



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Wednesday 29 th July 2020 (12:00am)	
Attendees: Mr I Inman (London Borough of Hounslow) and Ms C Page (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. Hoppers 1, 2 and 3 were all approx 40% full and require draining down.</p> <p>Tank 1B was empty and clean. Hoppers 1, 2 and 3 were all approx 50% full of stagnant water and required draining down.</p> <p>Tank 2A was empty and clean. Hoppers 1 and 2 were approx 25% full and required draining down, hopper 3 was empty.</p> <p>Tank 2B was empty and clean except for large areas of dry grit at the top end of the tank. Hoppers 1, 2 and 3 were all approx >25% full and require draining down.</p> <p>Tank 3A was empty and clean. Hoppers 1, 2 and 3 were all approx 30% full and require draining down.</p> <p>Tank 3B was empty and clean.</p>	

Hoppers 1 and 3 were both approx 30% full and require draining down, hopper 2 was empty.

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 empty and clean.
Hoppers 1, 2 and 3 were all approx 30% full, all require draining down.

Tank 6B was empty and clean.
Hoppers 1, 2 and 3 were all approx 25% full, all require draining down.

Tank 7A was empty and clean.
Hoppers 1, 2 and 3 (shallow hoppers) were all full of stagnant green water and require cleaning.

Tank 7B was empty and clean.
Hoppers 1, 2 and 3 (shallow hoppers) were all full of stagnant green water and require cleaning.

Tank 8A was empty and clean.
Hoppers 1, 2 and 3 were all full of stagnant green algae water and require draining down.
TW advised all 3 hoppers are currently blocked.

Tank 8B was empty and clean.
Hoppers 1, 2 and 3 were all full of stagnant green algae water and require draining down.
TW advised all 3 hoppers are currently blocked.

Feed Channel - The level of effluent in both feed channels was low along its entire length.

Complaints

The Council has received no complaints by email or telephone in the preceding week.

Odour Monitors

The odour readouts (H₂S) for all monitors that were providing data at the time of the inspection are below, except for OM1 which was flat lining.

Monitor 1	-----	ppm	12.06pm
Monitor 2	0.000	ppm	12.06pm
Monitor 3	0.000	ppm	12.06pm
Monitor 4	0.004	ppm	12.06pm
Monitor 5	0.000	ppm	12.06pm
Monitor 6	0.003	ppm	12.06pm
Monitor 7	0.000	ppm	12.06pm
Monitor 8	0.000	ppm	12.06pm
Monitor 9	0.000	ppm	12.06pm
Monitor 10	0.003	ppm	12.06pm
Monitor 11	0.000	ppm	12.06pm
Monitor 12	0.000	ppm	12.06pm
Monitor 13	0.000	ppm	12.06pm
Wind Speed	220.360	mph	12.06pm
Wind Direction	3.425		12.06pm

Odour Log (Thames)

Thursday 23rd July 2020

DAY SHIFT

Temp. Warm.

Weather. Sunny.

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: 05:00.

Observations / Customer Complaint. OM3 spiking 5 times last night for less than 15 mins. Customer complaint – Weavers Close reported at 17:45. OM2 spiked at 16:35-16:48pm. Wind direction was 197degrees (downwind) at 19:16hrs. South west at 10mph.

Operational issues / causes observed. East inlet checked by Aram. Area under skips was dry and Jeys fluid applied in last two days. Area good.

Actions Taken. Blank.

Friday 24th July 2020

DAY SHIFT

Temp. Warm.

Weather. Sunny w/patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM3 & 5 one spike each at 15:30pm and 16:50pm. Both <15minutes.

Operational issues / causes observed. Customer complaint received from Weavers Close.

Actions Taken. Wind direction to the South west. Inlet area checked.

NIGHT SHIFT

Temp. Warm.

Weather. Cloudy.

Odour Readings. All OMU's in use.

Time: 05:00.

Observations / Customer Complaint. No odour spikes.

Operational issues / causes observed. Liaised with Gayle about odour complaint, inlet east and west checked and washed down. No obvious odours from site.

Actions Taken. Blank.

Saturday 25th July 2020

DAY SHIFT

Temp. Warm.

