



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 12 th August 2020	
Attendees: Mr L Phillips and Miss Charlotte Page (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A - Tank empty and clean – All hoppers full and require over-pumping.</p> <p>Tank 1B - Tank empty clean – All hoppers drained to lowest point.</p> <p>Tank 2A - Tank empty clean – All hoppers drained to lowest point.</p> <p>Tank 2B - Tank empty – Slight grit build up at Hopper end of the Tank- All hoppers drained to lowest point.</p> <p>Tank 3A - Tank empty clean – All hoppers drained to lowest point.</p> <p>Tank 3B - Tank empty clean – All hoppers drained to lowest point.</p> <p>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.</p> <p>Tank 6A - Tank empty clean – All hoppers drained to lowest point.</p>	

Tank 6B - Tank empty clean – All hoppers drained to lowest point.

Tank 7A - Tank empty – Slight grit build up at Hopper end of the Tank- All hoppers full and require draining/ Over pumping.

Tank 7B - Tank empty – Slight grit build up at Hopper end of the Tank- All hoppers full and require draining/ Over pumping.

Tank 8A - Tank empty – Slight grit build up at Hopper end of the Tank- All hoppers full and require draining/ Over pumping.

Tank 8B - Tank empty – Slight grit build up at Hopper end of the Tank- All hoppers full and require draining/ Over pumping.

Feed Channel - The level of effluent in both feed channels was approx. 40% capacity - no local odours.

Complaints

The Council directly received no complaints by telephone in the preceding week.

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

The Council received no complaints by email from MRAG.

Thames Water controller advised that they had received no direct complaints in 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	12:19
Monitor 2	0.004	ppm	12:19
Monitor 3	0.000	ppm	12:19
Monitor 4	0.006	ppm	12:19
Monitor 5	0.005	ppm	12:19
Monitor 6	0.005	ppm	12:19
Monitor 7	0.000	ppm	12:20
Monitor 8	0.005	ppm	12:20
Monitor 9	0.007	ppm	12:20
Monitor 10	0.008	ppm	12:20
Monitor 11	0.00	ppm	12:21
Monitor 12	0.004	ppm	12:21
Monitor 13	0.004	ppm	12:21
Wind Speed	2.033	mph	12:21
Wind Direction	40.363		12:21

Odour Log (Thames)

Thursday 6th August 2020

DAY SHIFT:

Temp: Hot.

Weather: Cloudy W/Sunny spells.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM2 spiked to max 0.017ppm 08:08 to 08:39.

Operational issues / causes observed: East inlet and immediate vicinity checked no obvious source of spiked found area washed.

Actions Taken: Blank.

NIGHT SHIFT:**Temp:** Warm.**Weather:** Clear night.**Odour Readings:** All OMU's in operation.**Time:** 05:30.**Observations / Customer Complaint:** OM2 spiked at 21:07 – 21:37 max 0.029, 22:22 – 22:37 max 0.023 22:52 – 23:07 max 0.040 ppm, 23:50 – 00:20 max 0.040 ppm OM3 spiked at 03:23 – 03:38 max 0.024 ppm.**Operational issues / causes observed:** East inlet checked no odour found OCU 11 out of range 581 ppb.**Actions Taken:** Blank.**Friday 7th August 2020****DAY SHIFT:****Temp:** Very hot.**Weather:** Sunny.**Odour Readings:** All OMU's in operation.**Time:** 17:30.**Observations / Customer Complaint:** OM2 spiked 0.071 ppm at 13:37 less than 15 mins.**Operational issues / causes observed:** Blank.**Actions Taken:** Blank.**NIGHT SHIFT:****Temp:** Hot.**Weather:** Clear night.**Odour Readings:** All OMU's in operation.**Time:** 05:30.**Observations / Customer Complaint:** OM3 multiple spikes between 20:52 – 23:24 0.46 max.

OM13 0.022 23:11 – 23:27

OM1 0.021 20:50 – 21:21.

OM10 0.043 3:36 – 4:23.

0.027 2:21 – 22:37.

OM9 0.026 4:03 – 4:21.

OM8 22:24 – 22:59

OM5 multiple spikes between 21:06 – 5:22 0.046 max.

OM2 multiple spikes between 23:07 – 5:07 0.033 max.

Operational issues / causes observed: All areas checked no obvious

sources found digesters gassing off higher bell heights as only 2 cjp's running boilers running on diesel OCU11 stack output high 570ppb tech asked to checked PAS area no spills all OCU'S running. East inlet area checked no obvious source.

Actions Taken: Flare ran to lower bell heights.

Saturday 8th August 2020

DAY SHIFT:

Temp: Very hot.

Weather: Cloudy W/ Sunny..

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: Warm.

Weather: Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM3 0.018 23:09 – 23:24
0.017 00:09 – 00:24.

Operational issues / causes observed: OCU11 high ppb output 530.

Actions taken: Blank.

Sunday 9th August 2020

DAY SHIFT:

Temp: Very hot.

Weather: Sunny.

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: Hot.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM5 0.018 20:36 – 20:52.

