



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

| Date of inspection: 19 th January 2017 | |
|---|--------------------------------|
| Attendees: Mr I Inman (L B Hounslow) & Mr D Kalamantis (Thames Water). | |
| LB Hounslow Observation | Thames Water Action / Response |
| <p><u>Storm Water Storage Tanks (SWST)</u></p> <p>Tank 1A was empty & clean. Hoppers 1 & 2 were both <¼ full, hopper 3 was drained down.</p> <p>Tank 1B was empty & clean. Hoppers 1, 2 & 3 were all <¼ full.</p> <p>Tank 2A was empty & clean. Hoppers 1, 2 & 3 were all <¼ full.</p> <p>Tank 2B was empty & clean. Hopper 1 was approx ¼ full, hoppers 2 & 3 were <¼ full</p> <p>Tank 3A was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tank 3B was empty & clean. Hoppers 1, 2 & 3 were all drained down.</p> <p>Tanks 4A, 4B, 5A & 5B are covered and odour controlled.</p> <p>Tank 6A was empty & clean. Hoppers 1, 2 & 3 were all approx 1/3 full.</p> <p>Tank 6B was empty & clean. Hoppers 1 & 2 were approx ¼ full, hopper 3 was <¼ full.</p> <p>Tank 7A was empty & clean. Hoppers 1 & 2 (shallow hoppers) were all full, hopper 3 was full of grit.</p> | |

Tank 7B was empty & clean. Hoppers 1, 2 & 3 (shallow hoppers) were all full of grit.

Tank 8A was empty & clean. Hopper 1 was approx $\frac{3}{4}$ full, hopper 2 was full and hopper 3 was $\frac{3}{4}$ full and all required over pumping.

Tank 8B was empty & clean. Hopper 1 was $\frac{1}{4}$ full. Hoppers 2 & 3 were both $<\frac{1}{4}$ full.

Storm Water Channel

The storm feed channel serving STW's 1A-8B was empty of effluent.

Odour Monitors

The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 13:43).

| | | |
|------------|-------|-----|
| Monitor 1 | 0.004 | ppm |
| Monitor 2 | 0.003 | ppm |
| Monitor 3 | 0.006 | ppm |
| Monitor 4 | 0.008 | ppm |
| Monitor 5 | 0.009 | ppm |
| Monitor 6 | 0.000 | ppm |
| Monitor 7 | 0.000 | ppm |
| Monitor 8 | 0.007 | ppm |
| Monitor 9 | 0.006 | ppm |
| Monitor 10 | 0.005 | ppm |
| Monitor 11 | 0.008 | ppm |
| Monitor 12 | 0.006 | ppm |
| Monitor 13 | 0.001 | ppm |

Complaints

The Council received no odour complaints by telephone or Email in the preceding week.

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

Thursday 12th January 2017

AM No odour problems.

PM No odour issues on site. Trends good.

Friday 13th January 2017

AM No odour issues. Nothing of note on trends.

PM No odour issues. Pas tech reports sludge spill in thickening building. Spill cleaned up.

Saturday 14th January 2017

AM No odour problems. Nothing to report on trends.

PM No odours reported or found, no spikes on trends.

Sunday 15th January 2017

AM No odour issues. Nothing on note on trends.

PM OM5-four spikes, max 0.103ppm, manhole venting on main drive.
OM4-one spike, max 0.015ppm, less than 15 minutes.

Monday 16th January 2017

AM OM1-5 no spikes, 6-13 no spikes.

PM No odour issues on site. No spikes on trends.

Tuesday 17th January 2017

AM No odour issues. Nothing to report on trends.

PM No odour issues. Nothing to report on trends.

Wednesday 18th January 2017

AM OM1-5 no breaches. OM6-13 no breaches.

PM OM9 spiked at 23:10 to 0.020ppm 1hr. OM4 spiked at 10:30 to 0.017ppm 1:10hr. OM5 spiking through night.

Areas check some odours from drain cover on main drive.

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 | | | | | |
| 13/01/2017 | 0 | 450 | 61 | 511 | 5926 | 6437 |
| 16/01/2017 | 0 | 1218 | 0 | 1218 | 5237 | 6455 |
| 18/01/2017 | 0 | 389 | 0 | 389 | 7251 | 7640 |

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 within three days and which has been complied with in this instance

Imported Sludge

There have been 18 imports of sludge per day for the last week, each import containing 30m³ of sludge.

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 are permanently out of use.

Digesters 5 & 6 were both in use and had reasonable seals.

Digester 7 was in use and had a reasonable seal but was bubbling and

gassing off heavily on the service road side on the digester.

Digester 8 was in use and had a reasonable seal.

Digester 9 was in use and had a good dry seal.

Digesters 10, 11 & 12 were all in use and had reasonable seals.

Digester 13 is currently out of use.

Digesters 14 & 15 were both in use and had reasonable seals.

Digester 16 is currently out of use.

Digesters 17 & 18 were both in use and had a good dry seals.

Digester 19 is currently out of service.

Digester 20 was in use and had a reasonable seal.

Automatic dosing of anti-foaming agent is now in use and TW advised that this is also applied manually at least twice a day to all operational digesters.

Return Activated Sludge Channel

The RAS channel (which runs in the ground between FST's 61-64 & 65-67) was clogged in places with thick sludge at the time of the inspection.

Thames confirmed a tanker is cleaning this out on a weekly basis.

West side primary settlement tanks (PST)

Rectangular PSTs are now covered and odour controlled.

Circular PSTs 9, 10, 11 & 12 were all in operation and had clean 'fat-free' surfaces.

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).

At the time of the inspection all tanks 71 & 78 were not in operation.

East Side Screen House

The screen house now has new doors fitted, both pairs of which were closed at the time of the inspection.

Thames confirmed all screens were in operation.

Skips

On the East side there were two low level open skips on site, both of which were covered.

On the West side there was one empty bulk carrier, one empty 8yd skip and one low level open skip that was covered.

Pasteurisation Plant

The pasteurisation plant was in service at the time of the inspection.

The TW officer confirmed all 12 streams were running.

Section 106 agreement

There have been no breaches of the s106 agreement in the last week.

West Side Aeration Lanes (Old)

No issues appeared evident.

New Works (West Side)

At the time of the inspection access to Aeration Lanes 21-25 (E-Battery) was prohibited due to ongoing crane operations to replace the stirrers.

Thames confirmed tanker crews are cleaning the mixed feed liquor channel out on a weekly basis.

New Inlet Works (West Side)

No issues appeared evident at the new inlet works.

Odour Control Unit (OCU) performance monitoring – 18/01/2017

| Plant | Reading (ppm) | Action Level (ppm) | Compliant |
|--------------------------------------|----------------------|---------------------------|------------------|
| Main pumping station outlet | 0.009(av) | 0.2 | Yes |
| East OCU | 0.000(av) | 0.05 | Yes |
| West inlet | 0.000(av) | 0.05 | Yes |
| Sludge reception outlet | 0.000(av) | 0.8 | Yes |
| Thickening plant outlet | 0.000(av) | 0.6 | Yes |
| Pasteurisation plant outlet (OCU 12) | 0.0002(av) | 0.5 | Yes |
| Transfer PS outlet | 0.000(av) | 0.6 | Yes |
| New West OCU 11 outlet | 0.000(av) | 0.6 | Yes |

Jerome reading