



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	22 January 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use and full with Tanks 1a and 1b being flushed. Storm Water Tanks 2b, 3a and 3b required hosing down and emptying</p>	<p>The storm tanks are flushed on a regular basis to reduce odour. Hoses have also used to break up any floating sludge.</p>
<p><b>Odour Monitors</b></p> <p>Odour readings for the previous week had been low with the exception of a peak on 18/1/2010 when there was a peak of 0.0215ppm H<sub>2</sub>S on the central monitor. The odour logs showed that the area had been inspected but the source of odour that caused the spike was not identified.</p>	<p>On 18 January 2010, operatives carried out an inspection of the site. Unfortunately, they were unable to identify a likely source of odour that could have caused the increase of hydrogen sulphide.</p>
<p><b>Sludge Dip Records</b></p> <p>22/1/2010 W210m<sup>3</sup> and E6610m<sup>3</sup> = 6820m<sup>3</sup>            21/1/2010 W210m<sup>3</sup> and E6972m<sup>3</sup> = 7182m<sup>3</sup>            21/1/2010 W40m<sup>3</sup> and E5781m<sup>3</sup> = 5921m<sup>3</sup>            19/1/2010 W0 and E6148m<sup>3</sup> = 6143m<sup>3</sup>            18/1/2010 W70m<sup>3</sup> and E 5419m<sup>3</sup> = 5489m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>



<p><b>Digesters</b></p> <p>Digester 15 was foaming through the annular seal at the time of the inspection and foaming through the annular seals of digesters 19 and 16 had taken place. Digester 13 was also showing signs of foaming through the annular seals but no spillage had occurred at the time of the inspection.</p>	<p>As per section 3.1.2 of the odour management plan any foaming of the digesters is always promptly cleared and washed down. Adjustments were made to the Digesters in question to reduce further foaming as well as an anti-foaming agent being used.</p>
<p><b>West Rectangular Primary Settlement Tanks</b></p> <p>Tank 14b had a build up of solids of the top of the tank and needed additional scraping in addition to the twice daily cleaning that takes place</p>	<p>A manual scrape was carried out to remove a small build up of solids at one end of 14b. The tank was then returned to its normal scrape sequence.</p>
<p><b>General</b></p> <p>The washpactors on the west side of the works were being serviced.</p> <p>The issue of when the redundant circular primary settlement tanks on the East side of the works will be available for use as final clarification tanks was raised as this was originally due to have been completed in August 2009 but now appears not likely to be completed until early 2010. Please provide a date by which this will be completed and a full explanation as to why the slippage has occurred.</p>	<p>A regular service of one of the Washpactors was being carried out at the time of the inspection.</p> <p>As discussed at the resident meeting, we plan to have all 8 tanks in use by the end of April 2010.</p> <p>Unfortunately, undocumented buried services had caused delays to the original programme.</p> <p>We are planning to bring the tanks into use in pairs, and commissioning work will start in mid – late February.</p>



**Odour control unit (ocu) performance monitoring (20/01/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.002	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.14	1	yes
Thickening plant outlet	0.28	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.11	0.6	Yes

No further comment to add.

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	29 January 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use and full. Storm Water Tanks 2a and 2b required hosing down and emptying</p>	<p>Heavy flows have meant we have needed to use the storm tanks.</p> <p>Tanks 2a and 2b were flushed to keep them fresh and reduce the chance of any odour.</p>
<p><b>Odour Monitors</b></p> <p>Odour readings for the previous week had been low with the exception of activity on the south side monitor on 23/1/10, which was below the trigger level of 0.02ppm H<sub>2</sub>S. An inspection of the site was undertaken but did not identify any problems. There were peaks on the south side monitor again on 25/1/10. The site was inspected by the day shift who did not detect any odour or identify any operational problems but the storm water tanks were emptying to the river. The afternoon/evening shift undertook a further inspection of the site later in the day and checked the digesters and storm water tanks and no odour was detected. There was a peak on the East side monitor on 28/1/10 showed activity on 28/1/10. The site was inspected but no odour was detected during the inspection.</p>	<p>Thames Water will continue to carry out routine site inspections and odour investigations.</p>



<p><b>Sludge Dip Records</b></p> <p>29/1/2010 W0m3 and E4802m3 = 4802m3 28/1/2010 W70m3 and E4800m3 = 4870m3 27/1/2010 W0m3 and E4333m3 = 4333m3 26/1/2010 W0m3 and E3791m3 = 3971m3 25/1/2010 W140m3 and E3971m3 = 4111m3</p> <p>This is compliant with the current OMP</p>	<p>No further comment to add.</p>
<p><b>Digesters</b></p> <p>Digester 7 was gassing at the time of the inspection and there was evidence that digesters 9 and 19 had foamed through the annular seal but no spillage had occurred at the time of the inspection.</p>	<p>Operatives closely monitor the digester levels, looking out for any signs of foaming and gassing off. When necessary, adjustments are made.</p>
<p><b>West Rectangular Primary Settlement Tanks</b></p> <p>Tanks 14a and 16a had a build up of solids of the top of the tank and needed additional scraping in addition to the twice daily cleaning that takes place</p>	<p>The rectangular primary tanks are monitored on a regular basis.</p> <p>The build-up of solids will be removed by the tank scraping sequence. If necessary, hoses are also used to break up any clumps.</p>



**General**

The issue of when the redundant circular primary settlement tanks on the East side of the works will be available for use as final clarification tanks was raised as this was originally due to have been completed in August 2009 but now appears not likely to be completed until early 2010. Please provide a date by which this will be completed and a full explanation as to why the slippage has occurred.

Complaints were received from residents of Lynton Close on Sunday 24th January and while levels of H2S were low and the Officers subjective assessment of the odour was that it was not excessive and is probably due to the continued use of the storm water tanks, which were identified as a problem on my inspection of 22/1/10.

As discussed at the resident meeting, we plan to have all 8 tanks in use by the end of April 2010.

Unfortunately, undocumented buried services had caused delays to the original programme.

We are planning to bring the tanks into use in pairs, and commissioning work will start in mid – late February.

On 24 January, operatives noted an increase of hydrogen sulphide concentrations on the west side odour monitor. An inspection was carried out; however there was no clear point source of odour identified at that time.

**Odour control unit (ocu) performance monitoring (20/01/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.001	0.2	yes
East ocu	0.001	0.05	yes
West ocu	0.001	0.05	yes
Sludge reception outlet	0.16	1	yes
Thickening plant outlet	0.26	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.03	0.6	Yes

No further comment to add.



# London Borough of Hounslow



**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	5 February 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use and full. Tank 8 was empty but the hoppers while full were not odorous and due to be overpumped.</p>	<p>The hoppers to tank 8 were 'over-pumped' the following day to remove the collected rainwater.</p>
<p><b>Odour Monitors</b></p> <p>Odour readings for the previous week had been low with the exception of a peak on the East side monitor on 31/1/2010 above 0.02ppm H<sub>2</sub>S but when an inspection of the site was undertaken it did not identify any problems. There was also a peak on the East side monitor at 8.00pm on 1/2/2010. The site was inspected by Thames they did not detect any odour or identify any operational problems Both of these peaks correlate with the storm water tanks being used.</p> <p>There was large peak on the Northside monitor on 2/2/2010 and this was identified as a problem with the Scada monitor and not due to any operational problems on site.</p>	<p>Site inspections were carried out on both dates. On each occasion, operations team could not identify an obvious source for the increase in H<sub>2</sub>S activity detected by the monitors. At the time, the storm tanks were in use at the time of the inspection.</p> <p>In reference to the large spike on the North monitor, the increase in hydrogen sulphide was due to an erroneous reading from the scada system. The north monitor returned to normal operation immediately afterwards.</p>





<p><b>Sludge Dip Records</b></p> <p>5/2/2010 W250m3 and E10829m3 = 11059m3 4/2/2010 W160m3 and E10487m3 = 10647m3 3/2/2010 W60m3 and E11211m3 = 11271m3 2/2/2010 W80m3 and E10487m3 = 10567m3 25/1/2010 W0m3 and E6610m3 = 6610m3</p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was evidence that digesters 11 and 20 had foamed through the annular seals and needed to be hosed down</p>	<p>The digesters are closely monitored for signs of foaming.</p> <p>Digesters 11 and 20 have been washed down to clear the foaming.</p>



<p><b>West Rectangular Primary Settlement Tanks</b></p> <p>Tanks 14b and 15a had a build up of solids of the top of the tanks and needed additional scraping in addition to the twice daily automatic scraping that takes place</p>	<p>A manual scrape was carried out to remove a small build up of solids at one end of 14b and 15a. The tanks were then returned to their normal scraping sequence.</p>
<p><b>General</b></p> <p>A complaint was received from a resident of Morris Road on 3rd February in the evening but LBH duty Officer did not make a visit. The odour monitors did not show any elevated levels of H2S on that evening and no operational problems were identified.</p> <p>There was a small amount of grit on the west side of the works near the washpactors that needed to be removed and the area hosed down.</p> <p>The reading from the Transfer PS outlet was faulty and this needs to be undertaken again to ascertain the correct reading</p>	<p>As noted the odour log, the odour monitors did not note any unusual H2S activity and there were no operational problems on site at that time.</p> <p>The small amount of grit on the west side of the works was promptly removed the same day and the area washed down.</p> <p>The scada reading from the Transfer PS outlet showed a fault at the time of the weekly inspection. A manual sample was taken in its place and confirmed the OCU was operating correctly.</p>



**Odour control unit (ocu) performance monitoring (3/2/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.002	0.2	yes
East ocu	0.001	0.05	yes
West ocu	0.001	0.05	yes
Sludge reception outlet	0.22	1	yes
Thickening plant outlet	0.34	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	Faulty	0.6	Yes

No further comment to add.

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	12 February 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p>Storm Water Tanks</p> <p>Tanks 1-8 were all in use with tanks 1b, 2a, 2b and 3a in the process of being emptied/flushed as there was evidence of build up of sludge on the surface of these tanks.</p>	<p>The stormtanks are flushed on a regular basis to reduce odour. Hoses have also been used to break up any floating sludge.</p>
<p>Odour Monitors</p> <p>Odour readings for the previous week had been low with the exception of the south monitor where there have been peaks all week above 0.02ppm H<sub>2</sub>S.</p> <p>On 6th Feb peaks were identified on the monitor but when a site inspection was undertaken no odours were noted with the exception of slight odour from storm water tank 7.</p> <p>On 7th February there were further peaks on the monitor but when the site was inspected no odour was noted.</p> <p>On 8th February there were further spikes on the monitor but when the site was inspected both am and pm and no odour was found and neither were there any operational problems on site.</p> <p>On 9th February there were further spikes on the monitor and when a site inspection was undertaken to ascertain the reason for the spikes no odour was found and no operational problems were identified.</p> <p>On 10th February there were further spikes on the monitor but when the site</p>	<p>As noted, the South side boundary odour monitor has detected some hydrogen sulphide activity.</p> <p>On each occasion, operatives carried out a site inspection to try and identify the source of odour.</p> <p>Unfortunately, with the exception of the 6 February 2010, operatives were unable to find any obvious source of odour that could explain the changes in hydrogen sulphide levels.</p> <p>We agree that the powerhouse stack may have contributed to the variations in hydrogen sulphide and we are happy to look into this..</p> <p>The emissions from the Mogden Powerhouse engines are tested each year by an independent company.</p> <p>The engine emissions were last tested in October 2009. The results showed that the engines were operating efficiently and meeting each of the regulatory requirements. These tests are carried out in line with Environmental</p>



<p>was inspected both am and pm no odour was found and neither were there any operational problems on site.</p> <p>On 11th February there were further spikes on the monitor but when the site was inspected both am and pm no odour was found and neither were there any operational problems on site.</p> <p>It is likely that these peaks are due to the emissions from the powerhouse flue and at the time of my inspection there was a noticeable plume being emitted from the flue and the plume was moving southwards. The south monitor is located behind the powerhouse, which may explain the source of the peaks. This needs to be investigated and if possible the flue needs to be tested to ascertain if there are high levels of H2S in the exhaust gases.</p>	<p>Permitting Regulations enforced by the Environment Agency.</p>
<p>Sludge Dip Records</p> <p>12/2/2010 W555m3 and E126593 = 13214m3  11/2/2010 W571m3 and E11211m3 = 11786m3  10/2/2010 W1110m3 and E114683 = 12578m3  9/2/2010 W795m3 and E11830m3 = 12625m3  25/1/2010 W1980m3 and E12554m3 = 14534m3</p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>
<p>Digesters</p> <p>There was no evidence that digesters foamed through the annular seal.</p>	<p>Operatives closely monitor the digesters for signs of foaming. If necessary, adjustments are promptly made to reduce the change of any spills.</p>



<p>General</p> <p>The Council did not receive any odour complaints this week.</p>	<p>No further comment to add.</p>																								
<p>Odour Monitors</p> <p>Odour monitor readings have not been uploaded onto the website since 24th January 2010 and I cannot overemphasise the need to do so on a weekly basis in the interest of good community relations with residents.</p>	<p>The odour monitor readings are now up to date. We would like to apologise for any inconvenience caused by these delays.</p>																								
<p>Inspection Reports</p> <p>My inspection of 22nd January 2010 still has not been uploaded onto the website and neither has it been forwarded to be for approval before doing so and the delay is unacceptable given that it was sent to Thames on 25th January.</p>	<p>The report has been sent over for approval and will be online shortly, We would like to apologise for the delays in getting these reports online.</p>																								
<p>Odour control unit (ocu) performance monitoring (11/2/2010)</p> <table border="1" data-bbox="190 1177 1099 1399"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.006</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.18</td> <td>1</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.31</td> <td>1</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.006	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.18	1	yes	Thickening plant outlet	0.31	1	yes	<p>No further comment to add</p>
Plant	Reading (ppm)	Action Level (ppm)	Compliant																						
Main pumping station outlet	0.006	0.2	yes																						
East ocu	0.01	0.05	yes																						
West ocu	0.01	0.05	yes																						
Sludge reception outlet	0.18	1	yes																						
Thickening plant outlet	0.31	1	yes																						



Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.08	0.6	Yes	

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	18/2/2010
<b>Attendees</b>	Gerry McCarthy L B Hounslow; Thames Water Operations Team Manager

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use.</p>	<p>Owing to the recent rainfall, we have needed to use the storm tanks.</p> <p>The contents are monitored on a regular basis, and if necessary are flushed to reduce any odour.</p>
<p><b>Odour Monitors</b></p> <p>Odour readings for the previous week had been low with the exception of the south monitor where there peaks above 0.02ppm H<sub>2</sub>S.</p> <p>On 13<sup>th</sup> Feb in the morning peaks were identified on the monitor but when a site inspection was undertaken no odours were identified.</p> <p>On 13<sup>th</sup> February there were further spikes on the monitor but when the site was inspected in the afternoon no odour was found and neither were there any operational problems on site.</p> <p>As stated it is likely that these peaks are due to the emissions from the powerhouse flue The south monitor is located behind the powerhouse, which may explain the source of the peaks. This needs to be investigated and if possible the flue needs to be tested to ascertain if there are high levels of H<sub>2</sub>S in the exhaust gases.</p>	<p>As noted, the South side boundary odour monitor has detected some hydrogen sulphide activity.</p> <p>On each occasion, operatives carried out a site inspection to try and identify the source of odour.</p> <p>Operatives were unable to find any obvious process issues on site that could explain the changes in hydrogen sulphide levels.</p> <p>We agree that the powerhouse stack may be contributing to the recent variations in hydrogen sulphide and we currently investigating this.</p>





<p><b>Sludge Dip Records</b></p> <p>18/2/2010 W1196m<sup>3</sup> and E13383<sup>3</sup> = 14579m<sup>3</sup>  17/2/2010 W821m<sup>3</sup> and E13021m<sup>3</sup> = 13842m<sup>3</sup>  16/2/2010 W961m<sup>3</sup> and E13383<sup>3</sup> = 14344m<sup>3</sup>  15/2/2010 W1642m<sup>3</sup> and E13640m<sup>3</sup> = 15282m<sup>3</sup>  14/2/2010 W1642m<sup>3</sup> and E15812m<sup>3</sup> = 17454m<sup>3</sup>  13/2/2010 W 2843m<sup>3</sup> and E15917m<sup>3</sup> = 17760m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no evidence that digesters foamed through the annular seal though the logs show that anti-foaming agent was added to digesters 5.6 and on the morning of 18<sup>th</sup> February 2010.</p>	<p>As per section 3.1.2 of the odour management plan; any foaming of the digesters is always promptly cleared and washed down</p>
<p><b>General</b></p> <p>The Council did not receive any odour complaints this week.</p> <p><b>Odour Monitors</b></p> <p>The outstanding odour monitor readings that had not been uploaded onto the website since 24<sup>th</sup> January 2010 were uploaded and are now up to date.</p> <p><b>Inspection Reports</b></p> <p>My inspection of 22<sup>nd</sup> January 2010 still has not been uploaded onto the website and neither has it been forwarded to me for approval before doing so and the delay is unacceptable given that it was sent to Thames on 25<sup>th</sup> January and the same applies to my inspections of 29<sup>th</sup> Jan, 5<sup>th</sup> Feb and 12<sup>th</sup> Feb.</p>	<p>All reports are available for viewing on the Thames Water website. As stated in our previous report, we would like to apologise for the delays in responding to the getting the reports online.</p>



**Odour control unit (ocu) performance monitoring (17/2/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.005	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.19	1	yes
Thickening plant outlet	0.38	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.13	0.6	Yes

No further comment to add

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	24 February 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use. Storm water tanks 1a and 1b were being emptied. Amajet 4 of storm water tank 1b was not operating. Please confirm that this was addressed when the tank was emptied.</p> <p>There was an accumulation of fat on the surface of tank 7a.</p> <p>The hoppers to storm water tanks 8a and 8b while not odorous needed over pumping.</p>	<p>Amajet 4 on Storm Tank 1B was reset locally and returned into service while the tank was being emptied.</p> <p>Tank 7a was flushed through which removed any residual fat on the tank's surface.</p> <p>The hoppers of storm tank 8a and 8B were over pumped the same day remove the collected water..</p>
<p><b>Odour monitors</b></p> <p>Odour readings for the previous week had been low with the exception of the south monitor where peaks had occurred above 0.02ppm H<sub>2</sub>S on 22nd February from approximately 13.39 onwards. A site inspection was undertaken and no odours found or operational problems identified.</p> <p>There were further peaks in the afternoon on the same monitor but when a site inspection was undertaken no odours were identified.</p> <p>As stated it is likely that these peaks are due to the emissions from the powerhouse flue .The south monitor is located behind the powerhouse, which may explain the source of the peaks. This needs to be investigated and if possible the flue needs to be tested to ascertain if there are high levels of H<sub>2</sub>S in the exhaust gases. I have noted from previous inspections that this is being addressed.</p>	<p>The activity recorded by the South monitor on the 22nd February was noted in the site odour log. Investigations found no process or plant problems on site at that time which could cause such an increase in hydrogen sulphide</p> <p>As noted the emissions from the powerhouse stack may be contributing to the recent variations in hydrogen sulphide levels being recorded on the South boundary monitor. We will continue to closely monitor and investigate the levels with the assistance of the contracting company who maintain our odour control monitoring equipment.</p>



<p><b>Sludge Dip Records</b></p> <p>24/2/2010 W515m3 and E19537m3 = 20052m3 23/2/2010 W2236m3 and E14831m3 = 17067m3 22/2/2010 W2236m3 and E17365m3 = 19601m3 21/2/2010 W2236m3 and E15555m3 = 17791m3 20/2/2010 W2236m3 and E144673 = 16705m3</p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no evidence that digesters foamed through the annular seal though the logs show that anti-foaming agent was added to digester 6on the morning of 24th February 2010.</p>	<p>Anti-foaming agent is regularly used as a preventative measure to help reduce foaming through the digester's annular seal.</p>
<p><b>General</b></p> <p>The council did not receive any odour complaints this week.</p>	<p>Thames Water also did not receive any odour complaints this week relating to Mogden STW.</p>
<p><b>Odour monitors</b></p> <p>The odour monitor readings from the previous week had not been uploaded onto the website Inspection reports</p>	<p>The odour monitor readings are fully up-to-date on the Thames Water website.</p>



**Odour control unit (ocu) performance monitoring (23/2/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.004	0.2	yes
East ocu	0.001	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.3	1	yes
Thickening plant outlet	0.38	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.011	0.6	Yes

No further comment to add

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	12 March 2010
<b>Attendees</b>	Gerry McCarthy LB Hounslow; Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use. Storm water tanks 3a and 3b were being emptied. Storm water tanks 8a and 8b required flushing.</p>	<p>Tanks 8a and 8b were the next tanks to be flushed and emptied after 3a and 3b.</p>
<p><b>Digesters</b></p> <p>There was evidence that digesters 5 foamed through the annular though the spillage was minor and not odorous and required to be cleaned up without delay.</p>	<p>The foaming around digester was promptly washed down and cleared the same day.</p>



**Odour monitors**

Odour readings for the previous week had been low with the exception of the south monitor where a number of peaks had occurred above 0.02ppm and are detailed below:

8/3/2010, 0.0208ppm at approximately 10.25  
8/3/2010, 0.0252ppm at approximately 14.56  
8/3/2010, 0.0311ppm at approximately 19.54  
8/3/2010, 0.020ppm at approximately 20.55  
9/3/2010, 0.05ppm at approximately 19.20  
10/3/2010, 0.0355ppm at approximately 18.18  
10/3/2010, 0.0318ppm at approximately 19.16  
10/3/2010, 0.02015ppm at approximately 20.19  
10/3/2010, 0.0310ppm at approximately 21.51  
11/3/2010, 0.025ppm at approximately 18.14

As previously stated it is likely that these peaks are due to the emissions from the powerhouse flue. The south monitor is located behind the powerhouse, which may explain the source of the peaks. This needs to be investigated and if possible the flue needs to be tested to ascertain if there are high levels of H<sub>2</sub>S in the exhaust gases. I have noted from previous inspections that this is being addressed and it may also be necessary to increase the height of the stack to ensure that emissions are dispersed adequately. Please confirm that Pollution Monitors will be attending the site next week to undertake measurements from the stack of the powerhouse.

The South side Odour monitor recorded some activity between the 8<sup>th</sup> and 10<sup>th</sup> of March. The operational team carried out site inspections, however there were no problems or obvious sources that could have caused the increase in hydrogen sulphide.

Due to the proximity of the South Monitor to the Powerhouse outlet stack there is a chance the emissions from the stack are contributing to the increased hydrogen sulphide levels. Pollution Monitors are to attend site early next week to investigate these peaks.



<p><b>Servicing of Odour monitors</b></p> <p>The west monitor is back in service but will need to be moved from its present location on the embankment and please confirm the new location and whether the monitor will need to be out of service when this takes place and the duration for which the monitor will not be available if any.</p> <p>The central monitor is still out of service and please confirm when the necessary repairs will be completed and the monitor will be back in service.</p>	<p>The west side monitor is to be moved to the foot of the bank temporarily, whilst the construction work in this area is undertaken. We estimate the odour monitor will be unavailable for around 2 days.</p> <p>The Central Monitor was sent away for the repair and the recalibration of its sensor. It is due to be returned within the next two weeks.</p>
<p><b>Sludge Dip Records</b></p> <p>12/3/2010 W2532m<sup>3</sup> and E8058m<sup>3</sup> = 10590m<sup>3</sup>  11/3/2010 W485m<sup>3</sup> and E9763m<sup>3</sup> = 10248m<sup>3</sup>  10/3/2010 W2216m<sup>3</sup> and E13745m<sup>3</sup> = 15961m<sup>3</sup>  9/3/2010 W2236m<sup>3</sup> and E14831m<sup>3</sup> = 17067m<sup>3</sup>  8/3/2010 W2156m<sup>3</sup> and E14107m<sup>3</sup> = 16263m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No further comment to add.</p>
<p><b>Storm Tank Logs.</b></p> <p>The Council did not receive any storm tank logs and these need to be provided to the Council.</p>	<p>It has been noted that on more than one occasion the Council had not received the Storm Tank Log.</p> <p>We will do our very best to ensure the storm tank logs are continuously sent on a daily basis.</p>





**Odour control unit (ocu) performance monitoring (10/3/2010)**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.000	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.080	1	yes
Thickening plant outlet	0.49	1	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.00	0.6	Yes

**Gerry McCarthy**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	19 March 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1-7 were all in use, containing significant volumes of effluent. The storm feed channel also contained a significant volume. Storm water tanks 8a and 8b were empty, excepting the hoppers which were full and required flushing.</p>	<p>The storm tanks were full and in use due to a large amount rainfall in the catchment.</p> <p>The hoppers in storm tank 8 were emptied the following day by over pumping.</p>
<p><b>Sludge Dip Records</b></p> <p>19/3/2010 west side rectangular tanks 445m<sup>3</sup>; west side circular tanks 40m<sup>3</sup>; covered and odour controlled east side tanks 11,830m<sup>3</sup>. Site total 12, 315m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No further comment to add</p>



**Odour monitors**

Odour readings (H<sub>2</sub>S) at the time of inspection were low:

Northside 0.003ppm

Westside 0.006ppm

Southside 0.0019ppm

Eastside 0.002ppm

Southwest monitor 0.005ppm

Central monitor is presently away for servicing

The monitors which had detected peaks above 0.02ppm since the previous site inspection on the 12 March, are detailed below:

12/3/2010, the southside monitor recorded a peak of 0.029ppm at approximately 19.05 and the trigger level >0.020ppm was breached from approximately 18.36-19.36.

An entry in the odour log records that the site was toured but no odour was noted.

13/3/2010, the eastside monitor recorded a peak of 0.024ppm at approximately 13.30.

15/3/2010, the eastside monitor recorded a peak of 0.031ppm at approximately 10.29am and the trigger level >0.02ppm was breached from approximately 10.30-11.00am. An entry in the odour log records that in response, the east side of the works was patrolled and no strong odours were detected.

All storm tanks were in service on the 13/3/2010

Storm tanks 1-7 were in service on the 15/3/2010.

Further to the Council's previous report of the 12th March, 'Pollution Monitors' are to monitor H<sub>2</sub>S emissions from the powerhouse flue, week commencing 22/3/2010.

A site inspection was carried out during each peak in H<sub>2</sub>S levels. As noted the operations team could not identify an clear source that could have caused the increase in hydrogen sulphide detected by the East monitors on the 13th and 15th March. The storm tanks were in use on both occasions.

As per the Councils previous report. A portable monitoring station is to be used to gather data on the emissions from the Powerhouse flue. Once the Monitoring is complete, Pollution Monitors are to provide Thames Water with this data. This will be available for LB Hounslow officers to review.



<p><b>Servicing of Odour monitors</b></p> <p>The central monitor continues to be out of service and please confirm when the necessary repairs will be completed and the monitor will be back in service.</p>	<p>The central monitor is back in service.</p>																																
<p><b>Digesters</b></p> <p>Digester 11 was high and gassing via the annular seal. Remedial action was requested forthwith.</p>	<p>Adjustments were made to Digester no. 11 to prevent further 'gassing'.</p>																																
<p><b>Storm Tank Logs.</b></p> <p>The logs for the 19/3/2010 were available for inspection and supported the council officer's observations.</p>	<p>No further comment to add</p>																																
<p><b>Odour control unit (ocu) performance monitoring (17/3/2010)</b></p> <table border="1" data-bbox="190 962 1099 1374"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.000</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.1; 0.1;0.11</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.44; 0.46; 0.47</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>0.04</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.000	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.1; 0.1;0.11	0.8	yes	Thickening plant outlet	0.44; 0.46; 0.47	0.6	yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	0.04	0.6	Yes	<p>No further comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																														
Main pumping station outlet	0.000	0.2	yes																														
East ocu	0.01	0.05	yes																														
West ocu	0.01	0.05	yes																														
Sludge reception outlet	0.1; 0.1;0.11	0.8	yes																														
Thickening plant outlet	0.44; 0.46; 0.47	0.6	yes																														
Pasteurisation plant outlet	Not operating		N/A																														
Transfer PS Outlet	0.04	0.6	Yes																														



**London Borough  
of Hounslow**



**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	24 March 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3, 4, 5, 7 were all in use, containing significant volumes of effluent. Significant quantities of sludge on the surface of tanks 3A &amp; 3B, causing noticeable on site odour in the area of the storm tanks. Tank 6 effluent being returned to the works for treatment at the time of inspection.</p> <p>Tank 8 empty, except for hoppers.</p>	<p>Storm tanks 3a and 3b were scheduled to be returned to the head of the works next, and subsequently were. Hoppers on storm tank number 8 have been drained.</p>
<p><b>Odour monitors</b></p> <p>Odour readings (H2S) at the time of inspection were all low:            Northside 0.0025ppm            Westside 0.0006ppm            Southside 0.00047ppm            Eastside 0.0042ppm            Southwest monitor 0.0064ppm            Central monitor is presently away for servicing            The monitors which had detected peaks above 0.02ppm since the previous site inspection on the 19 March, are detailed below:</p> <p>21/3/2010, the southside monitor recorded a peak of 0.022ppm at approximately 22.39 and the trigger level &gt;0.020ppm was breached from approximately 22.10-22.40.</p>	<p>On each hydrogen sulphide peak above 0.02ppm, a site inspection was carried out. Operatives were unable to identify any specific source of odour that could have caused such an increase of odour.</p> <p>As noted, the storm tanks were in use.</p>



<p>24/3/2010, the southwest monitor recorded a peak of 0.026ppm at approximately 4.46am.</p> <p>Storm tanks 2-7 were full on the 21/3/2010 Storm tanks 1-7 were in service on the 24/3/2010</p>	
<p><b>Sludge Dip Records</b></p> <p>24/3/2010 west side rectangular primary settlement tanks 445m<sup>3</sup>; west side circular primary settlement tanks 95m<sup>3</sup>; covered and odour controlled east side tanks 9,658m<sup>3</sup>. Site total 10,198m<sup>3</sup></p> <p>The site totals for the days since the last inspection are as follows: 20/03 15,160m<sup>3</sup> 21/03 15,856m<sup>3</sup> 22/03 11,591m<sup>3</sup> 23/03 12,037m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No further comment to add.</p>
<p><b>Digesters</b></p> <p>None of the digesters were gassing at the time of inspection.</p> <p>No spillages were noted at the time of inspection.</p> <p>An anti-foaming agent was being applied.</p>	<p>No further comment to add.</p>



<p><b>West side primary settlement tanks</b></p> <p>There was noticeable quantities of sludge on the surface of tank 15A</p>	<p>The surface sludge was removed by the next automate scrape.</p>
<p><b>Storm Tank Logs.</b></p> <p>The storm tank log for the 24/3/2010 supported the council officer's observations.</p> <p>A faxed copy of a storm tank log received by the Council had a date and time missing.</p>	<p>No further comment to add.</p>
<p><b>East side grit house</b></p> <p>This is an odour controlled building. The roller shutter door has a fault which prevents it from being closed fully.</p>	<p>A job has been raised for an engineer to repair the door.</p>





**Odour control unit (ocu) performance monitoring (17/3/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.000	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.1; 0.1;0.11	0.8	yes
Thickening plant outlet	0.44; 0.46; 0.47	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.04	0.6	Yes

No further comment to add.



**London Borough  
of Hounslow**



**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	30 March 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3, 4, 5, 6 &amp; 7 were all in use, containing significant volumes of effluent. Significant quantities of sludge was present on the surface of tanks 6A &amp; 6B. Tank 8 empty, except for hoppers, some full, some part-full.</p>	<p>Storm tanks 6a and 6b had begun to be returned to the head of the works while on EHO inspection. Hoppers on storm tank number 8 have been drained.</p>
<p><b>Odour monitors</b></p> <p>Odour readings (H2S) at the time of inspection were all low:            Northside 0.0003ppm            Westside 0.0004ppm            Southside 0.0031ppm            Eastside 0.0047ppm            Southwest monitor 0.0059ppm</p> <p>Central monitor is presently away for servicing</p> <p>The monitors which had detected peaks above 0.02ppm since the previous site inspection on the 24 March, are detailed below:</p> <p>26/3/2010, the southwest monitor recorded a peak of 0.026ppm at approximately 19.32 and the trigger level &gt;0.020ppm was breached from approximately 19.03-19.33. An entry in the odour log recorded that there was 'no odour problem'.</p> <p>27/3/2010, an odour complaint was received by Thames Water at</p>	<p>No further comment to add.</p>



<p>approximately 12noon. The odour monitors at the time recorded levels below the trigger level. The southside monitor recorded the most odour activity, peaking at 0.016ppm at approximately 13.00 (below the trigger level). Storm tanks 1-7 were in use on the 26/3/2010 Storm tanks 1-6 were in use on the 27/3/2010</p>	
<p><b>Sludge Dip Records</b></p> <p>30/3/2010 west side rectangular primary settlement tanks 2,156m<sup>3</sup>; west side circular primary settlement tanks 0m<sup>3</sup>; covered and odour controlled east side tanks 10,849m<sup>3</sup>. Site total 13,005m<sup>3</sup></p> <p>This is compliant with the current OMP</p>	<p>No Comment.</p>
<p><b>Digesters</b></p> <p>Digester 5 was high and there was evidence of a recent spillage via the annular seal involving a very small amount of effluent which had settled on the digester lip.</p>	<p>Shift team advised, and antifoaming of the digester commenced. Sludge from lip removed.</p>
<p><b>Storm Tank Logs.</b></p> <p>The daily storm tank log for the 30/3/2010 supported the council officer's observations.</p>	<p>No further comment to add.</p>
<p><b>East side grit house</b></p> <p>This is an odour controlled building. The roller shutter door fault identified in the last report has been rectified.</p>	<p>No further comment to add.</p>



**Odour control unit (ocu) performance monitoring (25/3/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.000	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.15; 0.12;012	0.8	yes
Thickening plant outlet	0.41; 0.39; 0.41	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.03	0.6	Yes

No further comment to add.



**London Borough  
of Hounslow**



**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	8 April 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3, 4, 5, 6 &amp; 7 were all in use, containing significant volumes of effluent. Tank 8 empty, except for hoppers, some full, some part-full.</p>	<p>We have needed to use the storm tanks to temporarily store the excess flows.</p> <p>Whenever possible, the tanks are emptied or flushed to keep any odours to an absolute minimum.</p>
<p><b>Odour monitors</b></p> <p>The odour readouts for H<sub>2</sub>S for the four monitors which were providing data at the time of inspection were all low:          Northside 0.001ppm          Central 0.007ppm          Southside 0.006ppm          Eastside 0.006ppm</p> <p>There were no readings available for the westside or southwest monitor at the time of inspection and the screen records indicated that three of the monitors may have lost functionality over several days beginning on the 30 March.</p> <p>The monitors which had detected peaks above 0.02ppm since the previous site inspection on the 30 March, and for which data was available at the time of inspection are detailed below:</p> <p>06/04/2010, the eastside monitor recorded a peak of approximately 0.09ppm</p>	<p>Site H<sub>2</sub>S odour trends were temporarily unavailable due to maintenance work being carried out on the system. During this time, site inspections were used to monitor odour levels. Readings are available for review on the system.</p> <p>On 30 March, 6 April and 7 April there were increases in hydrogen sulphide levels. This activity is most likely to be linked with the storm tanks being returned to the head of the works for processing.</p>



<p>at around 02am. A comment in the odour log says that strong odours were detected in an area around covered storm tanks 4 &amp; 5. 07/04/2010, the southside monitor recorded activity late in the afternoon, peaking at 0.022ppm at around 17.00 and 0.058ppm at around 17.30pm. An entry in the odour log recorded odour being reported by site staff from the powerhouse exhaust flue at around 17.30, together with some odour from an area between storm tanks 4&amp;5.</p> <p>07/04/2010, the eastside monitor recorded activity peaking at 0.047ppm at around 21.10.</p> <p>08/04/2010, the southside monitor recorded activity peaking at 0.037ppm at around 3.13am.</p> <p>Storm tanks 1-7 were in use on the 06/07 &amp; 08 April.</p>	<p>As mentioned in the previous report, we are currently in the process of investigating the spikes recorded by the south odour monitor. We believe exhaust emissions from the sites engines may be the cause of the increased activity as site inspections did not report any other source of odour at the time.</p>
<p><b>Sludge Dip Records</b></p> <p>08/4/2010 west side rectangular primary settlement tanks 821m3; west side circular primary settlement tanks 0m3; covered and odour controlled east side tanks 20,261m3. Site total 21,082m3</p> <p>This is compliant with the current OMP.</p>	<p>No comment to add.</p>
<p><b>Digesters</b></p> <p>There was no evidence of any gassing or spillages from any of the digesters.</p>	<p>No comment to add.</p>





<p><b>West side primary settlement tanks</b></p> <p>There was a considerable cover of inverted sludge on the surface of tank 15A.</p>	<p>Tank was inspected and the sludge removed as part of its normal operation. The tank was found to be functioning properly.</p>																																
<p><b>Storm Tank Logs.</b></p> <p>The daily storm tank log for the 08/4/2010 supported the council officer's observations.</p>	<p>No comment to add.</p>																																
<p><b>Odour control unit (ocu) performance monitoring (07/4/2010)</b></p> <p>This is the most recent set of data available.</p> <table border="1" data-bbox="190 874 1099 1283"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.000</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.11; 0.12;0.09</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.46; 0.46; 0.43</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>0.01</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.000	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.11; 0.12;0.09	0.8	yes	Thickening plant outlet	0.46; 0.46; 0.43	0.6	yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	0.01	0.6	Yes	<p>No comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																														
Main pumping station outlet	0.000	0.2	yes																														
East ocu	0.01	0.05	yes																														
West ocu	0.01	0.05	yes																														
Sludge reception outlet	0.11; 0.12;0.09	0.8	yes																														
Thickening plant outlet	0.46; 0.46; 0.43	0.6	yes																														
Pasteurisation plant outlet	Not operating		N/A																														
Transfer PS Outlet	0.01	0.6	Yes																														



**London Borough  
of Hounslow**



**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	15 April 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3, 4, 5, 6, 7 &amp; 8 were all in use. Most of the tanks contained significant volumes of effluent. The contents of Tank 1 were being returned to the works for treatment. Storm tanks 2A and 2B held significant quantities of sludge on the surface. The adjacent storm feed channel was static and also contained inverted sludge. There was noticeable on site odour in the area next to the storm tanks and feed channel. The condition of the tank and channel was discussed at the time.</p>	<p>We have needed to use the storm tanks to temporarily store the excess flows.</p> <p>Whenever possible, the storm channel and tanks are emptied or flushed to keep any odours to an absolute minimum.</p>
<p><b>Odour monitors</b></p> <p>The odour readouts (H2S) for five monitors which were providing data at the time of inspection were all low (&lt;trigger level)</p> <p>Northside 0.002ppm Westside 0.01ppm Central 0.009ppm Southside 0.014ppm Eastside 0.001ppm</p> <p>There were no readings available for the southwest monitor at the time of inspection and the screen data indicated that the southwest monitor was not operational.</p>	<p>The site's south west H2S odour read outs were temporarily unavailable due to maintenance work being carried out on the system. During this time, site inspections were used to monitor odour levels. Readings are available for review on the system</p>



