



LB Hounslow Mogden STW Site Inspection

Date of inspection	09 January 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1-clean, dry Tank 2-very low volume of effluent. Amajet operational Tank 3A-very low volume of effluent Tank 3B-tank and hoppers empty Tank 4-in use Tank 5-in use Tank 6-filling Tank 7-returning Tank 8-tank empty/hoppers full (no odour). Return pump to be used to empty hoppers Storm channel near to tank 6 odorous</p>	<p>No comment to add</p>
<p>Storm tank cleaning log</p> <p>The condition of the tanks and hoppers had been inspected earlier by Thames operatives on the 9th January and the daily log had been completed.</p>	<p>No comment to add.</p>



<p>Sludge levels</p> <p>Total sludge 2,807m3</p> <p>The sludge dip measurements recorded no quantities of sludge were being held in the uncovered west side rectangular primary settlement tanks (pst's).</p> <p>With the exception of 20m3 being held in circular pst number 10, no other quantities were being held in the open circular pst's. The remainder of the sludge was being held in the covered and odour controlled east side pst's.</p>	<p>No comment to add.</p>
<p>Odour log</p> <p>The odour log was inspected and the new south west odour monitor showed some activity which peaked slightly above 0.02ppm on the 02 January. The entry in the log showed that this was investigated by the night shift which recorded 'no digester seals blowing'.</p>	<p>An investigation was carried out by one of the site operatives.</p> <p>On this occasion, there was no specific source identified to cause this odour.</p>
<p>Pasteurisation plant</p> <p>The plant was fully operational and Thames was satisfied that the ERG odour control unit was operating properly.</p> <p>Please refer to ocu performance data in table below.</p>	<p>No comment to add.</p>



<p>Primary settlement tanks</p> <p>Operatives were hosing down sludge at the hopper end of the tank to pst 13, further to a mechanical problem with the scraping mechanism.</p> <p>There was a tanker at pst 14 engaged in removal of surface sludge, further to a missed scrape due to a dropped bearing on a shaft.</p>	<p>The hoses were being used to clean down PST 13 as part of the final phase of the drain down process. A notification was sent out relating to this work.</p> <p>The tanker was being used to remove any residual sludge that had floated to the surface of the tank while we repaired the bearing in-situ. This meant that we could avoid the need for a drain down.</p>																												
<p>Odour control unit (ocu) performance monitoring (05/01/2009)</p> <table border="1" data-bbox="190 751 1099 1131"> <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</td> <td>0.2</td> <td>Yes</td> </tr> <tr> <td>East ocu</td> <td>0</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>0.9</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> <tr> <td>Pasteurisation plant outlet</td> <td>0.31</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0	0.2	Yes	East ocu	0	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.9	1	Yes	Thickening plant outlet	0.31	1	Yes	Pasteurisation plant outlet	0.31	0.6	Yes	<p>No comment to add.</p>
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**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	15 January 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1, 3, 4B and 5 were filling. 4A was empty. 6 was in use. 7 contained a small volume of effluent. 8 contained a small volume of groundwater arising from seepage into the tank</p>	<p>The small amount of effluent in tank number 7 was promptly removed by over-pumping the hoppers.</p>
<p>Storm tanks cleaning log</p> <p>The condition of the tanks and hoppers had been inspected earlier on the 15th January and the daily log had been completed.</p> <p>This log supported my observations.</p>	<p>No comment to add.</p>



<p>Sludge levels</p> <p>Total sludge stock 9,970m³</p> <p>The sludge dip measurements recorded no quantities of sludge were being held in the uncovered west side rectangular primary settlement tanks (pst's). 135m³ of sludge was being held in the uncovered west side circular pst's.</p> <p>9,835m³ was being held in the covered and odour controlled east side pst's.</p>	<p>No comment to add.</p>
<p>Odour log</p> <p>An entry in the odour log recorded that a sludge spillage at the pasteurisation plant on the 10th January had prompted a clean up by a team. The boundary odour monitors recorded H₂S levels below 0.02ppm for the 10th January, excepting the central monitor which showed odour activity just above 0.02ppm.</p> <p>An entry for the 11th January and again on the 12th January recorded problems with the ERG odour control unit (ocu).</p> <p>This unit serves the pasteurisation plant. The central odour monitor recorded H₂S activity up to approximately 0.03ppm on the 12th.</p>	<p>On Saturday 10 January 2009, there was a minor sludge spill at the pasteurisation plant. It was caused by an overflow from a safety valve on one of the reactors, resulting in a small amount of sludge spilling into an open drain (which feeds back to the head of the works). This is a normal safety process for this piece of plant and could not have been anticipated. A clean up was swiftly carried out.</p> <p>Engineers from the manufacturer of the pasteurisation plant odour control unit have been to site to carry out an investigation into the cause of the odour levels.</p> <p>They have since made adjustments to the odour control unit's chemical systems and this has reduced the levels of odour.</p>



<p>Pasteurisation plant</p> <p>Because of the recent problems with the pasteurisation plant ocu, the plant was inspected including at high level.</p> <p>Odour was apparent in the immediate vicinity of the plant.</p>	<p>Owing to the nature of the treatment process at the pasteurisation plant, some localised odours are generated.</p> <p>The plant has its own odour control units to deal with most of the odour and this part of the works is monitored by a designated member of staff 24 hours a day.</p>
<p>Digesters</p> <p>The recent foaming/overspill from digester 20 had recently been cleaned up and the area hosed down.</p> <p>Digester 14 was gassing through the annular seal.</p> <p>Digester 11 showed evidence of a recent spillage of sludge from the annular seal.</p>	<p>The control room was promptly notified to make adjustments to minimise the gassing off.</p> <p>The observations regarding digester number 11 related to a sludge overspill onto the lip of digester wall. No sludge had leaked onto the surrounding ground area.</p> <p>A clean up has been carried out.</p>
<p>Comments</p> <p>Further to the clean up of the spillage from the pasteurisation plant on the 10th January, there was no evidence of any remaining spilled material.</p> <p>The pasteurisation plant can be a source of odour and because of the nature of the material being treated, the odours can be unpleasant. Thames Water will need to be diligent in ensuring that the plant is operating correctly, particularly with regard to the performance of the odour control unit.</p> <p>Further to ERG's presence on site during the week, I would like to see the report identifying the problems with the ERG ocu and the corrective measures which were taken by the operatives.</p>	<p>TW are still awaiting the full report from the engineers' visit. We are happy to feedback any comments to LB Hounslow's EHO when available.</p>



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	22 January 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 were in use and full</p> <p>Tank 8 held a small amount of liquid comprising groundwater (from tank seepage) and rainfall.</p> <p>There was no noticeable odour associated with the use of the tanks.</p> <p>The associated storm return channel was full of effluent.</p> <p>The status of the tanks and storm return reflected the recent rainfall received in the catchment area.</p>	<p>No comment to add.</p>
<p>Storm tanks cleaning log</p> <p>The entries in the log for the 22 January agreed with my observations.</p> <p>The log showed that all of the tanks were full for the period 19-21 January inclusive.</p>	<p>No comment to add.</p>



<p>Sludge levels</p> <p>Total sludge stock 14,020m³</p> <p>200m³ was held in the uncovered west side circular primary settlement tanks (pst's) and 1,780m³ held in the uncovered west side rectangular pst's.</p> <p>12,040m³ was held in the covered and odour controlled east side pst's.</p>	<p>As noted, the high sludge stocks were held within the odour controlled primary tanks.</p>
<p>Odour monitors</p> <p>All boundary odour monitors were operational and had recorded consistently low levels of H₂S throughout the period 15-22 January (below 0.02ppm).</p>	<p>No comment to add.</p>
<p>Digesters</p> <p>Sludge from Digester 14 had lapped above the annular seal.</p> <p>Digester 11 was actively gassing through the annular seal and this was highly odorous and noticeable from within the boundary of the digester farm.</p>	<p>A clean-up of digester number 14 was swiftly carried out and adjustments were made to control the gassing of digester number 11.</p>



Odour control unit (ocu) performance monitoring 20/01/2009				No comment to add.
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
East ocu	0.01	0.05	Yes	
West ocu	0.01	0.05	Yes	
Sludge reception outlet			Yes	
Thickening plant outlet	0.31	1	Yes	
Pasteurisation plant outlet	0.31	0.6	Yes	
Comments				No comment to add.
The active venting of biogas from one of the digesters and the spillage from another were the matters of principal concern noted during this site inspection.				

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	28 January 2009
Attendees	Michael Mehta – LB Hounslow Alan McEvilly - Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use.</p> <p>Tank 8 was empty.</p> <p>No odour was associated with the use of these tanks at the time of inspection.</p>	<p>No comment to add.</p>
<p>Storm tank cleaning log</p> <p>The log entry for the 27th January recorded that tanks 1-7 were full.</p> <p>Thames management confirmed that storm effluent had been discharging to the river for the past seven days.</p>	<p>No comment to add.</p>



<p>Sludge levels</p> <p>Total sludge stock 10,561m³</p> <p>The sludge dip measurements recorded 3,284m³ was being held in the west side rectangular primary settlement tanks (pst's), 200m³ was being held in the west side circular pst's and 7077m³ was being held in the covered, odour controlled east side pst's.</p>	<p>As noted, the highest levels of sludge were being kept in the odour controlled covered tanks.</p>
<p>Odour log and boundary monitors</p> <p>The odour log entry showed that Thames Water had been making full use of the storm water storage tanks and had been decanting the effluent to keep it fresh.</p> <p>All boundary odour monitors were operational. All monitors recorded H₂S levels below 0.02ppm, excepting the new southwest monitor which recorded some H₂S odour activity above 0.02ppm on the 26th and activity on the 23 January.</p>	<p>It is possible that the digesters may have caused the H₂S activity shown on the southwest monitor. This area checked regularly throughout the day for such activity and where possible, steps are taken to remedy / mitigate any gassing off.</p>



Odour control unit (ocu) performance monitoring (20/01/2009)				No comment to add.
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
Main pumping station outlet		0.2	Yes	
East ocu	0.01	0.05	Yes	
West ocu	0.01	0.05	Yes	
Sludge reception outlet		1	Yes	
Thickening plant outlet	*0.31	1		
Pasteurisation plant outlet	*0.31	0.6		
* Instrumentation to be checked for accuracy				
Comments				
<p>The continuing extensive use of the storm water storage tanks was discussed and in accordance with Mogden's tank management plan, tank effluent would continue to be decanted to mitigate against the emission of odours.</p> <p>Thames is to make available the report on the pasteurisation plant ERG odour control unit, once it becomes available.</p>		<p>The storm tanks are flushed on a regular basis to keep them fresh and odour free as possible.</p>		



