



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 22 nd June 2021 (13:00pm)	
Attendees: Mr L. Phillips (London Borough of Hounslow) and Mr Dan Grady (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A - Was empty and clean - all hoppers had been drained down to lowest point.</p> <p>Tank 1B - Was empty slight sludge at bottom end of tank near hoppers. Hoppers 1 & 2 drained to lowest point hopper 3 full and needs draining.</p> <p>Tank 2A - Was empty and clean. Hoppers 1, 2 and 3 all drained to lowest point.</p> <p>Tank 2B - Was empty and clean all hoppers drained to lowest point.</p> <p>Tank 3A - Was empty and clean. All hoppers needed draining all half full.</p> <p>Tank 3B - Was empty and clean however had slight grit at hopper end of the tank. All hoppers were full and needed draining down.</p> <p>Tanks 4A, 4B, 5A & 5B - All tanks are covered and odour controlled. Unable to gauge condition as lighting system still not working.</p>	

Tank 6A - Was empty and clean. All hoppers 50% and need draining.

Tank 6B - Was empty and clean. Hopper 1 full needs draining however hoppers 2 & 3 drained to lowest point.

Tank 7A - Returning during inspection.

Tank 7B - The tank was clean however all hoppers were full of effluent and needed draining down.

Tank 8A - The tank was clean however all hoppers were full of effluent and needed draining down.

Tank 8B - The tank was clean however all hoppers were full of effluent and needed draining down.

Storm Feed Channel - The level of effluent in the feed channels was approx. 10% in depth along its entire length and was a sludgy sandy colour – Some fatty deposits observed floating on surface.

There were no observation of malodour at this locality of the works.

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.

Thames Water controller advised that they had received no direct complaints in the preceding week.

Odour Monitors

The odour readouts (H₂S) for all monitors that were providing data on 22/06/2021 at the time of the inspection are below.

Monitor 1	0.006	ppm	13:15pm
Monitor 2	0.005	ppm	13:15pm
Monitor 3	0.000	ppm	13:15pm
Monitor 4	0.004	ppm	13:15pm
Monitor 5	0.000	ppm	13:16pm
Monitor 6	0.004	ppm	13:16pm
Monitor 7	0.000	ppm	13:16pm
Monitor 8	0.004	ppm	13:16pm
Monitor 9	0.000	ppm	13:17pm
Monitor 10	0.000	ppm	13:17pm
Monitor 11	0.000	ppm	13:17pm
Monitor 12	0.000	ppm	13:17pm
Monitor 13	0.000	ppm	13:17pm
Wind Speed	0.030	mph	13:17pm
Wind Direction	40.548		13:17pm

Odour Log (Thames)

Tuesday 15th June 2021

DAY SHIFT

Temp: Hot.

Weather: Sunny.

Odour Readings: All Odour monitors are in operation.

Time: 17:30:

Observations / Customer Complaint: Customer compliant received North End of site asked to check OM2 which was reading 0.00ppm no odour issue found.

Operational issues / causes observed: Blank.

NIGHT SHIFT:

Temp: Warm.
Weather: Clear night.
Odour Readings: All Odour monitors are in operation.
Time: 05:30.
Observations / Customer Complaint: OM2 0.016 21:18 – 21:32 O.021
23:17 – 23:33 0.019 00:02 – 00:17
Operational issues / causes observed: EAST inlet hosed down.

Wednesday 16th June 2021

DAY SHIFT:

Temp: Hot.
Weather: Sunny.
Odour Readings: All Odour monitors are in operation.
Time: 17:30.
Observations / Customer Complaint: OM2 spiked at 15:30 – 15:46
max 0.018ppm.
Operational issues / causes observed: Carried out odour patrol.
Source for odour spike found.

NIGHT SHIFT:

Temp: Warm.
Weather: Clear night.
Odour Readings: All Odour monitors are in operation.
Time: 05:30.
Observations / Customer Complaint: OM2 0.016, 23:01 – 23:16 0.021
18:01 -18:16.
Operational issues / causes observed: No source found.

Thursday 17th June 2021:

DAY SHIFT:

Temp: Warm.
Weather: Rain.
Odour Readings: All Odour monitors are in operation.
Time: 17:30.
Observations / Customer Complaint: No odour issues.
Operational issues / causes observed: Blank.