<p>The monitors which had detected peaks above 0.02ppm (&gt;trigger level) since the previous site inspection on the 08 April, and for which data was available at the time of inspection are detailed below:</p> <p>08/04/2010, the eastside monitor recorded a peak of approximately 0.096ppm at around 23.54. A note in the odour log records gassing from digesters 5&amp;6.</p> <p>09/04/2010, the eastside monitor recorded activity peaking at 0.06 ppm at around 12.57.</p> <p>An entry in the odour log recorded odour reported by site staff from the storm tanks and that all tanks were full.</p> <p>For the period 11-15 April, all boundary monitors recorded low odour levels (&lt;trigger level), with the exception of the southside monitor which consistently and frequently recorded H2S at levels exceeding the trigger levels. Some examples are given:</p> <p>13/04/2010 0.1ppm at 20.50 14/04/2010 0.1ppm at 23.54 15/04/2010 0.077ppm at 9.27am</p> <p>These frequent elevated levels are a concern. Further investigation is required to determine whether there is any link between these levels and H2S concentrations in the power house exhaust gas emissions.</p> <p>Storm tanks were in use 11-15 April.</p>	<p>A site inspection showed that digesters 5 and 6 had shown some signs of gassing off. Adjustments were made to prevent any further gas from escaping.</p> <p>As noted, all of the storm tanks were in use at the time. There were no unusual activities taking place, therefore it is likely that the storm tanks may have contributed to the increased levels of hydrogen sulphide recorded by the odour monitor.</p> <p>We are currently in the process of investigating the spikes recorded by the south odour monitor. We believe exhaust emissions from the sites engines may be the cause of the increased activity as site inspections did not report any other source of odour at the time.</p>
<p><b>Sludge Dip Records</b></p> <p>15/4/2010 west side rectangular primary settlement tanks 1,711m<sup>3</sup>; west side circular primary settlement tanks 80m<sup>3</sup>; covered and odour controlled east side tanks 14,364m<sup>3</sup>. Site total 16,155m<sup>3</sup></p> <p>The measured sludge levels for the west side open PST's are not in breach of the OMP trigger levels.</p>	<p>No comment to add.</p>



<b>Digesters</b> There was no evidence of any gassing or spillages from any of the digesters.	No comment to add.
<b>West side primary settlement tanks (PST)</b> PST 13 had been drawn down earlier in the week and there was no effluent in the tank. The tanks walls and floor were clean.	No comment to add.
<b>Storm Tank Logs.</b> The daily storm tank log for the 15/4/2010 supported the council officer's observations.	No comment to add.
<b>Imported sludge</b> No imported sludge deliveries are presently being accepted at the site.	No comment to add.
<b>Pasteurisation Plant</b> The pasteurisation plant continues to be unused.	No comment to add.



<b>Odour control unit (ocu) performance monitoring (07/4/2010)</b>				No comment to add.
This is the most recent set of data available.				
Plant	Reading (ppm)	Action Level (ppm)*	Compliant	
Main pumping station outlet	0.000	0.2	yes	
East ocu	0.01	0.05	yes	
West ocu	0.01	0.05	yes	
Sludge reception outlet	0.11; 0.12;0.09	0.8	yes	
Thickening plant outlet	0.46; 0.46; 0.43	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.01	0.6	Yes	

**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	22 April 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3, 4, 5, 6, 7 &amp; 8 were all in use. Most of the tanks contained significant volumes of effluent. Storm tank slogs showed that there had been recent extensive use of the storm tanks ie. For the period 18,19, 20, 21 April, tanks 1-7 were in use each day.</p>	<p>Heavy rainfall before Easter created increased flow volumes into the works. High groundwater levels infiltrating into our sewer pipe network meant these larger flows did not subside for a long time. As a result of the weather, it didn't take long for the treatment process to reach its limit, meaning we needed to utilise all of the storm tanks. At the time, the volumes coming into the works were so high that we regrettably needed to discharge some sewage that had not been fully treated into the River Thames.</p> <p>Besides weather conditions, there have also been plant limitations on our full flow to treatment capabilities.</p> <p>Although our work on converting the old west side primary tanks will increase the full flow to treatment capacity, the improvements have meant a short term loss in the full flow to treatment capacity while the engineering works are carried out. We plan to put the final tanks into service very soon.</p> <p>We are currently carrying out work on our aeration lanes to improve the rate and efficiency with which we can push the settled sewage through this treatment stage. These improvements have also meant a short-term reduction in the full flow to treatment capacity.</p>



### **Odour monitors**

All six of the static boundary odour monitors were operating at the time of inspection.

The odour readouts (H<sub>2</sub>S) for these monitors which were providing data at the time of inspection were all low (<trigger level):

Northside 0.002ppm

Westside 0.007ppm

Central 0.009ppm

Southside 0.005ppm

Eastside 0.004ppm

Southwest 0.011ppm

The monitors which had detected peaks above 0.02ppm (>trigger level) since the previous site inspection on the 15 April, and for which data was available at the time of inspection are detailed below:

15/04/2010 the southside monitor recorded multiple spikes

16/04/2010 the southwest monitor recorded two significant peaks however it is thought that these are not true readings.

On the 17th and into the 18th, the eastside monitor recorded levels which peaked at 0.04ppm at approximately 0.04am. The odour log entry showed that the site was toured but there were no odours were found on site. Again on the 18th at around 16.49 the eastside monitor recorded H<sub>2</sub>S levels peaking at 0.04ppm.

On the 20/04/2010 the eastside monitor recorded a very high level which peaked at 0.096ppm at approximately 23.04. The entry in the odour log records "very high spike from the east monitor. No strong odours found". A lower peak earlier the same day around 18.04, also on the eastside monitor peaked at around 0.046ppm and the odour log records that this was attributed to odour from the storm tanks.

As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and the findings noted in the site odour log.

Recently there has been extensive use of the storm tanks. It is likely that the storm tanks may have contributed to the increased levels of hydrogen sulphide recorded by the odour monitor.

We have found a recent increase with the activity on the south side Boundary monitor. We have tasked one of our specialist monitoring contractors with investigating the activity.





<p>On the 21/04/2010 two monitors recorded significant activity. At 21.00 the southwest monitor record a peak of around 0.02 and the record made in the odour log reads “ odour on southwest, digester bell heights low, storm tanks returning”. The southside monitor peaked at 0.1ppm at around 18.00 and the southside monitor recorded a great deal of activity during the 21/04.</p> <p>In my last report from the 15/04 I raised the matter that the apparent frequent elevated levels being detected by the southside monitor are a concern. Further investigation is required to determine whether there is any link between these apparent levels and sulphur concentrations in the power house exhaust gas emissions.</p>	
<p><b>Sludge Dip Records</b></p> <p>22/4/2010 west side rectangular primary settlement tanks 2,838 m3; west side circular primary settlement tanks 110 m3; covered and odour controlled east side tanks 16,279m3. Site total 19,227 m3.</p> <p>The measured sludge levels for the west side open PST’s are not in breach of the OMP trigger levels.</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>Digester 11 was high and gassing audibly via the annular seal. There was a noticeable on site odour associated with the gassing.</p>	<p>Adjustments were made to digester no. 11 to prevent further ‘gassing off’.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>Further to the recent drain down of west side PST 13, hoppers to 13A &amp; B were full of odorous effluent.</p>	<p>The hoppers of no.13 PST were drawn down by pumping the same day.</p>



<p><b>Storm Tank Logs.</b></p> <p>The daily storm tank log for the 22/4/2010 supported the council officer's observations.</p>	<p>No further comment to add</p>
<p><b>Imported sludge</b></p> <p>No imported sludge deliveries are presently being accepted at the site</p>	<p>No further comment to add</p>
<p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be unused.</p>	<p>No further comment to add</p>
<p><b>Odour complaints</b></p> <p>Recent odour complaints for the 18,19,20,21 from Hillary Drive and Bankside Close on the 19th both of which lie on the east of the works, seem to be related to extensive use of the storm tanks.</p>	<p>No further comment to add</p>



<b>Odour control unit (ocu) performance monitoring (20/4/2010)</b>				<p>Odour Management Plant version 1.8 action level outlet values</p> <p>No further comment to add</p>
This is the most recent set of data available.				
Plant	Reading (ppm)	Action Level (ppm)*	Compliant	
Main pumping station outlet	0.000	0.2	yes	
East ocu	0.01	0.05	yes	
West ocu	0.01	0.05	yes	
Sludge reception outlet	0.14; 0.20;019	0.8	yes	
Thickening plant outlet	0.13; 0.16; 0.18	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.02	0.6	Yes	

**Michael Mehta**

Pollution Control, London Borough of Hounslow

These observations have been noted and, where practically possible, actions have been taken to address any issues

**Alan McEvilly**

Process Manager, Thames Water



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	29 April 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 4, 5, 6, &amp; 7 were all in use. Most of the tanks contained significant volumes of effluent. Tank 1 contained dark coloured effluent and was being emptied; the Amajets were operating and the churning action was causing odour noticeable around the tank. Tank 3 was empty excepting the hoppers which contained sludge causing an on site odour. Tank 8 was empty.</p>	<p>Work is continuing on the aeration lanes to improve the rate and efficiency with which we can push the settled sewage through this treatment stage. This is causing a short-term reduction in the full flow to treatment capacity which means that we need to use the storm tanks. The storm tanks are flushed and returned to the head of the works for processing, as often as possible.</p>
<p><b>Odour monitors</b></p> <p>All six of the static boundary odour monitors were operating at the time of inspection. The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level): Northside 0.007ppm Westside 0.004ppm Central 0.01ppm Southside 0.003ppm Eastside 0.007ppm Southwest 0.016ppm</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings are noted in the site odour log.</p> <p>The storm tanks are still being used and this may have contributed to the increased levels of hydrogen sulphide recorded by the odour monitor.</p>

<p>The monitors which had detected peaks above 0.02ppm (&gt;trigger level) since the previous site inspection on the 22 April, and for which data was available at the time of inspection are detailed below:</p> <p>15/04/2010 the southside monitor recorded multiple spikes</p> <p>16/04/2010 the southwest monitor recorded two significant peaks however it is thought that these are not true readings.</p> <p>On the 24<sup>th</sup> April, the southwest monitor recorded elevated H2S levels from approximately 4.25-6.13am. Also on the 24<sup>th</sup> April, the Westside monitor recorded multiple spikes peaking at 0.047ppm.</p> <p>On the 25<sup>th</sup> April, the eastside monitor recorded 0.09ppm as a maximum figure lasting for around 10 minutes at approximately 23.44. An entry in the odour log confirmed that 'storm tanks 6 &amp; 7 were smelly'</p> <p>On the 26<sup>th</sup> April, the southside monitor recorded a great deal of activity, with multiple breaches of the trigger level, spanning several hours from around 17.00-21.00.</p> <p>On the 27<sup>th</sup> April, the southside monitor recorded peaks breaching the trigger level at approximately 12.30 and 13.00.</p> <p>Late on the 27<sup>th</sup> April at approximately 23.29 and just after midnight on the 28<sup>th</sup> April, the eastside monitor peaked at around 0.05ppm. These lasted 10 and 12 minutes duration respectively.</p> <p>On the 29<sup>th</sup> April, for approximately 36 minutes, from 5.20-5.56am, the eastside monitor recorded a level exceeding the trigger level.</p> <p>An investigation is on going to determine whether there is any link between the continuing elevated levels recorded by the southside monitor and sulphur concentrations in the power house exhaust gas emissions.</p>	<p>Odour inspection carried out by site staff when trends developed, noted no odour.</p> <p>No odour detected on investigation walk round.</p> <p>No odour found on inspection of area.</p> <p>Storm tanks were being returned.</p> <p>The hydrogen sulphide activity is thought to be related to engine exhaust activity, investigation currently being carried out by a specialist monitoring contractor. On this occasion, there was no unusual odour detected by staff on the site investigation.</p> <p>As above</p> <p>At the time, the storm tanks were being returned to the head of the works for processing. This may have contributed to the increase of hydrogen sulphide.</p> <p>As above</p> <p>No further comment to add</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Sludge Dip Records</b></p> <p>Sludge dip measurements for the west side rectangular primary settlement tanks <b>exceeded the odour management plan trigger level</b> (3000m3), on the 23/04, 24/04, 25/04, 26/04 and 27/04.</p>	<p>Mogden has since reduced its sludge stocks to within trigger levels set out in the sites odour management plan.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of spillage to any of the digesters.</p>	<p>No further comment to add</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>Further to the recent drain down of west side PST 13, a total of 3 of the hoppers were full of effluent.</p>	<p>Tank has since been repaired and put in to service.</p>
<p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 4 of the converted tanks on the east side, now in use as final settlement tanks.</p>	<p>No further comment to add</p>
<p><b>Imported sludge</b></p> <p>No imported sludge deliveries are presently being accepted at the site</p>	<p>No further comment to add</p>

<p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be unused.</p>	<p>No further comment to add</p>																																
<p><b>Odour control unit (ocu) performance monitoring (28/4/2010)</b></p> <p>This is the most recent set of data available.</p> <table border="1" data-bbox="190 611 1099 1016"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.000</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.25; 0.19;0.20</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.19; 0.17; 0.18</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>0.08</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.000	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.25; 0.19;0.20	0.8	yes	Thickening plant outlet	0.19; 0.17; 0.18	0.6	yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	0.08	0.6	Yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																														
Main pumping station outlet	0.000	0.2	yes																														
East ocu	0.01	0.05	yes																														
West ocu	0.01	0.05	yes																														
Sludge reception outlet	0.25; 0.19;0.20	0.8	yes																														
Thickening plant outlet	0.19; 0.17; 0.18	0.6	yes																														
Pasteurisation plant outlet	Not operating		N/A																														
Transfer PS Outlet	0.08	0.6	Yes																														



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	7 May 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tanks 1, 2, 3 4, 5, 6, &amp; 7 were all in use. Most of the tanks did not contain volumes of effluent at capacity level. Tanks 1,2,3 &amp; 7 contained effluent actively being returned to the works for treatment. The Amajets were churning a small volume of effluent held in tank 7 and this action was causing noticeable odour in the immediate vicinity of the tank. Tank 8 was recently emptied, however the bottom of the tank was dirty and four of the hoppers were full of effluent.</p>	<p>Work is continuing on the aeration lanes to improve the rate and efficiency with which we can push the settled sewage through this treatment stage. This is causing a short-term reduction in the full flow to treatment capacity which means that we need to use the storm tanks.</p> <p>The storm tanks are being returned to the head of the works for processing and flushed to ensure they are clean when empty, as often as possible.</p>
<p><b>Odour monitors</b></p> <p>All six of the static boundary odour monitors were operating at the time of inspection.</p> <p>The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level): Northside 0.001ppm Westside 0.007ppm Central 0.009ppm Southside 0.007ppm Eastside 0.002ppm Southwest 0.011ppm</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>The storm tanks are still in use and this may have contributed to the increased levels of hydrogen sulphide recorded by the odour monitor.</p>



<p>Recent odour activity had been detected by several of the monitors. These had detected peaks above 0.02ppm (&gt;trigger level) on several occasions. These elevated readings had been noted in the written odour log, which was inspected at the time of the site visit.</p> <p>01/05/2010 the eastside monitor recorded activity, this was noted in the odour log and was linked to use of the storm water storage tanks during the day and night periods.</p> <p>02/05/2010 &amp; 03/05/2010 the *southside monitor recorded activity and multiple peaks. This activity was noted in the odour log.</p> <p>04/05/2010 the eastside monitor recorded activity and this was noted in the odour log and potentially linked to the return of effluent for processing from a storm water storage tank. Also on the 04/05/2010, a note in the odour log recorded that the *southside monitor was recording activity but no odours were found at the time.</p> <p>05/05/2010, there was eastside monitor activity and elevated readings recorded by the *southside monitor, during both day and night periods.</p> <p>06/05/2010 the northside monitor recorded an elevated reading, however an entry in the log showed that no strong odour was found at the time. On the same day, the southwest monitor recorded elevated levels and was potentially attributed to the pumping out of storm tanks.</p> <p>07/05/2010 the *southside monitor recorded elevated levels up to 0.04ppm</p> <p>An investigation is on going to determine whether there is any link between the continuing elevated levels recorded by the southside monitor and sulphur concentrations in the power house exhaust gas emissions.</p>	<p>Storm tanks were in use.</p> <p>The hydrogen sulphide spikes recorded by the south monitor are currently under investigation. On this occasion, there was no odour found on site.</p> <p>Storm tanks were in use at the time.</p> <p>No odour was found on site inspection.</p> <p>Storm tanks were in use at the time of the reading.</p> <p>No odour found on investigation.</p> <p>No further comment to add.</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Sludge Dip Records</b></p> <p>Sludge dip measurements for the west side rectangular primary settlement tanks <b>exceeded the odour management plan trigger level</b> (3000m<sup>3</sup>), on the 05/05 and 06/05. On the 07/05, the levels had reduced to 2,532m<sup>3</sup> for the west side rectangular tanks and 0m<sup>3</sup> for the west side circular tanks, and these levels are not in breach of the trigger levels.</p>	<p>No further comment to add.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of spillage(s) to any of the digesters.</p>	<p>No further comment to add.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>Further to the recent drain down of west side PST 13, and the repair of the scraper, this tank had been returned to operational service.</p>	<p>No further comment to add.</p>
<p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 4 of the converted tanks on the east side, now in use as final settlement tanks.</p>	<p>No further comment to add.</p>
<p><b>Imported sludge</b></p> <p>No imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p>	<p>No further comment to add.</p>

**Pasteurisation Plant**

The pasteurisation plant continues to be unused.

No further comment to add.

**Odour control unit (ocu) performance monitoring (05/5/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.000	0.2	yes
East ocu	0.01 (on re-test)	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.12; 0.11;0.11	0.8	yes
Thickening plant outlet	0.04; 0.058; 0.053	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.08	0.6	Yes

- Odour Management Plant version 1.8 action level outlet values

No further comment to add.



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	14 May 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p><b>There was a low volume of effluent being held across the 8 tanks and Thames had taken advantage of this favourable situation to commence undertaking a comprehensive clean down of tanks and hoppers.</b></p> <p>Tanks 1 was empty, high pressure hoses had been used for washing out the tanks earlier in the day. The hoppers to 1B were full of effluent including sludge. Tank 2 was empty and clean. Tank 3 was empty but the hoppers were full. Covered &amp; odour controlled tanks 4 &amp; 5 were full. Over-pumping was taking place to tank 6A, which was odorous and the adjacent storm water feed channel was also odorous. The hoppers to tank 8 contained sludge, which was highly odorous.</p>	<p>As per section 3.2 of the odour management plan; the storm tanks and hoppers are flushed and cleaned as soon as possible after their use.</p> <p>At the time of inspection two tanks were being hosed down and mobile pumps were being used to assist with their emptying. This work continued until all the storms tanks not in use were emptied and washed down.</p>
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The central monitor was not operating. The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level): Northside 0.004ppm Westside 0.008ppm Central NOT IN SERVICE</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log. The central odour, as noted at the time of the inspection, is currently away being recalibrated by the manufacturer. As soon as the monitor returns, it will be put back into service.</p>

Southside 0.01ppm  
Eastside 0.005ppm  
Southwest 0.009ppm

Recent odour activity had been detected by several of the monitors. These had detected peaks above 0.02ppm (>trigger level) on several occasions. These elevated readings had been noted in the written odour log, which was inspected at the time of the site visit.