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings on 28th January 2009

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

Date of inspection	19 th February 2009
Attendees	Gerry McCarthy LB Hounslow Operational Team Manager, Thames Water Andy Gingell, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Screens Handling Area</p> <p>There was a spillage from washpactor 1 which appeared to have happened at the time of the inspection as it was very localised and arrangements were put in place immediately to deal with it.</p>	<p>This spillage was due to a small blockage on one of the launders. This was quickly actioned.</p>
<p>Storm Water Tanks</p> <p>All of the storm water tanks were in use and while not odorous I requested that storm tank 3b needed flushing to ensure that odour did not cause a problem.</p> <p>The hoppers to storm tank 8a and 8b required emptying and while I was advised that they had been emptied earlier in the week this had not been recorded in the Storm Tank Log. In future when these hoppers are emptied this should be recorded in the Storm Tank Log.</p>	<p>Storm tank 3 was promptly flushed.</p>

<p>Sludge Stock Levels</p> <p>Levels of sludge in the works had been high with the following levels recorded.</p> <p>19/2/09 1860w and 7334e = 9194m3 18/2/09 1860w and 8315e = 10175m3 17/2/09 2236w and 7519e = 9827m3 16/2/09 1860w and 5886e = 7746m3</p> <p>Primary Settlement Tank number 8 on the east side of the works is out of service and it is hoped to be back in service by 27th February.</p>	<p>The high levels of sludge were being held / processed in the odour controlled areas of the site.</p>
<p>Odour Complaints and Monitors</p> <p>I advised that a complaint had been received earlier in the week but having examined the odour traces and site odour log it was not possible to identify the source of the odour which caused the resident to make the complaint.</p> <p>The south west monitor had shown a very short spike the source of which appears to have been digester 15 and the amount of gas in the digester was reduced which resulted in the bell height of the digester being reduced. No other problems were identified. I also checked this digester during the inspection and did not identify any problem at the time.</p>	<p>No comment to add.</p>
<p>West Side Rectangular Primary Settlement Tanks</p> <p>Due to the amount of material on the top of Tank14b it appeared to have missed a sequence of scraping and this needs to be attended to without delay.</p>	<p>A fault on the scraper bridge caused the problem with the automated scrape. This was repaired on that same day.</p> <p>Hoses were used to break up any surface sludge and any problems with the tank were resolved at the next sequence (that day).</p>

Odour control unit (ocu) performance monitoring.				No comment to add.
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
Main pumping station outlet	0.027	0.2	✓	
East ocu	0.01	0.05	✓	
West ocu	0.01	0.05	✓	
Sludge reception outlet	0.039	1	✓	
Thickening plant outlet	0.14	1	✓	
Pasteurisation plant outlet	0.12	0.6	✓	

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	4 th February 2009
Attendees	Michael Mehta – LB Hounslow Alan McEvilly – Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use. Tank 8 was not in use and contained a small volume of groundwater and rainwater only.</p>	No comment to add.
<p>Storm tank cleaning log</p> <p>Entries in the log recorded that the tanks were full and this supported my observations.</p>	No comment to add.
<p>Sludge levels</p> <p>Total sludge stock 8,333m³</p> <p>The sludge dip measurements recorded a volume of 1,780m³ was being held in the west side rectangular primary settlement tanks (pst's), 200m³ was being held in the west side circular pst's and 6,353m³ was being held in the covered, odour controlled east side pst's.</p>	No comment to add.



<p>Boundary odour monitors (H2S)</p> <p>All boundary odour monitors were operational.</p> <p>Some H2S activity, slightly above 0.02ppm, was recorded by the south and south west monitors on the 02 February and also by the south side monitor on the 01 February.</p> <p>This activity was discussed at the time and I am advised that the snow had interfered with the digester level sensors, which would have led to some gassing off.</p>	<p>No further comment to add.</p>
<p>Comments</p> <p>There was no detectable odour arising from the extensive use of the storm tanks and more generally, the level of on site odour was low.</p>	<p>The storm tanks are flushed on a regular basis to keep them fresh and odour free as possible.</p>

I agree that this report is a true reflection of my site inspection findings on 4th February 2009.

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

Date of inspection	13 th February 2009
Attendees	Michael Mehta – LB Hounslow Alan McEvilly – Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm water storage tanks</u></p> <p>Tanks 1-7 were at capacity and storm water was being discharged to the river Tank 8 was not in use and contained a small volume of groundwater (seepage) and rainwater.</p>	No comment to add.
<p><u>Storm tank cleaning log</u></p> <p>Storm tank daily checks' entries showed that the tanks were full and had been at capacity for consecutive days as far back as the 27th January.</p>	No comment to add.
<p><u>Sludge levels</u></p> <p>Total sludge stock 5,321m³</p>	No comment to add.



<p><u>Boundary odour monitors (H2S)</u></p> <p>All boundary monitors functioning except for the eastside monitor. The southside monitor indicated most H2S activity, however <u>none</u> of the functioning monitors had recorded H2S activity above 0.02ppm, since 6 Feb.</p>				<p>No comment to add.</p>																													
<p><u>Odour control unit (ocu) performance monitoring (13/02/2009)</u></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>0.00</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> <tr> <td>West ocu</td> <td>0.01</td> <td>0.05</td> <td>Yes</td> </tr> <tr> <td>Sludge reception outlet</td> <td></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> <tr> <td>Pasteurisation plant outlet</td> <td>*0.31</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>				Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.00	0.2	Yes	East ocu	*0.00	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet		1	Yes	Thickening plant outlet	*0.31	1	Yes	Pasteurisation plant outlet	*0.31	0.6	Yes	<p>No comment to add.</p>	
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**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings on 13th February 2009

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

Date of inspection	27 February 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-8 inclusive were in use.</p> <p>Some inverted sludge was present on the surface of storm water in tank 7.</p> <p>There was no odour associated with this at the time of inspection.</p>	<p>The storm tank 7 was flushed to prevent any possible odour by keeping the contents fresh.</p>
<p>Storm tank cleaning log</p> <p>Entries in the log recorded that the tanks were full and this supported my observations.</p>	<p>No comment to add.</p>
<p>Sludge levels</p> <p>Total sludge stock 8,308m³</p> <p>The sludge dip measurements recorded a volume of 1,780m³ being held in the west side rectangular primary settlement tanks (pst's), 175m³ was being held in the west side circular pst's and 6,353m³ was being held in the covered, odour controlled east side pst's.</p>	<p>No comment to add.</p>

Boundary odour monitors (H2S)

All boundary odour monitors were operational.

Further to odour complaints for the 20/21/22 February, the odour traces for these days were scrutinised.

All monitors had recorded low levels of H2S activity throughout the period 20/21/22 February (below 0.02ppm).

No comment to add.

Odour control unit (ocu) performance monitoring (25/02/2009)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	*	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	*	1	Yes
Thickening plant outlet	*	1	Yes
Pasteurisation plant outlet	*	0.6	Yes

No comment to add.

*Three manual readings taken using portable Jerome monitors. Temporary arrangement pending investigation by Pollution Monitors.

<p>Odour log</p> <p>On the morning of the 21 February, some odour had been identified at the back of the storm tanks. Storm water was being discharged to the river at the time.</p> <p>On the afternoon of the 21 February, some odour had been identified at the base of two of the pasteurisation plant reactors, further to a discharge, which had been dealt with by flushing through the drains. Sludge levels in two of the reactors was reduced.</p> <p>On the 22 February, further to the south west H2S odour monitor recording some activity (below 0.02ppm) thought to be a result of high gas levels in the digester area, corrective action was taken and the digester sequence stopped.</p> <p>On the 23 February, some odour was identified in the vicinity of the west side primary settlement tanks.</p>	<p>No further comment to add.</p>
<p>West side primary settlement tanks</p> <p>There was evidence of some inverted sludge on the surface of effluent in pst's 13A and B. This was causing on site odour.</p>	<p>Hoses were used to break up the sludge that had floated to the surface ahead of the next tank sequence.</p>
<p>Comments</p> <p>It was agreed with Thames Water that special attention should be given to the condition of the storm tanks (especially tank 7) and pst 13.</p>	<p>No further comment to add.</p>

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	13 th March 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use.</p> <p>Tank 8 did not contain any storm effluent.</p>	No comment to add.
<p>Storm tank cleaning log</p> <p>Entries in the log for the 13/03/2009 supported my own observations.</p>	No comment to add.
<p>Sludge levels</p> <p>Total sludge stock 5,783m³</p> <p>The sludge dip measurements recorded a volume of 2,156m³ held in the west side rectangular primary settlement tanks (pst's), 170m³ held in the west side circular pst's and 3,457m³ held in the covered , odour controlled east side pst's.</p>	No comment to add.

Boundary odour monitors (H2S)

All boundary odour monitors were operational.

The east side and south west monitors had recorded some higher activity on the 10th March, although these 'spikes' did not exceed 0.02ppm The odour log recorded that on the afternoon of the 12th March there was some on-site odour noted from the storm tanks and from the pasteurisation plant.

No comment to add.

Odour control unit (ocu) performance monitoring (13/03/2009)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.009/0.007/0.007	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.43/0.50/0.54	1	Yes
Thickening plant outlet	0.29/0.29/0.26	1	Yes
Pasteurisation plant outlet	0.13/0.14/0.14	0.6	Yes

No comment to add.

<p>Digesters</p> <p>A very recent spillage had taken place from digester 14.</p> <p>Digester 11 was actively gassing via the annular seal.</p>	<p>A foaming digester had caused the spillage around the lip of a digester.</p> <p>A clean up of the area was carried out with immediate effect and adjustments were made to reduce the gassing off.</p>
<p>Comments</p> <p>The observations regarding digesters 14 and 11 were the matters of most concern and required immediate attention.</p>	<p>No further comment to add.</p>

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	25 March 2009
Attendees	Michael Mehta, LB Hounslow A Georgaides, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1, 6, 8 empty. Settled sludge on base of tank 6A at far end.</p> <p>Tank 2, 3, 4, 5, 7 in use.</p> <p>Tank 3 held a low volume of effluent and the Amajet in operation was causing turbulence and consequent odour.</p> <p>Overpumping to drain down effluent from the hoppers to 8B was taking place.</p>	No comment to add.
<p>Storm tank cleaning log</p> <p>Entries in the updated log, supported my observations</p>	No comment to add
<p>Boundary odour monitors (H2S)</p> <p>The southwest monitor had recorded infrequent readings above 0.02ppm.</p>	Boundary monitor readings are closely monitored by the process controllers and are investigated as per the odour management plan.

<p>Digesters</p> <p>The bell height to digester 11 was high and there was some slight gassing taking place through the annular seal.</p>	<p>Adjustments were made to minimise gassing off.</p>																												
<p>Sludge levels</p> <p>Total sludge stock 5,659m³</p> <p>The sludge dip measurements recorded a volume of 1,780m³ held in the west side rectangular primary settlement tanks (pst's), 60m³ held in the west side circular pst's and 3,819m³ held in the covered, odour controlled east side pst's.</p>	<p>No comment to add.</p>																												
<p>Odour control unit (ocu) performance monitoring</p> <table border="1" data-bbox="190 821 1102 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>0.003/0.002/0.001</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>0.2/0.26/0.3</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.28/0.36/0.40</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>0.11/0.12/0.12</td> <td>0.6</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.003/0.002/0.001	0.2	Yes	East ocu	0.01	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.2/0.26/0.3	1	Yes	Thickening plant outlet	0.28/0.36/0.40	1	Yes	Pasteurisation plant outlet	0.11/0.12/0.12	0.6	Yes	
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Pasteurisation plant outlet	0.11/0.12/0.12	0.6	Yes																										

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	09 April 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1A empty, clean and dry</p> <p>Tank 1B empty, some dried sludge on tank bottom</p> <p>Tank 2A some effluent and sludge.</p> <p>Tank 2B low volume of effluent, some effluent churning caused by operation of the swing jets</p> <p>Tank 3A & 3B in use</p> <p>Tanks 4 & 5 in use</p> <p>Tank 6A some sludge settled on tank bottom</p> <p>Tank 6A & 6B hoppers full</p> <p>Tank 7A & 7B in use</p> <p>Tank 8A overpumping to hoppers in operation</p> <p>Urgent action required to 2A and 6A to prevent risk of odour emission</p>	<p>Tank 1B, 2A and 6A were promptly hosed down to remove any settled / dried sludge.</p>



<p>Storm tank cleaning log</p> <p>Entries in the updated log, supported my observations</p>	<p>No comment to add.</p>
<p>Boundary odour monitors (H2S)</p> <p>Boundary monitor readings for the week recorded levels below 0.02ppm (H2S)</p>	<p>No comment to add.</p>
<p>Sludge levels</p> <p>Total sludge stock 8,512m³</p> <p>The sludge dip measurements recorded a volume of 1,780m³ in the west side rectangular primary settlement tanks (pst's), 122.5m³ in the west side circular pst's and 6,610m³ held in the covered, odour controlled east side pst's.</p>	<p>No comment to add.</p>
<p>Digesters</p> <p>Digester 11 was gassing through the annular seal.</p> <p>Corrective action required by the powerhouse to reduce/prevent gas release</p>	<p>Adjustments were made to minimise any gassing off from digester no. 11.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.004/0.002/0.001	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.11/0.12/0.16	1	Yes
Thickening plant outlet	0.19/0.24/0.26	1	Yes
Pasteurisation plant outlet	Not operating	0.6	Not operating

Additional Comments
<p>Hosing down was taking place in the washpactor area.</p> <p>Three final effluent tanks were out of operation.</p> <p>De-watering was taking place on the hardstanding to the west side.</p> <p>Pasteurisation plant temporarily out of service, further to programmed servicing of the odour control unit.</p>

<p>Following dewatering, the area was promptly cleaned up.</p> <p>As noted the pasteurisation plant was out of service. A notification was sent out relating to this work.</p>
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**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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 McEvelly

Process Manager, Thames Water



LB Hounslow Mogden STW Site Inspection

Date of inspection	03 April 2009
Attendees	Plant Manager, Thames Water A McEvilly (part), Thames Water G McCarthy, LB Hounslow

LB Hounslow Observation	Thames Water Action / Response
<p>Screen House.</p> <p>There was a metal roller shutter door in the screen house open adjacent to the washpactor area. All such doors are required to be kept closed unless maintenance is being carried out and please confirm if maintenance was being carried out.</p>	<p>Screen number 5 is currently being refurbished. This is the reason for the shutters being open.</p>
<p>Grit Skips</p> <p>There were two uncovered grit skips (both approx half full) in the grit handling area on the East Side of the works</p>	<p>Our contractor who deals with the skips had been onsite and had left the two skips uncovered after moving them around. These were promptly re-covered and we have reinforced the procedures with the skip company.</p>
<p>Sludge Stocks</p> <p>3/4/09 West 890 and 140 plus East 3095, total 4125m³ 2/4/09 West 890 and 140 plus East 3457, total 4437m³ 1/4/09 West 1335 and 90 plus East 3095, total 4520m³</p>	<p>No comment to add.</p>



Storm Water Tanks

Storm Water Tank 1a was empty and while tank 1b was empty it appeared as if the middle amajet was not working as there was dried material on the floor of the tank and it needed to be flushed out.

Tank 2a was empty and Tank 2b was in use but emptying.
Tanks 3a, 3b, 4a, 4b, 5a, 5b and 6b, 7a and 7b were in use and Tanks 6a and 8a and 8b were empty.

There was a hopper full of effluent in both Tanks 8a and 8b and it appeared that these were overdue for being emptied as crusts had formed on top of the effluent.

On checking the storm water tank log tank it was noted that a number of amajets of the storm water tanks e.g. Tanks 1b, 3a, 4a(amajet 6), 5a (amajets 4 and 6), 6a (amajet 6) 7a and 8 were faulty and that it was not possible to reset them. Can you please confirm your that these amajets will be in proper working order as soon is reasonable practicable and also your procedure for ensure that these repairs take place as necessary.

I was extremely concerned to note that there is no record logged of when hoppers are emptied including by whom, date and time and that this needs to be recorded in the storm water log on every occasion that the hoppers are emptied as this will ensure that everyone is aware when the hoppers are emptied and there can be no misunderstandings regarding this matter. This was a matter, which I had raised on my previous inspection of the site on 19th February 2009 and needs to be addressed as a matter of urgency. Similar records need to be kept when the tanks are flushed out or emptied.

Storm tanks 1a and 1b were flushed to remove the dried material on the bottom of the tank.

The water that had collected in the hoppers of tank 8 was also pumped out.

We have instructed our maintenance team to look into all of the failed amajets.

We have also spoken with the teams who pump out the hoppers regarding audit trails.



Odour control unit (ocu) performance monitoring				No comment to add.
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
Main pumping station outlet	.006	0.2	Yes	
East ocu	0.01	0.05	Yes	
West ocu	0.01	0.05	Yes	
Sludge reception outlet	0.75	1	Yes	
Thickening plant outlet	0.17	1	Yes	
Pasteurisation plant outlet	0.1	0.6	Yes	

General	
<p>I again discussed the matter of the lack of odour monitor readings on the website and was advised that they will be uploaded next week. Can you provide me with an exact date by which this will happen in order that residents can be notified.</p> <p>I have noted that my inspection of 19th February has uploaded onto the website.</p> <p>While checking the odour monitor reading I noted that there was a very large spike < 0.08ppm on 25th March and can you please provide an explanation for this odour event.</p>	<p>The odour monitor readings were delayed owing to a broken fibre optic cable. This has now been fixed and the odour monitor readings are available for public viewing on our website.</p> <p>The spike you have noted is unusually large. There were no activities recorded for that day which could have caused such levels. Spikes like these are often typical of the odour monitors 'tripping out' and we have classified this reading as being erroneous.</p> <p>This has been raised to the technician responsible for the units.</p>



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	14 April 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1A empty, clean and dry</p> <p>Tank 1B some sludge on bottom of tank, indicative of a swingjet malfunction.</p> <p>Tank 2A one of the hoppers was full of effluent including sludge, which was giving rise to on-site odour.</p> <p>Tank 2B one of the hoppers contained sludge</p> <p>Tanks 3A & 3B empty</p> <p>Tanks 4, 5 & 6 in use</p> <p>Tank 7 in use and contained a small volume of effluent</p> <p>Tank 8 empty</p> <p>Urgent action required to tank 2 to remove effluent from hoppers</p>	<p>Effluent was pumped out from the hoppers on tank 2.</p> <p>A maintenance team have since repaired the faulty amajet.</p>



<p>Sludge levels</p> <p>Total sludge stock 4,133m³</p> <p>The sludge dip measurements taken on the 14 April recorded a volume of 2,156m³ held in the west side rectangular primary settlement tanks (PST'S), 120m³ in the west side circular PST's and 1,857m³ in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p>Boundary odour monitors (H2S)</p> <p>The south west and northside odour monitors had each recorded one occasion when the H2S levels had exceeded 0.02ppm on the 14 April.</p> <p>Excepting this activity, none of the odour monitors had recorded H2S levels exceeding 0.02ppm at any time over the Easter break i.e. 10/11/12/13 April.</p>	<p>No comment to add.</p>
<p>Digesters and sludge handling</p> <p>There was odour typically associated with sludge handling noticeable on site, in and around the sludge handling plant and processes. The precise source could not be identified.</p> <p>The digester area was largely odour free. Digester 11 showed evidence of a recent slight sludge spillage, which had resulted in sludge spilling onto the lip at the base of the digester but not beyond.</p>	<p>The dried residue had formed as a result of some digester foaming. This has since been cleaned up.</p>



<p>West side primary settlement tanks</p> <p>There was some localised odour associated with these tanks and in particular arising from sludge build up near the scraper bridges. A scraping sequence was programmed later during the evening.</p>	<p>The small accumulation of sludge was cleared as a result of the normal scraper sequence process.</p>
<p>Additional comments</p> <p>The most recent data set for odour control unit performance is 08 April and this has already been inspected and attached to the previous site inspection report for the 09 April.</p> <p>An entry in the storm tank cleaning log recorded that the the process controller had been informed regarding a fault on the return pump serving storm tank 2A/2B</p> <p>All skips had been covered with tarpaulins</p> <p>The pasteurisation plant had returned to service.</p>	



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	21 April 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm water storage tanks</u></p> <p>Tank 1, clean and dry</p> <p>Tank 2A, one of the hoppers was full of effluent and sludge floating on the surface which was emitting strong odour noticeable on site.</p> <p>Tank 2B contained some effluent and the swing jets were in use</p> <p>Tanks 3, 4, 5 & 6 were in use</p> <p>Tank 7 was being actively hosed down to remove sludge from the base of the tank.</p> <p>Over pumping of the hoppers was taking place simultaneously with effluent being decanted into the storm channel. These operations were causing odour, which was detectable on site.</p> <p>Tank 8 was clean and dry, except for one hopper in tank 8B which was full of water, arising from groundwater seeping into the tank. There was no odour associated with this.</p> <p>Urgent action is required to fully drain down the effluent from tank 2A hopper and complete the removal of sludge from tank 7</p>	<p>Storm tank 2A and 2B were flushed to remove any effluent from the tanks and the hoppers were pumped out to leave the tanks empty.</p> <p>Work on tank 7 continued until all the sludge had been broken up.</p> <p>The over pumping of the storm tank hoppers was being carried out to make sure that the hoppers on any empty tanks remain empty, as per the odour management plan. This also includes the groundwater seepage in tank 8.</p>



