



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Wednesday 11 th March 2020 (12:00pm)	
Attendees: Mr I Inman (London Borough of Hounslow) and Ms C Page (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Weather</u></p> <p>Dry and bright with broken cloud cover.</p> <p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was >75% full. Amajets 1, 2 & 3 were in operation.</p> <p>Tank 1B was >75% full. Amajets 1, 2 & 3 were in operation.</p> <p>Tank 2A was >75% full. Amajets 1, 2 & 3 were in operation.</p> <p>Tank 2B was >75% full. Amajets 1 & 2 were in operation.</p> <p>Tank 3A was >75% full. Amajets 1, 2 & 3 were in operation.</p>	

Tank 3B was >75% full.
Amajets 1, 2 & 3 were in operation.

Tanks 4A, 4B, 5A & 5B All tanks are covered and odour controlled.
Unable to gauge condition as lighting system still not working.

Tank 6A was >75% full.
Amajets 1, 2 & 3 were in operation.

Tank 6B was >75% full.
Amajets 1, 2 & 3 were in operation.

Tank 7A was >75% full.
Amajets 1, 2 & 3 were in operation.

Tank 7B was >75% full.
Only Amajet 1 was in operation.

Tank 8A was 50% full and filling.
Amajets 1, 2 & 3 were in operation.

Tank 8B was 50% full and filling.
Amajets 1, 2 & 3 were in operation.

Storm Feed Channel - The channel was 80% full.

Thames advised of planned works to replace all of the hopper valves to prevent back flow of effluent.

They are still also awaiting parts in order to bring the wash water pump system back into operation.

Complaints

The Council has received 1 complaint by email in the preceding week.

On 6th March at 20:04pm a complaint was received from a non-Hounslow resident (South Western Road, ref: 994734).

The historic monitoring trends showed no excessive readings at the time the complaint was received.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection: Wednesday 11th March 2020 at 11:19.

Monitor 1	0.010	ppm	11:19
Monitor 2	0.009	ppm	11:19
Monitor 3	0.000	ppm	11:19
Monitor 4	0.005	ppm	11:19
Monitor 5	0.006	ppm	11:19
Monitor 6	0.007	ppm	11:19
Monitor 7	0.006	ppm	11:19
Monitor 8	0.005	ppm	11:19
Monitor 9	0.006	ppm	11:19
Monitor 10	0.006	ppm	11:19
Monitor 11	0.009	ppm	11:19
Monitor 12	0.008	ppm	11:19
Monitor 13	0.006	ppm	11:19
Wind Speed	7.959	mph	11:19
Wind Direction	235.872	°	11:19

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

Thursday 5th March 2020

DAY SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour issues

Operational issues / causes observed. Blank

Actions Taken. Blank.

NIGHT SHIFT

Temp. Blank.

Weather. Blank.

Odour Readings. All OMU's in operation.

Time: Blank.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Friday 6th March 2020

DAY SHIFT

Temp. Cold.

Weather. Cloudy w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour spikes.

Odour complaint from resident.

Operational issues / causes observed. Site walk around undertaken north through south, no odour identified. Storm tanks going to river which may be a cause of odour, odour suppressant being used on southern edge of storm tanks as part of our routine practise when we storm to river.

Actions Taken. Site odour walk around undertaken. Odour suppressant is being applied as part of routine practise when the storm tanks are going to river.

NIGHT SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in use.

Time: 05:30.

Observations / Customer Complaint. OM9 0.04ppm 21:02-22:07.

OM10 0.017ppm 22:59-23:58.

OM1 23:52-00:21.

Operational issues / causes observed. No odour identified after site walk around. Storm tanks still going to river. Digester area no spills and bell height low.

Actions Taken. Blank.

Saturday 7th March 2020

DAY SHIFT

Temp. Cool.

Weather. Sunny w / patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM2 0.028 spike 05:36-05:46.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. OM3 0.02ppm 22:41-22:56;
0.027ppm 23:11-23:26.

Operational issues / causes observed. No odour identified.

Actions taken. Blank.

Sunday 8th March 2020

DAY SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour spikes.

Operational issues / causes observed. Storm tanks filling.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. OM10 0.01ppm 22:04-23:08.

Operational issues / causes observed. Storm tanks discharging to river.

Actions Taken. Confirmed east OCU is running correctly.