08/05/2010 multiple spikes had been recorded on the southside monitor and an odour log entry read 'no odour found'. The westside monitor recorded notable elevated activity from around 8.10-8.50am peaking at around 0.042ppm. The odour log entry read 'west inlet ok, west primaries ok, de-sludge sequence finished'.

10/05/2010 multiple spikes had been recorded on the southside monitor. The westside monitor recorded a peak of around 0.063ppm at 20.30. An entry in the odour log read 'storm tanks smelling'.

11/05/2010 the westside monitor recorded a peak of around 0.053ppm at 19.40. There was no mention in the odour log.

12/05/2010 the westside monitor recorded a peak of around 0.065ppm at 7.55am. The entry in the odour log records that the site was toured and that no odours were found. The southwest monitor recorded significant odour activity from around 23.00-00.50am, with several spikes up to 0.01ppm.

The southside, westside and southwest monitors recorded activity >0.025ppm for a period extending from 19.00-02.55am. This activity was recorded in the odour log, the site was checked and it was reported as all OK.

An investigation has now been completed by *Pollution Monitors* to determine whether there is any link between the continuing elevated levels recorded by the southside monitor and sulphur concentrations in the powerhouse exhaust gas emissions. Awaiting a report.

When an increase in H<sub>2</sub>S levels is detected on site, the Operations Team try to determine a possible cause. Due to the large size of the site, the source may not always be easily identified at the time of the investigation; however, everything observed is noted in the odour log.

We are awaiting the results from our specialist contractors undertaking the stack emissions monitoring on our behalf. As soon as we receive and process these results, they will be forwarded to Hounslow Council.

<p><b>Sludge Dip Records 14/05/2010</b></p> <p>Sludge dip measurements recorded 890m<sup>3</sup> for the west side rectangular primary settlement tanks and 0m<sup>3</sup> for the west side circular tanks, and these levels are not in breach of the trigger levels.</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of recent spillage(s) from any of the digesters.</p>	<p>No further comment to add</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>Checked. No comment.</p>	<p>No further comment to add</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks. Pressure hoses were in use to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>The water hoses are being used to prevent any accumulation of surface solids as noted by LBH. This accumulation is not related to the mitigation of odour.</p>

**Odour control unit (ocu) performance monitoring (05/5/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	.013; .016; .017	0.2	yes
East ocu	0.02	0.05	yes
West ocu	0.03	0.05	yes
Sludge reception outlet	0.12; 0.20;0.22	0.8	yes
Thickening plant outlet	0.15; 0.15; 0.15	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.02	0.6	Yes

- Odour Management Plant version 1.8 action level outlet values

No further comment to add





**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	20 May 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tank 1B was in use. Tank 2 was empty although the hoppers were full. Tanks 3, 4 &amp; 5 were in use. Tank 6B was being actively hosed down to remove settled sludge from the tank bottom. Tank 7 was in use. Tank 8B over pumping of hoppers was in progress and the hoppers to tank 8A were full.</p> <p>The storm water tank daily log recorded that washing was in progress to tanks 2-7 and that tank 8 was out of service.</p>	<p>As per section 3.2 of the odour management plan; the storm tanks and hoppers are flushed and cleaned as soon as possible after their use. At the time of inspection Tank 6B was being hosed down, to clear some settled sludge left on the base after it had been emptied. A mobile pump was being used to pump the water from the hoppers of Tank 8. This work continued until the cleaning was completed.</p>
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The central monitor was unavailable. The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level):</p> <p>Northside 0.0023ppm Westside 0.0016ppm Central NOT IN SERVICE Southside 0.003ppm Eastside 0.0002ppm Southwest 0.001ppm</p> <p>Broadly speaking, odour levels have remained low (&lt;trigger level) since the</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>As noted by Hounslow Council; the activity recorded on 17 May by the</p>

<p>14 May, the date of the previous site inspection. The odour records showed that the trigger level had been exceeded on the 17 May, when the westside monitor recorded a maximum value of 0.095ppm during the period 20.57-21.27. This Westside H2S activity had been noted and the odour log entry read "no odours detected on site".</p> <p>The monitor y axis scale has now been modified to show the <b>revised trigger level of 0.015ppm.</b></p>	<p>Westside monitor lasted for 30 mins. An investigation was carried out at this time; however, the Operations Team could not attribute the activity to any issues on site.</p>
<p><b>Sludge Dip Records 20/05/2010</b> Sludge dip measurements recorded 960m<sup>3</sup> for the west side rectangular primary settlement tanks and 0m<sup>3</sup> for the west side circular tanks. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters.</p>	<p>No further comment to add</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>Much of the surface (estimated 70%) of the effluent held in Tank 15A was covered in sludge. This was causing on-site odour. This was discussed at the time and action was agreed with Thames Water. The agreed action involved a manual scrape and use of sludge pumps.</p>	<p>A manual scrape was carried out the same day by the Operations team which removed all of the sludge on the surface of the tank.</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent + mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks. Pressure hoses continue to be used to break up surface scum.</p>	<p>No further comment to add</p>

<p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment to add</p> <p>No further comment to add</p>																																
<p><b>Odour control unit (ocu) performance monitoring (05/5/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 671 1099 1117"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0; 0.0; 0.00</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.02</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.14; 0.16;0.16</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.17; 0.16; 0.17</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>0.14</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.02	0.05	yes	Sludge reception outlet	0.14; 0.16;0.16	0.8	yes	Thickening plant outlet	0.17; 0.16; 0.17	0.6	yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	0.14	0.6	Yes	<p>* Odour Management Plant version 1.8 action level outlet values</p> <p>No further comment to add</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																														
Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes																														
East ocu	0.01	0.05	yes																														
West ocu	0.02	0.05	yes																														
Sludge reception outlet	0.14; 0.16;0.16	0.8	yes																														
Thickening plant outlet	0.17; 0.16; 0.17	0.6	yes																														
Pasteurisation plant outlet	Not operating		N/A																														
Transfer PS Outlet	0.14	0.6	Yes																														



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	27 May 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tank 1 empty and hoppers satisfactory. Tank 2 was empty although three of the hoppers were full. Tank 3 contained some effluent and the amajets were in use. Covered tanks 4 &amp; 5 were in use. Tank 6A contained a small volume of effluent and 6B was empty. Tank 7A was empty [sand and grit had accumulated on the bottom of the tank but was not odorous]. Tank 7B was being hosed down using a high pressure hose from the back of the tank. Tank 8 was empty; two hoppers were full.</p>	<p>As per section 3.2 of the odour management plan; the storm tanks and hoppers are flushed, cleaned and inspected as soon as possible after their use to ensure continued successful operation of site plant.</p>
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The southwest monitor was unavailable. The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level):          Northside 0.002ppm          Westside 0.0055ppm          Central 0.0046          Southside 0.002ppm          Southwest Temporarily out of service</p> <p>Over the past four days, the westside monitor has been recording a great deal of H2S activity. Much of this would appear to be linked to the accumulation of inverted sludge in uncovered primary settlement tank 15</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>The west odour monitor has been located roughly 2 metres away from the Primary settlement tanks. The relocation took place due to planned construction work in the previous location of the unit. The new location is not</p>

which lies on the west side of the works and the subsequent draining down of the tank.

The following is not an exhaustive list of all the westside peaks exceeding the trigger level but the examples illustrate the extent of the H<sub>2</sub>S being recorded by this boundary monitor.

On the 22 May the westside recorded a peak level of 0.07ppm at 2.54am.

On the 23 May the westside recorded multiple spikes, peaking at 0.06ppm at 9.00am. Also on the 23 May, the eastside monitor recorded a peak of 0.06ppm during a 10 minute period 19.59-20.09. The odour log recorded a complaint being made from Weavers Close.

On the 24 May the westside monitor recorded activity. PST 15 was being pumped out. This was recorded in the odour log.

On the 25 May am, the odour log entry recorded the 'west monitor showing spikes' and that '15 PST and no 1 SWST were being washed down'. On the afternoon of the 25 May, the log recorded that PST 15 was considered smelly. The westside monitor recorded levels >trigger level from 22.02-22.42 and a peak value of 0.06ppm at 22.12.

On the 26 May, the westside again showed significant activity >trigger level. The odour log entry recorded that there was odour on site from the west inlet, cross flow grit trap was being cleaned out and cleaning of storm tanks. There was a continuous period 4.18-5.28 when the trigger level was exceeded. At 4.28am the westside monitor peaked at 0.043ppm.

From the 26 May and into the 27 May, the Westside monitor was active with multiple spikes. All were <20 minutes duration and one peak reached 0.029m<sup>3</sup>.

The monitor y axis scale has now been modified to show the **revised trigger level of 0.015ppm.**

a true representation of fugitive emissions leaving the site's boundary, due to its close proximity to the PSTs. Relocation of the unit will be scheduled.

Please see note above re: west monitor. All spikes on the monitors are followed up with a site inspection.

<p><b>Sludge Dip Records 27/05/2010</b>  Sludge dip measurements recorded 70m<sup>3</sup> in the west side rectangular primary settlement tanks and 0m<sup>3</sup> in the west side circular tanks. The site total is 16,711m<sup>3</sup>. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment to add</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>The previous site inspection on the 20 May, noted that much of the surface (estimated 70%) of the effluent held in Tank 15A was covered in sludge, which was causing on-site odour. This tank had been subsequently emptied and taken out of service. <b>One of the hoppers to tank 15 was full of highly odorous sludge.</b>  The remaining tanks were in a satisfactory condition.</p>	<p>Removal of the sludge from hopper 15 was carried out by tanker to complete the cleaning operation. A daily review of area was carried out, to ensure there were no more issues.</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p>	<p>No further comment to add</p> <p>No further comment to add</p>

<p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>				<p>No further comment to add</p>																																
<p><b>Odour control unit (ocu) performance monitoring (26/5/2010)</b> This is the most recent set of data available.</p> <table border="1"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0; 0.0; 0.00</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.03</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.15; 0.15;0.16</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.17; 0.17; 0.17</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>To be advised</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>				Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes	East ocu	0.03	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.15; 0.15;0.16	0.8	yes	Thickening plant outlet	0.17; 0.17; 0.17	0.6	yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	To be advised	0.6	Yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																																	
Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes																																	
East ocu	0.03	0.05	yes																																	
West ocu	0.01	0.05	yes																																	
Sludge reception outlet	0.15; 0.15;0.16	0.8	yes																																	
Thickening plant outlet	0.17; 0.17; 0.17	0.6	yes																																	
Pasteurisation plant outlet	Not operating		N/A																																	
Transfer PS Outlet	To be advised	0.6	Yes																																	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	4 June 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1 empty, clean, dry very low levels in hoppers. Low levels in storm feed channel. Tank 2 was empty however two hoppers in 2A were full of sludge and one hopper in tank 2B.</p> <p>On site odour arising from these hoppers was very apparent. One hopper to tank 3A was full of sludge and odorous and two hoppers to 3 were full of sludge.</p> <p>Operatives were employed in 3B working on the Amajet.</p> <p>SWSTs 4&amp;5 were in use.</p> <p>SWST 6A was being actively overpumped into the storm feed channel.</p> <p>SWST 7 was satisfactory</p> <p>SWST 8 was empty. 8B hoppers were empty. 8A hoppers were full but not odorous.</p> <p><b>It was agreed that hoppers filled with sludge should receive priority attention.</b></p>	<p>As noted by LBH, work was being carried out on tank 3B's amajets and this work was completed the following day.</p> <p>The work continued washing and emptying the storm tank hoppers.</p>
<p><b>Odour monitors</b></p> <p>Four of the static boundary odour monitors were operating at the time of inspection. The southwest and eastside monitors were unavailable.</p> <p>The odour readouts (H2S) for these monitors which were providing data at the time of inspection were all low (&lt;trigger level):</p> <p>Northside 0.007ppm Westside 0.008ppm Central 0.0099</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p>



<p>Southside 0.005ppm</p> <p>Over the preceding six days, the westside monitor has been recording a great deal of H<sub>2</sub>S activity.</p> <p>The following is not an exhaustive list of all the westside peaks exceeding the trigger level but the examples illustrate the extent of the H<sub>2</sub>S being recorded by this boundary monitor.</p> <p>On the 28 May the central monitor recorded a peak level of 0.035ppm during the period 16.07-16.17.</p> <p>On the 29 May the central monitor recorded an exceedence of the trigger level, over the period 8.15-8.35am, peaking at 0.0266ppm. The log showed that no odours were detected on site. On the 31 May, there was significant activity recorded by the Westside monitor, peaking at 0.095ppm at 20.35. On the 01 June, the Westside monitor recorded activity. On the 02 June, the Westside recorded activity.</p> <p>The Westside monitor continued to record activity on the 03 and 04 June. The monitor recorded a peak value of 0.0709 ppm at 8.52am on the 04 June. The Westside monitor activity has been noted in the odour log but "no odour was detected on site".</p>	<p>As discussed in last week's report, the west monitor has been moved as part of the extension project and the new location is causing spiking even when no odour can be detected by olfactory testing in the vicinity of the monitor. Therefore the decision has been taken to move the monitor again, as currently the data it is providing is unrepresentative of odour levels leaving the site boundary.</p> <p>No odour was detected on the site inspection.</p> <p>Please see note above re: west monitor.</p> <p>There was a bonfire in a garden backing the works in the afternoon/evening of Monday 31 May, which caused the spike on the west monitor, no sewage odour was detected on the site tour, only smoke.</p> <p>Please see note above re: west monitor.</p>
<p><b>Sludge Dip Records 04/06/2010</b></p> <p>Sludge dip measurements recorded 0m<sup>3</sup> in the west side rectangular primary settlement tanks and 0m<sup>3</sup> in the west side circular tanks. The site total was 14,831m<sup>3</sup>. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment to add</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>We are continuing to proactively administer anti-foaming agent to the annular seal of the digesters to reduce the likelihood of foaming.</p>

<p><b>West side primary settlement tanks (PST)</b></p> <p>PST 15 had been returned to operational use and all tanks were in a satisfactory condition.</p>	<p>PST 15 was successfully repaired and returned to service as noted by LBH.</p>																				
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment to add</p> <p>No further comment to add</p> <p>No further comment to add</p>																				
<p><b>Odour control unit (ocu) performance monitoring (03/6/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1077 1097 1324"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0; 0.0; 0.00</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.15; 0.18;0.18</td> <td>0.8</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.15; 0.18;0.18	0.8	yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																		
Main pumping station outlet	0.0; 0.0; 0.00	0.2	yes																		
East ocu	0.01	0.05	yes																		
West ocu	0.01	0.05	yes																		
Sludge reception outlet	0.15; 0.18;0.18	0.8	yes																		

Thickening plant outlet	0.22; 0.24; 0.26	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.038	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	11 June 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tank 1 empty, clean &amp; dry. 'ABS' tanker on site and actively over-pumping effluent from tank hopper. Draw down using this method appeared to be very effective. No odour noted at time of visit. One hopper to tank 2A, was full of sludge. Tank 3 empty, clean &amp; dry. Over-pumping from hopper to tank 4 was in progress. Tank 5 in service. Middle hopper to tank 6A full of sludge. Tank 7 empty, some non-odorous effluent present in hoppers. Tank 8 empty; hoppers full of non-odorous effluent.</p> <p><b>It was agreed that hoppers filled with sludge should receive priority attention, by means of pumping out sludge using the on-site tanker.</b></p>	<p>Hopper cleaning on the storm tanks was carried out in the agreed sequence and method as discussed with LBH.</p>
<p><b>Odour monitors</b></p> <p>Four of the static boundary odour monitors were operating at the time of inspection. The southwest and eastside monitors were unavailable. The odour readouts (H2S) for three of these monitors which were providing data at the time of inspection were low (&lt;trigger level), the exception being</p>	<p>The southwest monitor has been moved to become one of 8 monitors placed around the digesters to monitor odour, as part of the section 106 agreement. The east monitor has been scheduled for recalibration by an engineer and until the monitor is up and running again, site staff are carrying out site</p>

<p>the westside monitor:  Northside 0.0021ppm  Westside 0.024ppm  Central 0.0058ppm  Southside 0.0052ppm</p> <p>Acting on the westside monitor elevated reading, LBH + Thames Water officers patrolled the area around the monitor and noted odour from the west side primary settlement tanks (pst), specifically from the weiring action at the back of the tanks. The westside monitor is presently positioned approximately 10 metres from the uncovered primary settlement tanks. It is therefore unsurprising that the westside monitor is recording elevated levels eg. On the 04 June, the westside monitor recorded considerable activity and at 0.43am peaked at around 0.1ppm. The odour log entry reads 'no odours on site'.</p> <p>On the 09 June, the westside monitor recorded multiple spikes and the entry in the odour log reads 'west odour spiking –area toured, no odours'.</p> <p>On the 10 June, the westside monitor recorded odour activity from primary settlement tank 15. An extra scrape was undertaken to 15A and consequent de-sludge. Also on the 10 June, the southside monitor recorded multiple spikes up to 0.09ppm.</p> <p>On the 11 June, the westside again recorded multiple spikes from 5.50-10am, with much of this &gt;trigger level.</p>	<p>inspections of the area, to monitor odour activity and reporting this in the site odour log, for inspection by the LBH.</p> <p>As noted by LBH, the new location of the west monitor is not providing a true representation of odour near the site boundary. Therefore we will be moving the monitor to a more suitable location at the end of July 2010, as agreed with LBH.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log. All activity on the west and south monitors was followed up with an inspection by site staff and no odour was detected, except on 10 June when a scrape failed on PST15A, as noted by LBH.</p>
<p><b>Sludge Dip Records</b></p> <p>Sludge dip measurements recorded 0m3 in the west side rectangular primary settlement tanks and 80m3 in the west side circular tanks. The site total was 8,395m3. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment to add.</p>

<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment to add.</p>								
<p><b>West side primary settlement tanks (PST)</b></p> <p>An additional manual scrape was in progress to PST 15A. Tanks were in a satisfactory condition.</p>	<p>No further comment to add.</p>								
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Around 10 daily imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment to add.</p> <p>No further comment to add.</p> <p>No further comment to add.</p>								
<p><b>Odour control unit (ocu) performance monitoring (05/5/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1289 1099 1324"> <thead> <tr> <th data-bbox="190 1289 595 1324">Plant</th> <th data-bbox="595 1289 741 1324">Reading</th> <th data-bbox="741 1289 938 1324">Action Level</th> <th data-bbox="938 1289 1099 1324">Compliant</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Plant	Reading	Action Level	Compliant					<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add.</p>
Plant	Reading	Action Level	Compliant						

	(ppm)	(ppm)*	
Main pumping station outlet	0.001; 0.0; 0.0	0.2	yes
East ocu	0.03	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.12; 0.15;0.17	0.8	yes
Thickening plant outlet	0.098; 0.21; 0.21	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.034	0.6	Yes



