



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 24th November 2016

Attendees: Mr A Devine (L B Hounslow) & 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 & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.</p> <p>Tank 2B was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were approximately 1/3 full of relatively fresh effluent.</p> <p>Tank 3B was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p>	

Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.

Tank 6B was empty & clean. Hoppers 1, 2 & 3 were all drained down with only a small amount of effluent at the base with some scum noted on the surface.

Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were full of grit and effluent water. These hoppers required further cleaning.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were full of grit and effluent. These hoppers required further cleaning.

Tank 8A was empty & clean. Hoppers 1, 2 & 3 were full of relatively fresh effluent.

Tank 8B was empty & clean. Hopper's 1, 2 and 3 were full of relatively fresh effluent.

All the hoppers required some form of further cleaning and draining down which Thames Water advised would be done.

Storm Water Channel

The storm feed channel serving STW's 1A-8B was effectively empty of effluent. A localised odour was noted near tanks 4 and 5.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 13:52).

Monitor 1	0.005	ppm
Monitor 2	0.005	ppm
Monitor 3	0.000	ppm
Monitor 4	0.004	ppm
Monitor 5	0.004	ppm
Monitor 6	0.003	ppm
Monitor 7	0.003	ppm
Monitor 8	0.003	ppm
Monitor 9	0.011	ppm
Monitor 10	0.006	ppm
Monitor 11	0.004	ppm
Monitor 12	0.005	ppm
Monitor 13	0.005	ppm

Complaints

The Council received no odour complaints by telephone or e-mail in the preceding week.

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

Thursday 17th November 2016

AM No Odour spikes on trends.

PM Odour monitor 3 reading 0.022ppm at 18:21pm to 18:33pm.

Friday 18th November 2016

AM Odour monitor 3 – Two spikes at 0.015ppm both under 15 minutes.

PM No odour issues. Nothing of note showing on trends.

Saturday 19th November 2016

AM No odours displayed on trends. No odour detected whilst out on site.

PM No odour problems. Nothing of note showing on trends.

Sunday 20th November 2016

AM No odour problems. Nothing of note showing on trends.

PM No odour issues. Nothing of note on trends.

Monday 21st November 2016

AM Nothing to report on trends. No odours detected on site.

PM An odour monitor spiked at 02:00 for 1 hour at exactly 0.018ppm. The odour monitor number was not given.

Actions Taken Check area around main entrance and digesters, no obvious odours found.

Tuesday 22nd November 2016

AM No odour showing on trends. No odours detected out on site.

PM Odour monitor 1 spiked at 15:37pm for 30 minutes with a maximum concentration of 0.27ppm.

Wednesday 23rd November 2016

AM Odour monitor 5 spiking at 0.029ppm from 12:17pm to 12.30pm. No other spikes.

PM Odour monitor 4 one spike at 0.021ppm for 55 minutes. Test running engines on oil after repairs.

Sludge Dip Records

Date	West PSTs	West PSTs	West PSTs	West Total	East PSTs	Grand Total
	1	2	3			
	All units in m³					
OMP limit	500					
17/11/2016	59	885	267	1211	2939	4150
21/11/2016	39	595	0	634	1633	2267
23/11/2016	59	679	206	944	3123	4067

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 45 imports of sludge received in the last week, each import containing 30m³ of sludge.

Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was open at the time of the inspection as works were being carried out in that area. Thames Water advised that the doors would be closed once the works have been completed.

Digesters

Digesters 1-4 are permanently out of use.

Digester 5- In use and had a weak seal, no evidence of spillage.

Digester 6- In use and had a good seal, no evidence of spillage.

Digester 7- In use however, weak seal bubbling and foamy. The digester was gassing off and a spill was noted on the coping stones. Thames Water advised that they would clean up the spill today.

Digester 8- In use however, weak seal bubbling and foamy. The digester was gassing off and a spill was noted on the coping stones. Thames Water advised that they would clean up the spill today.

Digester 9- In use and had a weak seal, no evidence of spillage.

Digester 10- In use and had a weak seal, no evidence of spillage.

Digester 11- In use and had a weak seal, no evidence of spillage.

Digester 12- In use and had a weak seal, no evidence of spillage.

Digester 13 - Out of use – empty & clean

Digester 14- In use and had a weak seal, no evidence of spillage.

Digester 15- In use and had a weak seal, no evidence of spillage.

Digester 16- Out of use – empty & clean

Digester 17- In use and had a weak seal, no evidence of spillage.

Digester 18 in use and had a good seal, no evidence of spillage.

Digester 19 Out of use – empty & clean – contractors on site and internal maintenance works ongoing.

Digester 20- In use and had a weak seal, no evidence of spillage.

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 RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clean and free flowing at the time of the inspection. Thames confirmed 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 10, 11 & 12 were all in operation and had clean 'fat-free' surfaces.

PST 9 is currently out of service. However Thames Water advised that it was being brought back into service today.

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 tanks 71 to 77 were in use & tank 78 was being drained down for maintenance work.

All 8 tanks have hose and sprinkler systems fitted onto the sweeper bridges that were operating.

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 confirmed all screens were in operation.

Skips

On the East side there were three low level open skips that were full and covered.

<p>On the West there were no skips in the skip storage area.</p> <p>There was one 6yd skip by the temporary centrifuge (located near to the entrance to the digesters). Due to the number of imports this skip was uncovered but a cover was next to the skip. The rag from the skip was noted to be odorous. Thames Water advised that if there was a break in imports than the skip would be covered.</p> <p>There was one 6yd skip at the entrance to the digesters which had doors which were closed.</p> <p>There was one 6yd skip with doors which were closed at the entrance to the digesters.</p> <p><u>Pasteurisation Plant</u></p> <p>The pasteurisation plant was in service at the time of the inspection. The TW officer confirmed all 12 streams were running.</p> <p><u>Section 106 agreement</u></p> <p>There have been no breaches of the s106 agreement in the last week.</p> <p><u>West Side Aeration Lanes (Old)</u></p> <p>No issues appeared evident.</p>	
<p><u>New Works (West Side)</u></p> <p>The mixed liquor feed channel serving aeration lanes 21-25 was free flowing and clear of debris at the time of the inspection.</p> <p>The sprinkler system for the aeration lanes is in use permanently and most were working at the time of the inspection.</p> <p>Thames confirmed tanker crews are cleaning the mixed feed liquor channel out on a weekly basis.</p>	

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 24/11/2016

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.048(av)	0.2	Yes
East OCU	0.018(av)	0.05	Yes
West inlet	0.000(av)	0.05	Yes
Sludge reception outlet	0.000(av)	0.8	Yes
Thickening plant outlet	0.011(av)	0.6	Yes
Pasteurisation plant outlet (OCU 12)	0.0002(av)	0.5	Yes
Transfer PS outlet	0.070(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes

Jerome reading