



Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 31 th August 2017	
Attendees: Mr L Phillips (London Borough of Hounslow) and 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 and clean. Hopper 1 was approximately half full. Hoppers 2 and 3 were drained down.</p> <p>Tank 1B was empty and clean. All hoppers drained to its lowest point no odour.</p> <p>Tank 2A was empty and clean. Hoppers three hoppers drained to lowest point no odours detected.</p> <p>Tank 2B was empty however slight build-up of grit on surface of tank. All hoppers had been drained to lowest point no odour.</p> <p>Tank 3A was empty and clean. All hoppers were approximately 30% full and required overpumping.</p> <p>Tank 3B was empty but had some dried grit in the tank. All hoppers were approximately 30% full and required overpumping.</p> <p>Tanks 4A, 4B, 5A & 5B are all covered and odour controlled.</p>	

Tank 6A tank was empty and clean. All hoppers were approximately 30% full and required overpumping.

Tank 6B was empty and clean. Hoppers 1, 2 and 3 were approximately 30% full and required overpumping.

Tank- 7A was empty and clean. Hoppers being drained at time of inspection.

Tank- 7B tank was empty and clean. All hoppers were drained down but however slight grit build up

Tank 8A - was empty and clean. All hoppers drained down to lowest point no odour.

Tank 8B - was empty and clean, all hoppers were drained down.

Feed Channel – The feed channel level was very low. The base of the channel feeding tanks 4-8 contained some sludge and was locally odorous. Thames Water advised that the feed channel would be flushed.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection (2:00pm) are as follows:

Monitor 1	0.000	ppm
Monitor 2	0.000	ppm
Monitor 3	0.000	ppm
Monitor 4	0.000	ppm
Monitor 5	0.000	ppm
Monitor 6	0.003	ppm
Monitor 7	0.008	ppm
Monitor 8	0.004	ppm
Monitor 9	0.000	ppm
Monitor 10	0.004	ppm
Monitor 11	0.000	ppm
Monitor 12	0.000	ppm
Monitor 13	0.000	ppm

All readings accessed using Envirosuite which provides data in ppb.

Complaints

The Council received one complaint by telephone in the preceding week.

On 30th August 2017 at approximately 13:11 a resident of Summerwood Road, Isleworth located to the South-East of the site phoned to advise of odour from Mogden Sewage Treatment Works. The historic odour monitoring trends were inspected during the weekly inspection and Odour Monitors 1 to 13 did not record any elevated levels at the time of the complaint odour monitor 9 read 0.000 at time complaint was raised.

The Council received three complaint by email from MRAG.

On 29th August 2017 a complaint was received by email via MRAG to

advise of ongoing odour arising from *Mogden STWs*. No address for the complaint was given in the email. The historic odour monitoring trends were inspected during the weekly inspection and Odour Monitors 1 to 13 did not record any elevated levels at the time of the complaint. The odour log for 29th August detailed that there were no spikes on odour monitors 1 to 13.

On the 29th of August 2017 a complaint was received by email via MRAG to advise of the on-going odour arising from Mogden STW'S. A resident of Amhurst Gardens Isleworth located North-East of the works. The historic odour monitoring trends were inspected during the weekly inspection and Odour Monitors 1 to 13 did not record any elevated levels at the time of the complaint.

On 29th August 2017 a complaint was received by email via MRAG to advise of ongoing odour arising from *Mogden STWs*. No address for the complaint was given in the email. The historic odour monitoring trends were inspected during the weekly inspection and Odour Monitors 1 to 13 did not record any elevated levels at the time of the complaint. The odour log for 29th August detailed that there were no spikes on odour monitors 1 to 13.

The Council received one complaint by email in the preceding week.

On 30th August 2017 a complaint was received by email from a resident of Grinwood Road advised of ongoing odour arising from Mogden STWs. The historic odour monitoring trends were inspected during the weekly inspection and Odour Monitors 1 to 13 did not record any elevated levels at the time of the complaint. The odour log for 30th August detailed that there were no spikes on odour monitors 1 to 13.

