



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 19 th July 2018	
Attendees: Mr I Inman (L B Hounslow) & Mr M Hussain (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. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 1B was empty and clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2A was empty and clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 2B was empty and clean. Hopper 1 was approx ¼ full, hoppers 2 & 3 were drained down.</p> <p>Tank 3A was empty and clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 3B was empty and clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>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.</p> <p>Tank 6A was empty and clean. Hoppers 1, 2 & 3 were all approx ¼ full.</p>	

Tank 6B was empty and clean. Hoppers 1, 2 & 3 were all approx. 1/3 full.

Tank 7A was empty and clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but had large amounts of grit in them.

Tank 7B was empty and clean. Hoppers 1, 2 & 3 (shallow hoppers) were all drained down but had large amounts of grit in them.

Tank 8A was empty and clean. Hoppers 1, 2 & 3 were all approx. 3/4 full. Over pumping to the storm channel was taking place at the time of the inspection by TW staff.

Tank 8B was empty and clean. Hoppers 1, 2 & 3 were all approx. 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.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 12:50 on 19th July 2018).

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	0.000	ppm
Monitor 7	0.004	ppm
Monitor 8	0.000	ppm
Monitor 9	0.000	ppm

Monitor 10	-0.000	ppm
Monitor 11	0.004	ppm
Monitor 12	0.000	ppm
Monitor 13	-0.000	ppm
Wind Direction		
Wing Speed		

Complaints

The Council received 2 complaints in the preceding week (one being an earlier complaint that was incorrectly sent to another Department within the Council).

On the 12th July 2018 at 19:18 an Email complaint was received from a resident of Whitton Dene, Isleworth (ref: 974881), via MRAG.

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 (12th July 2018 at 18:18).

A letter was sent out to the complainant on the 19th July 2018 with information on the 24 hour Mogden call out service and information of how to access weekly reports from inspections.

On the 16th July 2018 at 21:02 a telephone complaint was received from a resident of Mogden Lane, Isleworth (ref: 975006). However, the complaint was not called through to the out of duty officer until 22:27.

The complainant was contacted at 22:24 and after confirming odour was still causing an issue the duty officer agreed to visit the area as soon as possible.

A visit was made to Mogden Lane at approx. 23:10 and H2S sampling was carried which gave average readings of 0.0000ppm. However, the subjective assessment confirmed odour was present, therefore the Thames Water OHC was contacted at 23:26. TW advised that a site walk around had already been carried out that confirmed there were no issues with STW Hoppers, digesters, etc, but another one would be conducted to re-check.

The historic odour monitoring trends around the time of the complaint (between 20:00-00:30) showed no excessive readings.

A letter was sent out to the complainant on the 17th July 2018 advising details of the site visit along 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 12th July 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil. No odour issues noted.

Actions None.

PM Warm. Overcast night.

All OMU's in use.

Observations: 05:30 Nil. No odour issues.

Actions None.

Friday 13th July 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil. No odour issues.

Actions None.

PM Warm. Sunny with patchy clouds.

All OMU's in use.

Observations: 17:30. No odour issues.

Actions No information logged.

Saturday 14th July 2018

AM Hot. Sunny.

All OMU's in use.

Observations: 10:05. OM5 spiked to 0.03ppm for 15 minutes.

Actions Storm tanks filled through night and in process of being emptied.

PM Warm. Sunny.

All OMU's in use.

Observations: 17:30 Nil. No odour issues.

Actions None.

Sunday 15th July 2018

AM Hot. Sunny.

All OMU's in use.

Observations: 17:30 Nil. No odour issues.

Actions None.

PM Warm. Clear night.

All OMU's in use.

Observations: 05:30 Nil. No odour issues.

Actions None.

Monday 16th July 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:45 Nil. No odour issues.

Actions None.

PM Warm. Clear night.

All OMU's in use.

Observations: 23:36 OHC notified customer complaint by residents on ivy bridge estate and Hounslow Council.

05:30 No other complaints.

Actions No source found. Site survey carried out-no odour found, site survey also carried out at 01:50.

Tuesday 17th July 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil. No odour issues.

Actions None.

PM Warm. Clear night.

All OMU's in use.

Observations: 05:40 Nil. No odour issues.

Actions None.

Wednesday 18th July 2018

AM Warm. Cloudy with sunny spells.

All OMU's in use.

Observations: 17:30 Nil. No odour issues.

Actions None.

PM Warm. Clear night.

All OMU's in use.

Observations: 05:40 Nil. No odour issues.

Actions None.

Sludge Dip Records

Date	West PSTs	West PSTs	West PSTs	West Total	East PSTs	Grand Total
	1	2	3			
	All units in m ³					
OMP limit	500					
13/07/18	0	740	63	803	754*	1555*
					785	1585
16/07/18	0	0	0	0	2889	2889
18/07/18	0	389	61	450	1264	1714

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.

Despite being verified & checked by TW staff, figures highlighted in **red*** are incorrect amounts entered on Thames Water paperwork. Correct amounts entered below.

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. It was also noted that both digesters appeared to be bubbling excessively inside.

Digesters 7 & 8 were both in use and had good dry crusty seals. It was also noted that both digesters appeared to be bubbling excessively 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, 12, 13 & 14 were all in use and had good dry crusty seals.

Digester 15 was in use and had a good dry crusty seal. However, there was evidence of a recent sludge spill which had not been cleaned up.

Digesters 16, 17 & 18 were all in use and had good dry crusty seals.

Digesters 19 & 20 were both in use and had wet seals 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.

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).

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.

Thames Water advised screen 1 was out of service due to maintenance.

Skips

On the East side there was two 12yds skips. One was empty and one contained a small amount of general rubbish that was covered with a tarpaulin.

There was one 20yds open bulk carrier that was empty.

On the West side there was one 40yds closed bulk carrier.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection. Thames Water advised streams 3 & 11 were out of operation for 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. Almost all the sprinklers were in operation at the time of the inspection and appeared to be functioning correctly.

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 were both clear.

The channel serving aeration lanes 22 & 21 were both clogged with thick sludge & debris.

Odour was noticeably present.

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 – 18/07/2018

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	
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