



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Thursday 13th June 2019

Attendees: Mr L Phillips (London Borough of Hounslow) and Mr Waleed (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 rear of tank near hoppers. Hoppers 1, 2 and 3 all full and require draining. No odour detected.</p> <p>Tank 1B was empty and clean. All hoppers full and required draining no odour detected during visit.</p> <p>Tank 2A was empty and clean. All hoppers were full and required draining.</p> <p>Tank 2B was empty and clean. All hoppers had been drained to lowest point.</p> <p>Tank 3A was in use, tank flushing and all amajets were in operation.</p> <p>Tank 3B was in use, tank flushing and all amajets were in operation.</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 was in use, tank flushing and all amajets were in operation.

Tank 6B was in use, tank flushing and all amajets were in operation.

Tank 7A was empty, however tank required flushing due to sludge in the rear end of the tank near the hoppers. All hoppers had drained to lowest point.

Tank 7B was in use, tank flushing and all amajets were in operation

Tank 8A was empty and clean. All hoppers full and required draining.

Tank 8B was empty and clean. All hoppers full and required draining

Feed Channel - The level of effluent in both feed channels was low along its entire length. However, there was thick scum and sludge on the surface along large sections of the channel.

I can confirm that the storm tank hoppers were much improved and Thames advised that a tanker crew had been employed to clear the hoppers of grit and sludge.

Complaints

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

The Council received an Email complaint on 05^h June at 17:24 from resident in the Kneller Road area. However the complainant is not a resident of the London Borough of Hounslow and is outside of the catchment area. Checked the trends around the time of the complaint show no changes in the trends.

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 13th June 2019 at 11:48.

Monitor 1	0.006	ppm	11:48
Monitor 2	0.003	ppm	11:48
Monitor 3	0.000	ppm	11:48
Monitor 4	0.005	ppm	11:49
Monitor 5	0.004	ppm	11:50
Monitor 6	0.004	ppm	11:50
Monitor 7	0.005	ppm	11:50
Monitor 8	0.006	ppm	11:50
Monitor 9	0.000	ppm	11:50
Monitor 10	0.006	ppm	11:50
Monitor 11	0.005	ppm	11:50
Monitor 12	0.005	ppm	11:50
Monitor 13	0.004	ppm	11:50
Wind Speed	2.261	mph	11:50
Wind Direction	335.025	°	11:50

Odour Log (Thames) - Photocopies of log entries taken:

Thursday 06th June 2019

DAY SHIFT AM:

Temp: Warm.

Weather: Sunny W/ Patchy clouds

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM2 spiked at 16:40 – 16:57 max 0.017ppm.

Operational issues / causes observed: Checked areas adjacent to monitors no odours found.

Actions Taken: Blank.

Time: Blank.

Observations / Customer Complaint: OM3 spiked at 08:12 – 08:25 15 mins duration max 0.021ppm.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

NIGHT SHIFT PM

Temp: Cool.

Weather: Clear night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM2 three spikes 0.027ppm 19:57 – 20:19 0.021ppm 20:42 – 21:02 0.023ppm 21:13 – 21:48 OM5 0.018PPM 19:22 – 19:36.

Operational issues / causes observed: No odour detected OCU'S across site working normally.

Actions Taken: Blank.

Friday 07th June 2019**DAY SHIFT AM**

Temp: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM5 spiked three times 08:22 – 08:51, 11:21 – 11:36, 11:51 – 12:05 max 0.037ppm.

Operational issues / causes observed: No odours found.

Actions Taken: Blank.

NIGHT SHIFT PM

Temp: Warm

Weather: Rain.

Odour Readings: All OMU's in use.

Time: 05:10.

Observations / Customer Complaint: OM5 0.017 – 17:21 – 17:36 0.017 3:37 – 03:57.

Operational issues / causes observed: No odour identified.

Actions Taken: Blank.

Time: Blank.

Observations / Customer Complaint: OM2 0.023 – 18:01 – 18:21 0.020 01:33 – 01:44 0.024 04:30 – 04:50.

Operational issues / causes observed: Area checked no issues.

Actions Taken: Blank.

Saturday 8th June 2019

DAY SHIFT AM**Temp:** Warm.**Weather:** Sunny w/ Patchy Clouds.**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 PM****Temp:** Cool.**Weather:** Overcast night.**Odour Readings:** All OMU's in operation.**Time:** 05:30.**Observations / Customer Complaint:** No odour issues.**Operational issues / causes observed:** Blank.**Actions taken:** Blank.**Sunday 9th June 2019****DAY SHIFT AM****Temp:** Warm.**Weather:** Rain w/ Sunny spells.**Odour Readings:** All OMU's in operation.**Time:** 17:30.**Observations / Customer Complaint:** OM2 spiked at 15:00 – 15:17 max 0.021ppm and 15:27 – 15:49 max 0.033ppm. OM8 spiked at 16:06 – 16:22 max 0.019ppm.**Operational issues / causes observed:** No odour issues found at east inlet.**Actions Taken:** Blank.**NIGHT SHIFT PM****Temp:** Cool.**Weather:** Overcast night.**Odour Readings:** All OMU's in operation.**Time:** 05:20.**Observations / Customer Complaint:** No odour issues.**Operational issues / causes observed:** Blank.**Actions Taken.** Blank.

