



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 9 th November 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 approx ¼ full and needed draining down.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all approx ¼ full and needed draining down.</p> <p>Tank 2A was empty & clean. Hopper 1 was ¼ full, Hoppers 2 & 3 were <¼ full and all needed draining down.</p> <p>Tank 2B was empty & clean. Hoppers 1, 2 & 3 were all approx ¼ full and all needed draining down.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were all approx 1/3 full and all needed drained down.</p> <p>Tank 3B was empty but had dried sludge at the bottom end of the tank. Hoppers 1, 2 & 3 were all full and needed draining down.</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 ¼ full</p>	

and needed draining down.

Tank 6B was empty & clean. Hoppers 1 & 3 were ½ full and Hoppers 2 was 1/3 full, all needed draining down.

Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were mostly drained down but clogged with grit.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were mostly drained down but clogged with grit.

Tank 8A was empty & clean. Hopper 1 & 2 were both full, Hopper 3 was <½, all needed draining down.

Tank 8B was empty & clean. Hopper 1 was ½ full, Hoppers 2 & 3 were both full, all needed draining down.

Storm Water Channel

The storm feed channel serving STW's 1A-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 (approx 13:00).

Monitor 1	0.004	ppm
Monitor 2	0.006	ppm
Monitor 3	0.000	ppm
Monitor 4	0.006	ppm
Monitor 5	0.005	ppm
Monitor 6	0.007	ppm
Monitor 7	0.004	ppm
Monitor 8	0.009	ppm
Monitor 9	0.004	ppm
Monitor 10	0.005	ppm
Monitor 11	0.005	ppm

Monitor 12	0.006	ppm
Monitor 13	0.000	ppm

Complaints

The Council received no complaints in the preceding week.

Odour Log (Thames) - Photocopies of log entries taken

Thursday 2nd November 2017

AM No odour problems, nothing to report on trends.

PM No odour issues, no odour spikes on trends.

Friday 3rd November 2017

AM No odour spikes, nothing to report on trends.

PM No odour spikes, no other issues.

Saturday 4th November 2017

AM OM8 spiking to 0.024ppm at 17:30. OCU & PAS area checked by PAS tech 1.

PM OM3 0.030ppm between 04:43-04:53.

OM2 0.035ppm between 23:55-00:24, then 0.020ppm between 19:25-19:38.

OM5 0.033ppm between 00:05-00:18.

OM8 0.031ppm between 02:20-02:32, then 0.016ppm between 03:05-03:17, then 0.022ppm (max) between 18:05-19:17, multiple spikes, no odour source found.

OCU & PAS area checked by PAS tech 1, small spill around No:8 reactor, cleared up 03:35.

Sunday 5th November 2017

AM Spikes through the day from OM8, less than 15 minutes. Max spike 0.031ppm at 09:20.

OM4 spiked at 0.016ppm at 09:49, less than 15 minutes.

Tech 1 effluents checked site and odour patrol perimeter. PAS tech 1

reported small spill from No:8 PAS stream from over flow which was cleaned up by himself.

PM OM2 0.023ppm between 03:26-03:28 then 0.021ppm between 04:11-04:38.

OM4 0.024ppm between 19:21-19:33.

OM5 0.023ppm between 04:36-04:48, then 0.023ppm at 05:06-? Then 0.016ppm between 18:52-19:19.

PAS tech 1 carried out walk of area, small spillage PAS stream No:8 reactor overflow, cleaned up by himself.

Odour patrol of site carried out 2 times, no odour source found.

Monday 6th November 2017

AM OM's1-5 = OM2 0.016ppm between 08:10-08:22. OM's 6-13 no spikes.

PM OM's1-5 no spikes. OM6-13 no spikes. No other issues.

Tuesday 7th September 2017

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

PM OM8 spiked through night from 22:00 until 00:21. Max 0.074 but less than 15 minutes.

Area checked around power house & river crossing, no obvious odours found.

Wednesday 8th September 2017

AM OM's 1-5 no spikes. OM's 6-13 no spikes. Server 2 failed for 3 hours today so some data lost.

PM OM5 spike at 00:30 to 0.033ppm, less than 15 minutes.

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					

03/11/17	1131	534	0	1665	2081	3746
06/11/17	3495	1153	206	4854	1929	6783
08/11/17	605	389	61	3116	1440	4556

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 56 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 but had a wet sloppy seal that was bubbling off gas.

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

Digesters 7 & 8 were in use but had wet sloppy seals that were bubbling off gas, it was noted that both bells were high.

Digester 9 was in use but had a wet sloppy seal that was bubbling off gas.

Digester 10 was in use but had a wet sloppy seal that was bubbling off gas, it was noted that the bell was high.

Digesters 11 & 12 were in use but had wet sloppy seals that were bubbling off gas.

Digester 13 is currently out of use.

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

Digester 15 was in use but had a wet sloppy seal that was bubbling off gas, it was noted that the bell was high.

Digester 16 is currently out of use.

Digester 17, 18, 19 & 20 were all in use and had a good dry seals.

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 relatively free flowing and only contained a thin layer of fresh sludge along less than ¼ of its length.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation at the time of the inspection, all 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 tanks except 71 were in operation.

East Side Screen House

The screen house doors were closed at the time of the inspection.

Thames confirmed all screens are in operation.

Skips

On the East side there was one 16yd skip & one low level open bulk carrier on site, both were empty and no odour was present.

On the West side there were two empty large Bulk carriers.

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 24 & 25 (E

Battery) was clogged with the same rag and other floating debris. It was again noted that strong offensive odour was present in the area.

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

The sprinkler system for the aeration lanes should be in permanent use but a number of sprinklers were still not working properly at the time of the inspection, again being clogged with pondweed (as per last week's inspection).

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 06/11/2017

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.01(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)	0.000(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