



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 22nd December 2020 (13:00pm)

Attendees: Mr Zaheer Kadri (London Borough of Hounslow) and Mr T Costin (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A – Tank 3B were all approx. over 50% full. All Amajets were 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. 25% along its entire length and murky. 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 22/12/2020 at the time of the inspection are below.

Monitor 1	0.000	ppm	13:30pm
Monitor 2	0.000	ppm	13:30pm
Monitor 3	0.000	ppm	13:30pm
Monitor 4	0.000	ppm	13:30pm
Monitor 5	0.005	ppm	13:30pm
Monitor 6	0.000	ppm	13:30pm
Monitor 7	0.004	ppm	13:30pm
Monitor 8	0.004	ppm	13:30pm
Monitor 9	0.004	ppm	13:30pm
Monitor 10	0.000	ppm	13:30pm
Monitor 11	0.000	ppm	13:30pm
Monitor 12	0.000	ppm	13:30pm
Monitor 13	0.003	ppm	13:30pm
Wind Speed	0.210	mph	13:30pm
Wind Direction	18.343		13:30pm

Odour Log (Thames)

Wednesday 16th December 2020
DAY SHIFT

Temp. Blank.
Weather. Blank.
Odour Readings. Blank.
Time: Blank
Observations / Customer Complaint. Blank.
Operational issues / causes observed. Blank.
NIGHT SHIFT
Temp. Cool.
Weather. Overcast night.
Odour Readings.
OM2 faulty. No faults reported with other monitors.
Time: 05:30.
Observations / Customer Complaint.
OM2 - No odour issues found or reported.
Operational issues / causes observed. Blank.

Thursday 17th December 2020

DAY SHIFT

Temp. Cool.
Weather. Sunny.
Odour Readings. All in operation , No faults reported.
Time: 17:30.
Observations / Customer Complaint. No odour issues found or reported.
Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Cool.
Weather. Overcast night.
Odour Readings. OM2 faulty. All other monitors – No faults reported.
Time: 05:30.
Observations / Customer Complaint. No odour issues found or reported.
Operational issues / causes observed. Blank.

Friday 18th December 2020

DAY SHIFT

Temp. Cool.
Weather. Rain with sunny spells.

Odour Readings. All in operation. No faults reported.

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 in operation, No faults reported.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Saturday 19th December 2020

DAY SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All in operation . No faults reported.

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 in operation, No faults reported.

Time: 05:30.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Sunday 20th December 2020

DAY SHIFT

Temp. Cool.

Weather. Rain.

Odour Readings. All in operation No faults reported.

Time: 17:30.

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

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Blank.

Weather. Blank.

Odour Readings. Blank.

Time: Blank.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. Blank.

Monday 21st December 2020

DAY SHIFT

Temp. Cool.

Weather. Cloudy.

Odour Readings. No faults reported.

Time: 17:30.

Observations / Customer Complaint. OM8 spiked to 0.016ppm between 10:27-10:44.

Operational issues / causes observed. No odour issues on site/ ABLE contractors on site calibrating monitors.

NIGHT SHIFT

Temp. Cool.

Weather. Clear night.

Odour Readings. No faults reported.

Time: 05:00.

Observations / Customer Complaint. No odour issues.

Operational issues / causes observed. Blank.

Tuesday 22nd December 2020

DAY SHIFT

Temp. Blank.

Weather. Blank.

Odour Readings. Blank.

Time: Blank.

Observations / Customer Complaint. Blank.

Operational issues / causes observed. Blank.

NIGHT SHIFT

Temp. Blank.

Weather. Blank.

Odour Readings. Blank.

Time: Blank.

Observations / Customer Complaint. Blank.

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					
16/12/2020	117	824	595	1536	1088	2624
18/12/2020	117	824	740	1681	912	2593
21/12/2020	117	824	740	1681	912	2593

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 14 imports of sludge per day. Deliveries made on the 16th, 18th and 21st of December 2020.

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 was much improved and noticeably cleaner than on previous visits.

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 and had a thick seal that was approx. 3ft below coping stone.

Digester 6 was out of service

Digester 7 was in service and had a low wet seal that was bubbling off minimal amounts of gas. There were 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 in service and had a very wet seal that was 3ft below the coping stones.

Digesters 10 & 11 were both in service and 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, 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 in 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 in 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 in service and had a thick seal that was approx. 2ft below 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. 2ft 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).

PST 76 is currently out of service.

All remaining tanks were in operation at the time of the inspection.

Skips

East side grit house there were NO skips . One large Biffa enclosed Bulk carrier was at this location.

In the Sludge Import area there was a 12 yard skip which was covered.

On the service road next to the raw sludge screening building was a closed 12 yard skip.

On the West side grit house there was one closed BIFFA bulk carrier and one open bulk carrier.

East Side Screen House

The first set of screen house doors were open at the time of the inspection.

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 10 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 floating debris had been removed.

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: 22/12/2020

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	1.011 1.009 0.008	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	1.126 1.113 1.096	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes