



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 16 May 2023	
Attendees: Kumail Haider (L.B. Hounslow) and Miss Emma McDonald (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>1A = All Hoppers 50% full requires draining/over-pumping</p> <p>1B = Tank 20% covered in grit and all hoppers 50% full requires draining/over-pumping</p> <p>2A= Tank 10% covered in grit , all hoppers 20% full requires draining/over-pumping</p> <p>2B= Tank requires flushing 20% covered in grit/sludge, all hoppers full requires draining/over-pumping</p> <p>3A= Tank 40% covered by grit and sludge, all hoppers full - requires draining/over-pumping</p> <p>3B= Tank 30% covered by grit and sludge, all hoppers 40% - requires draining/over-pumping.</p> <p>Tanks 4A, 4B, 5A & 5B are covered, and odour controlled, were all in</p>	<p>Thames' response:</p> <ul style="list-style-type: none">• We have begun setting up overpumps to pump down some of the hoppers and will shortly begin our summer maintenance plan involving full cleans of the storm tanks, draining down of the hoppers, and maintenance work on the amajets and storm tank priming pumps

use - unable to measure condition as lighting system still not working

6A = Tank requires flushing – all hopper 80% full requires draining/over-pumping

6B = Tank requires flushing – all hoppers 50% full requires draining/over-pumping

7A= Tank 60% covered by grit and sludge – hoppers 1&2 80% requires further flushing

7B= Tank 50% covered by effluent, grit and sludge – requires draining/over-pumping

8A= Tank 50% covered by effluent, grit and sludge – requires further flushing. All Hoppers full requires draining/over-pumping

8B = Tank 50% covered by effluent, grit and sludge – requires further flushing – All Hoppers 60% requires draining/over-pumping

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					
10/05/2023	0	1152	722	1874	1568	3442
12/05/2023	0	1630	1368	2998	1416	4414
15/05/2023	0	1485	1387	2872	2057	4929

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 **0 online** complaints and **0 out of hour** calls during the preceding week.

Odour Monitors

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

Monitor 1	0.003	ppm	13.07
Monitor 2	0.001	ppm	↑
Monitor 3	0.000	ppm	
Monitor 4	0.000	ppm	
Monitor 5	0.000	ppm	
Monitor 6	0.004	ppm	
Monitor 7	0.000	ppm	
Monitor 8	0.007	ppm	
Monitor 9	0.003	ppm	
Monitor 10	0.004	ppm	
Monitor 11	0.005	ppm	
Monitor 12	0.005	ppm	
Monitor 13	0.000	ppm	
Wind Speed	5.0	MPH	
Wind Direction	325	DEG	↓

Odour Log (Thames):

Wednesday 10 May 2023

DAY SHIFT

Temp. Warm.

Weather. Cloudy w/Sunny Spells.

Odour Readings. All OMU's in operation except OM4.

Time: 17:30.

Observations / Customer Complaint.

No odour issues.

Operational issues / causes observed. No issues on site.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather Rain.

Odour Readings. All OMU's in operation except OM4/OM8.

Time: 05:30.

Observations / Customer Complaint.

OM5 spiked at 23.48-00.04, max 0.018 ppm and 03.00-03.18 max 0.022 ppm

Operational issues / causes observed. Odour coming from manhole on main drive.

OM8 trending erratically

Actions Taken. Blank.

Thursday 11 May 2023

DAY SHIFT

Temp. Cool.

Weather. Rain w/ Sunny Spells.

Odour Readings. All OMU's in operation except OM4.

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. Patchy Rain.

Odour Readings. All OMU's in operation except OM4.

Time: 05:30.

Observations / Customer Complaint.

No odour issues found or reported

Operational issues / causes observed. Blank

Actions Taken. Blank.

Friday 12 May 2023

DAY SHIFT

Temp. Warm.

Weather. Sunny w/Patchy Clouds

Odour Readings. All OMU's in operation except OM4.

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. Overcast Night.

Odour Readings. All OMU's in operation except OM4.

Time: 05:30.

Observations / Customer Complaint.

OM10 0.017 02.34-02.51

Operational issues / causes observed. Blank

Actions taken. Blank.

Saturday 13 May 2023

DAY SHIFT

Temp. Cool.

Weather. Cloudy

Odour Readings. All OMU's in operation except OM4.

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. Sunny w/Patchy Clouds.

Odour Readings. All OMU's in operation except OM4.

Time: 05:30.

Observations / Customer Complaint.