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	14 June 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Tanks</b></p> <p>Tank 1 empty, clean &amp; dry. Hoppers empty. Effluent in Tank 2A being sucked out using mobile pump and decanting into storm feed channel. 'ABS' tanker also discharging effluent to storm feed channel. Two hoppers in tank 3 full of effluent. Tank 4A/B empty, operatives working on Amajets. Tank 5 in use. Tank 6A/B empty; one hopper to tank 6A requires emptying. Tank 7 empty. Tank 8 empty; three hoppers full of non-odorous effluent. One mobile pump in situ.</p>	<p>Hopper cleaning on the storm tanks was carried out in the agreed sequence and method as discussed with LBH.</p>
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The southwest monitor is unavailable. The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level). Northside 0.0031ppm Westside 0.014ppm</p>	<p>The southwest monitor has been moved to become one of 8 monitors placed around the digesters to monitor odour, as part of the section 106 agreement.</p>



<p>Central 0.0079ppm          Southside 0.0035ppm          Eastside 0.002ppm</p> <p>Since the last site inspection on the 11 June, the boundary monitors had recorded levels below the trigger level (0.015ppm), except for some excursions recorded on the 12 June by the southside monitor up to 0.03ppmm and the westside monitor on the 12 June peaking at approximately 0.086ppm at 18.41 and peaking at 0.088ppm at 8.30am on the 14 June.</p> <p>The high readings which continue to be recorded by the westside monitor would seem to reflect the recent re-positioning of this monitor close to the bank of west side primary settlement tanks, which are uncovered and do not benefit from any odour capture.</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log. When reviewing the activity on the south monitor, it was noted by site staff that no odour was noticed in the area when inspected.</p> <p>As noted by LBH, the new location of the west monitor is not providing a true representation of odour near the site boundary. Therefore we will be moving the monitor to a more suitable location at the end of July 2010, as agreed with LBH.</p>
<p><b>Sludge Dip Records</b></p> <p>Sludge dip measurements recorded 2,532m3 in the west side rectangular primary settlement tanks and 60m3 in the west side circular tanks. The site total was 6,154m3. These levels are not in breach of the OMP trigger levels..</p>	<p>No further comment to add.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment to add.</p>

<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment to add.</p>																				
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Around 10 daily imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment to add.</p> <p>No further comment to add.</p> <p>No further comment to add.</p>																				
<p><b>Odour control unit (ocu) performance monitoring (05/5/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1114 1099 1332"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.001; 0.0; 0.0</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.03</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.12;</td> <td>0.8</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.001; 0.0; 0.0	0.2	yes	East ocu	0.03	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.12;	0.8	yes	<ul style="list-style-type: none"> <li>• Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																		
Main pumping station outlet	0.001; 0.0; 0.0	0.2	yes																		
East ocu	0.03	0.05	yes																		
West ocu	0.01	0.05	yes																		
Sludge reception outlet	0.12;	0.8	yes																		

	0.15;0.17			
Thickening plant outlet	0.098; 0.21; 0.21	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.034	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	24 June 2010	
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager	
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>	
<p><b>Storm Water Tanks</b></p> <p>Tank 1 empty, clean &amp; dry. All hoppers drained of effluent.            Tank 2 empty, some non-odorous dried sludge on bottom of tank. Hoppers to 2B full and require emptying. All hoppers to 2A empty.            Tank 3 empty, clean &amp; dry. 3A hoppers being pumped out and contents returned to storm feed channel. Some on site odour associated with this activity. 3B hoppers contain effluent, no odour at time of inspection.            First-fill storm tanks 4&amp;5 in use.            Tank 6 empty, clean &amp; dry. Very low level of effluent in hoppers.            Tank 7 empty, clean &amp; dry. 7A &amp; 7B small volume of non-odorous effluent in hoppers.            Tank 8 empty, clean &amp; dry; hoppers full, mainly consisting of groundwater from seepage into the tank. No odour.</p>	<p>Hopper cleaning on the storm tanks was carried out in the agreed sequence and method as discussed with LBH.</p>	
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The southwest monitor is unavailable.            The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level .015ppm).            Northside 0.0016ppm</p>	<p>The southwest monitor has been moved to become one of 8 monitors placed around the digesters to monitor odour, as part of the section 106 agreement.</p>	

<p>Westside 0.0002ppm  Central 0.0058ppm  Southside 0.005ppm  Eastside 0.002ppm</p> <p>16 June, loss of functionality to southside monitor.  16-19 June all readings for operational monitors &lt;trigger level.  20 June the central monitor recorded an exceedence of the trigger level lasting approximately 10 minutes and peaking at around 0.03ppm.  20 June loss of functionality to eastside monitor  21 June, all monitors recording levels below trigger level. Loss of functionality to eastside monitor.  23 June all monitors &lt; trigger level, except for northside monitor peaking at 0.024ppm at 4.17am</p> <p>Southside monitor functionality restored on 24 June. Eastside monitor not functioning.</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>The eastside monitor is with the engineer for recalibration.</p>
<p><b>Sludge Dip Records</b></p> <p>Sludge dip measurements recorded 515m<sup>3</sup> in the west side rectangular primary settlement tanks and 20m<sup>3</sup> in the west side circular tanks. The site total was 5,954m<sup>3</sup>. These levels are not in breach of the odour management plan (OMP) trigger levels.</p>	<p>No further comment to add.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment to add.</p>

<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition, except for 13A where a small area of inverted sludge was floating on the surface.</p>	<p>The small area of inverted sludge was cleared during the next automatic surface scrap the same day.</p>																				
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>In light of the low sludge levels held across the site, daily imported sludge deliveries have been revised upwards to 12 deliveries a day.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment to add.</p> <p>No further comment to add.</p> <p>No further comment to add.</p>																				
<p><b>Odour control unit (ocu) performance monitoring (05/5/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1114 1097 1327"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0; 0.0; 0.0</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.17;</td> <td>0.8</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0; 0.0; 0.0	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.17;	0.8	yes	<ul style="list-style-type: none"> <li>• Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																		
Main pumping station outlet	0.0; 0.0; 0.0	0.2	yes																		
East ocu	0.01	0.05	yes																		
West ocu	0.01	0.05	yes																		
Sludge reception outlet	0.17;	0.8	yes																		

	0.11; 0.18			
Thickening plant outlet	0.63; 0.58; 0.57	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.035 #	0.6	Yes	
# Portable Jerome measurement				



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	01 July 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1 empty, clean &amp; dry. All hoppers drained of effluent.            Tank 2 empty. Tanker being used to pump out effluent from hopper in tank 2B. Mobile pump being used to pump out hoppers to tank 3 and effluent was being returned to the storm feed channel. Turbulence created by this activity was causing noticeable on-site unpleasant odour. First-fill storm tanks 4 &amp; 5 in use.            Tank 6A &amp; 6B, tanks 7A &amp; 7B &amp; tanks 8A &amp; B were all empty, clean &amp; dry.</p>	<p>This activity was completed that day and is essential to prevent any odour arising from the hoppers when out of service.</p>
<p><b>Odour monitors</b></p> <p>Four of the static boundary odour monitors were operating at the time of inspection. The southwest monitor is unavailable, as it is presently being relocated and included in a separate 'ring' of sludge gas monitors around the digesters.</p> <p>The odour readouts (H2S) for those monitors which were providing data at the time of inspection were low (&lt;trigger level .015ppm).            Northside 0.0028ppm            Westside 0.0002ppm            Central 0.0046ppm            Southside 0.004ppm            Eastside out of service</p>	<p>The west monitor has been decommissioned pending its move a more suitable location at the end of July 2010, as agreed with LBH.</p>



<p>Odour complaints have been received recently and details of these have been compared with H2S levels recorded by the static monitors, together with entries recorded in the site odour log.</p> <p>22-25 June, all odour readings &lt;0.015ppm trigger level.  On 26 June a resident reported odour in Whitton Dene at 22.15. All monitors showed low levels including the southside 0.005ppm  On the 27 June the northside monitor peaked at 0.03ppm for approximately 20 minutes 3.37-3.57am. The odour log entry recorded this exceedence of the trigger level 'small spikes on north monitor but no strong odours detected on site'.  The northside monitor also recorded a small excursion at around 06.00am reaching 0.017ppm and exceeding the trigger level for approximately 10 minutes.  On the 28 June, an entry in the odour log noted a call received from a resident of Weavers Close at 3.45am. The northside monitor recorded a peak of around 0.027ppm and the trigger level was exceeded for approximately one hour from 2.47-3.47am. After one hour the level fell to a very low level (0.0044ppm at 4.07am). The condition of a storm feed channel was identified as being a possible cause and the contents of the storm channel was flushed into covered storm water storage tank 4.  This odour complaint is supported by the data recorded by the northside boundary odour monitor.  Also on the 28 June, the southside boundary monitor recorded one short duration exceedence of the trigger level, peaking at 0.02ppm at around 22.27.</p> <p>Two complaints were made on the 29 June. One concerned odour in Weavers Close (18.45), the other in Worton Road (19.15).  At around 18.47 on this day, the boundary monitors recorded levels as follows: northside 0.007ppm; Westside 0.002ppm, central 0.007ppm and the eastside 0.0001ppm. At 19.15, the monitor levels were also low and did not exceed the trigger level.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level and/or complaints made by residents are investigated and the findings written in the site odour log, as noted by LBH. The odour complaints have been responded to via email with the findings.</p> <p>The required action was promptly carried out.</p> <p>No further comment.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Sludge Dip Records 01/07/2010</b></p> <p>Sludge dip measurements recorded 3,283m<sup>3</sup> in the west side rectangular primary settlement tanks (PSTs) and 110m<sup>3</sup> in the west side circular tanks. The site total was 11,346m<sup>3</sup>. The level measured in the west side rectangular PSTs exceeded the odour management plan trigger level (3000m<sup>3</sup>).</p>	<p>The following day the sludge level returned below the trigger level. The situation is being monitored.</p>
<p><b>Digesters</b></p> <p>Digester 20 was gassing via the annular seal and the odour was noticeable in the vicinity of the digester. The bell height was high and this matter was raised with Thames at the time of inspection.</p>	<p>Adjustments were made to reduce the likelihood of further 'gassing'.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition, except for one of the circular tanks which unusually, exhibited a small area of inverted sludge floating on the surface.</p>	<p>This small amount of surface sludge was cleared during the next rotation of the scraper on the tank.</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>Daily imported sludge deliveries have been revised upwards.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment.</p>

**Odour control unit (ocu) performance monitoring (30/6/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.0 average	0.2	yes
East ocu	0.00#	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.32 average	0.8	yes
Thickening plant outlet	0.26	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.033 #	0.6	Yes

- Odour Management Plant version 1.8 action level outlet values

No further comment.

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	08 July 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1, 2, 3,6,7 &amp; 8 empty, clean &amp; dry. All hoppers drained of effluent. Covered &amp; odour controlled tank 4 empty. Covered &amp; odour controlled tank 5 in use. No odour observed in the vicinity of storm tanks, or storm feed channels.</p>	No further comment.
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The monitor, previously designated as the southwest boundary monitor, is now operating as one of the eight new additional monitors, designated as sludge gas monitors.</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level .015ppm). Northside 0.0049ppm Westside 0.0002ppm Central 0.0038ppm Southside 0.0044ppm Eastside 0.002ppm</p> <p>I am aware that complaints of odour have been made by residents and</p>	The west monitor has been decommissioned pending its move a more suitable location at the end of July 2010, as agreed with LBH.

forwarded by MRAG, citing the following dates: 02-05 July, 05 July (Varsity Drive) & 06 July (Isleworth).

The boundary monitors recorded H<sub>2</sub>S concentrations below 0.015ppm (trigger level) for the period 01-03 July. An entry in the site odour log recorded a complaint made by a resident of Weavers Close at 21.00 on the 02 July. The log records that in response to this, the site was toured, areas were good and all skips covered.

On the 04 July the eastside monitor recorded an exceedence of the trigger level, of 10 minutes duration 13.26-13.36, peaking at approximately 0.02ppm. On the 05 July, only the southside monitor exceeded the trigger level. The monitor recorded several occasions including 16.16-16.26, peaking at approximately 0.02ppm. At 14.42 a resident of Varsity Drive complained of odour. Varsity Drive lies to the south of the site. The monitor data supports the resident's complaint.

For the 06-08 July, all boundary monitors recorded H<sub>2</sub>S levels which did not exceed the trigger level. On the 06 July at 05.00am, a complaint was made of odour at a non-specific location in Isleworth.

#### New sludge gas monitors 6-13

These recently installed monitors located on the south of the site, provided the following readings at the time of the site inspection:

6-0.0000 ppm  
7-0.001 ppm  
9-0.004 ppm  
10-0.001 ppm  
11-0.005 ppm  
12-0.000 ppm  
13-0.001 ppm

None of these readings exceed the trigger level.

As per section 3.4.1 of the odour management plan, any activity detected above the trigger level and/or complaints made by residents are investigated and the findings written in the site odour log, as noted by LBH. The odour complaints have been responded to via email with the findings.

The peak on the odour monitor coincided with the start-up of one of our combine heat and power (CHP) engines, used for converting biogas into green electricity.

No further comment.

<p><b>Sludge Dip Records 24/06/2010</b></p> <p>Sludge dip measurements recorded 140m<sup>3</sup> in the west side rectangular primary settlement tanks and 0m<sup>3</sup> in the west side circular tanks. The site total was 8,093m<sup>3</sup>. These levels are not in breach of the odour management plan (OMP) trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition. There was noticeable on-site odour to the western end of these tanks.</p>	<p>No further comment.</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p><b>Imported sludge</b></p> <p>In light of the low sludge levels held across the site, daily imported sludge deliveries have been revised upwards to between 12-15.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>The situation is being monitored.</p> <p>No further comment.</p>

**Odour control unit (ocu) performance monitoring (07/7/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.0 Average	0.2	yes
East ocu	0.04	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.14 Average	0.8	yes
Thickening plant outlet	0.36 Average	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.044 #	0.6	Yes

- Odour Management Plant version 1.8 action level outlet values

No further comment.

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	12 July 2010
<b>Attendees</b>	Cllr Corinna Smart and Gerry McCarthy, LB Hounslow Process Manager, Operational Plant Manager and Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1, 2, 3,6,7 &amp; 8 empty, clean &amp; dry. The hoppers to tank 7b and 8a were being over pumped. The hoppers to tank 7a had been over pumped Covered &amp; odour controlled tanks 4 and 5 were in use with tank 5 being emptied. No odour observed in the vicinity of storm tanks, or storm feed channels.</p>	<p>Over pumping was carried out with clean final effluent water and the task was completed that day.</p>
<p><b>Odour monitors</b></p> <p>It was not possible to view the odour traces for the previous three days due to server problems</p> <p>There was one large spike up to 0.09ppm on the north side monitor on 8<sup>th</sup> July, which lasted from 17.53 to 18.14 approximately, and the odour log showed that when the site was inspected no cause for the odour spike was identified.</p> <p>The odour log showed that there were no problems identified on 9/7/2010 either am or pm.</p> <p>On 10/7/2010 am the odour log showed that there was one small spike on the north side monitor but when the area was inspected no source was identified as being responsible for the cause of the spike.</p>	<p>Unfortunately the data is unrecoverable due to a server failure.</p> <p>Due to the size of the spike and that no odour was detected in the area on our site inspection, we suspect the north monitor malfunctioned.</p> <p>No further comment.</p>



<p>On 11/7/2010 the log showed that there were no problems identified either am or pm and an inspection of the site was undertaken pm.</p> <p>The odour readouts (H2S) for the eight additional monitors all of which were providing data at the time of inspection 11.28 approximately were low (&lt;trigger level .002ppm).</p> <p>Monitor 6 -0.005 ppm  Monitor 7 -0.003 ppm  Monitor 9 -0.007 ppm  Monitor 10-0.002 ppm  Monitor 11 -0.006 ppm  Monitor 12 -0.002 ppm  Monotor13-0.003 ppm</p> <p>None of these readings exceed the existing trigger level.</p>	<p>No further comment.</p>
<p><b>Sludge Dip Records</b>  12/7/2010 W 1125m<sup>3</sup> and E6143m<sup>3</sup> = 7268m<sup>3</sup>  09/7/2010 W 1032m<sup>3</sup> and E6867m<sup>3</sup> = 7899m<sup>3</sup>  08/7/2010 W 140m<sup>3</sup> and E7953m<sup>3</sup> = 8093m<sup>3</sup></p> <p>These levels are not in breach of the current odour management plan (OMP) trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. TW advised that anti-foaming agent continues to be manually administered as a precautionary measure.</p>	<p>No further comment.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and tanks 13a,13b and 15a needed additional desludging due to the build up of sludge on the surface of the tanks.</p>	<p>After the site inspection, manual scrapes were completed on these tanks by operatives and then they were monitored.</p>

<p><b>General</b></p> <p><b>Final settlement tanks East Side of Works</b></p> <p>The 8 circular tanks previously used as PSTs are now being used as final tanks but pressure hoses continue to be used to break up surface scum. The tanks are not yet being used at full capacity.</p> <p><b>Imported sludge</b></p> <p>Imported sludge is still continuing to be received on site and a maximum of 12 lorries are received on site daily</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment.</p>																																
<p><b>Odour control unit (ocu) performance monitoring (07/7/2010)</b></p> <p>This is the most recent set of data available. Date for week commencing 12/7/2010 to be forwarded to LBH when completed.</p> <table border="1" data-bbox="190 858 1099 1297"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0 Average</td> <td>0.2</td> <td>Yes</td> </tr> <tr> <td>East ocu</td> <td>0.04</td> <td>0.05</td> <td>Yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>Yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.14 Average</td> <td>0.8</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.36 Average</td> <td>0.6</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> <tr> <td>Transfer PS Outlet</td> <td>0.044 #</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0 Average	0.2	Yes	East ocu	0.04	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.14 Average	0.8	Yes	Thickening plant outlet	0.36 Average	0.6	Yes	Pasteurisation plant outlet	Not operating		N/A	Transfer PS Outlet	0.044 #	0.6	Yes	<p>• Odour Management Plant version 1.8 action level outlet values</p> <p>No further comment.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																														
Main pumping station outlet	0.0 Average	0.2	Yes																														
East ocu	0.04	0.05	Yes																														
West ocu	0.01	0.05	Yes																														
Sludge reception outlet	0.14 Average	0.8	Yes																														
Thickening plant outlet	0.36 Average	0.6	Yes																														
Pasteurisation plant outlet	Not operating		N/A																														
Transfer PS Outlet	0.044 #	0.6	Yes																														

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	20 July 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager & Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1-8 inclusive empty, clean &amp; dry. All hoppers drained of effluent. No odours associated with the storm tanks and hoppers. A small quantity of effluent was held in the storm water feed channel.</p>	No further comment.
<p><b>Odour monitors</b></p> <p>Five of the five static boundary odour monitors were operating at the time of inspection. The southwest monitor is included in a separate 'ring' of sludge gas monitors around the digesters.</p> <p>The odour readouts (H2S) for those monitors which were providing data at the time of inspection were low (&lt;trigger level .015ppm). Northside 0.0046ppm Westside 0.0002ppm Central 0.0106ppm Southside 0.008ppm Eastside 0.0069ppm</p> <p>Odour complaints have been received recently and details of these have been compared with H2S levels recorded by the static monitors, together with entries recorded in the site odour log.</p>	<p>No further comment.</p> <p>No further comment.</p>

