



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Thursday 4th July 2019 (11:30)

Attendees: Mr Zaheer Kadri (LBH), Mr Desmond Wilson and Mr Waleed Janjua (Thames Water)

LB Hounslow Observation

Thames Water Action / Response

Storm Water Storage Tanks (SWST)

Tank 1A was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 1B was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 2A was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 2B was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 3A was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 2/3 full.

Tank 3B was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 2/3 full.

Tanks 4A, 4B, 5A & 5B which are covered and odour controlled were all empty - unable to gauge condition as lighting system still not working.

Tank 6A was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 6B was empty and clean .Hopper 1, 2, and 3 needed draining down 1/3 full.

Tank 7A was empty and clean. Hopper 1 and 2 were full however Hopper 3 was empty and had been drained down,

Tank 7B was empty and clean. Hopper 1 and 2 were full however Hopper 3 was empty and had been drained down.

Tank 8A was empty and clean. Hopper 1 was full however 2 and 3 were empty and had been drained down.

Tank 8B was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1, 2, and 3 needed draining down 2/3 full.

Amajets- No reports of any faults with amajets. All in working order.

Feed Channel - The level of effluent in both feed channels was low – almost bottomed out in places. Dark and murky throughout the channel– no local odours rags, fats or solids. .

Complaints

The Council received one (0) complaint by telephone in the preceding week.

The Council received NO complaints by email in the preceding week.

The Council received no complaints by email from MRAG.

Thames Water controller advised that they had received no direct complaints in the preceding week.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at time of inspection:

Monitor 1	0.004	ppm	11:56
Monitor 2	0.007	ppm	11:56
Monitor 3	0.000	ppm	11:56
Monitor 4	0.005	ppm	11:56
Monitor 5	0.000	ppm	11:56
Monitor 6	0.003	ppm	11:56
Monitor 7	0.003	ppm	11:56
Monitor 8	0.000	ppm	11:56
Monitor 9	0.004	ppm	11:56
Monitor 10	0.004	ppm	11:56
Monitor 11	0.003	ppm	11:56
Monitor 12	0.004	ppm	11:56
Monitor 13	0.004	ppm	11:56
Wind Speed	4.465	mph	11:56
Wind Direction	174.725	Deg	11:56

Odour Log (Thames) - Photocopies of log entries taken:

Thursday 27th June 2019

AM – Sunny with Patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Warm and Sunny.

All OMU's in use.

Time: 05:30.

Observations/Complaints.

No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 28th June 2019

AM – Hot and sunny.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No issues.

Operational Issues/Causes: None Noted.

Actions: None noted.

PM – Warm and clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints: No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 29th June 2019

AM – very Hot and sunny.

All OMU's in use.

Time: 07:12.

Observations/Complaints.

OM2 spiked between 13:31-13:47.

Operational Issues/Causes: No source discovered.

Actions: None noted.

PM – Hot/ Clear night.

All OMU's in use.

Time: not noted.

Observations/Complaints.

OM5 spiked to 0.017ppm between 21:53-22:08

OM3 had three spikes at 0.025ppm between 23:27-23:43, 0.039ppm between 00:42-00:59, 0.024ppm spiked between 02:29-02:43.

Operational Issues/Causes: No odour identified.

OCU11 chemical dosing out of range.

Actions: None Noted.

Sunday 30th June 2019

AM – Hot and Sunny.

All OMU's in use.

Time: 17:20.

Observations/Complaints.

OM5 spiked to 0.019ppm between 17:08 – ongoing.

Operational Issues/Causes: No Source discovered.

Actions: None Noted.

PM – Warm/Clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints.

OM3 spiked to 0.051ppm between 21:57 – 22:14.

Operational Issues/Causes: Area checked no odours identified.

Actions: None noted.

Monday 1st of July 2019

AM – Sunny with patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints.

OM3 spiked at 07:42 – 07:57 max spike 0.033ppm.

Operational Issues/Causes: Area investigated OCU11 performance out of range.

Actions: None.

PM – Clear night.

All OMU's in use.

Time: none noted.

Observations/Complaints.

No observations.

Operational Issues/Causes: None.

Actions: None noted.

Tuesday 2nd July 2019

AM – Sunny with patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No odour issues.

Operational Issues/Causes: No odours found.

