



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Wednesday 29 November 2023	
Attendees: Mr Kumail Haider (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– significant sections of weed growth remaining. All Hoppers approx. 80% full - Requires flushing and draining/over-pumping.</p> <p>Tank 1B – Tank empty – Approx. 80% of tank covered by grit and sludge – requires flushing –Hoppers 1&3 approx. 70% full - Requires flushing and draining/over-pumping.</p> <p>Tank 2A – Tank empty – Approx. 10% of tank covered by grit and sludge – requires flushing –Hopper 1 approx. 60% full - Requires flushing and draining/over-pumping.</p> <p>Tank 2B – Tank empty – Approx. 50% of tank covered by grit and sludge – requires flushing – All Hoppers approx. 40% full - Requires draining/over-pumping.</p> <p>Tank 3A – Tank empty – Approx 50% of tank covered by grit and</p>	

sludge – requires flushing.

Tank 3B — Tank in use – recently returned - approx 50% remains covered – requires further flushing and 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 and flushed clean. All Hoppers approx. 50% full - requires flushing and draining/over-pumping.

Tank 6B – Tank empty – Approx. 40% of tank covered by grit and sludge - requires further flushing – All Hoppers approx. 60% full requires flushing and draining/over-pumping.

Tank 7A – Tank full – All Amajets in use returning to works

Tank 7B – Tank recently returned - 100% of tank covered with thick layer of grit and sludge — All Hoppers full with heavy sludge deposits – requires flushing.

Tank 8A – Tank recently returned - 60% of tank covered with thick layer of grit and sludge –All Hoppers full with heavy sludge deposits – requires flushing.

Tank 8B – Tank recently returned - 100% of tank covered with thick layer of grit and sludge – requires flushing. All Hoppers full with heavy sludge deposits – requires flushing.

Feed Channel - The level of effluent in both feed channels was approximately 25% 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					
22/11/23	79	1922	824	2825	304	3129
24/11/23	40	1516	679	2235	608	2843
27/11/23	79	1734	824	2637	608	3245

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 received three complaints by email/online in the preceding week (two complaints received from out of borough)

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

Complaints.

- 1) 25/11/2023 @ 00.41 Summerwood Road, OM 4,9,10 & 11 historic data reviewed however no spikes noted.

Odour Monitors

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

Monitor 1	0.000	ppm	12.50
Monitor 2	0.001	ppm	
Monitor 3	0.001	ppm	
Monitor 4	0.003	ppm	
Monitor 5	0.000	ppm	
Monitor 6	0.000	ppm	
Monitor 7	0.003	ppm	
Monitor 8	0.004	ppm	
Monitor 9	0.000	ppm	
Monitor 10	0.005	ppm	
Monitor 11	0.000	ppm	
Monitor 12	0.000	ppm	
Monitor 13	0.004	ppm	
Wind Speed	0.206	mph	
Wind Direction	316.91°		

Odour Log (Thames):

Wednesday 22 November 2023:

AM –Sunny w/Patchy Clouds.

All OMU's in use.

Observations/Complaints: “No odour issues found or reported.”

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: “OM5 spiking max 0.034 a few times & OM8 0.020 02.03-02.45 .”

Operational Issues/Causes: Odour from vent on main drive.

Actions: No data.

Thursday 23 November 2023:

AM – Cool – Cloudy.

All OMU's in use.

Observations/Complaints: “OM8 0.029ppm 10.10-10.48 & 0.022ppm 11.48-12.04, OM3 0.021ppm 12.17-12.33.”

Operational Issues/Causes: Main drive manhole venting.

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: “OM3 0.016 20.17-20.31, OM4 0.016 04.19-04.47, OM8 0.020 18.13-18.33, 0.024 02.32-03.19 & 0.023 03.33-04.32.”

Operational Issues/Causes: Odour venting from main drive

Actions: No data.

Friday 24 November 2023:

AM – Cool – Cloudy.

All OMU's in use.

Observations/Complaints: “No odour issues.”

Operational Issues/Causes: No data.

Actions: No data.

PM – Cold– Clear Night.

All OMU's in use.

Observations/Complaints: “OM 8 spiked to max 0.028 04.17-05.04.”

Operational Issues/Causes: Area around powerhouse checked nothing of note found.

Actions: No data.

Saturday 25 November 2023:

AM – Cold – Cloudy.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cold – Cloudy.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: No data.

Actions: No data.

Sunday 26 November 2023:

AM – Cool – Cloudy.

All OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Rain.

All OMU's in use.

