



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 5th October (13:30pm)

Attendees: Mr Z Kadri (London Borough of Hounslow), Caitlin Simmonds (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A was approx. over 80% full and filling.
Amajets were in operation.

Tank 1B was approx. over 80% full and filling.
Amajets were in operation.

Tank 2A was approx. over 80% full and filling.
Amajets were in operation.

Tank 2B was approx. 80% full and filling.
No Amajets were in operation.

Tank 3A was approx. 80% full and filling.
Amajets 1, 2 and 3 were all in operation.

Tank 3B was approx. 80% full and filling.
Amajets 1, 2 and 3 were all in operation. No unpleasant odours witnessed.

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 approx. 80% full and filling.
Amajets 1, 2 and 3 were all in operation. No unpleasant odours witnessed.

Tank 6B was approx. 80% full and filling.
No Amajets were in operation. No unpleasant odours witnessed.

Tank 7A was approx. 80% full and filling.
No Amajets were in operation. No unpleasant odours witnessed.

Tank 7B was approx. 80% full and filling.
No Amajets were in operation. No unpleasant odours witnessed.

Tank 8A was approx. 80% full and filling.
No Amajets were in operation. No unpleasant odours witnessed.

Tank 8B was approx. 80% full and filling.
No Amajets were in operation. No unpleasant odours witnessed.

Storm Feed Channel - The level of effluent in both feed channels was at least 50% and was dark and murky but no signs of fatty deposits.

Complaints

The Council received 0 complaints by telephone in the preceding week.

The Council received 0 complaints via the on-line web system and no complaint via email in the preceding week.

Odour Monitors

The odour readouts (H₂S) for all monitors that were providing data on 5/10/2021 at the time of the inspection are below.

Monitor 1	0.000	ppm	13:19pm
Monitor 2	0.001	ppm	13:19pm
Monitor 3	0.000	ppm	13:19pm
Monitor 4	0.000	ppm	13:19pm
Monitor 5	0.003	ppm	13:19pm
Monitor 6	0.000	ppm	13:19pm
Monitor 7	0.003	ppm	13:19pm
Monitor 8	0.000	ppm	13:19pm
Monitor 9	0.003	ppm	13:19pm
Monitor 10	0.003	ppm	13:19pm
Monitor 11	0.000	ppm	13:19pm
Monitor 12	0.000	ppm	13:19pm
Monitor 13	0.000	ppm	13:19pm
Wind Speed	9.634	mph	13:19pm
Wind Direction	283.846		13:19pm

Odour Log (Thames)

Wednesday 29th September 2021

DAY SHIFT

Temp. Cool.

Weather. Sunny with patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed No odour issues.

Actions Taken. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Overcast 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.

Thursday 30th September 2021

DAY SHIFT

Temp. Warm.

Weather. Cloudy.

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. Patchy rain.

Odour Readings. All OMU's in operation.

Time: 05:30.

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

Operational issues / causes observed. Blank.

Actions Taken. Blank

Friday 1st October 2021

DAY SHIFT

Temp. Warm.

Weather. Rain with 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. Overcast night.
Odour Readings. All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint.
OM3 spiked to 0.021ppm at 17:35-17:50.
Operational issues / causes observed. Blank.
Actions taken. Blank.

Saturday 2nd October 2021

DAY SHIFT

Temp. Cool.

Weather. Rain.

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.

Sunday 3rd October 2021

DAY SHIFT

Temp. Warm.

Weather. Sunny with patchy clouds.

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. Clear Night.
Odour Readings. All OMU's in operation.
Time: 05:30.
Observations / Customer Complaint. No odour issues found or reported.
Operational issues / causes observed. Blank.
Actions Taken. Blank.

Monday 4th October 2021

DAY SHIFT

Temp. Warm.
Weather. Rain with 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 found or reported.
Operational issues / causes observed. Blank.
Actions Taken. Blank.

Tuesday 5th October 2021

DAY SHIFT

Temp. Cool.
Weather. Rain with 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. Clear night.

