



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: 12 th April 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 completely full. Amajets 2 & 3 were in operation.</p> <p>Tank 1B was completely full. No Amajets were in operation.</p> <p>Tank 2A was completely full. No Amajets were in operation.</p> <p>Tank 2B was completely full. Amajets 1, 2 & 3 were all in operation.</p> <p>Tank 3A was completely full. Amajets 1, 2 & 3 were all in operation.</p> <p>Tank 3B was completely full. Amajets 1, 2 & 3 were all in operation.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p> <p>Tank 6A was completely full. Amajets 2 & 3 were in operation.</p> <p>Tank 6B was completely full. No Amajets were in operation.</p> <p>Tank 7A was completely full. No Amajets were in operation.</p> <p>Tank 7B was completely full. No Amajets were in operation.</p> <p>Tank 8A was completely full. No Amajets were in operation.</p>	

Tank 8B was completely full. No Amajets were in operation.

Storm Water Channel

The storm feed channel serving STW's 1A-8B was just over half full along its entire length and returning water from the storm tanks into the works.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 13:13 on 12th April 2018).

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

Complaints

The Council received 3 complaints in the preceding week (one being an earlier complaint that was incorrectly sent to another Department within the Council).

On the 22nd March 2017 at 12:04 an Email complaint was received from a resident of Mogden Lane, Isleworth (ref: 972294). However, the complaint was initially sent to the incorrect Department and was only forwarded to the Pollution Team for response on the 6th April.

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at the time of the complaint showed that there were no spikes or excessive readings around the time the complaint was originally made (22nd March 2018).

On the 8th April 2018 at approx 06:00 a telephone complaint was received from a resident of Worton Road, Isleworth (ref: 972350). However, the complaint was not forwarded to the duty officer by the ETO until approx 09:35 (ref: 972350).

The duty officer contacted the complainant at 09:55 but received no response and therefore left them a voice message.

The historic odour monitoring trends around the time of the complaint (between 05:30-09:30) showed no excessive readings.

On the 8th April 2018 at approx 08:24 a telephone complaint was received from a resident of Mogden Lane, Isleworth (ref: 972351). However, the complaint was not forwarded to the duty officer by the ETO until approx 11:40 (ref: 972350).

The duty officer contacted the complainant at 12:15 who advised the odour was still very bad.

The duty officer the area at approx 13:00 and undertook H2S measurements between 13:05-13:19, which showed the average H2S reading was 0.00ppb which is below the threshold and the subjective assessment was 0.

The historic odour monitoring trends around the time of the complaint (between 08:00-12:00) showed no excessive readings.

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

Thursday 5th April 2018

Observations AM OM9 one spike between 09:41-09:59, peaked at 0.022ppm.

Actions: none.

Observations PM OM9 spiked between 23:22-23:34, <15 mins duration, max 0.022ppm.

Actions: none.

Friday 6th April 2018

Observations AM OM5 14:32-14:48 0.015ppm, 12:03-12:18

0.020ppm.

Actions: Area investigated, no odour found.

Observations PM OM8 spiked to 0.017ppm from 21:27-22:27. OM5 spiked to 0.023ppm at 0:48, less than 15 mins.

Actions: Area check around OM8, no obvious odours found.

Saturday 7th April 2018

Observations AM OM2 one spike 0.019ppm between 17:20-18:00. No odours identified.

Actions: none.

Observations PM No odour issues, nothing to report on trends.

Actions: none.

Sunday 8th April 2018

Observations AM No spikes on trends, no odour issues.

Actions: none.

Observations PM No odour issues, nothing of note on trends.

Actions: none.

Monday 9th April 2018

Observations AM No odour problems. No odour spikes on trends.

Actions: none.

Observations PM No odour issues. Nothing to report on trends.

Actions: none.

Tuesday 10th April 2018

Observations AM No odour spikes. No odour problems.

Actions: none.

Observations PM No spikes on trends. No odour issues on site.

Actions: none.

Wednesday 11th April 2018

Observations AM No odour spikes on trend. No odour problems.

Actions: none.

Observations PM No spikes on trends. No odour issues on site.

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					
05/04/18	0	2568	61	2629	5611	8240
09/04/18	0	2944	61	3005	8937* (should be 8927)	11942* (should be 11932)
11/04/18	0	2206	764	2970	4805	7775

* Figures entered in red are as stated on TW Sludge Dip Record Sheet (TW Management Checked) which are incorrect. Figures entered in brackets are (where possible) correctly totalled PST amounts.

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 no 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.
Digester 5 had a very wet seal that was bubbling off gas.

Digester 6 was over spilling sludge at the time of the inspection and had a very high bell.

Digester 7 had a very wet seal that was bubbling off gas, the bell was also very high.

Digester 8, 9, 10, 11 & 12 all had a very wet seals that were all bubbling off gas.

Digesters 13 & 14 were both out of use.

Digester 15 had a very wet seal that was bubbling off gas, the bell was also very high and it had also been spitting out sludge on one side.

Digester 16 was out of use.

Digesters 17 & 18 both had a very wet seals that was bubbling off gas.

Digester 19 had a very wet seal that was bubbling off gas, the bell was also very high.

Digester 20 had a very wet seal that was bubbling off gas.

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 relatively free flowing but was clogged along approx <1/4 of its length on the nearside with thick sludge at the time of the inspection.

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 tanks (71-78).
At the time of the inspection all tanks except 71 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 one 14yds skip which was empty.
No odour was present in the area.

On the West side there was one 40yds closed bulk carrier & one 20yds open bulk carrier that were both empty.
No odour was present in the area.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection.
The Thames Water officer confirmed 11 of the 12 streams were in operation.

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 whole of tanks have again developed a thick “fluffy” coverage across the entire surface that had a thick crust in some areas. This appears no better since the previous inspection and all internal dividing walls were covered. A significant quantity of surface sludge has surged over the West side external retaining wall onto surrounding grass. None of the sprinklers were in operation.

The mixed liquor feed channel serving aeration lanes 21-25 (E Battery) was clogged on the surface along its entire length with floating debris and thick sludge that appeared crusty in places.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 09/04/2018

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.09(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)	0.00(av)	0.5	Yes

Transfer PS outlet	0.00(av)	0.6	Yes	
New West OCU 11 outlet	0.2(av)	0.6	Yes	
# Jerome reading				