



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

Date of inspection: Thursday 1 st August 2019 (12:00)	
Attendees: Mr Zaheer Kadri (LBH), Mr Randolph Bristol and Mr Manzoor Hussain (Thames Water)	
LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks (SWST)</u></p> <p>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.</p> <p>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.</p> <p>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 as they were full.</p> <p>Tank 2B was empty and clean however some dry grit / residue on the surface of the Tank (Hopper end). Hopper 1 was full to the top and hopper 2 and 3 needed were 1/3 full. All hoppers needed draining down.</p> <p>Tank 3A was returning and 30% full of effluent, all amajets were in operation.</p>	

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

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. Hopper 1, 2, and 3 were all drained down to the bottom.

Tank 6B was empty and clean. Hopper 1, 2, and 3 were all drained down to the bottom.

Tank 7A was empty and clean. Shallow hoppers 1, 2 and 3 were full and needed draining down.

Tank 7B was empty and clean. Shallow hoppers 1, 2 and 3 were full and needed draining down.

Tank 8A was empty and clean. Hopper 1 was full however 2 and 3 were drained down to the bottom.

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 no complaints by telephone in the preceding week.

The Council received one complaint by email in the preceding week.

On Friday 26th of July 2019 at approx 12:16:23 AM the Council received an email regarding odours from TW – The email emanated from the Worple Road area of Isleworth TW7 7HU however the caller did not wish to call the Council out of hours services as they did not want a call back. On the 1st of August 2019 during the inspection the trends chart did not show any spikes in the odour monitors furthermore the odour logs did not illustrate any irregularities. Subsequently the complainant was sent a reply. This complaint was logged under Flare 986788

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	12:56
Monitor 2	0.003	ppm	12:56
Monitor 3	0.000	ppm	12:56
Monitor 4	0.000	ppm	12:56
Monitor 5	0.000	ppm	12:56
Monitor 6	0.000	ppm	12:56
Monitor 7	0.000	ppm	12:56
Monitor 8	0.004	ppm	12:56
Monitor 9	0.003	ppm	12:56
Monitor 10	0.000	ppm	12:56
Monitor 11	0.004	ppm	12:56
Monitor 12	0.005	ppm	12:56
Monitor 13	0.003	ppm	12:56

Wind Speed	0.569	mph	12:56
Wind Direction	317.954	Deg	12:56

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

Thursday 25th July 2019

AM – very hot and sunny.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Hot clear night.

All OMU's in use.

Time: 05:30.

Observations/Complaints. No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Friday 26th July 2019

AM – Hot , rain with sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No issues.

Operational Issues/Causes: None Noted.

Actions: None noted.

PM – Cool with rain.

All OMU's in use.

Time: 05:25.

Observations/Complaints: No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Saturday 27th July 2019

AM – Warm with rain.

All OMU's in use.

Time: 17:30.

Observations/Complaints. None noted.

Operational Issues/Causes: OM7 spiked twice during the day less than 15 minute duration. Also Storm Tanks filling and weiring to the river between 10:30-14:30.

Actions: None noted.

PM – Cool overcast night.

All OMU's in use.

Time: 05:25

Observations/Complaints. No odour issues.

Operational Issues/Causes: No odour identified.

Actions: None Noted.

Sunday 28th July 2019

AM – Cloudy with Sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints. No odour issues.

Operational Issues/Causes: Storm tanks returning.

Actions: None Noted.

PM – Cool/ clear night.

All OMU's in use.

Time: 05:25.

Observations/Complaints. OM2 spiked to 0.018ppm observed 05:25 ongoing. OM3 spiked to 0.017ppm observed 20:01 less than a 15 minute duration.

Operational Issues/Causes: Area checked no odours identified.

Actions: None noted.

Monday 29th July 2019

AM – Hot and sunny.

All OMU's in use.

Time: 17:30.

Observations/Complaints. OM2 spiked at 13:39 and again at 17:08 both spikes lasted under a 15 minute duration 0.019ppm max.

Operational Issues/Causes: none noted.

Actions: None.

PM – Warm Clear night.

All OMU's in use.

Time: 05:25.

Observations/Complaints. OM2 spiked to 0,030ppm at 02:33.

Operational Issues/Causes: None.

Actions: No source identified.

Tuesday 30th July 2019

AM – warm, rain with sunny spells.

All OMU's in use.

Time: 17:30.

Observations/Complaints: OM2 spiked to 0,020ppm max at 09:22 lasted less than 15 minutes.

Operational Issues/Causes: No odours found.

Actions: none noted.

PM – Cool overcast night.

All OMU's in use.

Time: 05:40.

Observations/Complaints: No issues.

Operational Issues/Causes: None noted.

Actions: None noted.

Wednesday 31st July 2019

AM – Sunny with patchy clouds.

All OMU's in use.

Time: 17:30.

Observations/Complaints: No observations/Issue.

Operational Issues/Causes: None noted.

Actions: None noted.

PM – Cool overcast night.

All OMU's in use.

Time: 05:30.

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					
26/07/19	0	122	61	183	2594	2777
29/07/19	0	412	305	717	2737	3454
30/07/19	0	595	244	839	2737	3576

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.

<p>Digester 8 - in use - good seal level approx. 1ft below coping stones.</p> <p>Digester 9 - in use - seal level approx. 1ft below surface of coping stones - good seal.</p> <p>Digester 10 - in use - seal level approx. 1ft below surface of coping stones - seal weak and bubbling.</p> <p>Digester 11 - in use - seal level approx. 1ft below surface of coping stones - seal weak and bubbling.</p> <p>Digester 12 - in use - seal level approx. 1ft below coping stones - good seal.</p> <p>Digester 13 - in use - seal level approx. 1ft below coping stones - good seal.</p> <p>Digester 14 - out of use.</p> <p>Digester 15 - out of use.</p> <p>Digester 16 - out of use.</p> <p>Digester 17 - in use - seal level approx. 1ft below coping stones - seal crusty.</p> <p>Digester 18 - in use - seal level approx. 2ft below coping stones - seal weak and slightly bubbling.</p> <p>Digester 19 - in use - seal level approx. 3ft below coping stones - good seal.</p> <p>Digester 20 - in use - seal level approx. 2ft below coping stones - good seal.</p> <p>No odour in the area observed at times of inspection</p>	
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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

There have been 30 imports of sludge over the last week (10 on Friday 26th, 10 on Monday 29th and 10 on Tuesday 30th August).

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 x 12yd skips were located at the East side grit House- These were empty and uncovered (used for general waste).
No Skips present at the West Side gritting house. - All clear.
No odour detected.

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 and 10 were in use and all hoses were in operation. Circular PST number 11 and 12 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. Celvac were on site at time of inspection.

Odour Control Unit (OCU) performance monitoring – (31st July 2019)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station inlet	0.02	Unknown	Unknown

	0.02 0.02 Ave: 0.02		
Main pumping station outlet	0.00 0.00 0.00 Ave: 0.00	0.2	Yes
East OCU	0.01 0.01 0.01 Ave: 0.01	0.05	Yes
West inlet OCU	0.00 0.00 0.00 Ave: 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	0.00 0.00 0.00 Ave: 0.00	0.6	Yes
Transfer PS inlet	No Data	Unknown	Unknown
Transfer PS outlet	0.00 0.00 0.00 Ave: 0.00	0.6	Yes
New West inlet (OCU 11)	0.00 0.00 0.00 Ave: 0.00	0.5	Yes
OCU 12 (Pasteurisation Plant)	0.01 0.01 0.01 Ave: 0.01	0.5	Yes

