



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 12th October (13:34pm)

Attendees: Mr L Phillips (London Borough of Hounslow), Ms Caitlin Simmonds (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A was empty 90% of the tank covered in sludge tank will need flushing. All hoppers full and need draining.

Tank 1B was empty 90% of the tank covered in sludge tank will need flushing. Hoppers 1 and 3 were full and needed draining, hopper 2 had been drained to its lowest point.

Tank 2A was empty and clean, all hoppers had been drained to lowest point.

Tank 2B was empty and clean, all hoppers had been drained to lowest point.

Tank 3A was empty, sludge build up at the end of the tank (hopper end), all hoppers full and needed draining.

Tank 3B was empty, sludge build up at the end of the tank (hopper end), all hoppers full and needed draining.

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 clean, however all hoppers full and needed draining.

Tank 6B was empty clean, however all hoppers full and needed draining

Tank 7A was empty but 80% of the tank surface covered by sludge, tank will need flushing. All hoppers full and needed draining.

Tank 7B was empty and clean, however all hoppers full and needed draining.

Tank 8A was empty and clean, however all hoppers full and needed draining.

Tank 8B was empty and clean however all hoppers full and needed draining.

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 12/10/2021 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	0.004	ppm	13:19pm
Monitor 5	0.000	ppm	13:19pm
Monitor 6	0.000	ppm	13:19pm
Monitor 7	0.000	ppm	13:19pm
Monitor 8	0.004	ppm	13:19pm
Monitor 9	0.003	ppm	13:19pm
Monitor 10	0.000	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	4.540	mph	13:19pm
Wind Direction	283.506		13:19pm

Odour Log (Thames)

Wednesday 6th October 2021

DAY SHIFT

Temp. Warm.

Weather. Sunny/ W patchy clouds.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Able onsite calibrating monitors.

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 7th October 2021

DAY SHIFT:

Temp: Warm.

Weather: Cloudy/ W Sunny spells.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Able on site calibrating monitors.

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 found or reported.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

Friday 8st October 2021

DAY SHIFT

Temp: Warm.

Weather: Cloudy/W Sunny spells.

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.

Saturday 9th October 2021

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: 05:30.

Observations / Customer Complaint: OM5 0.015 from 18:04 – 18:32.

Operational issues / causes observed: Blank.

Actions taken: Blank.

Sunday 10th October 2021

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: 05:30.

Observations / Customer Complaint: No odour issues.

Operational issues / causes observed: Blank.

Actions Taken: Blank.

Monday 11th October 2021

DAY SHIFT:

Temp: Warm.

Weather: Sunny W/ 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: Cold.

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 12th October 2021

DAY SHIFT:

Temp: Warm.

Weather: Sunny W/ 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.

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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					
//****	*	*	*	*	*	*
//****	*	*	*	*	*	*

** No sludge Dip records provided.

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. 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 was out of service.

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

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

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

Digester 9 was in service but had a weak seal. No evidence of spill.

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

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

Digester 12 was out of service.

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

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

Digester 15 was out of service.

Digester 16 was in service but had a weak seal. No evidence of spill.

Digester 17 was in service but had a weak seal. No evidence of spill.

Digester 18 was out of service.

Digester 19 was out of service.

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

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 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 then 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: 12/10/2021

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00 0.00 0.00	0.2	Unknown
East OCU	0.07 0.03 0.05	0.05	Unknown
West inlet OCU	0.00 0.00 0.00	0.05	Unknown
Thickening plant outlet	0.07 0.06 0.09	0.6	Unknown

New West inlet (OCU 11)	0.00 0.00 0.02	0.5	Unknown
Pasteurisation (OCU 12)	0.00 0.00 0.03	0.5	Unknown
Transfer PS inlet	99.31 97.27 91.02	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Unknown
GBT Plant OCU Outlet	0.00 0.00 0.00	Unknown	Unknown