<p><u>Sludge levels</u></p> <p>Total sludge stock 12,169m³.</p> <p>The sludge dip measurements taken on the 21 April recorded a volume of 890m³ held in the west side rectangular primary settlement tanks (PST's), 220m³ in the west side circular PST's and 11,059m³ in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>Further to the three odour complaints made on the 17 April and one on the 18 April, the odour readings and odour log were inspected. On the 17 April, all boundary monitor readings were below 0.02ppm. Entries in the odour log recorded no strong odours on site in the morning and all storm tanks were in use in the afternoon. At the time, the central and westside monitors had not been working. These monitors were subsequently checked/repared and were operational at the time of the site inspection.</p> <p>On the 18 April, the southside monitor recorded H₂S activity as high as approximately 0.04ppm.</p> <p>The odour log shows that this activity was noticed at the time but that no strong odours were found.</p> <p>The storm tanks were full on the 18th.</p>	<p>No comment to add.</p>



<p><u>Digesters</u></p> <p>Digester 11 was gassing through the annular seal.</p> <p>Corrective action is required by the powerhouse to reduce/prevent gas release</p>	<p>Adjustments were made to the digesters to reduce any gassing off.</p>
<p>East side classifiers grit handling building</p> <p>Some spilled liquid on the hardstanding immediately in front of the building although localised, was highly odorous.</p>	<p>The spill had been caused by a recent skip movement and was cleaned up immediately.</p>
<p>West side screenings skips</p> <p>Although these skips are located a long way from residential premises, tarpaulins need to cover the skips unless loading operations are taking place.</p>	<p>All skips that have potential to cause odour are covered with tarpaulins until they can be removed from site.</p>



Odour control unit (ocu) performance monitoring				No comment to add.
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
Main pumping station outlet	0.007/0.006/0.005	0.2	Yes	
East ocu	0.01	0.05	Yes	
West ocu	0.01	0.05	Yes	
Sludge reception outlet	0.44/0.45/0.50	1	Yes	
Thickening plant outlet	0.71/0.69/0.72	1	Yes	
Pasteurisation plant outlet		0.6	No reading	
Additional comments				No comment to add.
<p>With the recent improvement in weather, particularly a significant rise in daytime temperature, Thames Water must ensure a high standard of on site housekeeping. In respect of cleaning of the storm tanks and hoppers, cleaning operations to remove accumulated sludge, etc must be completed before the end of shift.</p>				



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	29 April 2009
Attendees	Gerry McCarthy, LB Hounslow Ian Inman, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm Tanks</p> <p>The use of the storm water tanks was as follows:</p> <p>Tank 1a empty, Tank 1b filling Tank 2a and 2b in use Tank 3a and 3b in use Tanks 4a and 4b in use Tanks 5a and 5b in use Tanks 6a(in use) Amajet 1 needs checking Tank 6b filling Tank 7a was empty and also being hosed down Tank 7b was empty and the hoppers were being over pumped Tank 8a and 8b were empty and the hoppers were being over pumped</p> <p>Since my previous inspection of 3rd April management of the tanks has improved and the storm water tank log is being maintained better but I would recommend that the time that the log is completed is recorded and that when hoppers are emptied this is initialled on the log by the staff member undertaking the work.</p>	<p>Concerns relating to Amajet 1 on tank 6a were passed on to the site maintenance team who rectified the fault on the following day.</p>



<p>Sludge Stocks</p> <p>Sludge stocks were high on the 29th April 1335 +175 W + 5991 E = 7501m³ 28th April 1711 175 W + 4893E = 6779m³ 27th April 1335 +175W + 5255E = 6765m³</p>	<p>The majority of the sludge stocks were being held in the odour controlled tanks.</p>
<p>Odour Monitor Readings</p> <p>The odour monitor readings for the previous week have not been uploaded on the website and this needs to be undertaken as a matter of urgency. It was also noted that the central monitor was out of service between 24th and 26th April.</p>	<p>The odour monitors are available for download on our Company website.</p> <p>Our technicians were unable to repair the monitors onsite and they have since been sent off to an external company for repair.</p>
<p>Site Inspections</p> <p>No site inspection reports have been uploaded onto the website since 3rd April and all outstanding reports need to be placed on the website without delay in the interest of good community relations with residents.</p>	<p>We are in the process of getting up to date with these inspection reports and plan to have this section of the website up to date shortly.</p> <p>We would like to apologise if this has caused any inconvenience.</p>
<p>Digester.</p> <p>There was evidence of a very slight spillage by digester 14, which was not odorous, and this was passed onto site operational staff while on site.</p>	<p>The slight spillage was as a result of the digester foaming. A clean up has been carried out.</p>



<p>Complaints</p> <p>I advised that 11 complaints had been received recently one complaining of odour from 19th April onwards and getting worse by 24th April and the rest relating to complaints over the weekend and overnight on Tuesday. It was agreed that these will be passed onto Thames Water for investigation and providing a response on the website.</p>	<p>Responses to these complaints have been put on our website.</p>																																
<p>Odour control unit (ocu) performance monitoring (20/01/2009)</p> <table border="1" data-bbox="190 691 1102 1109"> <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>0.44</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.16</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>0.1</td> <td>0.6</td> <td>Yes</td> </tr> <tr> <td>Transfer Pumping Station</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	0.006	0.2	Yes	East ocu	0.01	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.44	1	Yes	Thickening plant outlet	0.16	1	Yes	Pasteurisation plant outlet	0.1	0.6	Yes	Transfer Pumping Station	0.04	0.6	Yes	<p>No comment to add.</p>
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**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	08 May 2009
Attendees	Operational Team Leader, Thames Water Michael Mehta, LB Hounslow

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1 empty and clean. Hoppers full but no odour.</p> <p>Tank 2 in use, no odour.</p> <p>Tank 3 in use, no odour.</p> <p>Tanks 4 & 5 in use (covered and odour controlled)</p> <p>Tank 6A & 6B empty. Sludge on tank bottom.</p> <p>Tank 7 empty. Effluent in the shallow, modified hoppers. No odour.</p> <p>Tank 8 empty. Two hoppers full of groundwater.</p> <p>Action required to remove sludge from bottom of tank 6A/B</p>	<p>The hoppers were emptied by over-pumping.</p> <p>The tank was flushed through and cleaned thoroughly.</p>
<p>Sludge levels</p> <p>Dip records for 08/05 unavailable</p>	



<p>Boundary odour monitors (H2S) & odour log</p> <p>Further to complaints made regarding odour over the Bank Holiday period, the boundary odour monitor readings and odour log were checked.</p> <p>The monitors had recorded levels below 0.02ppm of H2S throughout the period 01-06 May.</p> <p>Entries in the odour log showed that there had been a problem with low chemicals to the pasteurisation plant odour control unit (ocu) and that the plant was shut down on the 02 May and restarted on the 04 May.</p> <p>While the boundary monitor odour levels for H2S for the period indicate that the action level was not exceeded, I would like to see the outlet readings for the pasteurisation plant odour control unit for the same period.</p>	<p>All of the boundary monitor readings over the bank holiday period were below the action level. Site inspections during this period showed no significant odours on site.</p> <p>The pasteurisation plant's OCU was temporarily shut down after a problem with the supply of the required chemical. During this time the reactors were not in use. This prevented any odour from being produced, as noted in the readings for the site boundary monitors.</p> <p>Unfortunately, due to a technical limitation, the outlet readings for this period are not available.</p>
<p>Digesters</p> <p>Digester 8 was gassing through the annular seal.</p> <p>Digester 11, evidence of recent foaming/spillage.</p> <p>Corrective action required by the powerhouse to reduce/prevent gas release</p>	<p>Adjustments were made to prevent further gassing.</p> <p>The small amount of sludge caused by the foaming digester was promptly cleared.</p>
<p>Odour control units performance monitoring</p> <p>The readings for the sludge reception outlet and the thickening plant outlet while compliant with the action level are high. These readings should be checked for validity. If valid they may indicate that the ocu's are beginning to under-perform.</p>	<p>All the odour control unit readings were compliant within the action level. The daily odour control unit checks showed that all odour control units are performing efficiently.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.01/0.009/0.008	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.8/0.88/0.92	1	yes
Thickening plant outlet	0.77/0.86/0.82	1	yes
Pasteurisation plant outlet	0.1/0.1/0.1	0.6	yes
Transfer ps outlet	0.04	1	yes

Additional comments

Analysis of the pasteurisation plant ocu outlet readings should be actioned for the Bank Holiday period.

These readings should be checked for compliance with the ocu outlet action level.



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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



<p>Sludge levels</p> <p>Total sludge stock 8,495m³</p> <p>The sludge dip measurements taken the same day recorded a volume of 1,780m³ in the west side rectangular primary settlement tanks (PST's), nil recorded volume in the west side circular PST's and 6,715m³ in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p>Boundary odour monitors (H₂S) & odour log</p> <p>The odour log entries recorded no odour problems for the period 08-14 May inclusive.</p> <p>Analysis of the odour readings showed the readings for H₂S were below the trigger level, except for activity recorded by the southside monitor on the 12 May, which recorded several spikes during the day peaking just above the trigger level.</p>	<p>The slight activity was investigated and no significant site odours were found.</p>
<p>Digesters</p> <p>Digester 11 was gassing through the annular seal.</p> <p>Corrective action is required by the powerhouse operatives to reduce/prevent gas release</p>	<p>The control room made adjustments to reduce further gas release.</p>



Odour control unit (ocu) performance monitoring			
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	0.69/0.72/0.76	1	yes
Thickening plant outlet	0.66/0.78/0.67	1	yes
Pasteurisation plant outlet	0.1	0.6	yes
Transfer ps outlet	0.04	1	yes

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	22 May 2009
Attendees	Operational Team Leader, Thames Water Michael Mehta, LB Hounslow

LB Hounslow Observation	Thames Water Action / Response
Screen house Work on-going in the screen house.	 No comment to add.
Storm water storage tanks Tank 1 empty Tank 2 in use. Effluent being returned and swingjets operating. Tanks 3, 4 & 5 in use. Tank 6 empty. Tank 7 part-filled and slight localised odour arising from sludge in one corner of the tank. Tank 8 empty Action required to remove sludge from tank 7	 The corner of tank 7 was promptly cleared using water hoses.



<p>Sludge levels</p> <p>Total sludge stock 9,930m³</p> <p>The sludge dip measurements for the same day recorded a volume of 1,335m³ in the west side rectangular primary settlement tanks (PST's), 70m³ in the west side circular PST's and 8,528m³ in the covered, odour controlled east side PST's.</p>	<p>No comment to add</p>
<p>Boundary odour monitors (H₂S) & odour log</p> <p>All boundary odour monitors functioning except for the central monitor.</p> <p>Low levels of H₂S activity (below the trigger level) for the period 13-22 May inclusive, except for one episode recorded by the south west monitor on the 15 May, when the level just peaked above 0.02ppm.</p>	<p>The central monitor has been sent away for recalibration.</p> <p>This was investigated and no localised odour was found.</p>
<p>West side rectangular primary settlement tanks</p> <p>Some inverted sludge present on surface of effluent in tank 15B Additional comments</p> <p>All skips on the west and east sides were properly covered with tarpaulins.</p>	<p>Tank 15B was hosed down to minimise any possibility of odour.</p>
<p>Storm tank cleaning log was completed for the 22 May.</p> <p>Urgent action required to storm tank 7 and to PST 15B.</p>	<p>As stated above.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.011/0.016/0.015	0.2	yes
East ocu	0.01	0.05	yes
West ocu	0.01	0.05	yes
Sludge reception outlet	0.87/0.91/0.85	1	yes
Thickening plant outlet	0.58/0.64/0.65	1	yes
Pasteurisation plant outlet	0.1	0.6	yes
Transfer ps outlet	0.04	1	yes

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	28 th May 2009
Attendees	Operational Team Leader, Thames Water Michael Mehta, LB Hounslow

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen house</u></p> <p>Work on-going in the screen house. This work comprises refurbishment of some of the screens.</p>	<p>The refurbishment work is being carried out in a fully odour controlled environment and will therefore not result in any increase of odour.</p>
<p><u>Storm water storage tanks</u></p> <p>Tank 1 empty. Hoppers drained down</p> <p>Tanks 2-7 inclusive all in use</p> <p>Tank 8 overpumping of hoppers in progress, with removed effluent discharged to the storm return channel.</p> <p>The daily storm tank log had been completed and the entries supported my observations on the condition and status of the storm tanks.</p>	<p>The over-pumping of the storm tank hoppers continued and was completed the same day</p>



<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>All operating boundary monitors recorded H2S levels below 0.02ppm throughout the bank holiday period (23/24/25 May). Levels below 0.02ppm were recorded throughout the 26/27 and into the 28 May (the inspection date).</p>	<p>No comment to add.</p>																																
<p><u>Sludge levels</u></p> <p>Total sludge stock 8,524m³</p> <p>The sludge dip measurements for the same day recorded a volume of 890m³ in the west side rectangular primary settlement tanks (PST's), 90m³ in the west side circular PST's and 7,544m³ held in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>																																
<p><u>Odour control unit (ocu) performance monitoring</u></p> <table border="1" data-bbox="190 970 1102 1321"> <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>0.012/0.006/0.012</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>0.37/0.39/0.43</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.62/0.54/0.65</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>0.1/0.1/0.1</td> <td>0.6</td> <td>Yes</td> </tr> <tr> <td>Transfer ps outlet</td> <td>0.04</td> <td>1</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.012/0.006/0.012	0.2	Yes	East ocu	0.01	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.37/0.39/0.43	1	Yes	Thickening plant outlet	0.62/0.54/0.65	1	Yes	Pasteurisation plant outlet	0.1/0.1/0.1	0.6	Yes	Transfer ps outlet	0.04	1	Yes	
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<p><u>Digesters</u></p> <p>Digesters 8 and 10 were releasing gas via the annular seals.</p> <p><u>Corrective action is required by the control room operatives</u></p>	<p>The control room was notified of the gas release and adjustments were promptly made to prevent further release.</p>
<p><u>West side primary settlement tanks</u></p> <p>Some inverted sludge was present in tank 15B</p>	<p>The small amount of surface sludge was removed during the next automated scrape sequence</p>

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	02 June 2009
Attendees	Operational Team Leader, Thames Water Michael Mehta, LB Hounslow

LB Hounslow Observation	Thames Water Action / Response
Screen house Refurbishment work to screens 5 and 6 was in progress.	 The refurbishment work is being carried out in a fully odour controlled environment and will therefore not result in an increase of odour.
Washpactors The hard standing around the BIFFA bulk waste carriers was clean and there was no odour.	 No comment to add.
Sludge levels Total sludge stock 7,624m ³ The sludge dip measurements for the same day recorded a volume of 1,335m ³ in the west side rectangular primary settlement tanks (PST's), 60m ³ in the west side circular PST's and 5,629m ³ held in the covered, odour controlled east side PST's.	 No comment to add.



<p>Storm water storage tanks</p> <p>Tank 1, empty, clean, dry. No odour.</p> <p>Tank 2 being flushed through. Amajets (swingjets) churning effluent and causing some on-site odour.</p> <p>Tank 3B, effluent being returned for treatment. Amajets churning effluent and causing some on-site odour.</p> <p>Tanks 4, 5, 6 & 7 in use.</p> <p>Tank 8 completely empty excepting one hopper, which was full of effluent.</p> <p>Action required to drain down hopper to tank 8.</p>	<p>The Amajets clean the storm tank by jetting effluent at high pressure along the base. This cleaning action by its nature can occasionally produce a small amount of localised odour. This only occurs during the final stages of the tank emptying and is essential to leave the tank clean.</p> <p>This hopper was promptly drained down by over-pumping.</p>
<p>Storm tank daily checks</p> <p>The daily log had been completed for the 02 June 2009 (the date of inspection), and entries recorded a faulty amajet in tank 6A and pumping out in progress to the hoppers to tank 8.</p>	<p>The site's maintenance team were informed of the fault and a work order raised for its repair, which was completed the following day.</p>
<p>Boundary odour monitors (H2S) & odour log</p> <p>Sustained H2S levels above the action level was recorded by the west side odour monitor lasting several hours on the night of the 01 June and into the early hours of the 02 June. H2S levels above the action level were recorded by the west side and south side monitors on the 02 June.</p> <p>Report requested from Thames regarding odour activity on the 01/02 June</p>	<p>Following the West Side Odour monitor recording elevated H2S levels at this time. The shift team on site carried out an odour patrol on site and found no obvious sources for the increased levels. This was noted in the site odour log.</p>



<p>Digesters</p> <p>Digester 11 was releasing gas via the annular seal.</p> <p>Corrective action was required by the control room operatives.</p>				<p>The control room was informed and adjustments were made to prevent further gas release.</p>																															
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I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	12 th June 2009
Attendees	Gerry McCarthy and Cllr Jon Hardy, LB H Hounslow Keith Gardner, Alan McEvilly and Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Storage Tanks</u></p> <p>The storm water tanks were all in use with the exception of storm water tank 8 where over pumping of the hoppers was taking place in tank 8a.</p> <p>It was noted that over pumping of Tank 8b had taken place.</p> <p>It was noted that the tanks had been use for a number of days and please confirm when each of the tanks was emptied following usage and if they have been used again since being emptied.</p> <p>It was noted that some amajets to the storm water tanks were not operating and on checking the storm tank log it was noted that amajets 5 and 6 to tanks 3a would not reset, amajets 3 and 5 to tank 4a were faulty, amajets to tanks 4b would not reset, amajets 2,4 and 6 to tank 5a were faulty and the amajets to tanks 8 were faulty.</p> <p>Please confirm the procedures that you have in place in respect of amajets that are faulty or will not reset faulty and to ensure that these matters are addressed as soon as the relevant storm tanks are empty.</p> <p>Please also confirm when these matters were addressed and the action taken and when the tanks were emptied as I requested that they should be emptied as soon as possible.</p>	<p>Over pumping of the hoppers was used to remove a build up of rainwater, during the recent heavy rainfall.</p> <p>Due to the heavy recent heavy rainfall, many of the storm tanks have been in use. Even during these times of high flows into the works, the contents of the storm tanks are returned and re-filled in turn to ensure the contents of each tank is kept as fresh and odour free as possible.</p> <p>When a fault is observed during the daily routine checks of the storm tanks, it is recorded in the storm tank log and a work order is raised with the maintenance team. As soon as the storm tank is emptied the engineers carry out the required repairs.</p>



<p><u>Digesters</u></p> <p>There was a problem with Digester 11 as the level of roof was very high and sludge had broken through annular seal of the digester due to the level of sludge in the digester.</p> <p>I was advised that you are having this matter investigated as it has happened on a number of occasions and please confirm that you are having this investigated by a specialist company and a date by which a report will be available detailing the works necessary to ensure resolve this matter including a timescale for undertaking any necessary repairs/adjustments to the operation of the digester.</p>	<p>There was a higher than usual volume of biogas in the digester no. 11. The control room was promptly notified and adjustments were made to reduce the gas level.</p> <p>A specialist contractor has been tasked with investigated the build up of biogas in no.11 digester. This investigation will commence on the 29th June and their report will follow.</p>
<p><u>Sludge Levels</u></p> <p>Sludge stocks on 12/6/09 were West Side 1,435m³ and 9,611 East Side, Total 11,046 11/6/09 West Side 1455m³ and 8,887 East Side, Total 10,342 m³ 9/6/09 West Side 2,231 and East Side 4858 , Total 7089 m³.</p> <p>This complies with the requirements of the OMP</p>	
<p><u>Boundary Odour Monitors (H2S) & Odour Log</u></p> <p>I also advised that a number of complaints were received during the previous week which have been passed onto Thames Water and the response to these needs to be put on the Thames Website without delay. It was noted that the boundary monitors did not show any elevated levels of H2S during the previous week.</p>	<p>During the time of these complaints, no elevated levels of H2S were noted on the site's boundary monitors.</p>



Odour control unit (ocu) performance monitoring

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	0.34	1	Yes
Thickening plant outlet	0.24	1	Yes
Pasteurisation plant outlet	0.02	0.6	Yes
Transfer ps outlet	0.03	1	Yes

I agree that this report is a true reflection of my site inspection findings on 12th June 2009

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

Date of inspection	17 th June 2009
Attendees	M.Mehta, EHO LB Hounslow, Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>All doors closed. [work on refurbishing screen number 5 is complete. Work to screen number 6 is on-going]</p>	<p>Screen number 5 is now back in service after completion of the refurbishment work.</p>
<p><u>Washpactors</u></p> <p>The hardstanding around the BIFFA bulk waste carriers was clean and there was no perceptible on-site odour.</p>	<p>No comment to add.</p>
<p><u>Storm water storage tanks</u></p> <p>Tanks 1-7 in use.</p> <p>Tank 7A full of effluent. Some sludge floating on the surface at the westerly end.</p> <p>Tank 8 empty, evidence that the hoppers had been recently pumped out.</p> <p>Action required to remove odorous sludge from tank 7A</p>	<p>Wash water hoses were used to break down the small amount of surface sludge at the back of the tank.</p>



