 0.026 spike 9:37 – 09:52.

Operational issues / causes observed: Inlet area checked no issues.

Actions Taken: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM2 0.036ppm 22:32 – 23:11
0.039ppm 00:10 – 00:29.

Operational issues / causes observed: Blank.

Actions Taken: East inlet area checked no odour identified.

Monday 13th July 2020:

DAY SHIFT;

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

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: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

Tuesday 14th July 2020

DAY SHIFT

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

Odour Readings: All OMU's in operation.

Time: 17:30.

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

Operational issues / causes observed: OM No's 1, 2, 4 not trending.

Actions Taken: OM No's 1 & 4 put in defect log.

NIGHT SHIFT:

Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues customer complaint from Heathfields, South of site.

Operational issues / causes observed: OM No's 1, 2, 4 not trending no spikes. on trends.

Actions Taken: Site checked no source found usual smells from PAS.

Wednesday 15th July 2020

DAY SHIFT:

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

Odour Readings: All OMU's in operation.

Time: 17:30.

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

Operational issues / causes observed: Blank.

Action 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.

Operational issues / causes observed: OM No's 1, 2, 4 not trending properly

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					
10/07/2020	0	122	534	656	1920	2576
13/07/2020	0	328	389	717	1920	2637
15/07/2020	39	328	183	550	1920	2470

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 seal - seal level approx. 2ft below coping stones – No evidence of previous spillage.

Digester 6 - In use – Weak seal - Seal level approx. 4ft below coping stones – No evidence of previous spillage.

Digester 7 – Out of use.

Digester 8 - In use – Weak seal - Seal level approx. 4ft below coping stones - No evidence of previous spillage.

Digester 9 - In use – Weak seal - Seal level approx. 1ft below coping stones – No evidence of previous spillage.

Digester 10 - In use – Weak seal - Seal level approx. 2ft below coping stones - No evidence of previous spillage.

Digester 11 - In use – Weak seal - Seal level approx. 1ft below coping stones – No evidence of previous spillage.

Digester 12 - Out of use.

Digester 13 - In use – Weak seal - Seal level approx. 1ft below coping stones – No evidence of previous spillage.

Digester 14 - In use – Weak seal - Seal level approx. 6” below coping stones - ongoing spill requiring anti-foam and clean-up. Bell height high requiring draw down of Biogas.

Digester 15 - Out of use.

Digester 16 - Out of use.

Digester 17 - In use – Weak seal - Seal level approx. 2ft below coping stones - No evidence of previous spillage.

Digester 18 - Out of use.

Digester 19 - Out of use.

Digester 20 - In use – Weak seal- Seal level approx. 3ft below coping stones – No evidence of previous spillage.

GENERAL

Sludge Screening House

Roller shutter door approx. 1ft open - All other doors open at time of inspection – contractors on site working on screens.

Imported Sludge

An average of 10 imports reported 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 partially filled small grit skip & 1x minis skip containing general waste by Sludge Screening House.

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

1x empty open container skip by West Side 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).

Pasteurisation Plant

Pasteurisation plant = 9 streams running.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues.

Circular PST's All in use.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 approximately 75% blocked – required jetting.

“Fluffy” coverage across surface has again begun to build up significantly, also quantity of material bypassing screener.

Odour Control Unit (OCU) performance monitoring – 13/07/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	No data	0.2	Unknown
East OCU	0.00 0.00 0.00	0.05	No
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	No data	0.6	Unknown

Transfer PS inlet	No data	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	No	
Pasteurisation Plant (OCU 12)	0.00 0.00 0.00	0.5	Yes	