



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 30 th May 2023	
Attendees: Mr L. Phillips (London Borough of Hounslow) and Miss Emma McDonald (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A – Tank empty clean – All Hoppers full and require draining/over-pumping.</p> <p>Tank 1B – Tank empty – Around 20% of tank covered by grit/sludge requires flushing – Hopper’s 1 and 2 approx. 90% full, Hopper 3 approx. 50% full requires draining/over-pumping.</p> <p>Tank 2A – Tank empty clean – Hopper’s 1 & 2 approx. 70% full, Hoppers 3 approx. 50% full requires draining/over-pumping.</p> <p>Tank 2B – Tank empty – Approx. 90% of tank covered by grit/sludge – requires further flushing – All Hoppers full and require draining/over-pumping.</p> <p>Tank 3A – Tank empty – Approx. 40% of tank covered by grit/sludge and requires flushing – All Hoppers full and require draining/over-pumping.</p>	

Tank 3B — Tank empty – 80% of tank covered by grit/sludge requires flushing – All Hoppers full - requires 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 – All Hoppers full and require draining/over-pumping.

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

Tank 7A – Tank empty – Approx. 90% of tank covered with by grit/sludge – requires flushing – All Hoppers covered in grit (shallow hoppers) requires draining/over-pumping.

Tank 7B – Tank empty – Approx. 90% of tank covered with by grit/sludge requires flushing – All Hoppers covered in grit (shallow hoppers) requires draining/over-pumping.

Tank 8A – Tank empty - Approx. 20% of tank covered by grit/sludge requires flushing – All Hoppers full and require draining/over-pumping.

Tank 8B – Tank empty - 90% of tank covered by grit/sludge requires flushing – All hoppers full and require flushing.

Feed Channel - The level of effluent in both feed channels was approximately 10% capacity.

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					
24/05/23	0	1485	1030	5064	1064	3579
26/05/23	0	1195	910	2105	1064	3169
29/05/23	20	1630	1181	2811	2394	5205

Complaints

The Council received no complaints by email from MRAG in the preceding week.

Thames Water controller advised that they had received no direct complaints in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received no calls to the out of hours service.

Odour Monitors

The odour readouts (H₂S) for all monitors which were providing data at time of inspection 30/05/2023:

Monitor 1	0.000	ppm	14:28
Monitor 2	0.001	ppm	14:28
Monitor 3	0.004	ppm	14:28
Monitor 4	0.000	ppm	14:28
Monitor 5	0.003	ppm	14:28
Monitor 6	0.004	ppm	14:28
Monitor 7	0.000	ppm	14:28
Monitor 8	0.006	ppm	14:28
Monitor 9	0.006	ppm	14:29
Monitor 10	0.008	ppm	14:29
Monitor 11	0.004	ppm	14:29
Monitor 12	0.004	ppm	14:29
Monitor 13	0.000	ppm	14:29
Wind Speed	5.541	mph	14:29
Wind Direction	56.368°		14:29

Odour Log (Thames):

Wednesday 24th May 2023

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. Cool.

Weather Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint.

OM5 spike at 01:19 – 01:33 max 0.021ppm.

Operational issues / causes observed.

No issues vent on main drive.

Actions Taken. No actions taken.

Thursday 25th May 2023

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. 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 26th May 2023

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. Clear Night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint.

OM3 spiking all night max 0.018ppm.

Operational issues / causes observed.

Aeration lane 20 starting smell north FST on B smelling.

Actions taken. B north FST's back service but tops quite smelling.

Saturday 27th May 2023

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. Clear Night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint.

OM3 showing odours from 22:45 max 0.029ppm

Operational issues / causes observed.

Aeration lane 20 starting to smell.

Actions taken. Blank.

Sunday 28th May 2023**DAY SHIFT**

Temp. Warm.

Weather. Sunny.

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. 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.

Monday 29th May 2023**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. 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 30th May 2023

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. Clear Night.
Odour Readings. All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint.
OM3 0.023 23:03 – 00.03.
Operational issues / causes observed.
Aeration lane 20 smelly.
Actions Taken. Blank.

Digesters

Digesters 1-4 – Out of use (permanent).

Digester 5 – In use –Good thick seal- No evidence of spillage

Digester 6 – In use –Good thick seal- No evidence of spillage.

Digester 7 In use –Good thick seal- No evidence of spillage.

Digester 8 - In use –Good thick seal- No evidence of spillage.

Digester 9 - In use- Weak seal - No evidence of sludge spill.

Digester 10 - In use- Weak seal - No evidence of sludge spill.

Digester 11 - In use –Good thick seal- No evidence of spillage.

Digester 12 – In use –Good thick seal- No evidence of spillage.

Digester 13 – Out of use

Digester 14 – Out of use.

Digester 15 – Out of use.

Digester 16 – Out of use.

Digester 17 - In use –Good thick seal- No evidence of spillage.

Digester 18 – In use –Good thick seal- No evidence of spillage.

Digester 19 – In use –Good thick seal- No evidence of spillage.

Digester 20 - In use –Good thick seal- No evidence of spillage.

GENERAL

Sludge Screening House

Doors closed at time of inspection. Roller shutter recently replaced – small gap at top – flagged for further works.

Imported Sludge

There were 103m³ imports in 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) – currently hoses being used to break up sludge on surface of all tanks.

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 & 11 in use – all have large fat deposits on surface – requires hoses to break-up. Number 12 drained down (long term out of service).

New Works (West Side) Battery E

No issues.

Pasteurisation Plant

Streams 7, 8,10 and 12 out of service.

Skips

1x small (blue) skip – rear of sludge screen house empty.

1x open container grit skip (empty) uncovered.

1x 10-Yard enclosed General Waste skip in Service Road at rear of East Raw Sludge Screening House.

Odour Control Unit (OCU) performance monitoring – 30/05/23

Not provided:

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	No data	Unknown	Unknown
East OCU	No data	Unknown	Unknown
West inlet OCU		Unknown	Unknown
Sludge reception inlet	No data	Unknown	Unknown
Sludge reception outlet	No data	Unknown	Unknown
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	No data	Unknown	Unknown
Transfer PS inlet	No data	Unknown	Unknown
Transfer PS outlet	No data	Unknown	Yes
New West inlet (OCU11)	No data	Unknown	Unknown
Pasteurisation Plant (OCU12)	No data	Unknown	Unknown
GBT Plant OCU Outlet	No data	Unknown	Unknown