Odour Readings. All OMU's in operation.

Time: 05:30.

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

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					
29/9/2021	0	1091	885	1976	760	2736
01/10/2021	0	1091	885	1976	760	2736

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 have been an average of 12 imports of sludge per day in the preceding week.

No.5 Pumping Station

The doors of No.5 pumping station were open at the time of the inspection. Slight unpleasant / offensive odour was noticeable.

Sludge Import Area

It was noted that the condition around the sludge import area was much improved and noticeably clean. No odours witnessed.

Raw 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 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 Out of service.

Digester 6 was in service and had a good low sludgy seal – No evidence of recent/previous sludge spillages.

Digester 7 was in service and had a very wet seal that was bubbling off gas, it was noted that the seal level was low. A spill had also taken place on the far side of the digester nearest the service Road that required cleaning up. This side was also noticeably erupting as usual.

Digester 8 was in service and had a low thick sludgy seal. No evidence of previous spillages. Coping stones were tidy.

Digester 9 was in service and had a low thick sludgy seal – no evidence of spillage.

Digester 10 was in service and had a low wet moist pasty seal. No signs of any spillages.

Digester 11 was in service and had a low thick sludgy seal. No signs of previous spillages and coping stones were clean.

Digester 12 Out of service.

Digester 13 was in service and had a thick sludgy seal that was approx. 2ft below the coping stone.

Digester 14 was in service and had a wet seal that was approx. 2ft below the coping stone.

Digester 15 Out of service.

Digester 16 was in service and had a wet seal that was bubbling off minimal amounts gas. No signs of previous spillage.

Digester 17 was in service and had a thick sludgy stable seal that was bubbling off minimal amounts gas. Noticeably a lot of weeds and foliage growth around the digester.

Digester 18 Out of service.

Digester 19 Out of service.

Digester 20 was in service and had a wet seal. it was noted that the seal level was low approx. 2ft below coping stone. No sign of previous spillages.

Anti-foaming agent is in use, which TW advised was also being applied manually to all operational digesters.

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 in operation at the time of the inspection and had surfaces covered with algae. There was no evidence of fatty deposits on the surface. The hose on the arm was rotating and clearing off any remaining deposits. No odours or offensive odours witnessed.

Skips On the 5th of October

On the East side there were two 14yds open skips- both skips contained a small amount of general rubbish & inert material. Tarpaulin was present but not covering the skips.

There was one 20yds open bulk carrier that contained grit, no tarpaulin cover was in place.

There was one 14yds skip adjacent to the Sludge Import area (West of the works) that contained inert material (Large metal cylinder ducting) . There was no tarpaulin cover over or near the skip.

On the West side of the works just after the pumping station there was a 14yds Biffa skip in situ filled with some inert material and general waste. The skip was covered with tarpaulin.

East Side Screen House

The doors at one end of the screen house were open at the time of the inspection. No staff were seen working inside.
No other issues appeared evident.

Return Activated Sludge Channel

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

The far side channel was clogged along 80% of its length, there was a significant number of weeds which have been growing out of it and through the steel grating. This has been in the same condition most part of the year.

West side primary settlement tanks (PST)

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

Circular PST's 9, 10 and 11 were all in use and had relatively fat free surfaces. Slight algae covered the surfaces of the PSTs.

No other issues were evident with these tanks.

Circular PST 12 is still out of service.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 9 streams are currently operational.

Section 106 agreement

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

West Side Aeration Lanes

All lanes are continuing to have biological issues, however surface movement was visible. Thick fluffy scum covered virtually the entire surface area of all lanes at E Battery however it was noted dividing walls were a lot more visible than previously observed.

The surface area of the mixed liquor feed channel serving the aeration lanes of E-Battery was mostly free-flowing between lanes 22-25 – A lot better condition than previous visits. Progress has been made with this channel.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works and everything appeared to be in a good tidy order.

**Odour Control Unit (OCU) performance monitoring:
UNAVAILABLE**

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