



London Borough of Hounslow

Mogden Sewage Treatment Works

TW Site Inspection

| Date of inspection: 2 nd February 2017 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------|---------------------------------------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|-----------|-------|-----|------------|-------|-----|------------|-------|-----|------------|-------|-----|------------|-------|-----|--|
| Attendees: Mr L Phillips (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>All tanks were full except 1A and 1B were being flushed at the time of the visit.</p> <p><u>Storm Water Channel</u></p> <p>The storm feed channel serving STW's 1A-8B was empty of effluent.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p><u>Odour Monitors</u></p> <p>The odour readouts (H₂S) for all of the monitors, which were providing data at the time of inspection (approx 14:00).</p> <table border="1"> <tr><td>Monitor 1</td><td>0.004</td><td>ppm</td></tr> <tr><td>Monitor 2</td><td>0.004</td><td>ppm</td></tr> <tr><td>Monitor 3</td><td>0.003</td><td>ppm</td></tr> <tr><td>Monitor 4</td><td>0.000</td><td>ppm</td></tr> <tr><td>Monitor 5</td><td>0.000</td><td>ppm</td></tr> <tr><td>Monitor 6</td><td>0.000</td><td>ppm</td></tr> <tr><td>Monitor 7</td><td>0.003</td><td>ppm</td></tr> <tr><td>Monitor 8</td><td>0.005</td><td>ppm</td></tr> <tr><td>Monitor 9</td><td>0.005</td><td>ppm</td></tr> <tr><td>Monitor 10</td><td>0.000</td><td>ppm</td></tr> <tr><td>Monitor 11</td><td>0.004</td><td>ppm</td></tr> <tr><td>Monitor 12</td><td>0.004</td><td>ppm</td></tr> <tr><td>Monitor 13</td><td>0.001</td><td>ppm</td></tr> </table> | | Monitor 1 | 0.004 | ppm | Monitor 2 | 0.004 | ppm | Monitor 3 | 0.003 | ppm | Monitor 4 | 0.000 | ppm | Monitor 5 | 0.000 | ppm | Monitor 6 | 0.000 | ppm | Monitor 7 | 0.003 | ppm | Monitor 8 | 0.005 | ppm | Monitor 9 | 0.005 | ppm | Monitor 10 | 0.000 | ppm | Monitor 11 | 0.004 | ppm | Monitor 12 | 0.004 | ppm | Monitor 13 | 0.001 | ppm | |
| Monitor 1 | 0.004 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 2 | 0.004 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 3 | 0.003 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 4 | 0.000 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 5 | 0.000 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 6 | 0.000 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 7 | 0.003 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 8 | 0.005 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 9 | 0.005 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 10 | 0.000 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 11 | 0.004 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 12 | 0.004 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitor 13 | 0.001 | ppm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Complaints

The Council received no odour complaints by telephone or e-mail in the preceding week.

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

Thursday 26th January 2017:

AM Odour monitor No 8 spiked at 23:15 for 20 minutes max 0.045. Area outside power house checked no odour source found.

PM No odour spikes.

Friday 27th January 2017:

AM Odour spikes from No 5 monitor less than 15 minutes.

PM Monitor 5 multiple spikes throughout shift. No odour detected whilst out on site.

Saturday 28th January 2017:

AM No odour spikes.

PM Monitor 5 two spikes max PPM 0019 both under 15 minutes.

Sunday 29th January 2017:

AM No 5 monitor spiked @ 17:04 cover on main drive venting.

PM Monitor 5 two spikes maximum of 0.034 PPM. No odour detected whilst out onsite.

Monday 30th January 2017:

AM Odour monitor No 4 spiked once at 08:49 for 15 minutes (max 70.045) monitor No 8 spiked at 17:20 but 15 minutes duration max (0.021).

PM Monitor 8 multiple spikes throughout the shift max PPM 0.037 investigated area. No odour detected.

Tuesday 31st January 2017:

AM No odour issues + no spikes on trends.

PM No odour problems.

Wednesday 1st February 2017:L

AM No odour issues no spikes on trends. Able in doing monitor maintenance.

PM No odours showing on trends. Sludge spill in PAS area cleaned up.

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 | | | | | |
| 27/01/2017 | 0 | 2549 | 267 | 2816 | 11961 | 14777 |
| 30/01/2017 | 0 | 2030 | 394 | 2424 | 9609 | 12033 |
| 01/02/2017 | 0 | 2029 | 581 | 2610 | 7252 | 9862 |

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 30 imports of sludge 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 had a weak sloppy seal.

Digester 8 was in use and had weak sloppy seal.

Digester 9 was in use and had weak sloppy seal.

Digesters 10, 11 & 12 was in use and all had weak sloppy seals.

Digester 13 is currently out of use.

Digesters 14 & 15 were both in use was in use and had weak sloppy seals.

Digester 16 is currently out of use.

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

Digester 19 is currently out of service.

Digester 20 was in use and had weak sloppy seal.

Automatic dosing of anti-foaming agent in 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 were in operation at the time tank 71 was 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 was one low level open skip on site which was 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)

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 – 1/02/2017

| Plant | Reading (ppm) | Action Level (ppm) | Compliant |
|--------------------------------------|----------------------|---------------------------|------------------|
| Main pumping station outlet | 0.023(av) | 0.2 | Yes |
| East OCU | 0.013(av) | 0.05 | Yes |
| West inlet | 0.000(av) | 0.05 | Yes |
| Sludge reception outlet | 0.000(av) | 0.8 | Yes |
| Thickening plant outlet | 0.039(av) | 0.6 | Yes |
| Pasteurisation plant outlet (OCU 12) | 0.0002(av) | 0.5 | Yes |
| Transfer PS outlet | 0.002(av) | 0.6 | Yes |
| New West OCU 11 outlet | 0.0023(av) | 0.6 | Yes |

Jerome reading