<p><u>Storm tank daily checks</u></p> <p>This report had been completed for the 17 June.</p> <p>Entries for tanks 3, 4 and 5 recorded that the Amajets had required re-setting. An entry for tank 6A recorded that a build up of sludge on the surface was hosed down earlier in the day.</p>	<p>Actions were carried out as detailed in the storm tank log.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 12,439m³</p> <p>The sludge dip measurements made the same day record a volume of 1,335m³ in the west side rectangular primary settlement tanks (PST's), 150m³ in the west side circular PST's and 10,954m³ held in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p><u>Boundary odour monitors (H₂S) & odour log</u></p> <p>All boundary monitors were operating, except the central monitor which is away for calibration.</p> <p>On the 14 June at approximately 22.30-23.30, the east side odour monitor recorded an H₂S level above 0.02ppm. Also on the 14 June, the north side recorded an H₂S level above 0.02ppm from approximately 23.00 to 23.30.</p> <p>On the 15 June at around 04.00am the northside odour monitor recorded some H₂S activity, although this level did not exceed the action level.</p>	<p>No comment to add.</p>



<p>An entry for the 14 June had been made in the odour log. This entry reads 'spikes showing north and east monitors. No odour found'.</p>	
<p><u>Odour complaints</u></p> <p>The complaints received from residents of Weavers Close and Manns Close for the 14/15 June are supported by the H2S activity recorded by Thames' boundary monitors. There is especially good correlation between the time reported by the complainant in Weavers Close and the activity recorded by the northside monitor on the 14 June.</p> <p>At the time, the storm tanks were in use and this is the most likely cause of the odour trends and the reported off-site odour.</p>	<p>It is most likely that the source of odour relating to these complaints may have been the storm tanks.</p>
<p><u>Digesters</u></p> <p>The digesters were inspected. None showed signs of active gassing.</p>	<p>No comment to add.</p>
<p><u>West side</u></p> <p>De-watering was taking place to grit</p> <p><u>Action required to remove grit and place in covered skip</u></p>	<p>This action has been completed.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet		0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet		1	Yes
Thickening plant outlet		1	Yes
Pasteurisation plant outlet	0.04	0.6	Yes
Transfer ps outlet	0.04	1	Yes

I agree that this report is a true reflection of my site inspection findings on 17th June 2009

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

Date of inspection	24 th June 2009
Attendees	M.Mehta, EHO LB Hounslow, Alan McEvilly Process Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>All doors closed. No contractors working on screen house at time of inspection.</p>	<p>No comment to add.</p>
<p><u>Washpactors</u></p> <p>The hardstanding around the BIFFA bulk waste carriers was clean and free of odour.</p>	<p>No comment to add.</p>
<p><u>Grit channels</u></p> <p>Work being undertaken to pump serving grit dredger 1. (pump not priming) No odour impact.</p>	<p>The site's grit removal equipment is all located in fully odour controlled housing.</p>
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour impact.</p>	<p>No comment to add.</p>



<p><u>Storm water storage tanks</u></p> <p>Tank 1 full. Amajets operating. Tank 2A, two hoppers full of effluent.</p> <p>Tank 2B. Overpumping on 2B because of blockage. All three hoppers full.</p> <p>Tank 3A empty. Penstock allowing some small quantity of effluent to re-enter the tank.</p> <p>Tank 3B emptying</p> <p>Tanks 4, 5 & 6 in use</p> <p>Tank 7A contained a small volume of effluent. Overpumping in progress</p> <p>Tank 8 full.</p> <p>The effluent in the storm tanks was very dark, some of which was odorous.</p> <p>The use of the amajets and active over pumping to various tanks was causing the emission of odour, which was noticeable on site in the vicinity of the tanks. Several sets of mobile pumps were in use to over pump effluent out of the tanks and/or the hoppers. Some had been hired in to improve on drain down times.</p>	<p>Once the overpumping on storm tank 2B was complete. The pump was unblocked and returned into service.</p> <p>The use of the amajets is essential to ensure the tank surface is left clean once emptied. The jetting action can occasionally cause some localised odour during the final stages of tank cleaning. The use of over pumping is essential to ensure the hoppers remain as empty as possible.</p>
<p><u>Storm tank daily checks</u></p> <p>The daily log had been completed for the date of inspection and reflected the council's observations.</p>	<p>No comment to add.</p>



<p><u>Sludge levels</u></p> <p>Total sludge stock 12,826m³</p> <p>The sludge dip measurements made the same day recorded a volume of 1,335m³ in the west side rectangular primary settlement tanks (PST's), 70m³ in the west side circular PST's and 11,421m³ held in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p><u>Boundary odour monitors (H₂S) & odour log</u></p> <p>All boundary odour monitors were operating, except for the central monitor which is away for calibration.</p> <p>The east side odour monitor recorded an elevated level above the trigger level lasting approximately two and a half hours on the 20 June.</p> <p>The north side odour monitor recorded some odour activity on the night of 22 June.</p> <p>These levels which breached the trigger levels were discussed with Thames staff and it is the view that the elevated levels reflect the use of the storm tanks at the time.</p>	<p>The storm tanks are the most likely source of odour noted on the east side monitor.</p> <p>Prior to the recent rainfall, the weather has been warm and dry. This is likely to have caused a higher level of septicity in the sewers. As a result of the recent rainfall, the more odorous sewage in the sewer pipe network will have been flushed into the works.</p> <p>The rainfall had also meant that the process streams were running at their maximum capacity. As a result, we needed to use the storm tanks to temporarily store the additional incoming flows.</p> <p>Because of the septicity of the sewage, the storm water flows into the works have been more odorous than usual.</p> <p>We are working hard process the wastewater held in the tanks as quickly as we can. We have also been flushing the more odorous wastewater with more dilute and less odorous wastewater, along with flushing the storm channel, which has helped.</p>



<p><u>Odour complaints</u></p> <p>Complaints were received from residents of Northcote Road for the dates 18,19, 20 June. A complaint was received from a resident of Worton Road on the 23 June.</p> <p>The odour log shows that the complaints are most likely to be linked to the storage (and subsequent movement) of septic sewage from the storm water storage tanks.</p>	<p>No further comment to add.</p>
<p><u>Digesters</u></p> <p>Digester 5 was gassing audibly via the annular seal and causing noticeable odour around the digester farm.</p> <p>Sludge had spilled via the seal and over the lip of digester 11. The sludge was still wet and this spill had occurred recently.</p>	<p>Adjustments were made to minimise the gassing from the annular seal.</p> <p>The small amount of sludge around the seal of digester 11 was promptly cleared and the area washed down.</p>
<p><u>West side Primary Settlement Tanks PSTs</u></p> <p>Some sludge had accumulated behind the scrapers at the west end of the tanks. This was causing some odour.</p>	<p>The small amount of sludge around the PST scraper was cleared during the next automated scrape of the tank</p>



<u>Odour control unit (ocu) performance monitoring</u>			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet		0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet		1	Yes
Thickening plant outlet		1	Yes
Pasteurisation plant outlet	0.04	0.6	Yes
Transfer ps outlet	0.04	1	Yes

<u>Urgent Actions required</u>	
Continuing work on pumping down of septic sewage from the storm tanks and storm tanks hoppers.	All the required actions were promptly undertaken, as noted.
Adjustments to be made to digester 5 to reduce gas emission.	
A clean up of spilled sludge around digester 11.	
De-sludging of the west side rectangular primary settlement tanks	

I agree that this report is a true reflection of my site inspection findings on 24th June 2009

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

Date of inspection	3 rd July 2009
Attendees	M.Mehta, EHO LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>All screen house doors closed. No odour.</p>	No comment to add.
<p><u>Washpactors</u></p> <p>Washpactor hardstanding clean, tidy, no odour.</p>	No comment to add.
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour impact.</p>	No comment to add.
<p><u>Storm water storage tanks</u></p> <p>Tank 1 full. Amajets in use causing some turbulence of the effluent. Tanks 2-8 inclusive, full. Tanks 2 and 3 causing on site malodour.</p> <p><u>Urgent action required to prioritise emptying of tanks 2 and 3</u></p>	<p>The use of the amajets is essential to ensure the tank surface is left clean once emptied. The jetting action can occasionally cause some localised odour during the final stages of tank cleaning.</p> <p>Tanks 2 and 3 have been flushed.</p>



<p><u>Storm return channel</u></p> <p>Channel contained static effluent with a build up of sludge on the surface. This was causing on site malodour.</p> <p><u>Urgent action required to mitigate odour by hosing down inverted sludge</u></p>	<p>The storm tank channel was promptly hosed down to break up the build up of some sludge on the surface.</p>
<p><u>Storm tank cleaning log</u></p> <p>Log completed for date of inspection, recording all tanks full. [note, log recorded tanks full 01-03 July]</p>	<p>#</p> <p>No comment to add.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 12,444m³</p> <p>The sludge dip measurements made the same day recorded a volume of 1,335m³ in the west side rectangular primary settlement tanks (PST's), 50m³ in the west side circular PST's and 11,059m³ held in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>



<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>The north side monitor recorded some activity on the 29 June. An entry in the log recorded this, 'spikes on north monitor; no odours detected on site'.</p> <p>The east side monitor recorded significant activity >0.04ppm for the date of inspection. The use and condition of the storm tanks, as well as the condition of the storm return channel, strongly suggest that these caused the east side monitor to record elevated levels.</p>	<p>As noted in the site odour log, the activity on the north monitor was investigated at the time and no odours were found on site.</p> <p>The storm tank log and the site odour log would suggest that storm tank use during the period was a likely contributing factor to the activity seen on the East Monitor.</p>
<p><u>Digesters</u></p> <p>Digester 5 was gassing audibly via the annular seal and causing noticeable malodour around the digester.</p>	<p>Adjustments were made to reduce the gassing around no.5 Digester's Annular seal.</p>
<p><u>Summary of urgent actions required</u></p> <ul style="list-style-type: none">• Hosing down of storm return channel• Emptying of odorous storm tanks• Emptying of remaining tanks• Adjustments to digester 5• Re-inspection of condition of tanks and return channel the next day	<p>Please see responses above</p>



**Odour control unit (ocu) performance monitoring
Data set 01 July 2009**

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00/0.00/0.00	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.5/0.64/0.64	1	Yes
Thickening plant outlet	0.21/0.27/0.29	1	Yes
Pasteurisation plant outlet*	0.15 * Not operational	0.6	
Transfer ps outlet	0.07	1	Yes

