



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 8th December 2016

Attendees: Mr Zaheer Kadri, Mr D Kalamantis (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tanks 1A – 3B All tanks were empty and all hoppers were completely drained down. There was no grit or effluent in the tanks. Tank 2A had slight grit near the hopper end that would require sweeping though there were no evidence of odour present.

Tanks 4a, 4b, 5a & 5b are covered and odour controlled.

Tanks 6A and 6B were empty and all hoppers were completely drained down. There was no grit or effluent in the tanks.

Tanks 7A – 8B all tanks were empty and all hoppers were completely drained down apart from Tank 7B that had some thick grit near the hopper end which required removal. The hoppers in tank 8a and 8b required over pumping due to the level of effluent which was forming a thick fatty layer on top. Thames Water explained that this was due to issues with backfilling and there were no signs of odour from these hoppers.

Storm Water Channel

The level of effluent in storm feed channels serving STW's 1A-8B was low though it appeared sludgy and was not odorous. There was no noticeable odour. The sludge in these channels was dark and murky in colour.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 15:18).

Monitor 1	0.007	ppm
Monitor 2	0.003	ppm
Monitor 3	0.000	ppm
Monitor 4	0.004	ppm
Monitor 5	0.006	ppm
Monitor 6	0.000	ppm
Monitor 7	0.000	ppm
Monitor 8	0.000	ppm
Monitor 9	0.004	ppm
Monitor 10	0.003	ppm
Monitor 11	0.004	ppm
Monitor 12	0.004	ppm
Monitor 13	0.004	ppm

Complaints

The Council received no complaints via telephone, e-mail or complaints via MRAG in the previous week.

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

Thursday 1st December 2016

AM – No odour issues on site – Nothing to report on trends

PM– Monitor No2 spiked once at 00:15 but less than 15 mins duration max 0.018ppm – skip hosed down at east inlet.

Friday 2nd December 2015

AM – No odour issues on site – Nothing to report on Trends

PM – Monitor No5 spiked once at 19:05 for a15 min duration (0.030ppm)

Saturday 3rd December 2016

AM – No odour issues on site – Nothing to report on trends

PM – Monitor No5 spiked at 13:30 (max 0.027ppm) – odour coming from manhole main drive

Sunday 4th December 2016

AM – No odour issues on site – Nothing to report on trends

PM – Trends flatlined early in shift – no odours issues

Monday 5th December 2016

AM – OM 1-5 no spikes and OM6-13 no spikes.

PM – No odour issues on site – nothing to report on Trends

Tuesday 6th December 2016

AM – OM1-5 no spikes OM13 crashed from 01:04 till 10:54

PM – No odour issues on site – nothing to report on Trends

Wednesday 7th December 2016

AM – No odour issues on site – nothing to report on Trends

PM – No odour issues on site – nothing to report on Trends

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					
02/12/2016	244	1012	0	1256	2930	4186
05/12/2016	435	1200	0	1635	1449	3084
07/12/2016	59	244	183	486	2450	2936

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 72 imports each of 30m³ of sludge in the last week.

Digesters

Digesters 1-4 are permanently out of use.

Digester 13, 16 and 19 were out of use.

All of the other digesters which were in use had good seals.

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually as required to all operational digesters. Digesters 14 and 18 clearly had pellets in use.

Return Activated Sludge Channel

The RAS channel (which runs in the ground between FST's 61-64 & 65-67) contained a layer of fluffy sludge for approximately 2 metres of its length.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 10, 11 & 12 were all in operation with no noticeable issues.

PST 9 is currently out of service.

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. All 8 tanks have hose and sprinkler systems fitted onto the sweeper bridges. Thames Water confirmed that there were currently no issues with these tanks though there was algal growth on a number of these tanks.

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 Water confirmed all screens were in operation.

Skips

East side

4 Bulk carriers covered and hatches closed (Screening House)

1 Large Bulk carrier – full and covered (Grit skips)

2 Large Bulk carrier – empty and uncovered (Grit skips)

West side

There were no skips present on the West Side of the works

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection with no reported problems.

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 and looked as if they were operating effectively.

New Works (West Side)

Thames confirmed tanker crews and cranes are in operation undertaking work so unable to observe this area.

New Inlet Works (West Side)

There were no reported issues on this part of the site.

Odour Control Unit (OCU) performance monitoring – 06/12/2016

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.031(av)	0.2	Yes
East OCU	0.015(av)	0.05	Yes
West inlet	0.003(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.05(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.002(av)	0.5	Yes
Transfer PS outlet	0.008(av)	0.6	Yes
New West OCU 11 outlet	0.006(av)	0.6	Yes

Jerome reading