



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 20 th July 2021	
Attendees: Mr L Phillips & Mr S Maunders (LB Hounslow), Ms Roxanne Denny & Dan Grady (Thames Water), Mr M Edwards (MRAG).	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty and clean – All hoppers full and require over-pumping.</p> <p>Tank 1B – Tank empty slight grit build up at hopper end of the tank - all hoppers full and require over - pumping.</p> <p>Tank 2A – Tank empty clean - All hoppers drained to lowest point.</p> <p>Tank 2B – Tank empty slight grit build up at hopper end of the tank - all hoppers full and require over - pumping.</p> <p>Tank 3A – Tank empty slight grit build up at hopper end of the tank - all hoppers full and require over-pumping.</p> <p>Tank 3B – Tank empty slight grit build up at hopper end of the tank- Hoppers 1 and 2 drained to lowest point, hopper 3 full and requires over-pumping.</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</p>	

working.

Tank 6A – Tank empty and clean – All hoppers full and require over-pumping.

Tank 6B – Tank empty slight grit build up at hopper end of the tank - Hoppers 1 and 2 drained to lowest point, hopper 3 full and requires over-pumping.

Tank 7A – Tank empty slight grit build up at hopper end of the tank - all hoppers full and require over-pumping.

Tank 7B – Tank empty and clean – All hoppers full and require over-pumping.

Tank 8A – Tank empty – All hoppers full- backfilling due to faulty return valve.

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

Feed Channel - The level of effluent in both feed channels was approximately 20% 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 were not available as SCADA system “locked out” - software licensing issue awaiting resolution.

Monitor 1	N/A	ppm	N/A
Monitor 2	N/A	ppm	N/A
Monitor 3	N/A	ppm	N/A
Monitor 4	N/A	ppm	N/A
Monitor 5	N/A	ppm	N/A
Monitor 6	N/A	ppm	N/A
Monitor 7	N/A	ppm	N/A
Monitor 8	N/A	ppm	N/A
Monitor 9	N/A	ppm	N/A
Monitor 10	N/A	ppm	N/A
Monitor 11	N/A	ppm	N/A
Monitor 12	N/A	ppm	N/A
Monitor 13	N/A	ppm	N/A
Wind Speed	N/A	mph	N/A
Wind Direction	N/A		N/A

Odour Log (Thames)**Wednesday 14th July 2021****DAY SHIFT**

Temp: Warm.

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: Warm.

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

Thursday 15th July 2021

DAY SHIFT:

Temp: Warm.

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: Warm.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: No odour issues non reported.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

Friday 16th July 2021

DAY SHIFT:

Temp: Warm.

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: Hot.

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.

Saturday 17TH July 2021

DAY SHIFT:

Temp: Very hot.

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: Hot.

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.

Sunday 18th July 2021

DAY SHIFT:

Temp: Hot.

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: Hot.

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.

Monday 19th July 2021

DAY SHIFT:

Temp: Very hot.

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: Hot.

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 20th July 2021

DAY SHIFT:

Temp: Very hot.

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: Hot.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: Storm tanks need cleaning.

Operational issues / causes observed: Blank.

Actions Taken: Blank.	
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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					
14/07/2021	0	948	1030	1978	760	2738
16/07/2021	0	345	1030	1975	760	2735
19/07/2021	0	1007	1030	2037	912	2949

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 - Out of service.

Digester 6 - In use. Weak seal - level approx. 4ft below coping stones, no evidence of previous spill.

Digester 7 - In use. Weak seal - level approx. 4ft below coping stones, no evidence of spill.

Digester 8 - In use. Good seal thick and crusty - level approx. 5ft below coping stones, no evidence of previous spill.

Digester 9 - In use. Good seal thick and crusty - level approx. 4ft below coping stones, good seal.

Digester 10 - In use. Weak seal - level approx. 3ft below coping stones, no evidence of previous spill.

Digester 11 - In use. Weak seal - level approx. 2ft below coping stones, no evidence of previous spill.

Digester 12 - In use. Weak seal - level approx. 3ft below coping stones, no evidence of previous spill.

Digester 13 - In use. Good seal thick and crusty - level approx. 4ft below coping stones.

Digester 14 - In use. Weak seal - level approx. 3ft below coping stones, no evidence of previous spill.

Digester 15 - Out of service.

Digester 16 - In use. Weak seal- level approx. 3ft below coping stones - ongoing spill requiring anti-foam and clean-up, Bell height high requiring draw down of Biogas.

Digester 17 - In use. Good thick seal - level approx. 4ft below coping stones.

Digester 18 - Out of service.

Digester 19 - Out of service.

Digester 20 - In use – seal level approx. 4ft below coping stones – seal weak and bubbling.

GENERAL

Sludge Screening House

All doors open at the time of inspection.

Imported Sludge

Average of imports daily for preceding seven days not provided.

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – Tank 75 = 100 of surface covered in “duck weed”.

Skips

1x open container grit/rag skip (50 % full) covered, 1x 8 yard general waste skip (covered), 1x 8 yard grit rag skip (empty), 1x enclosed container skip (empty) in Service Road at rear of Sludge Screen House. Evidence of sludge/grit leakage from skip into surface water gutter – required clean-up.

East Side Raw Sludge Screen House

Doors closed at time of inspection – facility currently out of service – contractors on site undertaking maintenance.

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

Nine streams running.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

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

New Works (West Side) Battery E

Feed Channel for Aeration Lanes 10% obstructed – requires jetting.
Large thick crust evident previously has largely broken up and air noticeably breaking surface.

Odour Control Unit (OCU) performance monitoring – 20/07/21

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	No
East OCU	0.08 0.09 0.08	0.05	No
West inlet OCU	0.000 0.000 0.000	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	0.017	0.6	Yes

	0.016 0.013		
Transfer PS inlet	0.102 0.095 0.093	Unknown	Unknown
Transfer PS outlet	0.000 0.000 0.000	0.5	Yes
New West inlet (OCU11)	0.000 0.000 0.000	0.5	Yes
Pasteurisation Plant (OCU12)	0.04 0.02 0.01	0.5	Yes
GBT Plant OCU Outlet	0.000 0.000 0.000	Unknown	Unknown