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	10 July 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>Screen house doors open to permit work undertaken to screen number 6. Screen house is an odour controlled building. No odour detectable outside building.</p>	<p>The refurbishment of screen number 6 was in progress during the site inspection. As noted by LBH, each screen in the screen house is sealed and odour controlled.</p>
<p><u>Washpactors</u></p> <p>Washpactor hardstanding clean and tidy. No odour</p>	<p>No comment to add.</p>
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour detectable outside building.</p>	<p>No comment to add.</p>



<p><u>Storm water storage tanks</u></p> <p>Tank 1 full. Amajets in use causing some turbulence. Tank 2 full. Some floating sludge visible in tank 2A. Tank 3 full. Tanks 4 & 5 (odour controlled) full. Tank 6 full of very dark coloured effluent. This was a source of on site malodour. Tank 7 full of dark coloured effluent. Tank 8 full of dark coloured effluent.</p> <p><u>Priority to be given to returning tanks 6, 7 & 8 for treatment</u></p>	<p>The use of the amajets is essential to ensure the tank surface is left clean once emptied. The jetting action can occasionally cause some localised odour during the final stages of tank cleaning.</p> <p>The storm tanks are always emptied and returned as quickly as the process will allow, to minimise the time they are in use.</p>
<p><u>Storm water feed channels</u></p> <p>Some sludge floating on surface of storm feed channels.</p>	<p>The small amount of sludge was cleared during the next storm tank flush.</p>
<p><u>Storm tank cleaning log</u></p> <p>01-05 July all tanks full 06 July tanks half full 07-10 July all tanks full</p>	<p>No comment to add.</p>



<p><u>Sludge levels</u></p> <p>Total sludge stock 10,142m³</p> <p>The sludge dip measurements from the same day recorded a volume of 2,156m³ in the west side rectangular primary settlement tanks (PST's).</p> <p>80m³ in the west side circular PST's and 7,906m³ held in the covered, odour controlled east side PST's.</p>	<p>No comment to add.</p>
<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>The east side boundary monitor had recorded significant activity on the 03,04,05,07,08 and 10 July. The extended use of the storm water storage tanks over this period strongly suggest that this was the cause of the H2S activity recorded by the monitor.</p>	<p>The storm tank log and the site odour log would suggest that storm tank use during the period was a likely contributing factor to the activity seen on the East Monitor.</p>
<p><u>Odour complaints</u></p> <p>Complaints were received on the 03,04,05,06,07,08 and 09 July. A significant majority of these complaint locations lie either to the north or east of the works. The storm tank log and the odour monitor readings suggest that the complaints are most likely to have been linked to the storage (and movement) of sewage in the storm water tanks.</p>	<p>Everything possible is undertaken to minimise odour released during the periods where the storm tanks are in use. The storm tanks are checked throughout the day.</p>



<p><u>West side</u></p> <p>A tarpaulin <u>covering</u> a skip had worked loose. The skip distance to the site boundary militated against any off site odour impact.</p>	<p>The skip cover was promptly secured.</p>																																
<p><u>Odour control unit performance data</u></p> <p>See data set for 09 July, as set out below.</p> <p>Odour control unit (ocu) performance monitoring</p> <table border="1" data-bbox="190 726 1102 1042"> <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>0.00/0.00/0.00</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>0.46/0.50/0.54</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.21/0.23/0.32</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet*</td> <td>0.08*</td> <td>0.6</td> <td>Yes</td> </tr> <tr> <td>Transfer ps outlet</td> <td>0.02</td> <td>1</td> <td>Yes</td> </tr> </tbody> </table> <p>*Note. Pasteurisation plant not operational</p>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.00/0.00/0.00	0.2	Yes	East ocu	0.01	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.46/0.50/0.54	1	Yes	Thickening plant outlet	0.21/0.23/0.32	1	Yes	Pasteurisation plant outlet*	0.08*	0.6	Yes	Transfer ps outlet	0.02	1	Yes	<p>No comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)	Compliant																														
Main pumping station outlet	0.00/0.00/0.00	0.2	Yes																														
East ocu	0.01	0.05	Yes																														
West ocu	0.01	0.05	Yes																														
Sludge reception outlet	0.46/0.50/0.54	1	Yes																														
Thickening plant outlet	0.21/0.23/0.32	1	Yes																														
Pasteurisation plant outlet*	0.08*	0.6	Yes																														
Transfer ps outlet	0.02	1	Yes																														



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	17 July 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>All screen house doors closed. Screen house is an odour controlled building. No odour detectable outside building. Screens 5 & 6 operational.</p>	No comment to add.
<p><u>Washpactors</u></p> <p>Washpactor hardstanding clean and tidy. No odour</p>	No comment to add.
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour detectable outside building.</p>	No comment to add.
<p><u>Storm water storage tanks</u></p> <p>Tanks 1-8 inclusive, all in service.</p>	All tanks are in use owing to the recent rainfall in the catchment.



<p><u>Storm tank cleaning log</u></p> <p>16 July-some tanks empty 15 July-all tanks in service 14 July-all tanks in service 13 July-all tanks in service</p>	<p>No comment to add.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 10,335m³</p> <p>The sludge dip measurements from the same day recorded a volume of 4,648m³ in the west side rectangular primary settlement tanks (PST's), 420m³ in the west side circular PST's and 5,267m³ held in the covered, odour controlled east side PST's.</p>	<p>The higher sludge stocks are being held in the odour controlled primary tanks.</p>
<p><u>Boundary odour monitors (H₂S) & odour log</u></p> <p>The east side boundary monitor had recorded periods of activity on the 11,12,13,14 and 15 July. The extended use of the storm water storage tanks over this period strongly suggest that this was the cause of the H₂S activity recorded by the monitor.</p>	<p>As noted, the most likely reason for the odour activity recorded by the east odour monitor is the use of and emptying of the storm tanks.</p>



<p><u>Odour complaints</u></p> <p>Complaints referred to malodour on the 11,13,14 July.</p> <p>The storm tank log and the odour monitor readings suggest that the complaints are most likely to have been linked to the storage (and movement) of sewage in the storm water storage tanks.</p>	<p>We have logged and investigated complaints relating to some of these date and conclude the most likely source of odour is the storm tanks.</p>
<p><u>Digesters</u></p> <p>Digester 5 was gassing via the annular seal and causing noticeable odour around the digester.</p> <p>There was evidence of an earlier ‘foaming’/spillage from digester 11.</p>	<p>The lip of digester number 11 was cleaned up immediately and adjustments were made to digester number 5 to reduce any gassing off.</p>
<p><u>West side primary settlement tanks</u></p> <p>The evening sequenced sludge removal was in progress.</p>	<p>No comment to add.</p>



<u>Odour control unit performance data</u>				No comment to add.
data set for 16 July, as set out below.				
Odour control unit (ocu) performance monitoring				
Plant	Reading (ppm)	Action Level (ppm)	Compliant	
Main pumping station outlet	0.00/0.00/0.00	0.2	Yes	
East ocu	0.01	0.05	Yes	
West ocu	0.01	0.05	Yes	
Sludge reception outlet	0.69/0.72/0.74	1	Yes	
Thickening plant outlet	0.34/0.38/0.40	1	Yes	
Pasteurisation plant outlet*	0.12/0.1/0.1 *	0.6	Yes	
Transfer ps outlet	0.02	1	Yes	
* Note. Some reactors now on line				

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	27 July 2009
Attendees	Gerry McCarthy, LB Hounslow Andrew Georgiades, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm Water Tanks</p> <p>All of the storm water tanks were in operation at the time of the inspection though they were not odorous.</p> <p>Amajets 1b2 and 1b3 of tank 1 were not operating. Amajet 2b2 of tank 2 was not operating. Amajets 1a1, 1a2 and 1a3 and 2b2 of tank 6 were not operating. Amajets 1a1 and 1b2 of tank seven were not operating Amajets 1b3 of tank eight were not operating.</p> <p>Please confirm the procedures that you have in place in respect of amajets that are faulty or will not reset faulty and to ensure that these matters are addressed as soon as the relevant storm tanks are empty. Please also confirm when these matters were addressed and the action taken and when the tanks were emptied as I requested that they should be emptied as soon as possible.</p> <p>It was noted through checking the storm water tanks had been in continuous use since 23rd July though the process controller advised that he was due to return the contents of one storm water tank for processing.</p>	<p>No comment to add</p> <p>As per the odour management plan, storm tank inspections are carried out and detailed in the storm tank checklist on a daily basis.</p> <p>Any faults found are noted in the checklist and promptly reported to the Maintenance Team. Repair priority is always given to any faults with the potential to cause odour.</p> <p>The faults with the amajets were promptly reported and rectified. The amajets brought back into service.</p>



<p>Sludge dips</p> <p>The following levels had been recorded</p> <p>28/7/09 1780m3 and 60m3 West plus 8268E = 10,108 m3 27/7/09 120m3 west and 9973m3 east. = 10.093m3 26/7/09 1780m3 and 20m3 west and 10,697 east = 12,497m3</p> <p>This is compliant with the current Odour Management Plan.</p>	<p>No comment to add</p>
<p>Odour Monitors</p> <p>These were checked and there was a very high spike on the north side monitor of 0.0764 and please clarify if this was a problem with the monitor or if was an odour event please investigate this.</p>	<p>The high spike was likely caused by a temporary fault with the monitor as it was not representative of the current trends.</p> <p>Following this spike, readings on the north monitors returned to more a steady trend with lower concentrations of hydrogen sulphide.</p>
<p>Digesters</p> <p>Digesters 5 and 9 had foamed and were being cleaned up during my inspection. I am very concerned that this still occurring as I had been advised that a company was due to attend the sewage works on 29th June. Has the company attended and if so have they produced a report advising of remedial works necessary including a timescale for undertaking any necessary remedial works. Please forward this information as soon as it is available.</p>	<p>Due to the nature and design of the digesters, foaming can occasionally occur. Any foaming is quickly discovered during the regular area inspections and remedial actions are made to clean the area and prevent further foaming, as noted by LBH at the time.</p> <p>An external company have attended site to investigate a problem with one digester. As soon as the report becomes available it will be forwarded to LBH.</p>



<p>West Side Rectangular Primary Settlement Tanks</p> <p>It was noted that tank 16b was gassing and please confirm the action that was taken to rectify this matter</p>	<p>The gassing was closely monitored and was rectified on the next tank scrape.</p>
<p>Skips</p> <p>It was noted that there were four covered skips on the west side of the works and while not odorous these should be removed off site without delay.</p>	<p>Full skips are always removed from site as quickly as possible.</p>
<p>Complaints</p> <p>I advised that only one complaint had been received this week and had been passed onto Thames Water and can be linked to the operation of the storm water tanks.</p>	<p>The complaint was promptly processed and a response provided.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.2	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.33	1	Yes
Thickening plant outlet	0.5	1	Yes
Pasteurisation plant outlet	Faulty	0.6	See note below
Transfer ps outlet	0.09	1	Yes

It was noted that the Pasteurisation Plant outlet was faulty and on checking the previous weeks record of testing this was also faulty. Please provide an explanation for this and a timescale by which the performance of the OCU will be able to be assessed.

