



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 18 th October 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 being flushed and returned during the time of inspection.</p> <p>Tank 1B was being flushed and returned during the time of inspection.</p> <p>Tank 2A was empty and clean. All hoppers drained to lowest point.</p> <p>Tank 2B was empty and clean. All hoppers drained to lowest point.</p> <p>Tank 3A was being flushed and returned during the time of inspection.</p> <p>Tank 3B was being flushed and returned during the time of inspection.</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> <p>Tank 6A was being flushed and returned during the time of inspection.</p> <p>Tank 6B was being flushed and returned during the time of inspection.</p>	

Tank 7A was empty and clean, however at the rear of the tank near the hoppers had dry grit on the surface of the tank. All hoppers required draining (shallow hoppers).

Tank 7B was empty and clean, however at the rear of the tank near the hoppers had dry grit on the surface of the tank. All hoppers required draining (shallow hoppers).

Tank 8A was being flushed and returned during the time of inspection.

Tank 8B was being flushed and returned during the time of inspection.

All Amajets working no reported faults.

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

Complaints

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

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 11th October 2018 at 13:05.

Monitor 1	0.005	ppm	12:34
Monitor 2	0.004	ppm	12:34
Monitor 3	0.000	ppm	12:35

Monitor 4	0.004	ppm	12:35
Monitor 5	0.005	ppm	12:35
Monitor 6	0.005	ppm	12:35
Monitor 7	0.006	ppm	12:35
Monitor 8	0.005	ppm	12:35
Monitor 9	0.003	ppm	12:35
Monitor 10	0.005	ppm	12:35
Monitor 11	0.004	ppm	12:35
Monitor 12	0.000	ppm	12:36
Monitor 13	0.004	ppm	12:36
Wind Speed	7.000	mph	12:36
Wind Direction	319.000	°	12:36

Odour Log (Thames)

Thursday 11th October 2018

AM

Temp: Cool.

Weather: Sunny W/ Patchy clouds.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint:

Nothing noted.

Operational issues / causes observed: No odour issues.

Actions Taken: None noted.

PM

Temp: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 05:30

Observations / Customer Complaint: Nothing noted.

Operational issues / causes observed: No odour issues.

Actions Taken: None noted.

Friday 12th October 2018

AM

Temp: Warm.

Weather: Cloudy w/ Sunny Spells

Odour Readings: All OMU's in operation.

Time: 17:30

Observations / Customer Complaint: None noted.

Operational issues / causes observed: No odour issues.

Actions Taken: None noted.

PM

Temp: Warm.

Weather: Overcast night.

Odour Readings: All OMU's in use.

Time: 05:30.

Observations / Customer Complaint:

OM3 spike 0.022ppm at 04:15 – 04:27.

Operational issues / causes observed: No odour issues.

Actions Taken: None noted.

Saturday 13th October 2018

AM

Temp: Warm

Weather: Cloudy w/ Sunny Spells

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: PST drained down tank hosed down.

Operational issues / causes observed: Nothing noted.

Actions Taken: Day works cleaning No9 PST.

PM

Temp: Warm.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30

Observations / Customer Complaint: OM3 0.21 – 4:16 -4:44, om8 0.19 4:14 -5:04

Operational issues / causes observed: No odour issues.

Actions taken: None noted.

Sunday 14th October 2018

AM

Temp. Warm.

Weather. Rain.

Time: 17:30.

Odour Readings. All OMU's in operation.

Observations / Customer Complaint. OM7 spike 0.031 13:08 – 13:23

Operational issues / causes observed. No odours found

Actions Taken. None noted.

PM

Temp: Cool.

Weather: Rain

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. Nothing noted.
Operational issues / causes observed: SWT overflowing from midnight. Server 1 failed and server 2 trends have failed.
Actions Taken: Defected both faults.

Monday 15th October 2018

AM

Temp: Cool.

Weather: Rain

Odour Readings: All OMU's in operation

Time: 17:30

Observations / Customer Complaint: OM3 spike 0.020ppm 09:08-09:23

Operational issues / causes observed:

No odour issues OCU11 chemical dosing out of range.

Actions Taken: None noted.

PM

Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30

Observations / Customer Complaint:

OM3 – 0.023 at 4:08 – 4:35

Operational issues / causes observed: Sludge tankers all night. Dig bells low.

Actions Taken: None noted.

Tuesday 16th October 2018

AM

Temp: Warm

Weather: Sunny w/ Patchy Clouds.

Odour Readings: All OMU's in operation.

Time: 18:00.

Observations / Customer Complaint: None noted.

Operational issues / causes observed: No odour issues.

Actions Taken: None noted.

PM

Temp: Warm.

Weather: Clear Cloudy.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint:

None noted.

Operational issues / causes observed:

No odour issues.

Actions Taken: None noted.

Wednesday 17th October 2018

AM

Temp. Cool.

Weather. Cloudy W/Sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint.

None noted.

Operational issues / causes observed. No odour issues

Actions taken: None noted.

PM

Temp: Warm.

Weather: Cloudy.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint:

None noted.

Operational issues / causes observed:

No odour issues.

Actions Taken: None noted.

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					
15/10/18	0	1031	0	1031	936	1967
16/10/18	0	601	0	801	1592	2393
17/10/18	0	1777	0	1777	1264	3041

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 12 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) – noticeable quantity of water accumulated to the brim of these tanks which is thick with algae – requires draining.

Digester 5 was in use but had a weak wet seal. There was evidence of a historic spill which needs cleaning (crusty needs sweeping).

Digester 6 was in use but had a weak wet 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.

Digester 13 was out of service.

Digester 14 was out of service.

Digester 15 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 16 was out of service

Digester 17 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 18 was in use but had a weak wet seal. There was no evidence of spillage.

Digester 19 was in use but had a weak wet seal. There was 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 20yds open bulk carrier that was empty.

One 16yds skip that was empty.

On the access road leading to the digesters there was one 12yds skip that contained a small amount of rag and was partly covered with a tarpaulin, it was noted that the waste was not-odorous.

On the West side there was one 16 yard skip empty.

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 10, 11 & 12 were all in operation at the time of the inspection (fat free surfaces). However PST 9 out service had been drained.

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 were clear and were free flowing. 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 the tanker and just finished clearing blockage.

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: 10/10/2018

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	- - -	Unknown	Unknown
Main pumping station outlet	0.00 0.0725 0.0726	0.00	Yes
East OCU	0.004 0.004 0.004	0.00	Yes
West inlet OCU	0.028 0.027 0.006	0.00	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	0.234 0.231 0.229	0.00	Yes
Transfer PS inlet	-	Unknown	Unknown
Transfer PS outlet	0.212 0.215 0.246	0.02	Yes
New West inlet (OCU 11)	0.165 0.147 0.154	0.03	Yes
OCU 12 (Pasteurisation Plant)	0.0003 0.0003 0.0003	0.03	Yes