



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 17 th October 2023	
Attendees: Mr L Phillips (London Borough of Hounslow) and Ms Chantelle Dixon (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 30% of tank covered by grit and sludge - Tank requires further flushing- Hopper 3 around 50% full and requires draining/over-pumping - Hoppers 1 and 2 drained to lowest point.</p> <p>Tank 2A – Tank empty – Around 20% of tank covered by grit and sludge top end of tank – Tank requires further flushing – all hoppers drained to lowest point.</p> <p>Tank 2B – Tank empty – Around 70% of tank covered by grit and sludge – Tank requires further flushing – All Hoppers around 40% full and requires draining/over-pumping.</p> <p>Tank 3A – Tank empty – Around 30% of tank covered by grit and sludge – Tank requires further flushing - All Hoppers full and require draining/over-pumping.</p>	<p>Continue to drain down hoppers when possible.</p> <p>Continue to flush and clean when possible in line with the maintenance programme and when there is a long enough dry spell.</p>

Tank 3B — Tank empty and flushed – Around 50% of tank covered by grit/sludge – Tank requires further flushing - All Hoppers full and require 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 – around 20% of tank covered in grit and sludge - Tank requires further flushing - All Hoppers around 30% full and require draining/over-pumping.

Tank 6B – Tank empty – Around 20% of tank covered by grit and sludge - Hopper end of tank - Tank requires further flushing – All Hoppers full back filling and require draining.

Tank 7A –Tank in the process of being drained and cleaned at time of inspection.

Tank 7B – Tank 100% covered in grit and sludge – requires flushing. All Hoppers full.

Tank 8A – Tank empty – Around 80% of tank covered by grit and sludge – Tank requires further flushing – All Hoppers full and require draining/over-pumping.

Tank 8B – Tank empty – Around 90% of tank covered by grit and sludge – Tank requires further flushing – All Hoppers full and require draining/over-pumping.

Feed Channel - The level of effluent in both feed channels was approximately 20% 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					
11/10/23	0	1892	398	2290	4045	6335 (TW figure 7326)
13/10/23	183	0	679	862	5045	5907

Complaints

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

The Council directly received no complaints by email/online 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:

Monitor 1	0.000	ppm	13:06
Monitor 2	0.001	ppm	13:06
Monitor 3	0.006	ppm	13:06
Monitor 4	0.000	ppm	13:06
Monitor 5	0.000	ppm	13:06
Monitor 6	0.000	ppm	13:06
Monitor 7	0.000	ppm	13:07
Monitor 8	0.000	ppm	13:07
Monitor 9	0.000	ppm	13:07
Monitor 10	0.004	ppm	13:07
Monitor 11	0.000	ppm	13:07
Monitor 12	0.000	ppm	13:07
Monitor 13	0.000	ppm	13:07
Wind Speed	0.216	mph	13:07
Wind Direction	84.465°		13:07

Odour Log (Thames):

Wednesday 11th October 2023:

DAY SHIFT

Temp. Warm.

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. Warm.

Weather. Rain.

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.

Thursday 12th October 2023:

DAY SHIFT

Temp. Cool.

Weather. Rain W/ Sunny spells.

Odour Readings. All OMU's in operation

Time: 17:30.

Observations / Customer Complaint.

OM10 spiked to 0.048ppm.

Operational issues / causes observed.

Able onsite calibrating instruments.

Actions taken. Blank.

NIGHT SHIFT

Temp. Warm.

Weather. Rain.

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.

Friday 13th October 2023:

DAY SHIFT

Temp. Hot.

Weather. Sunny W/ Patchy clouds.

Odour Readings. All OMU's in operation

Time: 17:30.

Observations / Customer Complaint.

OM3 0.017 06:50 – 07:05.

Operational issues / causes observed. Blank.

Actions taken. Blank.

NIGHT SHIFT

Temp. Warm.

Weather. Overcast 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.

Saturday 14th September 2023:

DAY SHIFT

Temp. Warm.

Weather. Rain.

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.

Sunday 15th October 2023:

DAY SHIFT

Temp. Hot.

Weather. Sunny W/ Patchy clouds.

Odour Readings. All OMU's in operation

Time: 17:30.

Observations / Customer Complaint.

OM3 0.017 06:50 – 07:05.

Operational issues / causes observed. Blank.

Actions taken. Blank.

NIGHT SHIFT

Temp. Warm.

Weather. Overcast 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 16th October 2023:

DAY SHIFT

Temp. Cold W/ Patchy clouds.

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. Cold.

Weather. Clear night.

Odour Readings. All OMU's in operation

Time: 05:30.

Observations / Customer Complaint.

OM3 spiked to max 0.017ppm 20:24 – 21:23.

Operational issues / causes observed.

OCU11 poor performance high output from stack.

Actions taken. Blank.

Tuesday 17th October 2023:

DAY SHIFT

Temp. Cool.

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.

OM3 03 0.025PPM 18-24 18:40

0.028 21:54 – 22:10.

Operational issues / causes observed.

OCU11 poor performance.

Actions taken. Blank.

Digesters

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

Digester 5 – In use- Weak seal - No evidence of sludge spillage.

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

Digester 7 - In use- Weak seal - No evidence of sludge spillage.

Digester 8 - In use- Weak seal - No evidence of sludge spillage.

Digester 9 - In use –Good thick seal- No evidence of spillage.

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

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 – In use- Weak seal - No evidence of sludge spillage.

Digester 16 – Out of use.

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

Digester 18- In use- Weak seal - No evidence of sludge spillage.

Digester 19 - In use- Weak seal - No evidence of sludge spillage.

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

GENERAL

Sludge Screening House

All doors open at time of inspection – Contractors on-site replacing screens. Odour suppression unit deployed to area outside roller-shutters doors and in use – motor/fan-blade on unit faulty and resulting in noise nuisance – advised requires immediate repair/replacement.

Imported Sludge

2148m³ 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 duck weed blooms on tanks 71 & 73.

East Side Raw Sludge Screen House

Shutter doors closed and small door open 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).

New Works (West Side) Battery E

Inlet lane clear.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Works always continue and odour suppressant unit in use the doors are open. We have now repaired the fan.

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

Pasteurisation Plant

Streams 2, 3, 7, 8 and 12 out of service.

Skips

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

1x 10-Yard enclosed General Waste skip in Service Road between Aeration lanes 12 & 13.

Odour Control Unit (OCU) performance monitoring – 18/10/23:

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	0.024 0.023 0.023	0.2	Unknown
East OCU	0.000 0.000 0.000	0.05	Yes
West inlet OCU	0.041 0.041 0.041	0.05	Unknown
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	0.019 0.021 0.021	0.6	Yes
Transfer PS inlet	0.039 0.039 0.039	Unknown	Unknown
Transfer PS outlet	0.027 0.027 0.027	0.5	Yes
New West inlet (OCU11)	0.020 0.020 0.020	0.5	Unknown
Pasteurisation Plant (OCU12)	0.000 0.000 0.000	0.5	Unknown
GBT Plant OCU Outlet	0.019 0.019 0.019	Unknown	Unknown