Monday 10th June 2019

DAY SHIFT AM

Temp.: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 17:40.

Observations / Customer Complaint: Blank.

Operational issues / causes observed. No odour issues.

Actions Taken: Blank.

NIGHT SHIFT PM

Temp: Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Tuesday 11th June 2019

DAY SHIFT AM:

Temp: Warm.

Weather: Sunny W/ Patchy clouds.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: OM5 0.022 5:51 – 06:08.

Operational issues / causes observed: No odour identified.

Actions Taken: Blank.

NIGHT SHIFT PM:

Temp: Warm.

Weather: Overcast night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: Blank.

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

Actions Taken: Returning storm tanks.

Wednesday 12th June 2019

DAY SHIFT AM

Temp: Cool.

Weather: Rain W/ Sunny spells.

Odour Readings: All OMU's in operation.

Time: 17:20.

Observations / Customer Complaint: OM5 0.022 7:37 – 07:52 0.021
8:07 – 08:22.

Operational issues / causes observed: No odour Identified.

Action Taken: Blank.

NIGHT SHIFT

Temp: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: Blank.

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

Actions Taken: Returning storm tanks.

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					
07/06/2019	0	0	183	183	456	639
10/06/2019	0	0	183	183	456	639
12/06/2019	0	206	305	511	966	1477

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

No imports due to pump not working.

No.5 Pumping Station

The doors and windows of No.5 pumping station were all open at the time of the inspection. Thames advised works are being undertaken inside and venting of the building was required for staff safety.

Raw Sludge Screening House

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

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

Thames advised of a long term project currently initiated to bring these

units back into service that will require significant investment.

Digester 5 - In use – weak sloppy seal – no evidence of recent spill.

Digester 6 - In use – weak sloppy seal – no evidence of recent spill.

Digester 7 - In use – weak sloppy seal – no evidence of recent spill.

Digester 8 - In use – weak sloppy seal – no evidence of recent spill.

Digester 9 - In use – weak sloppy seal – no evidence of recent spill.

Digester 10 - In use – seal level approx. 1ft below surface of coping stones.

Digester 11 - In use – weak sloppy seal – no evidence of recent spill.

Digester 12 - In use – weak sloppy seal – no evidence of recent spill.

Digester 13 - Out of use – empty and clean.

Digester 14 - Out of use – empty and clean.

Digester 15 - Out of use – empty and clean.

Digester 16 - Out of use – empty and clean.

Digester 17 - In use – weak sloppy seal – no evidence of recent spill.

Digester 18 - In use – weak sloppy seal – no evidence of recent spill.

Digester 19 - In use – weak sloppy seal – no evidence of recent spill.

Digester 20 - In use – weak sloppy seal – no evidence of recent spill.

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.

The area in and around all digesters has improved and I can confirm no evidence of recent or historical sludge spills. Thames advised they have been actively undertaking regular clean-ups of this area of the works.

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 no issues to report on.

Skips

x2 Skips present at the screening House empty.

x1 16 yard skip present at the East side grit House general waste inside.

No odour detected.

On the West side x2 16yd skip empty.

East Side Screen House

One pair of doors to the building were open at the time of the inspection. TW advised all screens were in operation and the doors were open due to staff undertaking daily checks of the screens.

Return Activated Sludge Channel

The nearside RAS channel was slightly clogged around 25% in the mid-section of both lanes.

West side primary settlement tanks (PST)

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

Circular PSTs 9, 10, 11 & 12 all to in operation at the time of the inspection, and all had fat free surfaces.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 6 streams were currently out of service.

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 had visible scum across the top surface However I can confirm that there has been a big improvement in comparison to the previous weeks inspection.

Most of the sprinklers appeared to be in operation.

The mixed liquor feed channel serving E-Battery was partially clogged with rag and other floating debris by lanes 25. Tanker onsite during visit.

No odour was noticeable.

TW advised a tanker crew are regularly on site undertaking clearance of any clogged areas.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.00 0.00 0.00	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
East OCU	0.00 0.00 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	Blank	Unknown	Unknown
Sludge reception outlet	0.00 0.00 0.00	0.8	Yes
Thickening plant inlet	Blank	Unknown	Unknown
Thickening plant outlet	0.00 0.00 0.00	0.6	Yes
Transfer PS inlet	Blank	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00 0.01	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation (OCU 12)	0.00 0.00 0.00	0.5	Yes