<p>15-16 July, all odour readings &lt;0.015ppm trigger level. Thames Water received one odour complaint on the 16 July from a resident of Worton Road. This complaint was investigated by Thames Water but no odour as discovered. None of the boundary monitors recorded levels above the trigger level for H2S.</p> <p>On the 17 July, the southside boundary monitor recorded a level peaking at 0.016ppm at 17.35. This exceedence of the trigger level (0.015ppm) was of approximately 10 minutes duration.</p> <p>On the 18 July, the eastside boundary monitor recorded a small spike which did not exceed the trigger level. This peaked at around 0.0139ppm and was of approximately 10 minutes duration.</p> <p>18-19 July the boundary monitors did not exceed the trigger level.</p> <p>Odour data for the new ring of sludge gas monitors was not available at the time of inspection.</p>	<p>No further comment.</p> <p>No odour was detected on the site investigation.</p> <p>No further comment.</p> <p>No further comment.</p> <p>An engineer is looking into the cause of the problem.</p>
<p><b>Sludge Dip Records 20/07/2010</b></p> <p>Sludge dip measurements recorded 960m<sup>3</sup> in the west side rectangular primary settlement tanks (pst's) and 162m<sup>3</sup> in the west side circular tanks. The site total was 6,903m<sup>3</sup>. The level measured in the west side rectangular pst's do not exceed the odour management plan trigger level (3000m<sup>3</sup>).</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>None of the digesters exhibited spillage or gassing. Anti-foaming agent continues to be used on site.</p>	<p>No further comment.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>

<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks (FST's), these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum.</p> <p>Two of the FST's are presently withdrawn from use for further work including retro-fitting of V-notch weirs.</p> <p><b>Imported sludge</b></p> <p>Daily imported sludge deliveries have been revised upwards.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>The work is progressing on schedule.</p> <p>No further comment.</p> <p>No further comment.</p>																												
<p><b>Odour control unit (ocu) performance monitoring (14/07/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 951 1099 1327"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0 average</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.03</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.59 average</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.44 average</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>Not</td> <td></td> <td>N/A</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0 average	0.2	yes	East ocu	0.03	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.59 average	0.8	yes	Thickening plant outlet	0.44 average	0.6	yes	Pasteurisation plant outlet	Not		N/A	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																										
Main pumping station outlet	0.0 average	0.2	yes																										
East ocu	0.03	0.05	yes																										
West ocu	0.01	0.05	yes																										
Sludge reception outlet	0.59 average	0.8	yes																										
Thickening plant outlet	0.44 average	0.6	yes																										
Pasteurisation plant outlet	Not		N/A																										

	operating			
Transfer PS Outlet	0.063 #	0.6	Yes	

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	29 July 2010
<b>Attendees</b>	Gerry McCarthy and Ian Inman, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1, 2, 3,6,7 &amp; 8 empty, clean &amp; dry. The hoppers to tank 6a and 6b were being over pumped. Thames need to continue to ensure that hoppers are over pumped as necessary to reduce any potential for odour. Covered &amp; odour controlled tanks 4 and 5 were in use with tank 5 being emptied. No odour observed in the vicinity of storm tanks, or storm feed channels.</p>	<p>Over pumping continued and the task was completed that day. We are continuing our programme of over pumping the hoppers to minimise possible odour.</p>
<p><b>Odour monitors</b></p> <p>Odour levels had been low and well below the current trigger level of 0.02pm H2S. The west monitor is currently out of service pending relocation once the development works have commenced.</p> <p>The East side monitor appeared to have gone out of service on the afternoon of Wednesday 28<sup>th</sup> July as it was no longer visible on the screen and please confirm that it is still operating or whether it is out of service.</p> <p>The odour readouts (H2S) for the eight additional monitors all of which were providing data at the time of inspection 15.00 approximately were low (&lt;trigger level .002ppm).</p> <p>Monitor 6 -0.001 ppm Monitor 7 -0.004 ppm</p>	<p>No further comment.</p> <p>The east monitor has been taken out of service for repair by our engineer.</p> <p>No further comment.</p>

<p>Monitor 9 -0.006 ppm  Monitor 10-0.001 ppm  Monitor 11 -0.004 ppm  Monitor 12 -0.000 ppm  Monotor13-0.000 ppm</p> <p>None of these readings exceed the existing trigger level.</p>	
<p><b>Complaints</b></p> <p>A number of complaints had been received over the previous week and these were checked against the odour monitor readings during the inspection and odour log kept in control room.</p> <p><b>Resident Hillary Drive</b></p> <p>Odour on Sat 17 13.40-16.40 and again at 21.40, storm water tank were not in use except for 5b which is covered and odour controlled.  Mon 19<sup>th</sup>, pungent odour around Isleworth Recreation Centre, There was a peak on the central monitor of 0.0153 at approx 14.05 and source of odour not identified when the site was inspected.</p> <p>Wed 21<sup>st</sup>, smell commenced 8.15am until 930am; site logs didn't not show any operational problems on site.  Thurs 22<sup>nd</sup>, 15.55 until 18.25, the east side monitor recorded 0.0125 pm at 15.35 and no problems were identified when the site was inspected  Sat 24<sup>th</sup>, 10.00am until 14.30, 16.15 until 22.00 and until midnight, the east side monitor recorded a peak of 0.0095 at 19.41 which is a very low level and there were no operational problems at the site on this day.</p> <p><b>Resident, Heathfield South</b></p> <p>Odour on 22<sup>nd</sup> July at 18.13.</p> <p>The monitors recorded low odour levels at this time and there were no operational problems on the site</p>	<p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level, and/or when a complaint is made, is investigated and findings noted in the site odour log. All of these complaints have been responded to as per section 5.4 of the odour management plan.</p> <p>No further comment.</p> <p>No further comment.</p>



<p><b>Resident Weavers Close</b></p> <p>Odour on 21<sup>st</sup> July at 21.00. The uncovered storm water tanks were not in use though the east side monitor recorded a peak of 0.01ppm at 19.07. The odour log shows that the site was inspected though no source of odour was identified. The peak was below the trigger level of 0.02ppm</p>	<p>No further comment.</p>
<p><b>Resident, odour bad in Tesco's car park on 22<sup>nd</sup> July</b></p> <p>The odour log did not identify any operational problems being identified and the south monitor did not show any elevated levels of H<sub>2</sub>S</p>	<p>No further comment.</p>
<p><b>Resident, Arnold Crescent</b></p> <p>Odour bad on Sat 24<sup>th</sup> at 17.00 and on Sun 25<sup>th</sup> at 15.30. The odour log did not show any operational problems on site and H<sub>2</sub>S levels were low if rotting veg smell it would have been a cocktail of compounds and not just H<sub>2</sub>S. The odour log did not record any operational problems on Sunday 25<sup>th</sup>.</p>	<p>No further comment.</p>
<p><b>Resident, Varsity Drive, Sun 25th at 18.13 unpleasant odour</b></p> <p>It was not possible to identify the source of odour complained of and the south monitor recorded a level of 0.007ppm H<sub>2</sub>S at the time of the complaint. There was a peak alter of 0.16ppm at 19.16 and below the trigger level of 0.02ppm. The site was inspected but it was not possible to identify the source of odour complained of.</p>	<p>No further comment.</p>
<p><b>Resident, Hillary Drive</b></p> <p>Sun 25<sup>th</sup>, woken at 3.25, got worse from 10.00am and continued until Monday when tailed off 15.15 and resumed 17.10 and intensified at 23.00 until 23.50. No operational problems identified on site during this period. There was a peak on the East monitor of 0.0218ppm at 2.25 on 26<sup>th</sup> and at this time the storm water tank 4 was emptying which may explain the source of odour complained of.</p>	<p>No further comment.</p>

<p>Tues 27<sup>th</sup>, 11.35 and all-day and stronger from 22.00 until 24.00, H<sub>2</sub>S levels were low on site and there were two peaks of 0.006ppm on south monitor at 17.45 and of 0.005ppm at 21.25 on the same monitor.</p> <p>Weds 28<sup>th</sup> woken at 6.15 by smell of excrement and subsided by 09.50, recommenced at 15.15 and continued beyond 22.30 no operational problems identified on site. LBH confirmed that a complaint was received from a resident in Napier Road complaining of odour at approx 6.00am but a visit was not made on this occasion.</p> <p>Thursday 29<sup>th</sup>, woken by stench at 01.50am and faded by 7.00am and resumed 9.50am. No operational problems identified by TW and LBH inspected on 29<sup>th</sup> July.</p>	
<p><b>Sludge Dip Records</b></p> <p>29/7/2010 W 200m<sup>3</sup> and E3714m<sup>3</sup> = 3914m<sup>3</sup>  28/7/2010 W 645m<sup>3</sup> and E4076m<sup>3</sup> = 4721m<sup>3</sup>  27/7/2010 W 1680m<sup>3</sup> and E4800m<sup>3</sup> = 6480m<sup>3</sup>  26/7/2010 W 1020m<sup>3</sup> and E6248 = 7268m<sup>3</sup></p> <p>These levels are not in breach of the current odour management plan (OMP) trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>There was evidence of excessive gassing of digesters 5 and 11 and the gas in these digesters needed to be drawn down though there was no evidence of significant recent spillage(s) from any of the digesters having occurred TW advised that anti-foaming agent continues to be manually administered as a precautionary measure.</p>	<p>This was noted during the inspection and adjustments were made by the control room to prevent further 'gassing'.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and no problems were identified with the operation</p>	<p>No further comment.</p>

<p>of these tanks</p>	
<p><b>General</b></p> <p><b>Final settlement tanks East Side of Works</b></p> <p>The 8 circular tanks previously used as PSTs are now being used as final tanks but pressure hoses continue to be used to break up surface scum. The tanks are not yet being used at full capacity.</p> <p><b>Imported sludge</b></p> <p>Imported sludge is still continuing to be received on site up to a maximum of 12 lorries being received on site daily depending on the quantity of sludge already in the works.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p> <p><b>PSTs West Side</b></p> <p>One of the PSTs was being pressure hosed to break up surface scum, which had built up on the surface of the tank.</p> <p><b>Grit on West Side</b></p> <p>One of the grit channels on the east side of the works was being over pumped due to a blockage and the grit was transported to the west side of the works. The grit had not been placed in a covered skip at the time of the inspection and while not odorous please confirm what measures were taken to deal with this problem.</p>	<p>Ongoing work is being carried out to ensure that the tanks can efficiently operate at full capacity.</p> <p>No further comment.</p> <p>No further comment.</p> <p>The activity was completed successfully that day.</p> <p>This process allows the grit to be dewatered before being moved to skips and covered. As per section 3.2 of the odour management plan, this work was completed the same day.</p>

<b>Odour control unit (ocu) performance monitoring (28/7//2010)</b>			
This is the most recent set of data available. Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.022 Average	0.2	Yes
East ocu	0.04	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.27 Average	0.8	Yes
Thickening plant outlet	0.53 Average	0.6	Yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.030#	0.6	Yes

- Odour Management Plant version 1.8 action level outlet values

No further comment.

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	5 August 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1 including hoppers, empty, clean &amp; dry.            Tank 2A &amp; 2B empty but settled sludge on bottom of tanks and effluent in hoppers to 2A.            Mogden STW aware of condition of the tank and hoppers. Remedial measures in progress using hoses to wash down the tanks and use of a mobile pump to over pump effluent from hoppers, discharging effluent into the storm feed channel.            Tank 3A &amp; 3B, empty, clean &amp; dry.            Tank 3B two out of the four hoppers contained effluent.            Covered and odour-controlled tanks 4 and 5 in use.            Tank 6A being over pumped using a mobile pump and effluent being discharged into the storm feed channel.            Tank 6B empty, clean and dry.            Tank 7A &amp; 7B empty, clean and dry. Hoppers contained effluent. No odour detectable.            Tank 8 empty, clean and dry.</p>	<p>Over pumping continued on tanks 2A and 6A and was completed that day. We are continuing our programme of over pumping the hoppers to minimise possible odour.</p>
<p><b>Odour monitors</b></p> <p>Five of the five static boundary odour monitors were operating at the time of inspection. The southwest monitor is included in a separate 'ring' of sludge gas monitors around the digesters.</p>	<p>No further comment.</p>

<p>The odour readouts (H2S) for those monitors which were providing data at the time of inspection were low (&lt;trigger level .015ppm).  Northside 0.0045ppm  Westside 0.002ppm  Central 0.0058ppm  Southside 0.0072ppm  Eastside 0.0056ppm  Odour complaints have been received recently and details of these have been compared with H2S levels recorded by the static monitors, together with entries recorded in the site odour log.</p> <p>29-31 July, all odour readings &lt;0.015ppm trigger level.  01 August, all odour readings &lt;0.015ppm.  Thames Water received one odour complaint on the 02 August from a resident of Weavers Close. This complaint was recorded in the odour log and investigated by Thames Water using a portable Jerome monitor. These readings recorded levels which exceeded the trigger level (Odour Management Plan version 1.9). The SCADA readings showed that readings for all of the odour monitors were within the trigger level, excepting the central monitor which peaked at 0.024ppm at around 00.24am. The exceedence was of approximately 20 minutes duration (00.15-00.35am).  The log showed that the inlet works was washed down.  04 August the southside monitor exceeded the trigger level at 19.03, peaking at 0.022ppm and lasting around 10 minutes 18.53-19.03.  04 August and 05 August, all odour readings &lt;0.015ppm.</p> <p>Odour data for the new ring of sludge gas monitors could not be interrogated at the time of inspection.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level, and/or when a complaint is made, is investigated and findings noted in the site odour log. All of these complaints have been responded to as per section 5.4 of the odour management plan.</p> <p>The data is available on SCADA and will be demonstrated during the next site visit.</p>
<p><b>Sludge Dip Records 05/08/2010</b></p> <p>Sludge dip measurements recorded 2,908m3 in the west side rectangular primary settlement tanks (PSTs) and 140m3 in the west side circular tanks and 0m3 in the covered and odour-controlled east side PSTs. The site total</p>	<p>No further comment.</p>

<p>was 3,048m<sup>3</sup>. The combined level measured in the west side rectangular +circular PSTs, does not exceed the odour management plan trigger level (3,250m<sup>3</sup>).</p>	
<p><b>Digesters</b></p> <p>Digesters 5 &amp; 7 were gassing via the annular seals and were odorous. Anti-foaming agent continues to be used on site.</p>	<p>This was noted during the inspection and adjustments were made by the control room to prevent further 'gassing'.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks (FST's), these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum. Two of the FST's have been partially drained down for de-sludging modifications.</p> <p><b>Imported sludge</b></p> <p>Daily imported sludge deliveries have been revised upwards.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>Ongoing work is being carried out to ensure that the tanks can efficiently operate at full capacity.</p> <p>No further comment.</p> <p>No further comment.</p>
<p><b>Odour control unit (ocu) performance monitoring (04/8/2010)</b> This is the most recent set of data available.</p>	<ul style="list-style-type: none"> <li>• Odour Management Plant version 1.8 action level outlet values</li> </ul>

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.0 average	0.2	yes
East ocu	0.07	0.05	No**
West ocu	0.09	0.05	No**
Sludge reception outlet	0.48 average	0.8	yes
Thickening plant outlet	0.29 average	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.034 #	0.6	Yes

This was due to a temporary fault with H<sub>2</sub>S analyser, however, the unit was working normally, and manual checks were carried out which showed that the action levels were not exceeded.

# Portable Jerome measurement

\*\* These elevated readings were raised by LBH





**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	12 August 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager and Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1, 2 &amp; 3 empty, clean &amp; dry. Hoppers empty. Covered and odour-controlled tanks 4 &amp; 5 in use. Tank 6A empty; one hopper to tank 6A being over-pumped using mobile pump and contents discharged to the storm feed channel. Tank 7 empty, clean &amp; dry. Hoppers to 7A full of effluent (modified hoppers:low volume). Grit deposits in hoppers to 7B. Tank 8 empty. All six hoppers contained effluent. Thin layer of sludge settled on tank bottom. Evidence that swingjets had not been operating.</p>	<p>The overpumping was completed that day to reduce volume of effluent in the hoppers when out of service.</p> <p>All the Amajets were temporarily unavailable due to a temporary electrical fault, which was rectified at the time. The tank was then back flushed with final effluent and emptied that day to minimise odour.</p>
<p><b>Odour monitors</b></p> <p>Five of the static boundary odour monitors were operating at the time of inspection. The westside monitor is unavailable.</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level). Northside 0.004ppm Central 0.006ppm Southside 0.007ppm Eastside 0.004ppm The southwest monitor is now incorporated into the ring of eight sludge gas monitors arranged around the digester area.</p>	<p>The west monitor has been decommissioned pending its move a more suitable location, as agreed with LBH.</p> <p>No further comment.</p>

<p>The readings for these monitors at the time of inspection was as follows:  No 6 0.004ppm  No 7 0.003ppm  No 8 0.005ppm  No 9 0.005ppm  No 10 0.001ppm  No 11 0.005ppm  No 12 0.002ppm  No 13 0.000ppm</p> <p>None of the monitors &gt;trigger level</p> <p>Since the last site inspection on the 05 August, the boundary monitors had recorded levels below the trigger level (0.015ppm), except for the following occasions:</p> <p>06 August the eastside monitor recorded a peak of 0.018ppm during the period 11.24-11.34, the odour log entry recorded 'nothing to report'.  11 August the eastside monitor recorded a peak of 0.016ppm at 21.30, during a 10 minute period 21.20-21.30, when the level breached the trigger level. The odour log entry recorded 'no odour to report'.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and the findings written in the site odour log, as noted by LBH.</p>
<p><b>Sludge Dip Records 12/08/2010</b></p> <p>Sludge dip measurements recorded 891m3 in the west side rectangular primary settlement tanks and 442m3 in the west side circular tanks. The site total was 3,342m3. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment.</p>

<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>																								
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78. Pressure hoses continue to be used to break up surface scum. V-notch weirs have now been retrofitted to all FSTs.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment.</p>																								
<p><b>Odour control unit (ocu) performance monitoring (11/8/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1013 1097 1324"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.019 average</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.04</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.38 average</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.26 average</td> <td>0.6</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.019 average	0.2	yes	East ocu	0.04	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.38 average	0.8	yes	Thickening plant outlet	0.26 average	0.6	yes	<ul style="list-style-type: none"> <li>• Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																						
Main pumping station outlet	0.019 average	0.2	yes																						
East ocu	0.04	0.05	yes																						
West ocu	0.01	0.05	yes																						
Sludge reception outlet	0.38 average	0.8	yes																						
Thickening plant outlet	0.26 average	0.6	yes																						

Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.039 Jerome reading	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	26 August 2010
<b>Attendees</b>	Gerry McCarthy, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>All of the storm water tanks were use at the time of the inspection and there was no odour noted from the uncovered tanks that were in use. No odour observed in the vicinity of storm tanks, or storm feed channels though there was a build up of sludge on the storm feed channels serving storm water tanks 4-8.</p>	No further comment.
<p><b>East side screen house</b></p> <p>One of doors to the east side screen house was open as screen 1a had become clogged and was being cleared.</p>	This is a health and safety requirement and the work was completed that day.
<p><b>Odour monitors</b></p> <p>Odour levels had been low and well bellow the current trigger level of 0.015ppm H2S. The west monitor is currently out of service pending relocation. Now that the development works have commenced The Council needs to be provided with a timescale by which this will take place, as it is essential that this monitor is operating.</p> <p>The odour monitor readings for the week 15<sup>th</sup> – 21<sup>st</sup> August have not yet been placed on the website and in the interest of good community relations with local residents I cannot overemphasise the necessity of having this data</p>	<p>The west odour monitor is to be reinstated beside the extension project construction offices. It is currently scheduled to be in place and operational by the beginning of October.</p> <p>We agree and would like to confirm that we do make every effort to make sure that this is the case; however, staff absence can sometimes delay the process.</p>

