



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 5th March 2018

Attendees: Mr Phillips (London Borough of Hounslow) and Mr Dimitrios Kalmantis (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks

Tank 1A – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 1B – Tank empty and clean - Hoppers 1 and 2 drained to lowest point however hopper 3 required draining.

Tank 2A – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 2B – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 3A – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tank 3B – Tank empty and clean – Hoppers 1, 2 & 3 all drained down to lowest point.

Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not working.

Tank 6A – Tank empty and clean - Hoppers 1 & 3 require draining hopper 2 drained to its lowest point.

Tank 6B – Tank empty and clean - Hoppers 1 & 2 were drained down to lowest point, hopper 3 requires draining.

Tank 7A – Tank empty and flushed -Hoppers 1, 2 & 3 drained down to bottom level

Tank 7B – Tank empty and cleaned all hoppers require action. Thames Water advised that this is down to an issue with faulty subterranean non-return valve allowing back filling of hoppers requires repair or replacement.

Tank 8A – Tank empty and clean – All hoppers drained down to lowest point.

Tank 8B – Tank empty and clean – All hoppers drained down to lowest point.

Feed Channel - The level of effluent in both feed channels was low – approximately 5-10% - almost bottomed out in places – some grit and sludge – no local odour.

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 of the monitors, which were providing data at time of inspection:

Monitor 1	0.009	ppm	10:27
Monitor 2	0.000	ppm	10:27
Monitor 3	0.000	ppm	10:27
Monitor 4	0.008	ppm	10:27
Monitor 5	0.009	ppm	10:27
Monitor 6	0.010	ppm	10:27
Monitor 7	0.009	ppm	10:27
Monitor 8	0.009	ppm	10:27
Monitor 9	0.009	ppm	10:27
Monitor 10	0.009	ppm	10:27
Monitor 11	0.000	ppm	10:27
Monitor 12	0.009	ppm	10:27
Monitor 13	0.009	ppm	10:27
Wind Speed	-	mph	10:27
Wind Direction	-	mph	10:27

Odour Log (Thames) - Photocopies of log entries taken:**Thursday 22nd February 2018:**

AM Monitor 6- One spike 16:30 -17:30 Peaked at 0.017ppm

PM Odour monitor 5 no spikes- Monitors 6 & 13 no spikes.

Friday 23rd February 2018:

AM Monitor No 5 spiked at 17:44 but 15 mins duration (Max 0.022 ppm)

No other issues found or reported.

PM No odour issues nothing to report on trends.

Saturday 24th February 2018:

AM No odour issues on site.

PM Odour monitor 7 spiked at 20:08 till 21:08 0.02ppm. Area check around storm tanks no obvious odours found.

Sunday 25th February 2018:

AM No odour issues no spikes on trends.

PM Odour monitor 12 at 00:35 till 01:42 peaked to 0.019. Odour monitor 9 spiked to 0.023ppm at 01:38 less than 15 minutes. Digester area and e batt finals check no notable smells found.

Monday 26th February 2018:

AM Odour monitor 12 showing odour 0.019 digesters checked and all ok.

PM Odour monitor 13 at 22:36 peaked to 0.019ppm for 1 hour. Odour Monitor 12 at 00:29 peaked to 0.018ppm for 1 hour. Area checked around permitted no obvious odours found.

Tuesday 27th February 2018:

AM Odour Monitor No9 spiked under 15 minutes (0.01) Odour monitor No4 14:30 – 15:30 (0.02) area checked and no odours found MTS cleaning FST channels.

PM Monitor 7 spike at 18:08 – 19:08 0.025ppm odour investigation carried out. Monitor 10 multiple spikes throughout shift. Peaked at digester bell heights. Waste gas burner failed due to frozen condensate drain burner operational after clearing drain.

Wednesday 28th February 2018:

AM Odour monitor 6 showing odour from 15:30 – 16:30. Area checked all ok monitors 9 and 4 showing odours from 16:30. Area checked and no odours found.

PM Monitor 4 spiked 4 times between 18:00 – 20:45. No apparent issues on site standby generators running till 19:30. Possibly exhaust fumes effecting monitor.

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					
23/02/18	0	2442	1261	3703	6582	10285
26/02/18	0	2629	2010	4639	6768	11407
28/02/18	1740	2441	1116	5297	6243	11540

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 within three days.

Digesters

Digesters 1-4 – Out of use permanent.

Digester 5 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 6 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 7 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 8 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 9 Was in use had a weak sloppy seal. No evidence of spillage.

Digester 10 – Was in use had a weak sloppy seal. No evidence of spillage.

Digester 11 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 12 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 13 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 14 – Out of use.

Digester 15 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 16 - Out of use

Digester 17 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 18 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 19 - Was in use had a weak sloppy seal. No evidence of spillage.

Digester 20 - Was in use had a weak sloppy seal. 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

Sludge Screening House

Shutter doors closed at time of inspection - no local odours.

Imported Sludge

Twelve imports of 35m³ daily for preceding seven days.

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 in service no issues to report.

Skips

1x empty large loader skip located at Grit house. – empty
1x small open skip covered tarpaulin no odour issues. Service Road by Pasteurisation plant.

1x small open skip approximately 50% full of mixture of rag and timber offcuts located by West side Inlet Works.

East Side Screen House

All doors closed.

Pasteurisation Plant

The pasteurisation plant is in service and fully operational.

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

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

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 30% obstructed in one channel – requires jetting.

New Works (West Side)

Feed Channel for Aeration Lanes 20 & 22 – 25 clear. Aeration Lane 21 approximately 30% obstructed – Tanker onsite at time of visit clearing up blockage.

New Works (West Side)

The mixed liquor feed channel serving aeration lanes 24 & 25 (E Battery) was clogged with rag and other floating debris.

The surface of the aeration are much improved and are now free flowing again.

The sprinkler system for the aeration lanes was in use and all sprinklers appeared to be working at the time of the inspection.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 23/02/2018

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

Jerome reading

