



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Tuesday 06th October 2020 (13:30am)

Attendees: Mr L. Phillips (London Borough of Hounslow) Tom Costin (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A Was in use full amajets in use.

Tank 1B Was in use full. Amajets in use.

Tank 2A Was in use full. Amajets in use.

Tank 2B Was in use full. Amajets in use.

Tank 3A Was in use full. Amajets in use.

Tank 3B Was in use full. Amajets in use.

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 in use full. Amajets in use.

Tank 6B Was in use full. Amajets in use.

Tank 7A Was in use full. Amajets in use.

Tank 7B Was in use full. Amajets in use.

Tank 8A Was in use full. Amajets in use.

Tank 8B Was in use full. Amajets in use.

Feed Channel - The level of effluent in both feed channels was low and bottomed out in some places. The effluent was murky along its entire length. Some deposits of fat across the surface. No odours witnessed.

Complaints

The Council received no complaints by telephone / Email 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 date 06/10/2020 at 14:12:

Monitor 1	0.006	ppm	14:12
Monitor 2	0.006	ppm	14:12
Monitor 3	0.000	ppm	14:12
Monitor 4	0.005	ppm	14:12
Monitor 5	0.005	ppm	14:12
Monitor 6	0.005	ppm	14:12
Monitor 7	0.005	ppm	14:12
Monitor 8	0.005	ppm	14:13
Monitor 9	0.004	ppm	14:13
Monitor 10	0.005	ppm	14:13
Monitor 11	0.004	ppm	14:13
Monitor 12	0.005	ppm	14:13

Monitor 13	0.003	ppm	14:13
Wind Direction	288.234	Deg	14:13
Wind Speed	3.291	mph	14:13

Odour Log (Thames)

Wednesday 30th September 2020:

DAY SHIFT:

Temp: Cool.

Weather: Rain W/ Sunny spells.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint:

OM2 spiked at 0:021ppm 14:55 – 15:10.

Operational issues / causes observed: No issues observed.

Actions Taken: East inlet area washed down.

NIGHT SHIFT

Temp: Cool.

Weather: 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

Thursday 01st October 2020

DAY SHIFT:

Temp: Warm.

Weather: Sunny W/Patch 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: Rain.

Odour Readings: All OMU's in use.

Time: 05:30.

Observations / Customer Complaint: OM2 0.048ppm at 19:26 – 20:39

Operational issues / causes observed: No issues.

Actions Taken: East inlet hosed down.

Friday 02nd October 2020

DAY SHIFT:

Temp: Cool.

Weather: Rain 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: Storms.

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 03rd October 2020

DAY SHIFT:

Temp: Cool.

Weather: Storms.

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: Blank

Weather: Clear Night.

Odour Readings: All OMU's in operation.

Time: 05:30.

Observations / Customer Complaint: OM2 0.020ppm 20:25 – 20:40.

Operational issues / causes observed: No odour detected rain all night.

Actions Taken: Blank.

Sunday 4th October 2020

DAY SHIFT

Temp: Cool.

Weather: Storms.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint: No dour issues.

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: No dour issues.

Operational issues / causes observed: Blank

Actions Taken: Blank.

Monday 5th October 2020

DAY SHIFT

Temp: Cool.

Weather: Rain.

Odour Readings: All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint:

No odour issues.

Operational issues / causes observed: Storm tanks full.

Actions Taken: Blank.

NIGHT SHIFT

Temp: Cool.

Weather: 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.

Tuesday 6th October 2020

DAY SHIFT

Temp. Cool.

Weather. Cloudy with sunny spells.

Odour Readings. All OMU's in operation.

Time: 17:30.

Observations / Customer Complaint:

No odour issues.

Operational issues / causes observed: Storm tanks full.

Action 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: Storm tanks returning.

Actions Taken:

None noted.

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					
30/09/2020	0	412	305	717	760	1477
02/10/2020	88	679	183	950	1592	2542
05/10/2020	0	389	305	694	0	694

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 7 imports of sludge daily.

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 had a weak sloppy seal. No evidence of spill.

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

Digester 7 is currently out of service.

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

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

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

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

Digester 12 were all in service and had High thick sludgy seals.

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

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

Digester 15 is currently out of service.

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

Digester 17 was in service and had good thick seal. No evidence of spill.

Digester 18 is currently out of service.

Digesters 19 is currently out of service.

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

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 the tanks were operating as normal and had a relatively fat free and clear surface. The hoses were in operation.

Skips

There was one 16yard skip which was empty and uncovered at the Screening House – No odours were detected.
There were NO skips at the West Side Grit House.

East Side Screen House

A set of doors at the screening house building were open due to maintenance taking place. The doors were open to allow ventilation whilst contactors were working. No odours detected at the time of 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 was partly clogged throughout much of its length, the surface was visibly crusty in areas and had weeds growing out of it. This was due to be manually unclogged by contractors

West side primary settlement tanks (PST)

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

Circular PST's 9, 10 and 12 were all in service except PST 11 this was out of service. All PST's had relatively fat free surfaces however some algae growth across the surface. No odours detected

Pasteurisation Plant

The pasteurisation plant is in service. TW advised 9 streams out of twelve 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.

The sprinkler systems were in operation and floating debris had been removed.

The mixed liquor feed channel serving aeration lanes 22 to 25 of E-Battery was partially clogged with thick dark sludge. TW will be unclogging this channel.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring: 24/09/2020

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	Blank	Unknown	Unknown
Main pumping station outlet	6.10 5.18 4.83 5.37	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	4.23 3.78 3.38 3.79	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	0.126 0,000 0.000 Ave: 0.024	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes

