



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 26th January 2021 (13:00pm)

Attendees: Mr Zaheer Kadri (London Borough of Hounslow) and Mr Dan Grady (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A – Tank 3B were all approx. over 50% full. Tank 2A - 3B all Amajets 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 – Tank 6B were both approx. 50% full and returning. Amajets were not in operation at time of inspection.

Tank 7A – Tank 8B were all approx. 50% full. All Amajets were in operation.

Storm Feed Channel - The level of effluent in both feed channels was approx. 40-50% along its entire length and murky and black in colour. No fatty deposits observed.

Complaints

The Council directly received no complaints by telephone in the preceding week.

The Council directly received no complaints by email in the preceding week.

The Council received no complaints by email from MRAG.

Odour Monitors

The odour readouts (H₂S) for all monitors that were providing data on 26/01/2021 at the time of the inspection are below.

Monitor 1	0.000	ppm	13:10pm
Monitor 2	0.000	ppm	13:10pm
Monitor 3	0.000	ppm	13:10pm
Monitor 4	0.005	ppm	13:10pm
Monitor 5	0.005	ppm	13:10pm
Monitor 6	0.000	ppm	13:10pm
Monitor 7	0.000	ppm	13:10pm
Monitor 8	0.007	ppm	13:10pm
Monitor 9	0.004	ppm	13:10pm
Monitor 10	0.000	ppm	13:10pm
Monitor 11	0.000	ppm	13:10pm
Monitor 12	0.003	ppm	13:10pm
Monitor 13	0.000	ppm	13:10pm
Wind Speed	4.989	mph	13:10pm
Wind Direction	183.544		13:10pm

Odour Log (Thames)

Wednesday 20th January 2021
DAY SHIFT

Temp. Cold.

Weather. Rain with sunny spells.

Odour Readings All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint.

No odour issues found or reported.

Operational issues / causes observed. Blank.

Thursday 21st January 2021

DAY SHIFT

Temp. Cold.

Weather. Sunny.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint.

No odour issues found or reported.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Cold.

Weather. Clear night.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint.

No odour issues found or reported.

Operational issues / causes observed. Blank.

Friday 22nd January 2021

DAY SHIFT

Temp. Cold.

Weather. sunny.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint.

No odour issues found or reported.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Cold.

Weather. Clear night.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Saturday 23rd January 2021

DAY SHIFT

Temp. Cool.

Weather. Cloudy.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint.

No odour issues found or reported.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Freezing.

Weather. Clear night.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint.

OM2 spiked to 0.015ppm at 20:31-21:28.

Operational issues / causes observed.

Area checked some odour from PAS.

Sunday 24th January 2021

DAY SHIFT

Temp. Cold.

Weather. Storms.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint.

No odour spikes or complaints.

Operational issues / causes observed.

Sludge on top of Storm water tanks no6.

NIGHT SHIFT

Temp. Freezing.

Weather. Clear night.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint.

No odour issues.

Operational issues / causes observed. Blank.

Monday 25th January 2021

DAY SHIFT

Temp. Freezing.

Weather. Sunny.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Freezing.

Weather. Clear nights.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:00.

Observations / Customer Complaint.

OM 5 spiked to 0.020ppm 20:40-20:55.

Operational issues / causes observed.

Area checked No source found.

Tuesday 26th January 2021

DAY SHIFT

Temp. Freezing.

Weather. Rain with sunny spells.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 17:30.

Observations / Customer Complaint. No odour problems.

Operational issues / causes observed.

NIGHT SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All Odour monitors are in operation / No Faults.

Time: 05:30.

Observations / Customer Complaint. No odour problems.

Operational issues / causes observed. No odour problems.

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					
22/01/2021	0	867	1406	2273	912	3185
25/01/2021	0	867	1073	1940	1240	3180

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 an average of 13 imports of sludge per day. Deliveries made on the 22nd and 25th January 2021.

No.5 Pumping Station

The doors of No.5 pumping station were closed at the time of the inspection.

Sludge Import Area

It was noted that the condition around the sludge import area has noticeably improved and clean & tidy. No odours detected at time of inspection

TW advised they are frequently hosing this area down.

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 was in service and had a thick seal that were approx. 3ft below coping stones.

Digester 6 was out of service.

Digester 7 was is service and had a low wet seal that was bubbling off minimal amounts of gas. There was signs of previous spillage.

Digester 8 was in service and had a very wet seal that was bubbling off minimal amounts of gas.

Digester 9 was is service and had a very wet seal that was 3ft below the coping stones.

Digesters 10 & 11 were both in service and all had very wet seals that were bubbling off minimal amounts of gas.

It was also noted that the sludge level of both digesters was very high, approx. 1ft below coping stone and in some places at the same level as the coping stones.

Digester 12 was in service and had a very wet seal that was bubbling off minimal amounts of gas.

It was also noted that the sludge level was high, approx. same level as coping stones.

Digester 13 was is service and had a very wet seal that was bubbling off minimal amounts of gas.

Digester 14 was in service and had a thick sludgy seal approx. 2ft below coping stones. There were signs of previous spillage. .

Digester 15 was out of service.

Digester 16 was is service and had a very wet seal. There were signs of previous spillage. Level of effluent was high approx. 1ft below coping stone

Digester 17 was is service and had a thick seal that was approx. 2ft blow coping stones.

Digesters 18 & 19 were both out of service.

Digester 20 was in service and had a very wet seal that was bubbling off minimal amounts of gas approx. 2 ft. below coping stones.

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 in operation at the time of the inspection.

Skips

On the East side (Grit house) there was one 16 yds. Skip with inert material / Uncovered.

No other skips on site.

West side Grit house had 2 large BIFFA containers which were enclosed.

East Side Screen House

The middle set of screen house doors were open at the time of the inspection no contractors working at site at time of inspection. Advised that these doors must remain closed.

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 nearest the road was clogged along approx. 80% of its length, there were visibly crusty areas and a number of weeds were growing out of it.

West side primary settlement tanks (PST)

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

PST's 9, 10 and 11 were all in service and had relatively fat free surfaces.
Circular PST 12 is currently out of service.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 8 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 appeared to be free flowing with the internal dividing walls being visible again. However it was noted that a thick fluffy foam is again starting to build up across the entire tanks surface area.

Most of the sprinklers were back in operation and a lot of floating of debris was noticeable (rag and a number of floating discarded face masks).

The mixed liquor feed channel serving the aeration lanes of E-Battery was free flowing along its entire length, although thick foam appeared to be starting to build up by lane 22.

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: 26th January 2021

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Blank	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Unknown
East OCU	0.00 0.00 0.00	0.05	Yes
West inlet OCU	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	Blank	Unknown	Unknown
Sludge reception outlet	Blank	0.8	Unknown

Thickening plant inlet	Blank	Unknown	Unknown
Thickening plant outlet	1.24 1.20 1.18 Ave: 1.21	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	No
Pasteurisation (OCU 12)	0.00 0.00 0.00	0.5	Yes
Transfer PS inlet	27.88 27.01 27.21 Ave: 27.31	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes