



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 6 th July 2021 (13:00pm)	
Attendees: Mr I Inman (London Borough of Hounslow), Mr D Grady (Thames Water) and Ms L Crispie (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was approx. 75% full and filling. No Amajets were in operation.</p> <p>Tank 1B was approx. 75% full and filling. No Amajets were in operation.</p> <p>Tank 2A was approx. 75% full and filling. No Amajets were in operation.</p> <p>Tank 2B was approx. 75% full and filling. No Amajets were in operation.</p> <p>Tank 3A was approx. 75% full and filling. Amajets 1, 2 and 3 were all in operation.</p> <p>Tank 3B was approx. 75% full and filling. Amajets 1, 2 and 3 were all in operation.</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 approx. 75% full and filling.
Amajets 1, 2 and 3 were all in operation.

Tank 6B was approx. 75% full and filling.
No Amajets were in operation.

Tank 7A was approx. 75% full and filling.
No Amajets were in operation.

Tank 7B was approx. 75% full and filling.
No Amajets were in operation.

Tank 8A was approx. 75% full and filling.
No Amajets were in operation.

Tank 8B was approx. 75% full and filling.
No Amajets were in operation.

Storm Feed Channel - The level of effluent in both feed channels was at least 60%.

Complaints

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

The Council received no complaints by either email or the on-line web system in the preceding week.

The Council received no complaints by email from MRAG in the preceding.

Odour Monitors

The odour readouts (H₂S) for all monitors that were providing data on 06/07/2021 at the time of the inspection are below.

Monitor 1	0.006	ppm	13:28pm
Monitor 2	0.001	ppm	13:28pm
Monitor 3	0.000	ppm	13:28pm
Monitor 4	0.000	ppm	13:28pm
Monitor 5	0.000	ppm	13:28pm
Monitor 6	0.000	ppm	13:28pm
Monitor 7	0.000	ppm	13:28pm
Monitor 8	0.000	ppm	13:28pm
Monitor 9	0.000	ppm	13:28pm
Monitor 10	0.000	ppm	13:28pm
Monitor 11	0.000	ppm	13:28pm
Monitor 12	0.000	ppm	13:28pm
Monitor 13	0.000	ppm	13:28pm
Wind Speed	9.029	mph	13:28pm
Wind Direction	268.836		13:28pm

Odour Log (Thames)

Wednesday 30th June 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.

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. Blank.

Actions Taken. Blank.

Thursday 1st July 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. Sludge spill from PAS stream
11 PAS pump.

Strong odour detected all around PAS area.

No spikes on trends

Operational issues / causes observed. Blank.

Actions Taken. Operators on call washing area down.

Friday 2nd July 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. Patchy 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.

Saturday 3rd July 2021**DAY SHIFT**

Temp. Warm.

Weather. Patchy 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. 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.

Sunday 4th July 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. 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					
30/06/2021	0	1340	1030	2370	1392	3762
02/07/2021	0	824 *1405 ?	740	1564	1064	2628 *3209
05/07/2021	0	824	740	1564	760	2324

* 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 have been an average of 10 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.

Sludge Import Area

It was noted that the condition around the sludge import area was much improved and noticeably clean.

One of the two skips present was only part covered and both skips were virtually full and giving off odour. It was also noted that general rubbish and plastics had been dumped in both of these 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 open at the time of the inspection due to ongoing maintenance by onsite contractors.

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 and had a very wet seal that was bubbling off gas.

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 (at least 30" below the top of the coping stone). A spill had also taken place on the far side of the digester that required cleaning up.

Digesters 8 and 9 were both in service and had a 'part' dry seals that were bubbling off gas, it was noted that the seal levels were low on both digesters (at least 30" below the top of the coping stone).

Digester 10 was in service and had a very wet seal that was bubbling off gas.

Digesters 11 and 12 were both in service and had a very wet seals that was bubbling off gas, it was noted that the seal levels were low on

both digesters (at least 30" below the top of the coping stone).

Digesters 13 and 14 were both in service and had no seals. It was noted that the gas was an inky black colour and giving off a strong offensive 'septic' odour.

Digester 15 was out of service.

Digester 16 was in service and the bell height was high. The digester was spitting and bubbling and had spilt on one side.

Digester 17 was in service and had a partially dry seal that was bubbling off minimal amounts of gas.

Digesters 18 and 19 were both out of service.

Digester 20 was in service and had a very wet seal (virtually no seal) that was bubbling off minimal amounts of gas. It was noted that the seal level was low (at least 30" below the top of the coping stone).

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. Other than surface algae on tank 74 and 78 that was covering less approx. 25% of the tanks surface, no other issues were evident.

Skips

On the East side there two 14yds open skips. One contained a small amount of general rubbish and the other contained a small amount of sodden wet rag and cloth, the skip was uncovered and the tarpaulin cover was on the floor. Also present was one 40yds closed bulk carrier that was empty and one 20yds open bulk carrier that contained grit, soil and hardcore (approx. 30%), no tarpaulin cover was in place.

In the Sludge Import area there were two 8yds open skips. One was only part covered and both skips were virtually full and giving off odour. It was also noted that general rubbish and plastics had been dumped in both of these skips.

On the service road next to the raw sludge screening building was a closed 14yds skip.

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 were open at the time of the inspection, TW advised staff were 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 were growing out of it and through the steel grating.

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.

No other issues were evident with these tanks.

Circular PST 12 is currently out of service. It was noted that the area in the middle of the tank contained a large quantity of solid fat, algae, rag and other debris.

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 7 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 but the dividing walls were more visible the previously.

A number of the sprinklers were out of operation and floating debris was present in a number of areas.

The surface area of the mixed liquor feed channel serving the aeration lanes of E-Battery was free-flowing between lanes 23-25. However, lane 22 was partially clogged with floating debris.

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: 30/06/2021

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Not provided	Unknown	Unknown
Main pumping station outlet	0.00 0.00 0.00	0.2	Unknown
East OCU	0.06 0.04 0.03	0.05	Yes
West inlet OCU	0.00 0.00 0.00	0.05	Yes
Sludge reception inlet	Not provided	Unknown	Unknown
Sludge reception outlet	Not provided	0.8	Unknown
Thickening plant inlet	0.00 0.00 0.00	Unknown	Unknown
Thickening plant outlet	0.020 0.016 0.011	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	No
Pasteurisation (OCU 12)	0.01 0.01 0.04	0.5	Yes
Transfer PS inlet	0.100 0.093 0.069	Unknown	Unknown
Transfer PS outlet	0.00 0.00	0.6	Yes

	0.00			
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