



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 7th September 2017

Attendees: Mr I Inman (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 were 1/3 full. Hopper 3 was ¼ full, all needed draining down.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2B was empty & clean. Hoppers 1, 2 & 3 were all approx ¾ full and needed draining down.</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were all approx ¼ full and needed drained down.</p> <p>Tank 3B was empty & clean. Hoppers 1, 2 & 3 were all approx ¾ full and needed draining down.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p> <p>Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all approx 2/3 full and needed draining down.</p>	

Tank 6B was empty & clean. Hoppers 1, 2 & 3 were all approx ¼ full and needed draining down.

Tank 7A was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but clogged with grit.

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but clogged with grit.

Tank 8A was empty & clean. Hopper 1 was ¼ full. Hoppers 2 & 3 were drained down and being over pumped at the time of the inspection.

Tank 8B was empty & clean. Hoppers 1, 2 & 3 were all approx 1/3 full and 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 (<5%) 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 14:12).

Monitor 1	0.005	ppm
Monitor 2	0.004	ppm
Monitor 3	0.014	ppm
Monitor 4	0.000	ppm
Monitor 5	0.000	ppm
Monitor 6	0.004	ppm
Monitor 7	0.004	ppm
Monitor 8	0.004	ppm
Monitor 9	0.000	ppm
Monitor 10	0.004	ppm
Monitor 11	0.004	ppm
Monitor 12	0.000	ppm
Monitor 13	-0.001	ppm

Complaints

The Council received 1 complaints in the preceding week.

On the 30th August 2017 at 13:11 a telephone complaint was received from a resident of Summerwood Road, Isleworth (ref: 966442). However, at the time of the complaint no officers were available to visit the area.

The historic odour monitoring trends around the time of the complaint showed no excessive readings.

Odour Log (Thames) - Photocopies of log entries taken

Thursday 31st August 2017

AM OM 1-5 no spikes. OM 6-13 no spikes.

PM Spike on OM2 of 1:34 (1 min).

Friday 1st September 2017

AM OM 1-5 no spikes. OM 6-13 no spikes.

PM No odour issues found or reported. No spikes on trends.

Saturday 2nd September 2017

AM OM 1-5 no spikes. OM 6-13 no spikes.

PM No odour issues found or reported. No spikes on trends.

Sunday 3rd September 2017

AM OM 1-5 no spikes. OM 6-13 no spikes. PST-10 tank surface ½ covered in sludge.

PM OM2 spiked at 21:20 for around an hour (max 0.019ppm and again at 23:45 but <15 mins duration (max 0.018ppm) and again at 00:47 for 30 mins duration (max 0.022ppm).

Odour investigated on foot. No odours found, rain falling during this time.

Monday 4th September 2017**AM** No odour issues, nothing to report on trends.**PM** No odour issues.**Tuesday 5th September 2017****AM** No odour problems, nothing to report on trends.**PM** OMs 1-5 = Monitor 5 = 0.017ppm from 19:59 to 20:12.

OMs 6-13 = Monitor 8 = 0.020ppm from 00.02 to 00.14

Wednesday 6th September 2017**AM** OM3 spiked to 0.048ppm at 12:51 for less than 15 minutes.

Checked round area, back of E Battery PST's & Aeration, nothing of note found.

PM OMs 1-5 = Monitor 3 = 0.043ppm at 23:20 to 23:33.

OMs 6-13 = No spikes.

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					
01/09/17	0	993	0	993	4902	5895
04/09/17	0	1093	61	1154	5238	6392
06/09/17	20	267	0	287	6915	7202

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.

Digester 5 was in use and had a good dry seal.

Digester 6 was in use and had a good dry seal.

Digesters 7, 8, 9, 10, 11 & 12 were all in use but all had a very wet seals that were bubbling off gas.

Digester 13 is currently out of use.

Digester 14 was in use and had a good dry seal.

Digester 15 was in use and had a good dry seal.

Digester 16 is currently out of use.

Digester 17 was in use and had a good dry seal.

Digester 18 was in use and had a good dry seal.

Digester 19 is currently out of service.

Digester 20 was in use and had a good dry 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 still clogged along the three quarters of its length with thick dry sludge at the time of the inspection. It was also noted that hundreds of tiny flies/insects were crawling over the sludge. 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 except 77 were in operation. It was noted that the surface of tank 71 was completely covered in green algae/pond weed and the sweeper bridge was not 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 that was empty, no odour was present.

On the West side there were no skips present.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. The TW officer confirmed all 12 streams were running.

It was noted during the inspection that a very strong and offensive ammonia (H₂S) type smell was present around the area of the PAS plant and Pumping Station No:5.

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) was still clogged along more than three quarters of its length with the same rag and floating debris seen during last week's inspection.

It was also noted that again a strong ammonia (H₂S) type smell was present in the area (Thames advised this is potentially coming from PSTs 21-25 and is currently being investigated).

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 – 04/09/2017

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	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	0.000(av)	0.6	Yes
New West OCU 11 outlet	0.000(av)	0.6	Yes

Jerome reading