Actions: none noted.

PM – Clear night.

All OMU's in use.

Time: 05:20.

Observations/Complaints: No observations.

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 3rd July 2019

AM – Sunny.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No observations/Issue.

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Clear night.

All OMU's in use.

Time: 05:15.

Observations/Complaints: No observations.

Operational Issues/Causes: None found or reported.

Actions: 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					
30/06/19	0	328	183	511	1088	1599
01/07/19	0	534	0	534	1112	1646
02/07/19	0	787	305	1092	356	1448

The sludge stock levels for the West side circular primary settlement tank 1 were **compliant** with the OMP trigger level (500m³) for all of the dates for which data has been 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.

Digesters

Digesters 1-4 – Out of use (permanent) – noticeable quantity of water accumulated to the brim of these tanks which is thick with algae – requires draining. Long term project currently initiated to bring these units back into service – will require significant investment.

Digester 5 - in use – seal level approx. 1ft below coping stones – good seal – evidence of recent spill – requires anti-foam and clean-up.

Digester 6 - in use – good seal level approx. 1ft below coping stones.

Digester 7 - in use – seal level approx. 1ft below coping stones. Seal was weak and bubbling.

Digester 8 - in use – good seal level approx. 1ft below coping stones.

Digester 9 - in use – seal level approx. 1ft below surface of coping stones – good seal.

Digester 10 - in use – seal level approx. 1ft below surface of coping stones.

Digester 11 - in use – seal level approx. 1ft below surface of coping stones – seal weak and bubbling.

Digester 12 - in use – seal level approx. 1ft below coping stones – good seal.

Digester 13 - in use – seal level approx. 1ft below coping stones – good seal.

Digester 14 - out of use.

Digester 15 - out of use.

Digester 16 - out of use.

Digester 17 - in use – seal level approx. 1ft below coping stones – seal crusty.

Digester 18 - in use – seal level approx. 2ft below coping stones – seal weak and slightly bubbling.

Digester 19 - in use – seal level approx. 1ft below coping stones – good seal.

Digester 20 - in use – seal level approx. 1ft below coping stones – good seal.

No odour in the area observed at times of inspection

GENERAL

Sludge Screening House

All doors closed at time of inspection however aware that on previous visits these doors have been left open to avoid condensation build up – TW advised that doors being left open to create air flow is a Management decision to improve internal working environment for staff – odour monitors deployed in vicinity to determine whether local odours increase as a consequence. No odours observed.

Imported Sludge

Estimated average of 10 imports daily for preceding seven days.

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 jets and hoses were in operation and no excessive build-up of algae.

Skips

No Skips present at the East side screening House- All clear.
2 Large bulk loaders (open carriers) were present at the East side grit House- These were empty and uncovered (used for general waste).
No odour detected.
No Skips present at the West Side gritting house. - All clear.

East Side Raw Sludge Screen House

Doors closed at time of inspection.

West side primary settlement tanks (PST)

Rectangular PSTs – No issues noticed at time of inspection

Circular PST's 9, 10 and 12 all in use and all hoses were in operation. Circular PST number 11 had been drained down and out of service. No Odours observed.

Pasteurisation Plant

Pasteurisation plant had six streams that were out of service. - All remaining pasteurisation plant in service fully operational.

West Side Aeration Lanes (Old)

Battery C aeration feed channel approximately 90% clear of any obstruction- effluent is flowing with ease NO rags or build up noticed.

New Works (West Side)

Feed Channel for Aeration Lanes 21-24 free flowing no obstructions or odours.

The “Fluffy” coverage (obscured internal dividing walls within tank) that had been observed on previous visits had lightened in texture revealing the dividing walls within the tank. There were no concerning odours around this area.

Odour Control Unit (OCU) performance monitoring – (2nd July 2019)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.03 0.04	Unknown	Unknown

	0.04 Ave: 0.03		
Main pumping station outlet	0.00 0.00 0.00	0.2	Yes
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	No data	Unknown	Unknown
Sludge reception outlet	No data	0.8	Yes
Thickening plant inlet	No data	Unknown	Unknown
Thickening plant outlet	0.06 0.06 0.05 Ave: 0.05	0.6	Yes
Transfer PS inlet	No Data	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.00 0.00 0.00	0.5	Yes