Monday 9th March 2020

DAY SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour issues found or reported.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank

Actions Taken. Blank.

Tuesday 10th March 2020

DAY SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Overcast night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. OM6 0.019ppm 23:54-00:10.

Operational issues / causes observed. No odour source found.

Actions Taken. Blank.

Wednesday 11th March 2020

DAY SHIFT

Temp. Cool.

Weather. Cloudy w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM13 spiked at 07:30-08:30, max 0.016ppm.

OM1 spiked at 13:00-13:28, max 0.021ppm.

Operational issues / causes observed. Storm tanks almost full.

Action Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Overcast night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. OM10 0.0196ppm 20:52-20:54.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

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					
06/03/2020	0	806	389	1195	3226	4421
11/03/2020	0	516	1223	1739	1592	3331

*** incorrect totals entered on TW paperwork.**

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.

Imported Sludge

There has been approximately 77 imports of sludge in the preceding week (approx 11 per day).

No.5 Pumping Station

The doors of No.5 pumping station were open at the time of the inspection due to ongoing maintenance within the building but no odour was noticeable.

Raw Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was open at the time of the inspection for no apparent reason and one 40yds bulk container was inside.

Digesters

Digesters 1-4 Out of use (permanent). Thames advised of a long term project currently initiated to bring these units back into service that will require significant investment.

Digesters 5 & 6: Both were in service and had wet sloppy seals that was bubbling off small amounts of gas.

Digester 7: Out of service.

Digesters 8, 9, 10 & 11: All were in service and had wet sloppy seals that were bubbling off small amounts of gas.

Digester 12: In service and had a fluffy seal. There was evidence of a recent spill that required cleaning up.

Digester 13: In service and had wet sloppy seals that were bubbling off small amounts of gas.

Digesters 14 & 15: Both were out of service.

Digester 16: In service and was bubbling and spitting. It was also noted that the digester bell was very high and gas needed to be drawn off.

Digester 17: In service and had wet sloppy seals that were bubbling off small amounts of gas.

Digester 18: Out of service.

Digesters 19 & 20: Both were in service and had wet sloppy seals that were bubbling off gas.

There was evidence of anti-foaming agent in use and TW advised that this is applied daily to all of the digesters that are operational.

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).

All tanks were operational at the time of the inspection and no issues were evident.

Skips

On the East side there was one 20yds open bulk carrier that was approx 70% full of general non-inert rubbish.

On the service road next to raw sludge screening building was an 8yds open skip that was less than 15% full and contained rag, the tarpaulin had been removed to fill the skip.

On the West side there was one 20yds open bulk carrier that was virtually empty and one 40yds closed bulk container that was also empty.

East Side Screen House

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

Return Activated Sludge Channel

The nearside RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clear and free flowing following repair of the main air-line.

West Side Aeration Lanes (Old)

No issues.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled. TW advised no issues.

Circular PST's 9, 11 & 12 were all in service and had relatively fat free surfaces.

Although PST 10 is currently out of service the tank was full due to flow issues between the PST's.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 9 streams are currently in service (1, 5 & 12 are out of service).

Section 106 agreement

There have been no breaches of the s106 agreement in the last week.

West Side Aeration Lanes (New)

A very thick scum has again developed across all of the aeration lane surfaces that was thick enough to obscure some of the internal dividing walls.

Although nearly all of the sprinklers appeared to be in operation floating debris was clogging these areas of the lanes.

The mixed liquor feed channel serving aeration lanes 25 and part of 24 of E-Battery was clogged with thick scum and floating debris. However, no odour was noticeable.

New Inlet Works (West Side)

Unit 13 is currently out of service due to ongoing maintenance.

Odour Control Unit (OCU) performance monitoring: 10/03/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Not in use	Unknown	Unknown
Main pumping station outlet	Not in use	0.2	Yes
East OCU	0.01 0.01 0.01	0.05	No
West inlet OCU	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	Blank	Unknown	Unknown
Sludge reception outlet	Blank	0.8	Yes
Thickening plant inlet	Blank	0.5	Yes
Thickening plant outlet	Blank	0.6	Yes
Transfer PS inlet	Blank	Unknown	Unknown
Transfer PS outlet	0.01 0.01 0.01	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation (OCU 12)	0.00 0.00 0.00	0.5	Yes