<p>placed on the website as soon as early as is practicably possible during the next working week.</p> <p>The south monitor showed a peak of 0.014ppm H<sub>2</sub>S on 24/8/2010 at approximately 21.45 and again on 25/8/2010 of 0.013ppm H<sub>2</sub>S at approximately 22.55. There appears to be an ongoing problem with odour levels on the south monitor, which has been identified as an issue by LBH since February of this year, and we are still awaiting the report on this to be produced, which should explain the continued reason for peaks to be occurring on this monitor. Please provide a timescale by which this report will be produced.</p> <p>The odour readouts (H<sub>2</sub>S) for the eight additional monitors all of which were providing data at the time of inspection 14.30 approximately were low (&lt;trigger level 0.015ppm).</p> <p>Monitor 6 - 0.004 ppm  Monitor 7 - 0.003 ppm  Monitor 8 - 0.005 ppm  Monitor 9 - 0.004 ppm  Monitor 10 - 0.000 ppm  Monitor 11 - 0.004 ppm  Monitor 12 - 0.002 ppm  Monotor13 - 0.000 ppm</p> <p>None of these readings exceed the existing trigger level. This data needs to be available on the website and please confirm when this information will be available on the website in the same format as the existing five odour monitors.</p>	<p>We anticipate the report being available in the next few weeks and apologise for the delay.</p> <p>No further comment.</p> <p>This is being chased up with our contractor and we will advise a timeframe in due course.</p>
<p><b>Complaints</b></p> <p>The Council had not receive any odour complaints in the previous week</p>	<p>No further comment.</p>

<p><b>Sludge Dip Records</b></p> <p>26/8/2010 W 80m<sup>3</sup> and E1495m<sup>3</sup> = 1575m<sup>3</sup>  25/8/2010 W 80m<sup>3</sup> and E2114m<sup>3</sup> = 2194m<sup>3</sup>  24/8/2010 W 80m<sup>3</sup> and E1647m<sup>3</sup> = 1727m<sup>3</sup>  23/8/2010 W 60m<sup>3</sup> and E1752m<sup>3</sup> = 1902m<sup>3</sup></p> <p>These levels are not in breach of the current odour management plan (OMP) trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>There was evidence of a sludge spillage from digesters 5, 6 and 13 and the gas in these digesters needed to be drawn down to prevent this occurring again. TW advised that anti-foaming agent continues to be manually administered as a precautionary measure twice a day and additionally if necessary.</p>	<p>At the time of the site inspection, operatives were washing down the area and it was completed that day.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and there was evidence of gassing from tank 15f, which needs to be addressed.</p>	<p>The situation was monitored and a manual desludge carried out.</p>
<p><b>S106</b></p> <p>As the west side extension work has started the commencement provisions of the s106 now apply and the main provisions that apply are:</p> <ul style="list-style-type: none"> <li>• Trigger levels for H<sub>2</sub>S odour boundary monitors are now 0.015ppm H<sub>2</sub>S.</li> <li>• The provisions relation to the east side storm water tanks and hopper management plan, schedule 3 of the s106 agreement.</li> <li>• The provisions of the sludge gas monitoring plan, schedule 12 of the s106 agreement</li> <li>• The provisions of the odour management plan.</li> </ul>	<p>The start of construction on the extension project commenced on Monday 23 August 2010, and as LBH note, we are now working to the section 106 regulations.</p>

<p><b>General</b></p> <p><b>Final settlement tanks East Side of Works</b></p> <p>The 8 circular tanks previously used as PSTs are now being used as final tanks and are being used at full capacity. There is also a system in place to prevent the build up of scum on these tanks.</p> <p><b>Imported sludge</b></p> <p>Imported sludge is still continuing to be received on site up to a maximum of 20 lorries being received on site daily depending on the quantity of sludge already in the works. This will be reviewed in the event of sludge stocks increasing on site as the number of deliveries will need to be increased</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p> <p><b>Grit on West Side</b></p> <p>There was a heap of grit and other washings awaiting treatment which had not been placed in a covered skip at the time of the inspection and while not odorous please confirm what measures were taken to deal with this problem.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment.</p> <p>This was moved to a covered skip later that same day.</p>																				
<p><b>Odour control unit (ocu) performance monitoring (25/8/2010)</b></p> <table border="1" data-bbox="190 1077 1102 1324"> <thead> <tr> <th>This is the most recent set of data available. Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.002 Average</td> <td>0.2</td> <td>Yes</td> </tr> <tr> <td>East Ocu</td> <td>0.07 0.00#</td> <td>0.05</td> <td>Yes</td> </tr> <tr> <td>West Ocu</td> <td>0.01</td> <td>0.05</td> <td>Yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.51</td> <td>0.8</td> <td>Yes</td> </tr> </tbody> </table>	This is the most recent set of data available. Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.002 Average	0.2	Yes	East Ocu	0.07 0.00#	0.05	Yes	West Ocu	0.01	0.05	Yes	Sludge reception outlet	0.51	0.8	Yes	<ul style="list-style-type: none"> <li>• Odour Management Plan version 1.9 action level outlet values</li> </ul> <p>No further comment.</p>
This is the most recent set of data available. Plant	Reading (ppm)	Action Level (ppm)*	Compliant																		
Main pumping station outlet	0.002 Average	0.2	Yes																		
East Ocu	0.07 0.00#	0.05	Yes																		
West Ocu	0.01	0.05	Yes																		
Sludge reception outlet	0.51	0.8	Yes																		



	Average			
Thickening plant outlet	0.15 Average	0.6	Yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.043#	0.1	Yes	

# Portable Jerome measurement



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	02 September 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager and Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1 empty, clean &amp; dry. Hoppers empty.          Tank 2 empty. One hopper in tank 2A contained sludge.          Tank 3 empty. Hoppers in tank 3A contained sludge.          Tank 4 empty.          Tank 5 in use.          Tank 6 empty; all four hoppers to tank 6A contained significant volumes of effluent and sludge.          Tank 7 empty.          Tank 8 empty. All six hoppers to 6A &amp; 6B contained effluent and sludge.          * The sludge in many of the hoppers was odorous.</p>	<p>As per section 3.2 of the odour management plan and the East Side Storm Water Tanks and Hoppers Management Plan; every effort is made to ensure the hoppers are flushed and cleaned as soon as possible after use.</p> <p>At the time of inspection the hoppers in tank 6 were being drained down with two mobile pumps. This work continued until all the hoppers were in a satisfactory condition.</p>
<p><b>Odour monitors</b></p> <p>Four of the original static boundary odour monitors were operating at the time of inspection.          The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level 0.015ppm).          Northside 0.005ppm          Westside presently not in service          Central 0.0078ppm          Southside 0.0094ppm</p>	<p>The west side monitor is due to be back online at the beginning of October 2010.</p>

<p>Eastside 0.0064ppm</p> <p>The new additional sludge gas odour monitors were giving the following readings at the time of inspection:</p> <p>AT06 0.005ppm  AT07 0.002ppm  AT08 0.005ppm  AT09 0.009ppm  AT10 0.003ppm  AT11 0.006ppm  AT12 0.004ppm  AT13 0.000ppm</p> <p>Since the last site inspection on the 26 August, the boundary monitors had recorded levels below the trigger level (0.015ppm), except for the excursions detailed as follows:</p> <p>On the 28 August, the eastside monitor recorded a peak of 0.02ppm during the period 8.21-8.31am.  On the 30 August, the southside monitor peaked at 0.04ppm at 15.29, during the period 15.19-15.49 (30 minutes &gt;trigger level).  A further peak of 0.018ppm was recorded by the southside monitor on the same day at 17.48 during the period 17.48-17.58 (10 minutes &gt;trigger level).  An odour complaint was reported on the 01 September at approximately 6am. The odour monitors recorded H2S levels &lt;trigger level at this time. At approximately 5.52am, both the central and southside monitors recorded slight increases in H2S levels. The central of around 0.012ppm and the southside 0.009ppm.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level, and/or when a complaint is made, is investigated and findings noted in the site odour log.</p> <p>This complaint was not received by Thames Water, but as LBH note, the odour monitors were reading below the trigger level at the time.</p>
<p><b>Sludge Dip Records 02/09/2010</b></p> <p>Sludge dip measurements recorded 0m3 in the west side rectangular primary settlement tanks and 90m3 in the west side circular tanks. The site total was 3,804m3. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment.</p>

<p><b>Digesters</b></p> <p>There was excessive gassing from two of the digesters, numbers 7 &amp; 11 [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>Adjustments were made to prevent further 'gassing' and had subsided within an hour.</p>								
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition. Entec were gas sampling from circular PST 9.</p>	<p>No further comment.</p>								
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>These are in service.</p> <p><b>Imported sludge</b></p> <p>Daily imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment.</p>								
<p><b>Odour control unit (ocu) performance monitoring (02/9/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1197 1097 1316"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0016 average</td> <td>0.2</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0016 average	0.2	yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant						
Main pumping station outlet	0.0016 average	0.2	yes						

East ocu	0.04	0.05	yes	
West ocu	0.01	0.05	yes	
Sludge reception outlet	0.37 average	0.8	yes	
Thickening plant outlet	0.28 average	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.034 Jerome reading	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	09 September 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1 recently emptied and still wet. Layer of odorous sludge on tank bottom. Hoppers empty.          Tank 2A empty, some grit settled on tank bottom. Three hoppers full of effluent. No odour noticed at time of inspection.          Tank 2B three hoppers contained a small volume of effluent. No odour noticed at time of inspection.          Tank 3 in use and all Amajets operating.          Covered tanks 4 &amp; 5 in use.          Tank 6 in use and Amajets operating          Tank 7A sludge on bottom of tank.          Tank 7B empty and clean.          Tank 8A and 8B in use</p>	<p>As per section 3.2 of the odour management plan and the East Side Storm Water Tanks and Hoppers Management Plan; every effort is made to ensure the storm tanks are cleaned as soon as possible after use. Tanks 1&amp;7 were being hosed and cleaned at the time of the inspection and the activity was completed that day.</p> <p>Tanks 4&amp;5 and 3&amp;6 were brought into service after a storm event.</p> <p>Please see note above above.</p> <p>At the time of the inspection, tank 8 had been back flushed to clean it, but had not completely emptied due to a blockage in one of the storm return pumps.</p>
<p><b>Odour monitors</b></p> <p>Five static boundary odour monitors were operating at the time of inspection. The odour readings (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;trigger level).          Northside 0.004ppm          Central 0.002ppm</p>	<p>No further comment.</p>

<p>Southside 0.003ppm Eastside 0.006ppm</p> <p>These original monitors have been supplemented by additional new sludge gas monitors. The odour readings (H2S) for these additional monitors were low (&lt;trigger level).</p> <p>AT06 0.004ppm AT07 0.003ppm AT08 0.005ppm AT09 0.004ppm AT10 0.001ppm AT11 0.006ppm AT12 0.003ppm AT13 0.000ppm</p> <p>The last site inspection was on the 02 September. The data available at the time of inspection indicated that the eastside monitor had recorded H2S levels exceeding the trigger level on the 07 September, when the monitor had peaked at @0.07ppm during the period 22.26-23.46. The trigger level was exceeded for a total of @80 minutes.</p> <p>The odour log recorded that all the storm tanks were full at the time.</p> <p>On the 08 September, the eastside monitor recorded a peak of 0.019ppm at 19.24 during a 20 minute period when the trigger level was exceeded. An entry in the odour log recorded that the storm tanks were giving rise to odour.</p> <p>On the 09 September the eastside monitor was recording a level &lt;trigger level.</p> <p>* Trends were not available for analysis for the period 02-07 September, excepting the eastside monitor.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>Please see note above.</p> <p>There is an issue with the data display on the old system. TW will show LBH the data on the new system for future inspections.</p>
<p><b>Sludge Dip Records 09/09/2010</b></p> <p>Sludge dip measurements recorded 0m3 in the west side rectangular primary settlement tanks and 40m3 in the west side circular tanks. The site total was 1,897m3. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment.</p>

<p><b>Digesters</b></p> <p>There was no excessive gassing or any evidence of significant recent spillage(s) from any of the digesters. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>No further comment.</p>								
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and the evening sequence of de-sludging was in progress to tanks 13 and 14. 16B had inverted sludge on the surface and a noticeable odour associated with this sludge. There was inverted sludge on the surface of both 15A &amp; 15B.</p>	<p>The inverted sludge was cleared by the automatic desludge process.</p>								
<p><b>General</b></p> <p><b>Final settlement tanks (FST's)</b></p> <p>Further to modifications, the majority of the FST's have been returned to service. Two are out of service.</p> <p><b>Imported sludge</b></p> <p>Around 20+ daily imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>One of the tanks has now been brought back into service.</p> <p>No further comment.</p> <p>No further comment.</p>								
<p><b>Odour control unit (ocu) performance monitoring (08/9/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1262 1099 1323"> <thead> <tr> <th data-bbox="190 1262 600 1323">Plant</th> <th data-bbox="600 1262 745 1323">Reading (ppm)</th> <th data-bbox="745 1262 936 1323">Action Level (ppm)*</th> <th data-bbox="936 1262 1099 1323">Compliant</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant					<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>No further comment</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant						



Main pumping station outlet	0.0 average	0.2	yes	
East ocu	0.00 Jerome reading	0.05	yes	
West ocu	0.01	0.05	yes	
Sludge reception outlet	0.52 average	0.8	yes	
Thickening plant outlet	0.20 average	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.022 Jerome reading	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	17 September 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager and Communications Advisor, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1A empty, clean &amp; dry. Very small volume of effluent in hoppers. No odour.            Tank 1B empty, hoppers contained rainwater. No sludge visible and no odour.            Tanks 2A &amp; 2B empty, clean &amp; dry. Third hopper in tank 2A contained sludge. Hoses in place. Mobile pump not operating at time of site visit.            Tanks 3A &amp; 3B empty, clean &amp; dry.            Tank 4 empty.            Tank 5 in use.            Tank 6A empty. Back third of tank bottom covered in sludge, suggesting an Amajet operating problem. Two hoppers contained sludge.            Tank 6B empty, clean &amp; dry.            Tanks 7A &amp; 7B, empty, clean &amp; dry. Settled grit in and around hoppers. No odour.            Tank 8A &amp; 8B empty, clean &amp; dry.</p>	<p>As per section 3.2 of the odour management plan and the East Side Storm Water Tanks and Hoppers Management Plan; every effort is made to ensure the storm tanks and hoppers are cleaned as soon as possible after use. Tank 2A was being hosed and cleaned at the time of the inspection and tank 6A was also cleaned that day.</p>
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor) are as follows:            OM1 eastside 0.008ppm            OM2 northside 0.004ppm</p>	<p>No further comment.</p>

<p>OM3 westside not in service  OM4 0.007ppm southside  OM5 0.006ppm central  AT06 0.007ppm  AT07 0.005ppm  AT08 0.004ppm  AT09 0.007ppm  AT10 0.002ppm  AT11 0.006ppm  AT12 0.002ppm  AT13 0.00ppm</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 09 September, the boundary monitors had recorded levels below the trigger level (0.015ppm), with the notable exception on the 12 September, when monitors OM6 and OM7 recorded levels exceeding the trigger level and peaking at around 0.022ppm. These elevated readings are likely to be in response to a spillage from the thickened sludge holding tank.</p> <p>The log entry confirms that Thames arranged for a clean up of the spillage and used two operatives and a tanker.</p> <p>On the 17 September, the eastside monitor recorded a level exceeding the trigger level from around 8.03-8.14 am, peaking at around 0.02ppm.</p>	<p>No further comment.</p> <p>As LBH notes, there was a spillage from the thickened sludge holding tank on 12 September. We had a PLC (Programmable Logic Controller) failure for the automatic digester feed; this caused sludge to build-up and overtop the tank. The spill was minor and cleaned very quickly using a tanker and two operatives.</p> <p>Although the trigger level was exceeded, the duration did not last for 20 minutes or longer.</p>
<p><b>Sludge Dip Records 17/09/2010</b></p> <p>Sludge dip measurements recorded 0m<sup>3</sup> in the west side rectangular primary settlement tanks and 80m<sup>3</sup> in the west side circular tanks. The site total was 5,162m<sup>3</sup>. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment.</p>

<p><b>Digesters</b></p> <p>There was evidence of recent spillages of small quantities of effluent from digesters 20 &amp; 6. [Anti foaming agent continues to be manually administered as a precautionary measure].</p>	<p>At the time of the site inspection, operatives were washing down the area and it was completed that day.</p>												
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>												
<p><b>General</b></p> <p><b>Final settlement tanks</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>No further comment.</p> <p>No further comment</p>												
<p><b>Odour control unit (ocu) performance monitoring (16/09/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1173 1099 1326"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.0026 average</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.00</td> <td>0.05</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.0026 average	0.2	yes	East ocu	0.00	0.05	yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.8 action level outlet values</li> </ul> <p>Operative has been asked to pay close attention to this week's results at the request of LBH.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant										
Main pumping station outlet	0.0026 average	0.2	yes										
East ocu	0.00	0.05	yes										

	Jerome reading			
West ocu	0.01	0.05	yes	
Sludge reception outlet	0.42 average	0.8	yes	
Thickening plant outlet	0.56 average	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.061 Jerome reading	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	24 September 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1A &amp; 1B in use.          Tank 2A &amp; 2B in use.          Tanks 3A &amp; 3B empty, clean &amp; dry. Replacement fixed jet presently under trial.          Covered tanks 4 &amp; 5 in use.          Tank 6 &amp; 7 in use.          Tank 8A &amp; 8B empty. Hoppers contained some influent. No odour detected.</p>	No further comment.
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor), at the time of inspection were as follows:</p> <p>OM1 eastside 0.007ppm          OM2 northside 0.001ppm          OM3 westside not in service          OM4 0.005ppm southside          OM5 0.002ppm central          AT06 0.006ppm          AT07 0.005ppm          AT08 0.004ppm</p>	No further comment.