Operational issues / causes observed: Area checked no obvious source.

Actions taken: Blank.

Monday 10th August 2020

DAY SHIFT:

Temp: Very hot.

Weather: Sunny.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM2 0.015 @ 14:52 – 15:06 under 15 mins.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:

Temp: Hot.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM5 0.023 4:22 – 4:37

0.017 00:37 – 00:52

0.015 20:37 – 20:52.

Operational issues / causes observed: Area checked no obvious source usual odour from PAS.

Actions Taken: Blank.

Tuesday 11th August 2020

DAY SHIFT:

Temp: Very hot.

Weather: Sunny.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM2 – 0.015 for less than 15 min OM3 0.021 for less than 15 mins.

Operational issues / causes observed: Blank.

Actions taken: Blank.

NIGHT SHIFT:**Temp:** Hot.**Weather:** Cloudy.**Odour Readings:** All OMU's in operation.**Time:** 05:30.**Observations / Customer Complaint:** OM2 0.02ppm from 00:38 – 01:22.

OM5 0.022ppm from 00:53 – 01:37

OM3 0.02ppm 01:09 – 01:38.

Operational issues / causes observed: Inlets checked and washed down West inlets checked and FST'S checked no obvious odours found.**Actions Taken:** Inlets washed down.**Wednesday 12th August 2020****DAY SHIFT:****Temp:** Very Hot.**Weather:** Rain W/ Sunny spells.**Odour Readings:** All OMU's in operation.**Time:** 17:30.**Observations / Customer Complaint:** OM2 spiked twice for 14 minutes to 0.017 OM5 spiked for 14 minutes to 0.016.**Operational issues / causes observed:** Blank.**Actions taken:** Blank.**NIGHT SHIFT:****Temp:** Hot.**Weather:** Cloudy.**Odour Readings:** All OMU's in operation.**Time:** 05:30.**Observations / Customer Complaint:** OM2 spiked twice over 0.015ppm but less than 15 minutes – 23:38 – 03:53**Operational issues / causes observed:** Blank.**Actions Taken:** Blank.

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					
07/08/2020	0	61	389	450	2422	2872
10/08/2020	0	267	305	572	1761	2333

Digesters

Digesters 1-4 – Out of use (permanent) – noticeable quantity of water accumulated to the brim of these tanks which is thick with algae – requires draining. Long term project currently initiated to bring these units back into service – will require significant investment.

Digester 5 - In use – Weak seal level approx. 2ft below coping stones – No evidence of spill.

Digester 6 - In use – Weak seal level approx. 1ft below coping stones
No evidence of spill.

Digester 7 - Out of use.

Digester 8 - In use – Weak seal level approx. 18” below coping stones– Evidence of spill requiring anti-foam and clean-up.

Digester 9 - In use – Weak seal level approx. 18” below coping stones – No evidence of spill.

Digester 10 - In use – Weak seal level approx. 18” below coping stones – No evidence of spill.

Digester 11 - In use – Weak seal level approx. 1ft below coping stones – No Evidence of spill.

Digester 12 - In use – Weak seal level approx. 2ft below coping stones – No evidence of spill.

Digester 13 - In use – seal level approx. 3ft below coping stones – No evidence of spill.

Digester 14 – Coming back into Service.

Digester 15 - Out of use.

Digester 16 - In use – Weak seal level approx. 6” below coping stones – No evidence of spill.

Digester 17 - In use – Weak seal level approx. 18” below coping stones – No evidence of spill.

Digester 18 - Out of use – empty and clean – contractor on site undertaking maintenance.

Digester 19 - Out of use.

Digester 20 - In use – Weak seal level approx. 3ft below coping stones – No evidence of spill.

GENERAL

Sludge Screening House

All doors open at the time of inspection – contractors on site working on screens.

Imported Sludge

There have been an average of 15 imports of sludge per day in the preceding week.

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78).

Skips

1x 12 yard & 1x 8 yard skip containing general waste and 1x enclosed container skip (empty) in Service Road at rear of Screen House.

1x 8 yard skip containing general waste in Service Road adjacent to Raw Sludge Screen House.

1x empty open container skip by West Side PST's.

East Side Raw Sludge Screen House

Doors closed 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).

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 10 streams are currently operational.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's 9, 10 & 11 in use, PST 12 drained down.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 approximately 50% blocked – requires jetting.

“Fluffy” coverage across surface has again begun to build up significantly, also quantity of material bypassing screener.

Odour Control Unit (OCU) performance monitoring – 11/08/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	No data	Unknown	Unknown
Main pumping station outlet	No data	0.2	Unknown
East OCU	0.00 0.00 0.00	0.05	Unknown
West inlet OCU	0.00 0.00 0.00	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	0.00 0.00 0.00	0.6	Unknown
Transfer PS inlet	6.93 5.62 5.43	Unknown	Unknown
Transfer PS outlet	No data	0.5	Unknown
New West inlet (OCU11)	0.00 0.00	0.5	Unknown

	0.00			
Pasteurisation Plant (OCU12)	0.00	0.5	Unknown	
	0.00			
	0.00			