



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 9 th March 2017	
Attendees: Mr I Inman (L B Hounslow) & Mr D Kalamantis (Thames Water).	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2B was empty & clean. Hoppers 1, 2 & 3 were all approx ½ full and needed over pumping.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were all approx ½ full and needed over pumping.</p> <p>Tank 3B was empty & clean. Hopper 1 was full, hopper 2 was 1/3 full & hopper 3 was ½ full, all needed over pumping.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p> <p>Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all approx 1/3 full and needed over pumping.</p> <p>Tank 6B was empty & clean. Hoppers 1, 2 & 3 were all approx ½ full and needed over pumping.</p> <p>Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) all</p>	

contained a quantity of water and needed over pumping.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) all contained a quantity of water and needed over pumping.

Tank 8A appeared to have recently been flushed and had large deposits of solid matter near the hopper. Hoppers 1 & 3 were both $\frac{3}{4}$ full and hopper 2 was full with liquid and floating solids, all needed over pumping. Tank 8A was noticeably odorous.

Tank 8B was relatively clean empty and clean, except for a deposit of thick grit by hopper 1. Hoppers 1, 2 & 3 were all full and needed over pumping.

Storm Water Channel

The storm feed channel serving STW's 1A-8B was virtually empty of effluent and only had a shallow level of water along most of its length..

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 13:03).

Monitor 1	0.006	ppm
Monitor 2	0.005	ppm
Monitor 3	0.000	ppm
Monitor 4	0.005	ppm
Monitor 5	0.004	ppm
Monitor 6	0.005	ppm
Monitor 7	0.004	ppm
Monitor 8	0.006	ppm
Monitor 9	0.008	ppm
Monitor 10	0.005	ppm
Monitor 11	0.004	ppm
Monitor 12	0.005	ppm
Monitor 13	0.008	ppm

Complaints

The Council received no odour complaints by telephone or e-mail in the preceding week.

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

Thursday 2nd March 2017

AM No odour problems.

PM No odour spikes on trends.

Friday 3rd March 2017

AM No odour problems. Trends failed.

PM No readings as no Scada working.

Saturday 4th March 2017

AM No odour issues. Trends failed.

PM OM1-5 = 0.022 at 7:01-7:14. 6-13 no spikes up to 08:37am.

Scada issues. Scada trends failed at 8:37.

Sunday 5th March 2017

AM OM 1-5 no spikes. 6-13 no spikes.

PM NO INFORMATION PROVIDED.

Monday 6th March 2017

AM No odour issues on site. No spikes on trends.

PM OM 1-5 no spikes. OM8 0.021ppm at 8:49 to 9:02.

Tuesday 7th March 2017

AM OM1 1 spike of 0.020ppm <15 minutes. OM8 1 spike of 0.016ppm < 15 minutes.

PM No odour spikes. No odour problems.

Wednesday 8th March 2017

AM OM8 2 spikes, max 0.017ppm, both <15 minutes. No other odour issues.

PM No odour spikes. No odour problems.

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					
03/03/2017	435	1968	0	2403	8540	10943
06/03/2017	0	1714	0	1714	8982	10696
08/03/2017	0	1968	0	1968	10283	12251

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 and which has been complied with in this instance

Imported Sludge

There have been 5 imports of sludge per day for the last week (35 in total), each import containing 30m³ of sludge.

Sludge Screening House

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

Digesters

Digesters 1-4 are permanently out of use.

Digesters 5, 6, 7 & 8 were all in use and had wet seals with no dry areas.

Digester 9 was in use and had a good dry seal.

Digesters 10 & 11 were both in use and had wet seals with no dry areas.

Digester 12 was in use and had a good dry seal.

Digester 13 is currently out of use.

Digesters 14 & 15 were both in use and had wet seals with no dry areas.

Digester 16 is currently out of use.

Digester 17 was in use and had a good dry seals.

Digester 18 was in use and starting to overflow sludge at the time of the inspection.

Digester 19 is currently out of service.

Digester 20 was in use and had a wet seal with no dry areas.

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually at least twice a day to all operational digesters.

Return Activated Sludge Channel

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clogged along two-thirds of its entire length with thick sludge (dry in places), rag etc at the time of the inspection and

noticeably odorous.
Thames advised a tanker is cleaning this out on a weekly basis.
However, the material in the channel appeared to show otherwise.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation and had clean 'fat-free' surfaces.

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).

At the time of the inspection all 8 tanks were in operation but the sprinkler arms on tanks 71 & 78 were non-operational.

East Side Screen House

The screen house now has new doors fitted, both pairs of which were closed at the time of the inspection.

Thames confirmed all screens were in operation.

Skips

On the East side there was 1 open bulk carrier on site that was partly filled and covered, no odour was present. However, the area around the east side building was generally a mess and littered with vehicle wheels, palettes, tarpaulins, tree branches and a piece of metal framework.

The skip area on the West side was a complete mess. There were two empty 8yd skips but a large pile of grit on the ground, part covered with a tarpaulin. Another tarpaulin was simply lying on the ground, which was very messy and covered in thick slimy mud, sludge and rag; The

area was noticeably odorous.

On the entrance road to the Digesters was also an uncovered 8yd skip that was ½ full of odorous rag.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. The TW officer confirmed all 12 streams were running.

Section 106 agreement

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

West Side Aeration Lanes (Old)

No issues appeared evident.

New Works (West Side)

The mixed liquor feed channel serving aeration lanes 21-25 (E Battery) was clogged with rag & debris along half its length and was being hosed and sucked out by a tanker crew at the time of the inspection.

The surface of the tanks was filled with a dense layer of scum.

The sprinkler system for the aeration lanes should be in permanent use but nearly 50% were not working at the time of the inspection.

Thames confirmed tanker crews are cleaning the mixed feed liquor channel out on a weekly basis.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 09/03/2017

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.05(av)	0.2	Yes
East OCU	0.005(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.002(av)	0.8	Yes
Thickening plant outlet	0.005(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.006(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes

Jerome reading