Weather. Rain w/sunny.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM5 0.025ppm 09:52-10:07am.

Operational issues / causes observed. PAS area occasional odour detected.

Actions Taken. Confirmed odour traps were topped up with water.

NIGHT SHIFT

Temp. Warm.

Weather. Overcast night.

Odour Readings. All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint. No odour spikes.

Operational issues / causes observed. Blank.

Actions taken. Blank.

Sunday 26th July 2020

DAY SHIFT

Temp. Warm.

Weather. Sunny w/patchy.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. No odour problem.

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. Blank.

Operational issues / causes observed. Blank

Actions Taken. Blank.

Monday 27th July 2020

DAY SHIFT

Temp. Warm.

Weather. Rain w/sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM2 spiked max 0.025ppm at 14:00 till 14:43.

Operational issues / causes observed. East inlet works checked. No odours found.

Actions Taken. Area clean.

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. Blank.

Actions Taken. Blank.

Tuesday 28th July 2020

DAY SHIFT

Temp. Warm.

Weather. Sunny w/patchy.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM3 at 12:23 for less than 15min.

OM1 at 13:14 till 13:38, max 0.094ppm.

Operational issues / causes observed. PST's 15 & 16 pumped down. Storm tanks checked.

Actions Taken. Storm tanks 1& 2 need hosing down.

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. Blank

Actions Taken. Blank.

Wednesday 29th July 2020

DAY SHIFT

Temp. Warm.

Weather. Sunny w/patchy.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint. OM2 spiked twice.

Operational issues / causes observed. East inlet works clean and no odours found.

Action Taken. Area washed down during day.

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. 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					
24/07/2020	20	389	244	653	3900	4553
27/07/2020	59	389	389	837	2409	3246
29/07/2020	0	534	244	778	2257	3035

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 11 imports of sludge daily over the last week.

No.5 Pumping Station

The doors of No.5 pumping station were open at the time of the inspection, some odour was present.

Sludge Import Area

It was noted that the sludge import area was still in a very poor condition.

A tank leak is causing sludge to spill out across the surrounding area and skips.

TW were 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 but had a wet sloppy seal. There was also evidence of a very recent spill that required cleaning up.

Digester 6 was in service but had a wet sloppy seal.

Digester 7 is currently out of service.

Digester 8 was in service but had a wet sloppy seal. It was also noted that the bell was very high.

Digester 9 was in service but had a wet sloppy seal. There was also evidence of a very recent spill that required cleaning up between D9 & D11.

Digesters 10, 11, 12 and 13 were all in service but had wet sloppy seals.

Digesters 14 and 15 were both out of service.

Digester 16 was in service but had a wet sloppy seal that was bubbling off gas.

Digester 17 was in service and had a good dry seal.

Digester 18 was out of service.

Digesters 19 and 20 were both in service and had a good dry seals.

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.

The area around all digesters was much improved with no evidence of recent or historical sludge spills. Thames advised they have been actively undertaking regular clean-ups of this area of the works.

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.

Skips

In the Sludge Import area there were two 8yds open skips, both of which were covered.

On the service road next to the raw sludge screening building was an uncovered 8yds open skip that was approx 30% full of rag.

On the West side there was one 20yds open bulk carrier that was empty.

East Side Screen House

The doors at both ends of the screen house building were 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 was partially clogged along approx 30% of its length, was visibly crusty in areas and had weeds growing out of it.

West side primary settlement tanks (PST)

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

Circular PST's 10 and 12 were both out of service.
PST's 9 and 12 were both in service and had relatively fat free surfaces.

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 (New)

All lanes are now much improved and appeared to be free flowing, with the internal dividing walls being visible again.
Most of the sprinklers were back in operation and floating debris had been removed.

The mixed liquor feed channel serving aeration lanes 22 to 25 of E-Battery was partly clogged with thick dark scum.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring: 28/07/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Blank	Unknown	Unknown
Main pumping station outlet	Blank	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	0.00 0.00 0.00	0.6	Yes
New West inlet (OCU 11)	4.17 3.56 3.46	0.5	No
Pasteurisation (OCU 12)	0.00 0.00 0.00	0.5	Yes
Transfer PS inlet	20.60 10.51 8.11	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes