



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Friday the 13th October 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 and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 1B was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 2A was empty. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 2B was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 3A was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 3B was empty slight grit build up. Hoppers 1 and 2 required over pumping hopper 3 had been fully drained no odours detected.

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

Tank 6A was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 6B was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 7A was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 7B was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 8A was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Tank 8B was empty and clean. Hoppers 1, 2 and 3 were empty no odours detected.

Storm Water Channel

The storm feed channel serving STW's 1A-8B were being filled with effluent 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 15:15).

Monitor 1	0.006	ppm
Monitor 2	0.005	ppm
Monitor 3	0.000	ppm
Monitor 4	0.003	ppm
Monitor 5	0.000	ppm
Monitor 6	0.006	ppm
Monitor 7	0.004	ppm
Monitor 8	0.004	ppm
Monitor 9	0.006	ppm
Monitor 10	0.004	ppm
Monitor 11	0.005	ppm
Monitor 12	0.004	ppm

Monitor 13	0.004	ppm
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Complaints

The Council received one email complaint in the preceding week. On 12th October at 04:30 a resident of Malting Way located to the North East of the Works e-mailed the Council to advise "There was a nasty odour this morning on my way to work on Malting Way". The area of the works closest to the resident is the storm water tanks and on 12th October the log recorded at 04:30 showed that none of the uncovered tanks were in use, none of the tanks required flushing and none of the hoppers required over pumping and it has not been possible to identify the source of odour complained of on this occasion.

Odour Log (Thames) - Photocopies of log entries taken

Thursday 5th October 2017

AM No odour spikes. Sludge spill from imported sludge tank. Sludge spill in thickening building.

PM No odour spikes no odour problems.

Actions taken AM: Day ops cleaned up area.

Friday 06th October 2017

AM OM2 0.034 spike 11:20 less 15 mins, om8 0.019 spike 7:17-7:29 no issues found in area

PM Monitor 2 _One spike- peaked at 0.027ppm 04:51- 05:46. No other odour issues site.

Actions taken PM: Jerry investigated odour spike from monitor 2. East inlet no odour detected.

Saturday 7th October 2017

AM OM3 09:58- 10:05 = 0.027

12:50- 13:20 = 0.025

14:52- 15:05 = 0.071

15:23 – 15:37 = 0.027

15:53 – 16:20 = 0.030

16:38 – 17:07 = 0.051

OM2 8:05 0.025.

PM Customer complaint received @00:15 see odour investigation form.
No spikes on trends no odour issues on site.

Sunday 8th October 2017

AM OM2 9:51 – 10:04 - 0.022

OM9 6:51–7:04 - 0.024 under 15 mins no odour source found no other issues.

PM Monitor 2- 3 spikes 21:52- 22:35 0.022ppm

23:05 – 23:20 - 0.017ppm

03:35 - 03:50 - 0.078ppm. East area checked no odour detected.

Monday 9th October 2017

AM Multiple spikes monitor No2 07:50 – 09:30 no odours found. 3 spikes from odour monitor No3 all 15 mins max 0.045ppm OCU No11 MV and PH reading suspect.

PM Monitor 8- One spike peaked @ 0.026 18:01 – 18:31 area investigated- No odour detected.

Action taken AM: OCU 11 put in defect book.

Tuesday 10th October 2017

AM Monitor No2 spiked briefly 15 mins duration at 07:53 max 0.016 ppm no odours found on investigation.

PM OM2 0.018 3:51 – 04:04 no odour source found no other issues.

Wednesday 11th October 2017

AM Monitor No2 spiking on and off between 06:23 and 07:50 3 spikes two 15 mins duration and 1 x 27 mins (max0.035ppm)

PM Under 15 mins OM5 0.026 4:19 – 4:32

OM3 0.103 20:54 – 21:07

No source found. No other issues.

Actions taken: East inlet skip area hosed down to remove skip juice from floor no other sources of odour discovered.

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					
6/10/17	1886	618	0	2504	1088	3592
9/10/17	1985	0	0	1985	3091	5076
11/10/17	1886	618	0	2504	1088	3592

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, 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.

Digesters 5 - Was in use good seal. No evidence of sludge spill.

Digester 6 - Was in use weak foamy seal. No evidence of sludge spill.

Digester 7 - Was in use and had a weak seal. No evidence of sludge spill.

Digester 8 - Was in use and had a good seal. No evidence of sludge spill.

Digester 9 - Was in use and had a weak seal. No evidence of sludge spill.

Digesters 10 - Was in use and had a weak seal. No evidence of sludge spill.

Digester 11 - Was in use and had a weak seal. No evidence of sludge spill.

Digester 12 - Was in use and had a weak seal. No evidence of sludge spill.

Digester 13 - Was out of service.

Digester 14 - Was in use good seal. No evidence of sludge spill.

Digester 15- Was in use and had a weak seal. No evidence of sludge spill.

Digester 16- is out of service.

Digester 17- Was in use good seal. No evidence of sludge spill.

Digester 18 - Was in use good seal pellets in use. No evidence of sludge spill.

Digester 19- out of service.

Digester 20 -Was in use good seal. No evidence of sludge spill.

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 still clogged along the three quarters of its length with thick dry sludge at the time of the inspection. Thames stated that this matter would be addressed.

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 and all three had clean fat free surfaces. PST 10 is currently out of service and drained down.

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 were in operation apart from tank number 78. It was noted that the surface of tanks were covered in green algae/pond weed..

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 16 yard skip covered with tarpaulin. On the West side x 2 large bulk containers present.

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) were free flowing and there were no signs of rag or floating debris seen. The Thames Water officer explained that normally a four man tanker crew clear the channel on a weekly basis.

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

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 04/09/2017

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	0.002(av)	0.6	Yes
New West OCU 11 outlet	0.003(av)	0.6	Yes
# Jerome reading			