



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Monday 2 nd March 2020 (12:00pm)	
Attendees: Mr I Inman (London Borough of Hounslow) and Mr L Channon (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 completely full. No Amajets in operation.</p> <p>Tank 1B was completely full. No Amajets in operation.</p> <p>Tank 2A was completely full. No Amajets in operation.</p> <p>Tank 2B was completely full. No Amajets in operation.</p> <p>Tank 3A was completely full. All amajets were in operation.</p>	

Tank 3B was completely full.
All amajets 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 completely full.
No Amajets in operation.

Tank 6B was completely full.
No Amajets in operation.

Tank 7A was completely full.
No Amajets in operation.

Tank 7B was completely full.
No Amajets in operation.

Tank 8A was completely full.
No Amajets in operation.

Tank 8B was completely full.
No Amajets 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 no complaints by email in the preceding week.

On 28th February at 9:42am a complaint was received via the Council's

call centre from a resident of Hall Road, Isleworth (ref: 994384).
 The historic monitoring trends showed all monitors were below 0.009ppm around the time of the complaint (09:00-11:00am), except for OM2.
 OM2 peaked from 0.010ppm to 0.040ppm at 07:35am before dropping off to 0.010ppm again at 07:40am; it then spike to 0.012ppm at 09:38am and again spiked to 0.014ppm at 10:22am before dropping back to 0.010ppm.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection: Monday 2nd March 2020 at 12:12.

Monitor 1	0.009	ppm	12:12
Monitor 2	0.010	ppm	12:12
Monitor 3	0.000	ppm	12:12
Monitor 4	0.007	ppm	12:12
Monitor 5	0.006	ppm	12:12
Monitor 6	0.006	ppm	12:12
Monitor 7	0.006	ppm	12:12
Monitor 8	0.005	ppm	12:12
Monitor 9	0.008	ppm	12:12
Monitor 10	0.008	ppm	12:12
Monitor 11	0.007	ppm	12:12
Monitor 12	0.007	ppm	12:12
Monitor 13	0.006	ppm	12:12
Wind Speed	5.727	mph	12:12
Wind Direction	261.381	°	12:12

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

Thursday 20th February 2020
DAY SHIFT

Temp. Cold.

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. Blank.

Operational issues / causes observed. No odour issues found or reported.

Actions Taken. Blank.

Friday 21st February 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 issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cold.

Weather. Clear night.

Odour Readings. All OMU's in use.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Saturday 22nd February 2020

DAY SHIFT

Temp. Cool.

Weather. Cloudy.

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. Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Storm tanks returning.

Actions taken. Blank.

Sunday 23rd February 2020**DAY SHIFT**

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM1 0.024ppm 12:30-13:00.

Operational issues / causes observed. Storm tanks returning, 3B flushed and returning.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. Blank

Operational issues / causes observed. No odour issues found or reported.

Actions Taken. Blank.

Monday 24th February 2020

DAY SHIFT

Temp. Cool.

Weather. Cloudy.

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. OM5 spiked at 04:38-04:54
max 0.020ppm.

Operational issues / causes observed. Area checked found 'PAS'
odour in air.

Actions Taken. PAS water traps checked / topped up.

Tuesday 25th February 2020

DAY SHIFT

Temp. Cool.

Weather. Rain w / sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM2 0.015ppm at 07:22-08:06,
max 0.071ppm.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cold.

Weather. Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Actions Taken. Blank.

Wednesday 26th February 2020

DAY SHIFT

Temp. Cold.

Weather. Sunny w / patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM2 spiked at 10:07-10:35 max 0.101ppm.

OM8 spiked at 16:50-17:04 max 0.018ppm.

Operational issues / causes observed. No odour source found.

Action Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. OM2 spiked to max 0.049ppm between 01:21-.

Operational issues / causes observed. Area checked no obvious odours detected.

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					
21/02/2020	39	516	412	967	2224	3191
24/02/2020	205	516	412	1133	2376 *2224	3509 *3357
26/02/2020	833	722	661	2216	3032	5248

*** 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 49 imports of sludge in the preceding week (approx 7 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. Strong odour was clearly noticeable outside the building on the wind.

Raw Sludge Screening House

The large roller shutter door of the Raw Sludge Screening building was open at the time of the inspection and one 40yds bulk container was

inside.

A pile of debris that had previously formed at the end of the conveyor belt has now been cleared.

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.

Digester 5: In service and had a wet sloppy seal that was bubbling off small amounts of gas

Digester 6: In service and had a wet sloppy seal that was bubbling off small amounts of gas. There had also been a recent spill over the top of the coping stone.

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.

Digesters 12 & 13: Both were in service and had wet sloppy seals that were bubbling off small amounts of gas. There was also evidence of recent spills of both digesters which had gone over the top of the coping stones.

Digesters 14 & 15: Both were out of service.

Digesters 16 & 17: Both were 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 closed 14yds skip that was empty and 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 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)

No issues.

Odour Control Unit (OCU) performance monitoring: 24/02/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.04 0.04 0.04	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
East OCU	0.00 0.00 0.00	0.05	No
West inlet OCU	0.04 0.03 0.03	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	0.00 0.00 0.00	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
Pasteurisation (OCU 12)	0.01 0.01 0.01	0.5	Yes