



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 6th September 2018

Attendees: Mr Zaheer Kadri (L B Hounslow) & Mr M Hussain (Thames Water).

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tanks 1A to 3B were all empty and clean. All the Hoppers had been drained down.

Tanks 4A, 4B, 5A & 5B are covered and odour controlled.
Unable to gauge condition as lighting system still not working. Window hatch removed to enable access for over-pumping and requires replacement.

Tank 6A and 6B were empty and clean. Hoppers 1, 2 & 3 of both tanks were all drained down and clear.

Tank 7A was empty, however some grit had accumulated at the hopper end which needed sweeping. Hoppers 1, 2 & 3 (shallow hoppers) were full of effluent (sludgy) – Hoppers needed draining down.

Tank 7B was empty however some grit had accumulated at the hopper end which needed sweeping. Hoppers 1, 2 & 3 (shallow hoppers) were full of effluent (thickish) – Hoppers needed draining down.

Tank 8A had a leakage and need flushing - Hoppers 1, 2 & 3 were all approx. $\frac{3}{4}$ full and needed draining down.

Tank 8B was empty and clean. Hoppers 1, 2 & 3 were all approx $\frac{3}{4}$ at the time of the inspection and were due to be over pumped the same day.

Thames advised that all tanks and hoppers were flushed yesterday to prevent potential issue with insects (mosquitos).

Storm Water Channel

The storm feed channel serving STW's 1A-8B was virtually empty with only a shallow level of clean water along its entire length some patches of grit noticeable.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 12:32 on 6th September 2018).

Monitor 1	0.005	ppm
Monitor 2	0.004	ppm
Monitor 3	0.000	ppm
Monitor 4	0.003	ppm
Monitor 5	0.003	ppm
Monitor 6	0.005	ppm
Monitor 7	0.003	ppm
Monitor 8	0.007	ppm
Monitor 9	0.000	ppm
Monitor 10	0.000	ppm
Monitor 11	0.000	ppm
Monitor 12	0.000	ppm
Monitor 13	0.000	ppm
Wind Direction	332,000	
Wing Speed	5.000	

Complaints

The Council received 1 complaint in the preceding week via email.

On the 27th of August 2018 at approx 06:09 an email complaint was received from a resident residing in the Eve Road area of Isleworth TW7 7HS (ref: 976411). The historic odour monitoring trends at the time of the complaint showed that there were no spikes or excessive readings around the time the complaint was originally made (27th of August 2018 at approx 06:09).

A letter was sent out to the complainant on the 3rd of September 2018 with information on the 24 hour Mogden call out service and information of how to access weekly reports from inspections.

Odour Log (Thames) - Photocopies of log entries taken

Thursday 30th August 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil.

No Odour Issues.

Actions None.

PM Cool, Clear night.

All OMU's in use.

Observations: 05:30 Nil.

No Odour Issues.

Actions None.

Friday 31st August 2018

AM Warm. Sunny with Patchy clouds.

All OMU's in use.

Observations: 17:30 Nil.

OM2 = 0.015ppm 21.26 to 21.38, OM5 = 0.025ppm 03.08 - 03.36 No

Odour Issues.

Actions None.

PM Warm. Cool Clear night.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

Saturday 1st of September 2018

AM Hot. Sunny.

All OMU's in use.

Observations: 17:15 Nil

No odour issues.

Actions None

PM Warm. Sunny.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

Sunday 2nd September 2018

AM Hot. Sunny.

All OMU's in use.

Observations: 17:30 Nil.

No odour issues.

Actions None.

PM Cool. Clear night.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

Monday 3rd September 2018

AM Warm. Sunny with Patches.

All OMU's in use.

Observations: 17:30 Nil.

No odour issues.

Actions None.

PM Cool. Clear night.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

Tuesday 4th September 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil.

No odour issues.

Actions None.

PM Cool, Overcast night.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

Wednesday 5th September 2018

AM Warm. Sunny with patchy clouds.

All OMU's in use.

Observations: 17:45 Nil.

Odour complaint. Strong smell of gas from Regency Mews TW7
@16.15hrs.

Actions No odour discovered after site walk round. No spikes on trends. Digester bell height was low 22.5meters. Siloxane plant was not regenerating.

PM Cool, overcast night.

All OMU's in use.

Observations: 05:30 Nil.

No odour issues.

Actions None.

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					
02/09/18	20	656	0	676	1896	2572
03/09/18	20	244	0	264	1112	1376
04/09/18	20	122	0	142	1234	1376

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.

Imported Sludge

There have been 3 imports of sludge over the last week.

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 & 6 were both in use and had good dry crusty seals.

Digesters 7 & 8 were both in use and had wet seals. It was also noted that both digesters appeared to be slightly bubbling inside and had high bell heights.

Digester 9 was in use and had good dry crusty seal.

Digester 10 was in use and had a wet seal in places that was bubbling off small amounts of gas.

Digesters 11 and 12 were both in use and had good dry crusty seals.

Digesters 13 and 14 were both out of service.

Digester 15 was in use and had a wet seal.

Digester 16 was out of service

Digesters 17 & 18 were both in use and had wet seals.

Digesters 19 & 20 were both in use and had sludgy seals in places, crusty but were only bubbling off minimal amounts of gas.

Automatic dosing of anti-foaming agent is 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 along 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. Some algae growth noticeable across surfaces.

GENERAL

Final Settlement Tanks East Side of Works

The 8 circular tanks previously used as PSTs are now being used as final settlement tanks (71-78). Some algae growth noticeable across surfaces.

At the time of the inspection all tanks were in operation.

East Side Screen House

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

Skips

On the East side there was two 8yd skips stacked up on each other and empty. There was a large Biffa Loader 20yd skip however this was empty and at the time was covered with Tarpaulin. The skip contained some general waste.

At the entrance to the storm tanks there was one 4yd skip with general waste inside and covered with Tarpaulin.

On the West side there was one 8yd skip at the entrance of the digesters- this contained general waste (minimal) and was covered.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. Thames Water advised that 3 streams out of 12 were not in operation due to maintenance.

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)

All of the aeration tanks have again developed a thick “fluffy” coverage across their entire surface. However, the surface appears much improved and free flowing. Some sprinklers were out of action due to issues with water pressure/flow however operatives from Celvac were working to resolve the matter whilst we were on inspection.

E-Battery:

The feed channel for aeration lane 25 was clogged on the surface along its entire length with thick sludge that appeared crusty in places. Odour was noticeably present.

The mixed liquor feed channel serving aeration lanes 24, 23, 22 & 21 all had thick sludgy surface (smooth/skimmed across the length). Odour was slightly noticeably at time of inspection.

Odour was noticeable in places along the mixed liquor feed channel and a tanker crew were on site undertaking clearance of the clogged areas.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 5/09/2018

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00(av)	0.2	Yes
East OCU	0.00(av)	0.05	Yes
West inlet	0.00(av)	0.05	Yes
Sludge reception outlet	No data	0.8	Yes
Thickening plant outlet	0.00(av)	0.6	Yes

Pasteurisation plant outlet (OCU 12)	0.01(av)	0.5	Yes
Transfer PS outlet	0.00(av)	0.6	Yes
New West OCU 11 outlet	0.00(av)	0.6	Yes
# Jerome reading			