NIGHT SHIFT:

Temp: Cool.
Weather: Overcast night.

Odour Readings: All Odour monitors are in operation.

Time: 05:30.

Observations / customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Friday 18th June 2021:

DAY SHIFT:

Temp: Cool.

Weather: Rain.

Odour Readings: All Odour monitors are in operation.

Time: 17:30.

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

Operational issues / causes observed: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Rain.

Odour Readings: All Odour monitors are in operation except.

Time: 05:30.

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

Operational issues / causes observed: Blank.

Saturday 19th June 2021

DAY SHIFT

Temp: Cool.

Weather: Cloudy.

Odour Readings: All Odour monitors are in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

NIGHT SHIFT:

Temp: Cool.

Weather: Patchy rain.

Odour Readings: All Odour monitors are in operation.

Time: 05:30.

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

Operational issues / causes observed: Blank.

Sunday 20th June 2021

DAY SHIFT

Temp. Cool.

Weather: Cloudy W/ 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: Warm.

Weather: Overcast night.

Odour Readings: All Odour monitors are in operation.

Time: 05:30.

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

Operational issues / causes observed: Blank.

Monday 21st June 2021

DAY SHIFT:

Temp: Warm.

Weather: Rain.

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: Overcast.

Odour Readings: All Odour monitors are in operation.

Time: 05:30.

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

Operational issues / causes observed: 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					
16/06/2021	0	1279	1030	2309	1720	4029
18/06/2021	0	1612	1218	2830	2376	5206
23/06/2021	0	1297	1218	2515	1720	4235 4238*

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.

4238* is the incorrect calculation from Thames Water.

Imported Sludge

There has been an average of 3 imports of sludge per day.

No.5 Pumping Station

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

Sludge Import Area

The sludge import area was 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 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 out of service.

Digester 6 was in service had a weak seal. No evidence of spill.

Digester 7 was in service had a weak seal. No evidence of spill.

Digester 8 was in service had a weak seal. No evidence of spill.

Digester 9 was in service had good thick seal. No evidence of spill.

Digester 10 was in service had a weak seal. No evidence of spill.

Digester 11 was in service had a weak seal. No evidence of spill.

Digester 12 was in service had a weak seal. No evidence of spill.

Digester 13 was in service had a weak seal. No evidence of spill.

Digester 14 was in service had a weak seal. No evidence of spill.

Digester 15 was out of service.

Digester 16 was in service and had a good thick seal.

Digester 17 was in service and had a dry thick seal – The digester had been pelleted.

Digester 18 out of service.

Digester 19 out of service.

Digester 20 was in service had a weak seal. No evidence of spill.

The walkways around the digesters were clean and tidy. There were no signs of previous spillages or crusty remains of historic spillages.

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/sprinklers were in operation at the time of the inspection. Surfaces were mostly clear and free of any build-up of fatty/mossy deposits. The water hoses/sprinklers were breaking up any remainder residue across the surface.

Skips

1x large open bulk carrier (half full) with general waste – covered.
1x 8 yard grit/rag skip (full) - covered with blue tarpaulin
No other skips observed on site.

East Side Screen House

The doors were closed during visit.

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.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled. TW advised no concerns or issues. No noticeable odours at time of inspection.

PST's 9, 10 and 11 were all in service and had relatively fat free surfaces.

Circular PST 12 has been drained down and is currently out of service.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 6 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 in some areas. 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 again 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: 22nd June 2021

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.00 0.00 0.00 Ave:0.00	Unknown	Unknown
East OCU	0.08 0.05 0.03 Ave:0.05	0.05	YES
West inlet OCU	0.00 0.00 0.00 Ave:0.00	0.05	Yes
Thickening plant outlet	0.020 0.015 0.012 Ave:0.07	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00 Ave:0.00	0.5	Yes
Pasteurisation (OCU 12)	0.01 0.01 0.04 Ave: 0.02	0.5	Yes
Transfer PS inlet	0.101 0.093 0.068 Ave:0.3	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes

	Ave:0.00		
GBT Plant OCU outlet	0.00 0.00 0.00 Ave:0.00	Unknown	Unknown