



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 22 nd November 2018	
Attendees: Mr L. Phillips (London Borough of Hounslow) and Mr M Hussain (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty and clean slight grit build up at end of tank (near hoppers). Hoppers 2 & 3 were drained to lowest point. Hopper 1 was half full and needed draining down.</p> <p>Tank 1B was empty and clean. Hoppers 1 2 & 3 were full of effluent and needed draining down.</p> <p>Tank 2A 50% full of effluent and being flushed. All Amajets in operation.</p> <p>Tank 2B Was in use the tank was 50% full and being flushed at the time of inspection. All Amajets were in operation at the time.</p> <p>Tank 3A Was in use the tank was 50% full and being flushed at the time of inspection. All Amajets were in operation at the time.</p> <p>Tank 3B was in use the tank was 50% full and being flushed at the time of inspection. All Amajets were in operation at the time.</p> <p>Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all empty. Unable to gauge condition as lighting system still not working.</p>	

Tank 6A Empty and clean all hoppers were full and required draining.

Tank 6B Empty and clean all hoppers were full and required draining.

Tank 7A Empty and clean all hoppers were full and required draining.

Tank 7B Empty and clean all hoppers were full and required draining.

Tank 8A Empty and clean all hoppers were full and required draining

and 8B Empty and clean all hoppers were full and required draining

All AMAJETS WERE IN ORDER – NO FAULTS

Feed Channel - The level of effluent in both feed channels was very murky in colour however at a low level along its entire length and bottomed out in places where grit was present.

Complaints

The Council received one complaint by telephone in the preceding week.

On the 21st of November 2018 at 10:28 an odour complaint was received in the Mogden Lane area of Isleworth at approximately 01:06 regarding foul odours in the area.

The Officer called the complainant at approximately 11:14 and however no response from complainant. Officer left message and advised should the odour still be an issue to contact the council.

At approximately 11:55 the on duty Officer still conducted a visit to the area of Mogden Lane. After ten readings the average reading was 0.00ppm.

On the 22/11/2018 the day of the inspection the Trends were observed for the time and date the complaint was received by LBH. OM4 and OM9 are the closest to the Mogden Lane area. However OM4 measured at 0.003PPM and OM9 measured at 0.002PPM at approx. 10:15. The

odour logs displayed that the temperature was cold and over cast night and TW had logged the shift as having no odour issues.

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

The Council received no complaints by email from MRAG.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection: Thursday 22nd November 2018 at 12:31.

Monitor 1	0.006	ppm	12.05
Monitor 2	0.007	ppm	12.05
Monitor 3	0.009	ppm	12.05
Monitor 4	0.005	ppm	12.05
Monitor 5	0.007	ppm	12.05
Monitor 6	0.004	ppm	12.05
Monitor 7	0.006	ppm	12.05
Monitor 8	0.004	ppm	12.05
Monitor 9	0.006	ppm	12.05
Monitor 10	0.006	ppm	12.05
Monitor 11	0.006	ppm	12.05
Monitor 12	0.010	ppm	12.05
Monitor 13	0.008	ppm	12.05
Wind Speed	-	mph	12.05
Wind Direction	-	°	12.05

Odour Log (Thames)

Thursday 15th November 2018

AM

Temp. Cool.

Weather. Sunny w/ Patchy clouds .

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaints Blank

Operational issues / causes observed OM2 and 6 spiked once during day less than 15 minutes. Flushing storm tanks 2,3 and 6.

Actions Taken. Blank.

PM

Temp. Cool.

Weather. Overcast night.

Odour Readings. All OMU's in operation.

Time: 05:30

Observations / Customer Complaint. Blank.

Operational issues / causes observed. OM3 spiked between 20:03
2032 max 0.021ppm

Actions Taken. Area checked with no odours found in vicinity.

Friday 16th November 2018

AM

Temp. Warm

Weather. Sunny w/ Patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations/Customer Complaint. Blank.

Operational issues / causes observed. No Odour issues

Actions Taken. Blank.

PM

Temp. Cool.

Weather. Clear night.

Odour Readings. All OMU's in use.

Time: 05:00.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. OM3 0.016 03:50 – 04:02.
Actions Taken. No source found.

Saturday 17th November 2018

AM

Temp. Cool.

Weather. Sunny w/ Patchy clouds.

Odour Readings. All OMU's in operation.

Time: Blank

Observations / Customer Complaint. Blank

Operational issues / causes observed. No odour issues

Actions Taken. Blank.

PM

Temp. Cold

Weather. Clear night.

Time: Blank

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. OM3 one spike 0.023ppm
between 20:40 – 20:56.

Actions taken. Blank.

Sunday 18th November 2018

AM

Temp. Cold

Weather. Sunny.

Time: 17:30

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. Blank

Operational issues / causes observed. No odour issues.

Actions Taken. Blank.

PM

Temp. Cool.

Weather. Overcast night.

Time: 05:30.

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. No odour issues found or reported.

Actions Taken. Blank.

Monday 19th November 2018

AM

Temp. Cold.

Weather. Rain with sunny spells.

Time: 07:12.

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. OM3 0.022 at 15:26 -15:38.

Actions Taken. Area checked no odour detected.

PM

Temp. Cold.

Weather. Rain.

Time: 05:30.

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. No odour issues.

Actions Taken. Blank.

Tuesday 20th November 2018

AM

Temp. Cold.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. No odour issues

Actions Taken: Blank.

PM

Temp. Cold

Weather. Rain

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. No odour issues

Actions Taken: Blank

Wednesday 21st November 2018

AM

Temp. Cold.

Weather. Sunny with patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. Blank

Operational issues / causes observed. OM3 at 14:26 -14:39

Actions taken: Area checked no odour detected.

PM

Temp. Cool.

Weather. Overcast night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. No odour issues.

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					
15/11/2018	0	989	534	1523	2930	4453
17/11/2018	0	1383	244	1627	3230	4857
19/11/2018	59	1528	806	2393	2114	4507

There are no limits for the East side primary settlement tanks as these are covered and odour controlled. Thames is required by the terms of the abatement notice agreed in 2005 to notify LBH on the next working day of any such exceedance and notify LBH within three working days of any appropriate remedial measure taken.

Imported Sludge

There have been 10 imports of sludge daily over the last week.

Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was closed at the time of the inspection.

Digesters

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

Digester 5 Was in use weak wet seal bubbling. There was evidence of a historic spill which needs cleaning crusty-needs cleaning.

Digester 6 was in use and had a dry seal. There was evidence of a historic spill which needs cleaning (crusty needs sweeping).

Digester 7 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 8 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 9 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 10 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 11 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 12 was in use but had a weak wet seal. There was no evidence of spillage.

Digesters 13 Out of service.

Digesters 14 Out of service.

Digester 15 was in use and had a wet seal. No evidence of spillage.

Digester 16 was out of service

Digester 17 was in use and had a wet seal. No evidence of spillage

Digester 18 was in use and had a wet seal. No evidence of spillage

Digester 19 was in use and had a dry crusty seal. No evidence of spillage

Digester 20 was in use but had a weak wet seal. There was no evidence of spillage.

There was evidence of anti-foaming agent in use and TW advised that this is applied daily to all of the digesters that are operational.

GENERAL

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final tanks (71-78). All tanks were operational at the time of the inspection.

Skips

On the East side there was one 16yd skip empty covered.

On the West side there were No skips present.

1 large bulk carrier covered.

East Side Screen House

All doors were closed at the time of the inspection. TW advised all screen are in operation.

Return Activated Sludge Channel

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was relatively free flowing along its length.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled. TW advised no issues.

Circular PSTs 9, 10, 11 & 12 were all in operation at the time of the inspection (fat free surfaces). Odour neutraliser generated a mist over

the Primary settlement tank- only one PST was being used to trial this system. No odours were noticeable.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 3/12 streams were out of operation (2, 7 and 11).

Section 106 agreement

There have been no breaches of the s106 agreement in the last week.

West Side Aeration Lanes (New)

All of the aeration tanks appeared to be free flowing and the surface appeared much improved.

The mixed liquor feed channel serving aeration lanes 24-25 (E Battery) was free flowing in places and thick and sludgy in places.
The channel serving aeration lanes 21, 22 & 23 were free flowing.

No odour was not noticeable along the mixed liquor feed channel and TW advised that a tanker crew are regularly on site undertaking clearance of the clogged areas (Celvac).

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring: 21/11/2018

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	-	Unknown	Unknown

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Main pumping station outlet	0.00 0.00 0.00 AV 0.00	0.2	Yes
East OCU	0.00 0.00 0.00 AV 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00 Av 0.00	0.05	Yes
Sludge reception inlet	-	Unknown	Unknown
Sludge reception outlet	0.00 0.00 0.00	0.8	Yes
Thickening plant inlet	-	Unknown	Unknown
Thickening plant outlet	0.00 0.00 0.00 AV 0.00	0.6	Yes
Transfer PS inlet	-	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00 AV 0.00	0.6	Yes
New West inlet (OCU 11)	0.05 0.04 0.03 Av 0.04	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00 Av 0.00	0.5	Yes