



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 9th June 2017

Attendees: Mr L Phillips (L B Hounslow) & Mr D Kalamantis (Thames Water).

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A was empty & clean. Hoppers 1, 2 & 3 were all approximately ½ full and require over pumping

Tank 1B was empty & clean. All hoppers had been drained to lowest level.

Tank 2A was empty & clean. All hoppers had been drained to lowest level.

Tank 2B was empty & clean. All hoppers had been drained to lowest level.

Tank 3A was empty & clean. All hoppers had been drained to lowest level.

Tank 3B was empty & clean. All hoppers had been drained to lowest level.

Tanks 4A, 4B, 5A & 5B are covered and odour controlled.

Tank 6A was empty & clean. All hoppers had been drained to lowest level.

Tank 6B was empty & clean. All hoppers had been drained to lowest level.

Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down.

Tank 7B was empty but had large areas of dry silt/grit at the top end of the tank. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down.

Tank 8A was empty & clean. Hopper 1 was approximately $\frac{3}{4}$ full, hoppers 2 and 3 were approximately $\frac{1}{3}$ full, these hoppers require overpumping.

Tank 8B was empty & clean. All hoppers had been drained to lowest level.

Storm Water Channel

The storm feed channel serving STW's 1A to 4B has dried sludge which was noted to locally odorous, particularly around tanks 4A and 4B. Thames Water advised that the feed channel would be flushed. The feed channel serving STW's 5A-8B was empty of effluent and only had a shallow level of water (<5%) along its entire length.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approximately 11:00).

Monitor 1	0.003	ppm
Monitor 2	0.003	ppm
Monitor 3	0.003	ppm
Monitor 4	0.004	ppm
Monitor 5	0.003	ppm
Monitor 6	0.000	ppm
Monitor 7	0.006	ppm
Monitor 8	0.004	ppm
Monitor 9	0.000	ppm
Monitor 10	0.000	ppm
Monitor 11	-0.000	ppm
Monitor 12	0.000	ppm
Monitor 13	0.004	ppm

Odour monitor 11 flat lining.

Complaints

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

The Council received no complaints via e-mail in the preceding week.

The Council received no complaints via MRAG in the preceding week.

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

Thursday 1st June 2017

AM 1-5 – No issues 6-13 - No issues.

PM No issues found or reported.

Friday 2nd of June 2017

AM No odour issues.

PM Monitor 5- Two spikes- Max 0.030PPM Investigated area. Reset inhibits on OCU 11 chemical dosing pumps both spikes under 10 minutes.

Saturday 3rd June 2017

AM 0.022PPM odour monitor 3 10:26-10:39 no other odour issues.

PM No logs provided.

Sunday 4th of June 2017

AM Odour monitor 5 0.021PPM 7:21- 7:35 odour complaint 14:15 by passer-by (north of site) undertook site inspection. No other issues.

PM No odour issues no spikes on trends.

Monday 5th of June 2017

AM No odour issues reported or found no spikes on trends..

PM No odour issues on site No spikes on trends.

Tuesday 6th June 2017

AM No odour issues sludge spill underbridge pasteurisation hose down area.

PM Trends showing no odour spikes. Day works out to clean up sludge in PAS area.

Wednesday 7TH June 2017

AM No issues.

PM 1 spike on monitor 3 for 15 minutes area checked and all ok. *P.S.T
10 pumping out.

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					
02/06/17	0	1030	0	1030	4584	5614
05/06/17	0	1012	122	1134	3648	4782
07/06/17	0	1116	0	1116	4609	5725

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.

Imported Sludge

There have been 49 imports of sludge over the last week, each import containing 30m³ of sludge.

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 are permanently out of use.

Digester- 5 was in use and had a good dry seal.

Digester- 6 was in use and had a good dry seal.

Digester-7 was in use but had as weak foamy seal.

Digester- 8 was in use but had a weak foamy seal.

Digesters- 9 was in use and had a good dry seal.

Digester-10 was in use but had a weak foamy seal.

Digester -11 was in use but had a weak foamy seal.

Digester 12 was in use but had a weak foamy seal.

Digester 13 is currently out of use.

Digester 14 was in use and had a good dry seal use of pellets.

Digester 15 was in use and had a good seal very thick in places.

Digester 16 is currently out of use.

Digesters 17 & 18 were both in use and had good dry seals with the use of pellets.

Digester 19 is currently out of service.

Digester 20 was in use and had a good dry seal.

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. Thames Water advised that immediate remedial action would be taken with regard to digester 7.

Return Activated Sludge Channel

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clogged along the three quarters of its length with thick dry sludge at the time of the inspection. It was also noted that hundreds of tiny flies/insects were crawling over the sludge.

Thames advised a tanker is cleaning this out on a weekly basis.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 11 & 12 were all in operation at the time of the inspection. PST 10 is currently out of service and drained down. Hoses were spraying into PT 10 at the time of the inspection.

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 and appeared to be working fine. Tanks 77 and 78 had a build-up of green algae on the surface.

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 low level bulk carrier on site that was empty and no odour was present.

On the West side there was one 12yd skip that was empty and one bulk container.

A 6yd skip which was covered was also present outside the pasteurisation plant

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. TW confirmed ten of the 12 streams were operating at the time of the inspection.

Section 106 agreement

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

West Side Aeration Lanes (Old)

No issues appeared to be evident.

New Works (West Side)

The mixed liquor feed channel serving aeration lanes 21-25 (E Battery) was clogged with rag & debris along more than half its length.

The surface of the tanks appeared much improved and was visibly flowing again.

The sprinkler system for the aeration lanes should be in permanent use but a number of sprinklers were not working properly at the time of the inspection, being clogged with pondweed.

Thames confirmed that 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 – 08/06/2017

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.000(av)	0.2	Yes
East OCU	0.000(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.000(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.000(av)	0.5	Yes

Transfer PS outlet	0.000(av)	0.6	Yes	
New West OCU 11 outlet	0.000(av)	0.6	Yes	
# Jerome reading				