Odour Log (Thames)

Thursday 24th August 2017

AM – No odour spikes. No issues

PM – Odour monitor No 3 showing odour 18:07 – 18:17 (0.027ppm)
odour monitor No5 spiked 22:00-22:10 (0.016ppm)

Friday 25th August 2017

AM – No odour Spikes alarm going off in the sludge thickening building.

PM – Monitor 2- Two spikes see odour investigation form.

Saturday 26th August 2017

AM – 1 spike OM5 0.019 16:45 16:58 (13mins)

PM – Monitors 4/5/8/9 all spiking,

Monitor 4- 23:56- 00:11 0.017ppm

Monitor 5- 23:59 - 00:11 0.019ppm.

Monitor 8 23:32- 00.27 0.029.

Monitor 9- 23:17- 01:02 0.039ppm.

Monitor 2 -01:03-01:13 0.016ppm.

Monitor 2- 01:33-0258 0.024ppm.

Actions taken: area on main drive investigated (No odour issues/source found.)

Actions taken: Unusual burning smell on site waste burner operated in manual to drop gas bell height from 26m to 24m.

Sunday 27th August 2017

AM – Monitor 19- One spike 0.016ppm under 15 minutes.

PM – Monitor 5- One spike 0.018ppm 1946-1956 under 15 minute duration no odour detected in area.

Monday 28th August 2017

AM – Monitor No 8 spiked at 13:17 but 15 mins duration max 0.015ppm OCU No12 failed around this time.

PM – Monitor 5 two spike 21:46 – 21:56 0.015ppm.

22:31 -22:56 0.019ppm.

Monitor 2 – one spike 00.03 - 00.13, 0.015

Actions taken: Maintenance technician called out to attend site for OCU No12 failure back running at 15:00ish.

Tuesday 29th August 2017

AM – No odour issues reported or found no spikes on trend.

PM – No odour spikes no issues.

Wednesday 30th August 2017

AM – No odour issues.

PM – Odour monitor 5 4:30 – 4:45 no issues 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					
25/08/2017	0	206	0	206	6242	6448
28/08/2017	0	993	0	993	3763	4756
30/08/2017	20	2362	0	2382	6583	8965

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m³) for all dates on which data has been provided. 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.

Sludge Screening House

Shutter doors closed at time of inspection.

Imported Sludge

Six imports of 35m³ daily for preceding seven days.

Digesters

Digesters 1-4 – Out of use (permanent),

Digester 5 – Was out of use for maintenance.

Digester 6 – Was in use with a good thick seal.

Digester 7 – Was in use but had a weak seal.

Digester 8 – Was in use but had a weak seal.

Digester 9 – Was in use and had a weak seal.

Digester 10 – Was in use and had a weak seal no evidence of spillage.

Digester 11 – Was in use but had a weak seal no evidence of spillage

Digester 12 – Was in use but had a weak seal no evidence of spillage

Digester 13 – Was in use but had a weak seal no evidence of spillage.

Digester 14 – Was in use and had a good thick seal.

Digester 15 – was in use but had a weak seal no evidence of spillage.

Digester 16 – Was out of use for maintenance.

Digester 17 – Was in use and had a good thick seal.

Digester 18 – Was in use and had a good thick seal pebbles used on this digester.

Digester 19 – Was out of use for maintenance.

Digester 20 – Was in use good thick seal.

Automatic dosing of anti-foaming agent in 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 clogged along the three quarters of its length with thick dry sludge at the time of the inspection. 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.

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). Tank 77 had been drained down and was not in use at the time of the inspection.

East Side Screen House

All doors closed.

Other Skips

1 x 15 yd. open general waste skip at rear of screen house.

Pasteurisation Plant

The pasteurisation plant is in service and fully operational.

Section 106 agreement

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

West side primary settlement tanks (PST)

Rectangular PSTs – no issues

Circular PST's all in use except for PST 10.

West Side Aeration Lanes (Old)

Battery C aeration feed channel was clear, contractors were on site clearing the channels further North.

New Works (West Side)

Feed Channel for Aeration Lanes 20 - 25

The aeration lanes appeared much improved from previous visits. sprinklers were working. The volume of rag in the channels appears to have decreased. The feed channel needs clearing, Thames Water advised that a tanker does clean out the feed channel.

Odour Control Unit (OCU) performance monitoring – (15/08/17)

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