<p>AT09 0.003ppm  AT10 0.001ppm  AT11 0.004ppm  AT12 0.002ppm  AT13 0.00ppm</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 17 September, the boundary monitors had recorded levels below the trigger level (0.015ppm), the exceptions are listed as follows:</p> <p>On the 17 September, all monitors recorded levels &lt; trigger level except for the eastside monitor which recorded a peak of 0.019ppm at approximately 8.13am. This exceedence was of very short duration.</p> <p>On the 18 September, the central monitor recorded a single spike at around 5.27-5.57, peaking at 0.038ppm. The odour log for the 18 September showed that digester 6 had been foaming via the annular seal and that the 'foam' had been cleaned up.</p> <p>On the 21 September the northside odour monitor recorded three occasions when the trigger level was exceeded. Each event lasted &lt; 30 minutes.</p> <p>On the 24 September the eastside monitor recorded odour activity which exceeded the trigger level for approximately 80 minutes, from 23.30-00.50am, with a peak of 0.022ppm at 0.21am.</p>	<p>Although the trigger level was exceeded, the duration did not last for 20 minutes or longer.</p> <p>As LBH notes, the sludge foam was cleaned up and the digester dosed with antifoam.</p> <p>Although the trigger level was exceeded, the duration did not last for 20 minutes or longer.</p> <p>The east monitor spiked while we were discharging partially treated wastewater to the River Thames with the consent of the Environment Agency.</p>
<p><b>Sludge Dip Records 24/09/2010</b></p> <p>Sludge dip measurements recorded 2,907m<sup>3</sup> in the west side rectangular primary settlement tanks and 140m<sup>3</sup> in the west side circular tanks. The site total was 5,162m<sup>3</sup>. These levels are not in breach of the OMP 1.9 trigger levels.</p>	<p>No further comment.</p>

<p><b>Digesters</b></p> <p>At the time of inspection, all digesters appeared to be operating satisfactorily. Ant-foaming agent continues to be used.</p>	<p>No further comment.</p>								
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>								
<p><b>General</b></p> <p><b>Final settlement tanks (FST's)</b></p> <p>FST 12 was being drained down using a mobile pump to facilitate access to the scraper bridge to replace a centre bearing. The presence of solids were giving rise to on-site odour.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>The mobile pump continued to run until the tank was drained down to allow the work to be carried out.</p> <p>No further comment.</p> <p>No further comment.</p>								
<p><b>Odour control unit (ocu) performance monitoring (22/09/2010)</b> This is the most recent set of data available.</p> <table border="1" data-bbox="190 1197 1097 1316"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>Average of 3</td> <td>0.2</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	Average of 3	0.2	yes	<ul style="list-style-type: none"> <li>Odour Management Plant version 1.9 action level outlet values</li> </ul> <p>No further comment.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant						
Main pumping station outlet	Average of 3	0.2	yes						



	readings <action level		
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.3 average	0.8	yes
Thickening plant outlet	0.43 average	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.004	0.6	Yes



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	30 September 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1-8 inclusive full. Storm feed channel full. No on site odour noted at time of inspection.</p>	No further comment.
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor), at the time of inspection were as follows:</p> <p>OM1 eastside 0.006ppm OM2 northside 0.003ppm OM3 westside not in service OM4 0.003ppm southside OM5 0.002ppm central AT06 0.005ppm AT07 0.004ppm AT08 0.005ppm AT09 0.005ppm AT10 0.001ppm AT11 0.005ppm AT12 0.004ppm AT13 0.00ppm</p>	No further comment.

<p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 24 September, the boundary monitors had recorded levels below the trigger level (0.015ppm), the exceptions are listed as follows:</p> <p>On the 24 September, the southside monitor recorded activity exceeding the trigger level from around 15.53-17.33, peaking at 0.04ppm at around 17.13.</p> <p>On the 26 September, the eastside monitor slightly exceeded the trigger level for around ten minutes from 13.50-1400, peaking at around 0.019ppm.</p> <p>On the 29 September the eastside odour monitor exceeded the trigger level for approximately 20 minutes, from around 20.46-21.06, peaking at 0.028ppm at around 21.06. This activity was recorded in the odour log.</p> <p>Later the same day, a record in the odour log showed that odour monitor 7 spiked at 22.17 and this is attributed to digester gas levels.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>There was a sludge spill from a digester and a fault with one of our combined heat and power (CHP) engines. The digester was dosed with antifoam and the spill cleaned up. The engine was taken offline and repaired. Although the trigger level was exceeded, the duration did not last for 20 minutes or longer.</p> <p>This exceedence occurred while we were discharging partially treated wastewater to the River Thames, which, though regrettable, is legal and consented.</p> <p>As LBH notes, this was due to digester gas levels and the third CHP engine was brought online to alleviate the problem.</p>
<p><b>Sludge Dip Records 30/09/2010</b></p> <p>Sludge dip measurements recorded 0m<sup>3</sup> in the west side rectangular primary settlement tanks and 110m<sup>3</sup> in the west side circular tanks. The site total was 4,548m<sup>3</sup>. These levels are not in breach of the OMP 1.9 trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>At the time of inspection, all digesters appeared to be operating satisfactorily. Anti-foaming agent continues to be used.</p>	<p>No further comment.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>

<p><b>General</b></p> <p><b>Final settlement tanks (FST's)</b></p> <p>FST 12 has been drained down using a mobile pump and is awaiting repair.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>The FST's scraper chain and the slew ring require maintenance, which will be carried out shortly.</p> <p>No further comment.</p> <p>No further comment.</p>																				
<p><b>Odour control unit (ocu) performance monitoring (29/09/2010)</b></p> <p>This is the most recent set of data available.</p> <table border="1" data-bbox="190 794 1099 1326"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.00 Average of 3 readings &lt;action level</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.007 Jerome reading</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.025 Jerome reading</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.2</td> <td>0.8</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.00 Average of 3 readings <action level	0.2	yes	East ocu	0.007 Jerome reading	0.05	yes	West ocu	0.025 Jerome reading	0.05	yes	Sludge reception outlet	0.2	0.8	yes	<ul style="list-style-type: none"> <li>• Odour Management Plant version 1.9 action level outlet values</li> </ul> <p>Thickening plant outlet will be monitored closely, as per LBH's suggestion.</p>
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																		
Main pumping station outlet	0.00 Average of 3 readings <action level	0.2	yes																		
East ocu	0.007 Jerome reading	0.05	yes																		
West ocu	0.025 Jerome reading	0.05	yes																		
Sludge reception outlet	0.2	0.8	yes																		

	average			
Thickening plant outlet	0.59 average	0.6	yes	
Pasteurisation plant outlet	Not operating		N/A	
Transfer PS Outlet	0.0005	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	8 October 2010 (evening inspection)
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1-7 inclusive in use. Tank 8 empty, clean and dry. Tank 8, five of the six hoppers full. No on site odour noted at time of inspection.</p>	No further comment.
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor), at the time of inspection were as follows: OM1 eastside 0.004ppm OM2 northside 0.003ppm OM3 westside not in service OM4 0.005ppm southside OM5 0.005ppm central AT06 0.007ppm AT07 0.005ppm AT08 0.005ppm AT09 0.006ppm AT10 0.002ppm AT11 0.009ppm AT12 0.005ppm</p>	No further comment.

<p>AT13 0.00ppm</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 30 September, the boundary monitors had recorded levels below the trigger level (0.015ppm), the exceptions are listed as follows:</p> <p>On the 02 October, the eastside monitor recorded activity exceeding the trigger level from around 22.28-22.58, peaking at 0.05ppm at around 22.38. A note in the odour log recorded 'strong odours from storm tanks'.</p> <p>On the 05 October, the southside monitor slightly exceeded the trigger level.</p> <p>On the 06 October the eastside odour monitor measured an exceedence of the trigger level for approximately 20 minutes, from around 6.24-6.44, peaking at around 0.034ppm. At the time, storm tanks were discharging to the river.</p> <p>On the 08 October the central odour monitor measured an exceedence of the trigger level for approximately 20 minutes, from around 13.52-14.12, peaking at approximately 0.086ppm at 14.09.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>This exceedence occurred while we were discharging partially treated wastewater to the River Thames, which, though regrettable, is legal and consented.</p> <p>The only odour detected was exhaust fumes from our combined heat and power (CHP) engines.</p> <p>This exceedence occurred while we were discharging partially treated wastewater to the River Thames, which, though regrettable, is legal and consented.</p> <p>No odour detected and monitor fault suspected. An engineer is to investigate.</p>
<p><b>Sludge Dip Records 08/10/2010</b></p> <p>Sludge dip measurements recorded 2156m<sup>3</sup> in the west side rectangular primary settlement tanks and 250m<sup>3</sup> in the west side circular tanks. The site total was 3,796m<sup>3</sup>. These levels are not in breach of the OMP 1.9 trigger levels.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>At the time of inspection, all digesters appeared to be operating satisfactorily.</p>	<p>No further comment.</p>

Anti-foaming agent continues to be used.																																
<b>West side primary settlement tanks (PST)</b>																																
All tanks were in service and in a satisfactory condition.				No further comment.																												
<b>General</b>																																
<b>Final settlement tanks (FST's)</b>																																
FST 12 has been fully drained down using a mobile pump and is awaiting repair.				The FST's scraper chain and the slew ring require maintenance, which will be carried out shortly.																												
<b>Imported sludge</b>																																
Imported sludge deliveries are presently being accepted at the site. This situation remains under review.				No further comment.																												
<b>Pasteurisation Plant</b>																																
The pasteurisation plant continues to be out of service.				No further comment.																												
<b>Odour control unit (ocu) performance monitoring (06/10/2010)</b>																																
This is the most recent set of data available.				<ul style="list-style-type: none"> <li>Odour Management Plant version 1.9 action level outlet values</li> </ul>																												
<table border="1"> <thead> <tr> <th>Plant</th> <th>Reading (ppm)</th> <th>Action Level (ppm)*</th> <th>Compliant</th> </tr> </thead> <tbody> <tr> <td>Main pumping station outlet</td> <td>0.00 average of 3 readings &lt;action level</td> <td>0.2</td> <td>yes</td> </tr> <tr> <td>East ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td>0.24 average</td> <td>0.8</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.16 average</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Pasteurisation</td> <td>Not operating</td> <td></td> <td>N/A</td> </tr> </tbody> </table>				Plant	Reading (ppm)	Action Level (ppm)*	Compliant	Main pumping station outlet	0.00 average of 3 readings <action level	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.24 average	0.8	yes	Thickening plant outlet	0.16 average	0.6	yes	Pasteurisation	Not operating		N/A	No further comment.
Plant	Reading (ppm)	Action Level (ppm)*	Compliant																													
Main pumping station outlet	0.00 average of 3 readings <action level	0.2	yes																													
East ocu	0.01	0.05	yes																													
West ocu	0.01	0.05	yes																													
Sludge reception outlet	0.24 average	0.8	yes																													
Thickening plant outlet	0.16 average	0.6	yes																													
Pasteurisation	Not operating		N/A																													



plant outlet				
Transfer PS Outlet	0.0003	0.6	Yes	



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	15 October 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tank 1A &amp; B empty, clean &amp; dry. No odour. Tanks 2A &amp; 2B empty, clean &amp; dry, except for three hoppers in tank 2A which contained effluent. A mobile pump and hoses were being set up for the purpose of over pumping the contents of the hoppers, into the storm feed channel. Tanks 3A &amp; 3B empty, clean &amp; dry. Covered and odour controlled tanks 4 &amp; 5 in use. Tank 6A empty, clean &amp; dry. The hoppers contained low levels of sludge. Hosing down of one of the hoppers was in progress and was causing on site odour noticeable in the immediate vicinity. Tank 6B empty, clean &amp; dry, except for hoppers which contained sludge. Tanks 7A &amp; 7B, empty, clean &amp; dry. Settled grit in and around shallow modified hoppers. No odour. Tank 8A &amp; 8B empty, clean &amp; dry, except for some sludge held in hoppers to 8A.</p>	<p>As per section 3.2 of the odour management plan and the East Side Storm Water Tanks and Hoppers Management Plan; every effort is made to ensure the storm tanks and hoppers are cleaned as soon as possible after use. Tank 2A's hoppers were being pumped out at the time of the inspection and one of tank 6A's hoppers was also cleaned that day. This programme continued until all hoppers containing sludge were clean.</p>
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor) are as follows: OM1 eastside 0.004ppm OM2 northside 0.003ppm</p>	<p>No further comment.</p>

<p>OM3 westside not in service  OM4 0.007ppm southside  OM5 0.004ppm central  AT06 0.007ppm  AT07 0.006ppm  AT08 0.004ppm  AT09 0.005ppm  AT10 0.003ppm  AT11 0.004ppm  AT12 0.004ppm  AT13 0.00ppm</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 08 October, the boundary monitors had recorded levels below the trigger level (0.015ppm), with the notable exception of the 09 October, when the southside monitor recorded levels exceeding the trigger level. Thames Water is to comment on the operation of this monitor.</p> <p>On the 11 October, the southside monitor recorded H2S levels &gt;trigger level, up to a value of 0.07ppm. Thames Water to comment on this high reading.</p> <p>On the 12 October, the southside monitor was the only monitor to record significant H2S activity.</p> <p>On the 14 October, the southside was again the only monitor which recorded any significant movements in concentrations of H2S. An entry made in the odour log recorded that exhaust fumes had been detected.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>During 9, 11, 12 and 14 October, the south monitor registered multiple spikes above the trigger level agreed with LBH. There was no odour detected on the site investigations except for exhaust smell from the combined heat and power (CHP) engines.</p> <p>The readings were checked with a portable Jerome monitor and we will be closely monitoring performance of the south monitor.</p>
<p><b>Sludge Dip Records 15/10/2010</b></p> <p>Sludge dip measurements recorded 1,780m3 held in the west side rectangular primary settlement tanks and 80m3 in the west side circular tanks. The site total was 1,860m3. These levels are not in breach of the OMP trigger levels.</p>	<p>No further comment.</p>

<p><b>Digesters</b></p> <p>Digesters and digester seals were satisfactory at the time of inspection, although I understand that a sludge spill had occurred from number 19 on the 14 October and that this spill had been cleaned up. Anti foaming agent continues to be manually administered as a precautionary measure.</p>	<p>No further comment.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>
<p><b>General</b></p> <p><b>Final settlement tanks (FST's)</b></p> <p>Effluent +mixed liquors have been introduced to 8 of the converted tanks on the east side, now in use as final settlement tanks, these tanks are numbered 71-78.</p> <p>FST 12 continues to be empty and out of service, awaiting the fitting of a slew ring.</p> <p>A crane is located in the north-east corner of the digester farm, to assist with construction of a platform for a new gas compressor.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>No further comment.</p> <p>The FST's scraper chain and the slew ring require maintenance, which will be carried out shortly.</p> <p>This is being carried out by Black &amp; Veatch, as part of the construction of the extension at Mogden.</p> <p>No further comment.</p> <p>No further comment.</p>

**Odour control unit (ocu) performance monitoring (15/10/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.000 average	0.2	yes
East ocu	0.001 Jerome reading	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.15 average	0.8	yes
Thickening plant outlet	0.37 average	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.0003	0.6	Yes

- Odour Management Plant version 1.9 action level outlet values

No further comment.



**LB Hounslow Mogden STW Site Inspection**

<b>Date of inspection</b>	21 October 2010
<b>Attendees</b>	Michael Mehta, LB Hounslow Operational Plant Manager, Thames Water
<b>LB Hounslow Observation</b>	<b>Thames Water Action / Response</b>
<p><b>Storm Water Storage Tanks (SWST)</b></p> <p>Tanks 1-3 inclusive, clean, dry &amp; empty. Covered and odour controlled tanks 4 &amp; 5 in use. Tank 6 clean, dry &amp; empty. Some hoppers contained effluent. Tank 7 clean, dry &amp; empty. Grit in shallow (modified) hoppers. No odour noted. Tank 8 clean, dry &amp; empty. Hoppers empty.</p> <p>A trail hole has been constructed in the separating wall between tank1A and 1B to facilitate movement of storm effluent between the tanks.</p>	<p>No further comment.</p> <p>This project is still in progress, but as LBH note, we hope that it will aid the movement of wastewater between cells A and B in storm tank 1.</p>
<p><b>Odour monitors</b></p> <p>Readings for the original static boundary monitors 5No and 8No sludge gas monitors (including the southwest monitor), at the time of inspection were as follows:</p> <p>OM1 eastside 0.006ppm OM2 northside 0.004ppm OM3 westside not in service OM4 0.007ppm southside OM5 0.005ppm central AT06 0.008ppm AT07 0.006ppm AT08 0.004ppm</p>	<p>No further comment.</p>

<p>AT09 0.007ppm  AT10 0.004ppm  AT11 0.006ppm  AT12 0.005ppm  AT13 0.00ppm</p> <p>The odour readouts (H2S) for all of these monitors which were providing data at the time of inspection were low (&lt;0.015ppm trigger level).</p> <p>Since the last site inspection on the 17 September, the boundary monitors have recorded levels below the trigger level (0.015ppm), the exceptions are listed as follows:</p> <p>On the 16 October, the southside monitor recorded significant H2S activity exceeding the trigger level at various times over an extended period from 10.31-17.41. The monitor recorded a maximum value of 0.06ppm. This activity was noted in the odour log.</p> <p>On the 17 October, the eastside monitor recorded an exceedence of the trigger level for around ten minutes from approximately 2.39-2.49 peaking at around 0.019ppm.</p> <p>Also on the 17 October, the northside odour monitor recorded an exceedence of the trigger level for approximately 37 minutes, from around 20.07-20.37, peaking at approximately 0.034ppm. An entry in the odour log noted that the site was toured but no odours were observed.</p> <p>On the 19 October, the southside monitor recorded an H2S concentration of 0.02ppm.</p> <p>On the 20 October, the central monitor recorded an exceedence for approximately 20 minutes from 19.53-20.13, peaking at 0.04ppm. An entry in the odour log noted that there was odour from the aeration lanes.</p>	<p>No further comment.</p> <p>As per section 3.4.1 of the odour management plan, any activity detected above the trigger level is investigated and findings noted in the site odour log.</p> <p>This exceedence was attributed to the exhaust fumes from our combined heat and power (CHP) engines, as 3 were running at the time.</p> <p>Although the trigger level was exceeded, the duration did not last for 20 minutes or longer.</p> <p>This exceedence occurred while we were discharging partially treated wastewater to the River Thames, which, though regrettable, is legal and consented.</p> <p>The only odour detected was exhaust fumes from our combined heat and power (CHP) engines.</p> <p>As LBH note, the site investigation attributed the odour to the aeration lanes.</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p><b>Sludge Dip Records 21/10/2010</b></p> <p>Sludge dip measurements recorded 2,908m<sup>3</sup> in the west side rectangular primary settlement tanks and 80m<sup>3</sup> in the west side circular tanks. The site total was 7,122m<sup>3</sup>. These levels are not in breach of the OMP 1.9 trigger levels, but are over the operational target of 3,000m<sup>3</sup>.</p>	<p>No further comment.</p>
<p><b>Digesters</b></p> <p>At the time of inspection, all digesters appeared to be operating satisfactorily. Ant-foaming agent continues to be used.</p> <p>Digester 5 is out of service having been drained down, in preparation for cleaning.</p>	<p>No further comment.</p> <p>This is being carried out by Black &amp; Veatch, as part of the construction of the extension at Mogden.</p>
<p><b>West side primary settlement tanks (PST)</b></p> <p>All tanks were in service and in a satisfactory condition.</p>	<p>No further comment.</p>
<p><b>General</b></p> <p><b>Final settlement tanks (FST's)</b></p> <p>FST 12 continues to be out of service awaiting repair. The tank is drained down.</p> <p><b>Imported sludge</b></p> <p>Imported sludge deliveries are presently being accepted at the site. This situation remains under review.</p> <p><b>Pasteurisation Plant</b></p> <p>The pasteurisation plant continues to be out of service.</p>	<p>The FST's scraper chain and the slew ring require maintenance, which will be carried out shortly.</p> <p>No further comment.</p> <p>No further comment.</p>



**Odour control unit (ocu) performance monitoring (20/10/2010)**

This is the most recent set of data available.

Plant	Reading (ppm)	Action Level (ppm)*	Compliant
Main pumping station outlet	0.00 Average of 3 readings <action level	0.2	yes
East ocu	0.04 Jerome reading	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.13 average	0.8	yes
Thickening plant outlet	0.53 average	0.6	yes
Pasteurisation plant outlet	Not operating		N/A
Transfer PS Outlet	0.0004	0.6	Yes

- Odour Management Plant version 1.9 action level outlet values

No further comment.