



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 18 April 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 70% full requires draining/over-pumping</p> <p>1B = Tank requires flushing</p> <p>2A= Tank requires flushing 10% covered in grit requires draining/over-pumping</p> <p>2B= Tank requires flushing 20% covered in grit/sludge requires draining/over-pumping</p> <p>3A= Tank 40% covered by grit and sludge – requires further flushing – All Hoppers approx. 50% full - requires draining/over-pumping</p> <p>3B= Tank 20% covered by grit and sludge – requires further flushing –Hoppers 1-2 90% & 3 50% at capacity - requires draining/over-pumping.</p>	<p>Thames' response:</p> <ul style="list-style-type: none"> • Day ops/tankers to overpump storm tanks and hoppers when possible. Due to winter weather and heavy rain the storm tanks are frequently in use at the moment, but we are coming up with a plan to overpump and flush these when weather permits • Longer-term, project being scoped to address the storm tank non-return valve replacement and upgrade the borger pump, estimated cost £160,000 and beginning May 2023

Tanks 4A, 4B, 5A & 5B are covered, and odour controlled, were all in use - unable to measure condition as lighting system still not working

6B = Tank requires flushing – Hopper 3- 40% full requires draining/over-pumping

7B= Tank 50% covered by effluent, grit and sludge – requires further flushing

8A= Tank 40% covered by effluent, grit and sludge – requires further flushing. All Hoppers full and requires draining/over-pumping

8B = Tank 50% covered by effluent, grit and sludge – requires further flushing – All Hoppers full and requires 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					
12/03/2023	0	1466	61	1527	936	2463
14/03/2023	0	1860	412	2272	1240	5580
20/03/2023	0	1733	824	2557	912	3469

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	0.005	ppm	13.03
Monitor 2	0.001	ppm	↑
Monitor 3	0.005	ppm	
Monitor 4	0.003	ppm	
Monitor 5	0.005	ppm	
Monitor 6	0.006	ppm	
Monitor 7	0.000	ppm	
Monitor 8	0.007	ppm	
Monitor 9	0.004	ppm	
Monitor 10	0.006	ppm	
Monitor 11	0.006	ppm	
Monitor 12	0.006	ppm	
Monitor 13	0.005	ppm	
Wind Speed	8.80	MPH	
Wind Direction	78.40	DEG	↓

Odour Log (Thames):

Wednesday 12 April 2023

DAY SHIFT

Temp. Cool.

Weather. Rain w/Sunny Spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint.

OM5 0.018ppm 14.02-14.17.

Operational issues / causes observed. No issues on site.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather Cloudy.

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 13 April 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.

No odour issues found or reported

Operational issues / causes observed. Blank

Actions Taken. Blank.

Friday 14 April 2023

DAY SHIFT

Temp. Cool.

Weather. Rain 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.

Saturday 15 April 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

Operational issues / causes observed. Blank.

Actions taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Cloudy.

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 16 April 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. Cloudy.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint.

OM8 0.020ppm 18.49-19.07

Operational issues / causes observed. Area checked. No odour issues discovered.

Actions Taken. Blank.

Monday 17 April 2023

DAY SHIFT

Temp. Warm.

Weather. Cloudy w/Sunny Spells.

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

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Tuesday 18 April 2023

DAY SHIFT

Temp. Cool.

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. Cold.
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

Wednesday 19 April 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. Cold.
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

Digesters

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

Digester 5 – In use – seal level approx. 1.5ft below coping stones - seal weak and bubbling.

Digester 6 – In use – seal level approx. 1.0 ft below coping stones - seal weak and bubbling.

Digester 7 - In use – seal level approx. 2ft below coping stones - seal weak bubbling and spilling over coping stone. Bell high gas drawn down required

Digester 8 - In use – seal level approx. 2ft below coping stones - seal weak and bubbling. Bell high gas drawn down required

Digester 9 - In use – seal level approx. 1ft below coping stones - seal weak and bubbling.

Digester 10 - In use – seal level approx. 2ft below coping stones - Seal weak. Bell high gas drawn down required

Digester 11 - In use – seal level approx. 0.5ft below coping stones - seal weak and bubbling.

Digester 12 - Out of use

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. 2ft below coping stones - seal weak and bubbling.

Thames' response:

- PCEs to draw down digesters 7, 8 and 10

Digester 18 – In use – seal level approx. 0.5ft below coping stones - seal weak bubbling.

Digester 19 – In use – seal level approx. 1.5ft below coping stones - seal good.

Digester 20 - In use – seal level approx. 1.5ft below coping stones - seal good.

GENERAL

Sludge Screening House

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

Imported Sludge

No data

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78) – no issues.

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:

- East side grit skip to be cleared and teams reminded of use
- Pumping station and raw sludge screening doors to be shut
- Tanker clearing E battery aeration lane channels

Pasteurisation Plant

Streams 2, 7, 8, 10 and 11 out of service.

Skips

1x 10-Yard East Side - grit skip contaminated

Odour Control Unit (OCU) performance monitoring: 18/04/2023

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	0.25 0.28 0.30	0.2	No
East OCU	0.048 0.052 0.056	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	0.072 0.077 0.074	0.6	Yes
New West inlet (OCU 11)	0.048 0.049 0.053	0.5	Yes
Pasteurization (OCU 12)	1.064 1.068 1.054	0.5	No
Transfer PS inlet	0.363 0.364 0.370	-	-
Transfer PS outlet	0.046 0.047 0.048	0.6	Yes
GBT Plant OCU Outlet	0.003 0.003 0.003	-	-