Observations/Complaints: "OM5 spiked to max at 0.037ppm 21.47-22.32"

Operational Issues/Causes: "Area checked no obvious odours found . High discharge from OCU11."

Actions: No data.

Monday 27 November 2023:

AM – Cold - Drizzle.

All OMU's in use.

Observations/Complaints: "OM5 0.019ppm 06:53 – 07:09 & 0.019ppm 08:23 – 08:38. OM8 0.018ppm 11:47 – 12:02."

Operational Issues/Causes: "No odour issues".

Actions: No data.

PM – Cold – Overcast Night.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported"

Operational Issues/Causes: No data

Actions: No data.

Tuesday 28 November 2023:

AM – Cold - Sunny.

All OMU's in use.

Observations/Complaints: "No odour issues found or reported."

Operational Issues/Causes: No data

Actions: No data.

PM – Cool – Clear Night.

All OMU's in use.

Observations/Complaints: "OM5 0.030 ppm 19.45-20.01, 0.026ppm 02.31-02.46."

Operational Issues/Causes: "Main Drive manhole odour"

Actions: No data.

<p><u>Digesters</u></p> <p>Digesters 1-4 – Out of use (permanent).</p> <p>Digester 5 – In use – seal level approx. 0,5ft below coping stones – Good Seal - Bell height high requiring draw down of Biogas.</p> <p>Digester 6 - In use – seal level approx. 1ft below coping stones – Good Seal - Bell height high requiring draw down of Biogas.</p> <p>Digester 7 - In use – seal level approx. 1ft below coping stones – Good seal - Bell height high requiring draw down of Biogas. Ongoing spill requiring clean-up and anti-foam.</p> <p>Digester 8 - In use – seal level approx. 1ft below coping stones – Good Seal – Bell height high requiring draw down of Biogas.</p> <p>Digester 9 - In use – seal level approx. 2ft below coping stones – Good Seal.</p> <p>Digester 10 - In use – seal level approx. 1ft below coping stones - Seal weak and bubbling – Tank noticeably gassing off - Bell height high requiring draw down of Biogas.</p> <p>Digester 11 - In use – seal level approx. 1ft below coping stones – Seal weak and bubbling.</p> <p>Digester 12 - In use – seal level approx. 2ft below coping stones – Good Seal.</p> <p>Digester 13 – Out of use.</p> <p>Digester 14 – Out of use.</p> <p>Digester 15 – Being brought back into service – seal level approx. 2ft</p>	

below coping stones – seal weak and bubbling.

Digester 16 – Out of use.

Digester 17 - In use – seal level approx. 1.5ft below coping stones – Good Seal.

Digester 18- In use – seal level approx. 1.5ft below coping stones – Seal weak and bubbling.

Digester 19 - In use – seal level approx. 2ft below coping stones – seal weak and bubbling.

Digester 20* - In use – seal level approx. 1.5ft below coping stones – Good Seal.

* = Digesters shown on Weekly “Cover Sheet” as out of service – however observed in use during Inspection.

GENERAL

Sludge Screening House

All doors open at time of inspection – Contractors on-site replacing screens. TW confirmed that doors now closed when contractors not on site. New Odour Suppression Unit deployed to area outside roller-shutters doors and in use.

Imported Sludge

1972m³ 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 blanket on tank 75.

East Side Raw Sludge Screen House

All doors closed at time of inspection.

West Side Aeration Lanes (Old)

Battery C aeration feed channel 100% obstructed in one channel (left) – partially cleared from previous Inspections – but still areas of complete coverage remain – 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. Number 12 drained down (long term out of service).

New Works (West Side) Battery E

Inlet lane and chambers clear.

Pasteurisation Plant

Streams 1, 2, 3, 7, and 12 out of service.

Skips

2x small (blue) skips – rear of sludge screen house both empty – quantity of rag on ground in surrounding area that requires clean-up.

1x open container grit skip (uncovered) empty and 1x 10-Yard Rag skip (covered) full - at rear of Sludge Screening House.

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

Odour Control Unit (OCU) performance monitoring – 29/11/23:

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	↑	0.2	↑
East OCU		0.05	
West inlet OCU		0.05	
Sludge reception inlet		Unknown	
Sludge reception outlet		0.8	
Thickening plant inlet		Unknown	
Thickening plant outlet		0.6	
Transfer PS inlet		Unknown	
Transfer PS outlet		0.5	
New West inlet (OCU11)		0.5	
Pasteurisation Plant (OCU12)		0.5	↓
GBT Plant OCU Outlet	↓	Unknown	Unknown