



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 23rd November 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 empty

Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 2B was empty & clean. Hopper all hoppers require draining.

Tank 3A was empty slight grit build up. All hoppers were empty.

Tank 3B was empty & clean. Hoppers 1, 2 were empty hopper 3 requires draining.

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

Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 6B was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 7A was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 8A was empty & clean. Hoppers 1, 2 & 3 were all empty.

Tank 8B was empty & clean. Hoppers 1 & 2 were both full, Hopper 3 was $\frac{1}{2}$, 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 (<math><5\%</math>) 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 13:13).

Monitor 1	0.005	ppm
Monitor 2	0.008	ppm
Monitor 3	0.004	ppm
Monitor 4	0.005	ppm
Monitor 5	0.005	ppm
Monitor 6	0.008	ppm
Monitor 7	0.005	ppm
Monitor 8	0.008	ppm
Monitor 9	0.008	ppm
Monitor 10	0.006	ppm
Monitor 11	0.008	ppm
Monitor 12	0.007	ppm
Monitor 13	0.007	ppm

Complaints

The Council received no complaints in the preceding week.

Odour Log (Thames) - Photocopies of log entries taken

Thursday 16th November 2017

AM: Monitor No 5 at 16:37 15 minutes duration 0.017ppm.

PM: No odour spikes over limit no odour problems.

Friday 17th November 2017

AM: Monitor No5 spiked at 14:47 but 15 minutes duration max 0.021ppm. Monitor No11 spikes just over trigger level 0.0016ppm for around 50mins. Areas checked no odours found.

PM: Monitor 5- One spike peaked at 0.021ppm 20:19 – 20:34. Area investigated no odour detected.

Saturday 18th November 2017

AM Odour Monitor 2 spiked at 09:43 to 0.020 less than 15 minutes. Odour monitor 10 spiked to 0.015ppm @14:50 less than 15 minutes.

PM Monitor 5- Two spikes peaked at 0.028ppm both under 15 minutes. Monitor 8- One spike 0.016ppm under 15 minutes. Monitor 9- One spike 0.020 ppm under 15 minutes. Investigated spikers no odour detected OCU onsite running ok.

Sunday 19th November 2017

AM: No odour spike nothing to report on trends.

PM: Monitor 5 one spike 0.016ppm less than 15 minutes. No odour detected no other odour issues onsite.

Monday 20th November 2017

AM: Monitor No2 spiking for around 1¼ hour s reading fluctuating lots of less movements this morning (max 0.032ppm). Monitor No3 spiked at 14:45 but 15 mins duration. Area being hosed down after skip change.

PM: Monitor 3- one spike peaked at 0.049ppm 01:13/01:28 15 minute spike could not identify source of spike no other odour problems onsite

Tuesday 21st November 2017

AM: Monitor No2 spiked at 08:00 but 15 mins duration (max 0.016ppm) monitor No2 spiked at 13:28 for over an hour (max 0.018ppm). Checked

east inlet screen house flume N01 being cleaned out to remove rag tanker operation.

PM No odour spikes. No odour problems.

Wednesday 22nd September 2017

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

PM: Monitor No13 showing odour from 21:52- 22:47 @ (0.016)ppm area on E checked and no odours found.

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					
17/11/17	2365	656	122	3143	1929	5072
20/11/17	3645	778	61	4484	1273	5757
22/11/17	3645	778	61	4484	1425	5909

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 70 imports of sludge over the last week (10 deliveries daily), 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 had a weak sloppy seal.

Digester 6 was in use had a good dry seal.

Digesters 7 was in use had a weak seal.

Digester 8 was in use but had weak seal.

Digester 9 was in use had good dry seal.

Digester 10 was in use but had weak seal.

Digester 11 was in use but had weak seal.

Digester 12 was in use but had wet sloppy seal.

Digester 13 is currently out of use.

Digester 14 was in use had good dry seal.

Digester 15 was in use but had a weak seal.

Digester 16 is currently out of use.

Digester 17 was in use had good dry seal.

Digester 18 was in use had good dry seal.

Digester 19 was in use but had a weak seal.

Digester 20 was in use but had a weak 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.

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 & 77 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 low level open bulk carrier on site, this was empty 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 – 20/11/2017

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.13(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
Pasteurization 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			