No odour issues found or reported

Operational issues / causes observed. Blank.

Actions taken. Blank.

Sunday 14 May 2023

DAY SHIFT

Temp. Cool.

Weather. Sunny w/ Patchy Clouds.

Odour Readings. All OMU's in operation except OM4.

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 except OM4.

Time: 05:30.

Observations / Customer Complaint.

OM3 0.026 (20.31-20.47) & 0.028 (21.31-21.47)

OM5 0.020 (18.17-18.32)

OM8 0.022 00.24-01.24 & 0.022 19.30-19.54

Operational issues / causes observed. OM8 trending erratically

Odour from main drive manhole PAS 5 sludge spill.

Actions Taken. Blank.

Monday 15 May 2023**DAY SHIFT**

Temp. Warm.

Weather. Sunny.

Odour Readings. All OMU's in operation except OM4.

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 except OM4.

Time: 05:30.

Observations / Customer Complaint.

OM3 0.018 (21.47-22.03)

OM10 0.016 (01.51-02.05)

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Tuesday 16 May 2023**DAY SHIFT**

Temp. Warm.

Weather. Sunny.

Odour Readings. All OMU's in operation except OM4.

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 except OM4.

Time: 05:30.

Observations / Customer Complaint.

No odour issues found or reported

Operational issues / causes observed. Blank.

Actions Taken. Blank

Digesters

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

Digester 5 – In use – seal level approx. 1.0ft below coping stones - seal crusty.

Digester 6 – In use – seal level approx. 1.0 ft below coping stones - seal crusty and bubbling. Bell High gas draw down required

Digester 7 - In use – seal level approx. 1ft below coping stones - seal weak bubbling and spilling over coping stone. Bell high gas drawn down required

Digester 8 - In use – seal level approx. 1.5ft below coping stones - seal good. Bell high gas drawn down required

Digester 9 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling.

Digester 10 - In use – seal level approx. 0.5ft below coping stones – seal weak and bubbling. Bell high gas drawn down required

Digester 11 - In use – seal level approx. 0.5ft below coping stones - seal good forming a crusty layer.

Digester 12 - In use – seal level approx. 1.0ft below coping stones - seal good and crusty.

Digester 13 – Out of use

Digester 14 – Out of use.

Digester 15 – Out of use.

Digester 16 – Out of use.

Digester 17 - In use – seal level approx. 1.5ft below coping stones - seal crusty/good.

Thames' response:

- PCEs to draw down bells
- Day ops to clean digester 7 spill and up antifoam dosage

Digester 18 – In use – seal level approx. 1.5ft below coping stones - seal crusty/good.

Digester 19 – In use – seal level approx. 0.5ft below coping stones - seal weak.

Digester 20 - In use – seal level approx. 2ft below coping stones - seal good.

GENERAL

Sludge Screening House

1x (pedestrian) door open at time of inspection.

Imported Sludge

117m³

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – FST73 swing bridge not operating.

East Side Raw Sludge Screen House

Doors open at time of inspection no contractors working.

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 9-11 in use and 12 drained down.

New Works (West Side) Battery E

E-battery aeration lane blockage.

Thames' response:

- I've arranged for the east skip to be collected and will ensure signs stating what waste can go in the skip are up
- Teams have been reminded about keeping doors of odour controlled buildings shut
- The tanker regularly cleans E battery aeration lane channels however some of the sprinklers are broken, we will speak to the teams about fixing these
- Ongoing repairs are being made on the wheel on FST 73 bridge

Pasteurisation Plant

Streams 2, 7, 8, 10 and 12 out of service.

Skips

1x 10-Yard East Side - grit skip contaminated

Odour Control Unit (OCU) performance monitoring: 16/05/2023

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Not done by TW due to resource issues	Unknown	Unknown
Main pumping station outlet	0.051 0.081 0.083	0.2	Yes
East OCU	0.080 0.081 0.083	0.05	No
West inlet	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	-	-	-
Sludge reception outlet	-	-	-
Thickening plant inlet	-	-	-
Thickening plant outlet	0.010 0.015 0.023	0.6	Yes
New West inlet (OCU 11)	0.070 0.072 0.075	0.5	Yes
Pasteurization (OCU 12)	1.445 1.410 1.379	0.5	No
Transfer PS inlet	0.330 0.339 0.331	-	-
Transfer PS outlet	0.014 0.014 0.019	0.6	Yes
GBT Plant OCU Outlet	0.000 0.000 0.000	-	-