



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 17th August 2023

Attendees: Mr Steven Maunders (London Borough of Hounslow) and Mr Josh Callaway and Ms Chantelle Dixon (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A – Tank empty – Approx. 25% of tank covered by grit and sludge – with significant sections of weed growth – requires flushing. All Hoppers approx. 95% full and with complete blanket of duck-weed – Requires draining/over-pumping.

Tank 1B – Tank empty – Approx. 40% of tank covered by grit and sludge – with significant sections of weed growth – requires flushing – Hopper 1 approx. 40% full with complete blanket of duck-weed, Hopper 2 approx. 20% full with blanket of sludge and duck-weed, Hopper 3 approx. 50% full with blanket of sludge and duck-weed - requires draining/over-pumping.

Tank 2A – Tank empty – Approx. 30% of tank covered by grit and sludge – with significant sections of weed growth – requires flushing – Hopper 1 approx. 40% full, Hoppers 2 & 3 approx. 25% full.

Tank 2B – Tank empty – Approx. 75% of tank covered by grit and sludge – with significant sections of weed growth – requires flushing – All Hoppers approx. 60% full with blanket of sludge and duck-weed - requires draining/over-pumping.

Tank 3A – Tank empty and flushed clean. Hopper 1 approx. 10% full, Hopper 2 approx. 50% full and Hopper 3 approx. 75% full with blanket of sludge and duck-weed - requires draining/over-pumping.

Tank 3B — Tank empty and 100% covered with sludge and grit – requires flushing. Hoppers 1 & 2 full, Hopper 3 approx. 80% full – All with complete blanket of sludge and duck-weed - 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 and flushed clean. All Hoppers approx. 80% full - requires draining/over-pumping.

Tank 6B – Tank empty – Approx. 10% of tank covered by grit and sludge – requires further flushing – All Hoppers approx. 40% full.

Tank 7A – Tank in use – All Amajets in operation as Tank being returned.

Tank 7B – Tank empty – 100% of tank covered with thick layer of grit and sludge – with significant sections of weed growth – requires flushing – All Hoppers bottomed out with heavy sludge deposits – requires flushing.

Tank 8A – Tank empty - Approx. 50% of tank covered by grit and sludge – requires flushing – All Hoppers full with blanket of sludge and duck-weed – requires draining/over-pumping.

Tank 8B – Tank empty – Approx. 75% of tank covered by grit and sludge – requires flushing – All Hoppers approx. 75% full with complete blanket of sludge and duck-weed - 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					
11/08/23	127	1199 (TW figure 1198)	824	2150	1392	3542 (TW figure 3541)
14/08/23	98	1467	824	2389	1720	4109

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 six complaints by email in the preceding week:

09/08/23 (21:19) = Sussex Avenue.

11/08/23 (15:37) = Sussex Avenue.

12/08/23 (01:10) = Holme Court, Twickenham Road.

13/08/23 (18:41) = Sussex Avenue.

13/08/23 (22:33) = Sussex Avenue.

14/08/23 (12:15) = Sussex Avenue.

It was not possible to analyse OMU data for these incidents during the Inspection due to TW SCADA system being down whilst updates were being processed.

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

Odour Monitors

It was not possible to take odour readouts (H₂S) at the time of the Inspection as the SCADA system was down whilst updates were being processed.

Monitor 1	No data	ppm	No data
Monitor 2	No data	ppm	No data
Monitor 3	No data	ppm	No data
Monitor 4	No data	ppm	No data
Monitor 5	No data	ppm	No data
Monitor 6	No data	ppm	No data
Monitor 7	No data	ppm	No data
Monitor 8	No data	ppm	No data
Monitor 9	No data	ppm	No data
Monitor 10	No data	ppm	No data
Monitor 11	No data	ppm	No data
Monitor 12	No data	ppm	No data
Monitor 13	No data	ppm	No data
Wind Speed	No data	mph	No data
Wind Direction	No data		No data

Odour Log (Thames):

Wednesday 9th August 2023:

AM – Warm – Sunny.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Thursday 10th August 2023:

AM – Warm – Sunny.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Friday 11th August 2023:

AM – Hot – Sunny with Patchy Clouds.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Overcast Night.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Saturday 12th August 2023:

AM – Warm – Sunny with Patchy Clouds.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Cool – Clear Night.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Sunday 13th August 2023:

AM – Warm – Sunny with Patchy Clouds.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Warm – Patchy Rain.

OMU 2 out of service - All other OMU's in use.

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

Operational Issues/Causes: No data.

Actions: No data.

Monday 14th August 2023:

AM – Cool – Patchy Rain.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

PM – Warm – Clear Night.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "Nil."

Operational Issues/Causes: No data.

Actions: No data.

Tuesday 15th August 2023:

AM – Warm – Sunny with Patchy Clouds.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "OM8 0.020ppm 10:36-11:08."

Operational Issues/Causes: "No odour issues onsite."

Actions: No data.

PM – Warm – Clear Night.

OMU 2 out of service - All other OMU's in use.

Observations/Complaints: "No odour issues."

Operational Issues/Causes: No data.

Actions: No data.

Digesters

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

Digester 5 – In use – seal level approx. 3ft below coping stones – Good Seal.

Digester 6 - In use – seal level approx. 3ft below coping stones – Good Seal – evidence of previous spill requiring clean-up.

Digester 7 - In use – seal level approx. 4ft below coping stones – Good seal - Bell height high requiring draw down of Biogas.

Digester 8 - In use – seal level approx. 4ft below coping stones – Good Seal – Bell height high requiring draw down of Biogas.

Digester 9 - In use – seal level approx. 2ft below coping stones – Good Seal.

Digester 10 - In use – seal level approx. 3ft below coping stones - Seal weak and bubbling – Tank noticeably gassing off - Bell height high requiring draw down of Biogas.

Digester 11 - In use – seal level approx. 1ft below coping stones – Good Seal.

Digester 12 - In use – seal level approx. 1ft below coping stones – Good Seal.

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 –
Good Seal.

Digester 18- In use – seal level approx. 18” below coping stones –
Good Seal.

Digester 19 - In use – seal level approx. 4ft below coping stones –
Good Seal.

Digester 20 - In use – seal level approx. 3ft below coping stones –
Good Seal.

GENERAL

Sludge Screening House

One small door open at time of inspection. Roller shutter recently replaced – small gap at top – flagged for further works.

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) – currently hoses being used to break up duck weed blooms on tanks 75 & 78.

East Side Raw Sludge Screen House

Doors 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).

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 obstructed up to Aeration Lane 24 – requires hoses to break-up.

Pasteurisation Plant

Streams 2, 7, 8 and 10 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) and 1x 10-Yard Rag skip (covered) at rear of Sludge Screening House.

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

Odour Control Unit (OCU) performance monitoring – No data

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