The fault in the sensor was rectified. The sensor is now in operation.

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	07 August 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>There was no work taking place in the screen house at the time of inspection and all doors were closed. No odour was detectable outside the building.</p>	No comment to add
<p><u>Washpactors</u></p> <p>Washpactor hardstanding clean and tidy. No odour</p>	No comment to add
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour detectable outside building.</p>	No comment to add



<p><u>Storm water storage tanks</u></p> <p>Tanks 1-7 in use and both storm feed channels were holding effluent. Fat on surface of storm feed channels.</p> <p>Fat covering approximately 25% surface of storm water in tank 7B. Sludge on bottom of tank 8A.</p> <p>One hopper in tank 8B full of dark effluent and gassing.</p> <p><u>Priority to be given to cleaning tank 8A and emptying hopper in tank 8B</u></p>	<p>Storm tank no.8 was promptly washed down and the hopper fore mentioned was emptied using over pumping.</p>
<p><u>Storm tank cleaning log</u></p> <p>The log had been completed for the 07 August and recorded that tanks 1-7 were in service and that the hoppers to tank 8 need pumping out.</p> <p>The log showed that tanks 1-7 were in service on the 06 August.</p>	<p>A daily log is completed on the condition of the storm tanks.</p> <p>Any storm tanks requiring further action to mitigate odour is promptly acted upon.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 12,764m³</p> <p>The sludge dip measurements from the same day recorded no sludge volume being held in any of the west side primary settlement tanks (PST's),</p> <p>All sludge was being held in the enclosed odour controlled east side PST's.</p> <p>This is compliant with the current Odour Management Plan.</p>	<p>No comment to add.</p>



<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>Several of the odour monitors had recorded odour activity since the previous council site inspection.</p> <p>The east side monitor showed considerable activity for the period 30 July-03 August. The odour log linked this activity on the 01 August to odours arising from the use of the storm water storage tanks.</p> <p>On the 03 August, the odour log entry recorded some odours due to problems with the new pasteurisation plant odour control unit (ocu). The new ocu was shut down</p> <p>On the 05 August, the odour log entry recorded odours detected on site from use of the pasteurisation plant ocu. This was paused and an engineer called out.</p> <p>On the 06 August, the odour log entry recorded that the pasteurisation plant was paused because the ocu was unsatisfactory</p> <p><i>On the 06 August-07 August, the south west monitor recorded a level exceeding the trigger level (up to 0.04ppm).</i></p>	<p>As per the odour management plan, any readings exceeding the 0.02ppm H2S trigger level are investigated.</p> <p>The incidents noted were all investigated and probable sources for the odour were identified at the time. The required actions were promptly carried out and noted in the site odour log.</p>
<p><u>Odour complaints</u></p> <p>Complaints were received from Harvesters Close, Weavers Close & Worton Road on the 05 August & Varsity Drive on the 06 August</p>	<p>The complaints received by Thames Water have been logged and investigated. Responses for these dates have been posted on our website.</p>



<p>Digesters</p> <p>Digesters 6, 8, 10 & 15 all showed evidence of recent foaming.</p> <p>Digester 9 was actively gassing via the annular seal.</p> <p>Digester 5 showed evidence of a very recent spillage.</p> <p><u>Urgent action was requested to control foaming/spillages from several of the digesters.</u></p>	<p>Any foaming was promptly cleared using hoses.</p> <p>Adjustments were also made to prevent 'gassing' of the digesters.</p>
<p>West side primary settlement tanks</p> <p>Some sludge was noticeable on the surface of tank 15A</p>	<p>The small amount of surface sludge was removed during the next surface scrape</p>
<p>Odour management plan version 1.7</p> <p>The foaming/spillages from several digesters require a response in accordance with the requirements of the odour management plan</p>	<p>As noted above, this was promptly actioned.</p>
<p>Other comment:</p> <p>Thames Water need to clarify the position on the pasteurisation plant ocu's</p>	<p>The pasteurisation plant's new odour control unit during the commissioning period was not performing to the high standard required. For this reason it has been turned off for further testing.</p>



<p><u>Odour control unit performance data</u></p> <p>See data set for 05 August, as set out below.</p>																																			
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I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	12 August 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Screen House</u></p> <p>There was no work taking place in the screen house at the time of inspection and all doors were closed. No odour was detectable outside the building.</p>	<p>No comment to add.</p>
<p><u>Washpactors</u></p> <p>Washpactor hardstanding clean and tidy. One washpactor chute was disconnected from the bulk waste carrier. Screenings left on the chute were causing localised on site odour.</p>	<p>Work was being carried out correcting a bend on the washpactor chute. This is the most likely cause of the small build-up of screenings.</p> <p>The chute is back in service.</p>
<p><u>East side grit house</u></p> <p>Shutter closed. Odour controlled building. No odour detectable outside building.</p>	<p>No comment to add.</p>



<p><u>Storm water storage tanks</u></p> <p>Tanks 1-7 in use</p> <p>Tank 1 contained dark coloured effluent, which was causing odour on site.</p> <p>Tank 2 contained a low volume of effluent with inverted sludge on the surface. This was causing odour on site.</p> <p>Tank 3 contained dark coloured effluent, which was causing odour on site.</p> <p>Tanks 4 & 5 were being filled.</p> <p>Tanks 6 & 7 were in use</p> <p>Tank 8 was empty. The hoppers contained effluent which was not giving rise to any odour.</p> <p><u>Priority to be given to emptying and/or flushing out tanks 1, 2 and 3</u></p>	<p>Owing to the recent heavy rainfall, we have needed to use the on site storm tanks.</p> <p>To reduce odour, the storm tanks and storm channels have been emptied and flushed on a regular basis.</p> <p>Tanks 1,2 and 3 were flushed at the earliest opportunity.</p>
<p><u>Storm tank cleaning log</u></p> <p>The log had been completed for the 13 August and recorded that a mobile pump had been set up on tank 2B but had failed to pump as the sludge was too thick. Amajets on 2B repaired.</p>	<p>Operatives have been monitoring the amajets and when necessary, the maintenance team have carried out repairs.</p>



<p><u>Sludge levels</u></p> <p>Total sludge stock 10,954m³</p> <p>The sludge dip measurements from the same day recorded no sludge volume being held in any of the west side primary settlement tanks (PST's),</p> <p>All sludge was being held in the enclosed odour controlled east side PST's.</p> <p>This is compliant with the current Odour Management Plan.</p>	<p>As noted, the higher sludge were contained within the covered, odour controlled, primary tanks.</p>
<p><u>Boundary odour monitors (H2S) & odour log</u></p> <p>The odour log recorded that during the day on the 10 August, storm tanks 1-4 were odorous and the tanks were pumped out and hosed down.</p> <p>During the night of the 10/11 August, the east side odour monitor recorded levels exceeding the trigger level, up to around 0.03ppm at around 3.40am. The odour log record shows that the storm tanks were odorous.</p> <p>On the 13 August all odour monitor levels were less than the trigger level (<0.02ppm).The odour log record shows that 3no digesters were spilling/foaming and that high digesters were pulled down.</p>	<p>On 10 August, site inspections noted that some of the storm tanks were a bit odorous. The tanks were flushed as soon as possible to reduce odour levels.</p> <p>On 11 August, operatives also noted some localised odours around the pasteurisation area and made adjustments to the pasteurisation plant to reduce odour levels.</p> <p>This may have contributed to the odour spikes picked up by the east side monitor.</p> <p>On 13 August, odour monitor readings showed little activity during the day, however later that night hydrogen sulphide concentrations spiked for a short duration on the east and west monitors. The duty operative carried out an investigation; unfortunately they were unable to find any particular source that could have caused such an increase.</p>



<p><u>Odour complaints</u></p> <p>A complaint was received from a resident of Elizabeth Gardens on the 12 August and the council's duty response officer (DRO) confirmed that there was odour. The east side monitor recorded a level of around 0.01ppm at around the same time.</p>	<p>On 12 August, the duty operative noticed a slight spike on the east side odour monitors. This may have been due to the use of the storm tanks and although at a low concentration, it may be the cause of the odour complaint.</p>
<p>Digesters</p> <p>Digesters 18 & 19 had foamed over onto the service road</p> <p>There were fresh spills from digesters 5 & 6.</p> <p>A Thames clean up team was on site dealing with the spillages.</p> <p><u>Urgent action was requested to control foaming/spillages from several of the digesters and for the clean up to continue.</u></p>	<p>A response team quickly carried out a cleanup of the spills as a result of the digester foaming.</p> <p>Operatives closely monitored this area for odour while the cleanup was being carried out.</p>
<p>West side primary settlement tanks</p> <p>The de-sludge sequence had commenced and the tanks were causing odour.</p>	<p>The de-sludging sequence is a normal process for the west side primary tank.</p>



<p><u>Odour control unit performance data</u></p> <p>See data set for 12 August, as set out below.</p>																																				
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<p>Odour management plan version 1.7</p> <p>The foaming/spillages from several digesters require a response in accordance with the requirements of the odour management plan</p>				<p>Please see comments relating to digesters.</p>																																



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	19 August 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

<u>Screen House</u> There was no work taking place in the screen house at the time of inspection and all doors were closed. No odour was detectable outside the building.	No comment to add
<u>Washpactors</u> Washpactor hardstanding clean and tidy.	No comment to add
<u>East side grit house</u> Shutter closed. Odour controlled building. No odour detectable outside the building.	No comment to add



<p><u>Storm water storage tanks</u></p> <p>Tank 1 in use Tank 2 in use, effluent being returned. Tanks 3, 4, 5, 6 & 7 in use Tank 8 was empty, clean and dry. The hoppers contained effluent, which was not giving rise to any odour at the time of inspection.</p>	<p>The hoppers were subsequently drained using over pumping.</p>
<p><u>Storm tank cleaning log</u></p> <p>The log had been completed for the 19 August. Records showed that some of the tanks were in use on the *13 August and that tanks 6 & 7 were flushed. Records showed that on the **14 August tanks 2,3,4,5 & 7 were in use. Records showed that on the 18 August a return pump had failed to prime.</p>	<p>A request to repair the failed return pump was communicated to the maintenance team who promptly carried out the work.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 7,856m³ The sludge dip measurements from the same day recorded 140m³ held in any of the west side rectangular primary settlement tanks (PST's) and 20m³ held in the west side circular PST's. 7,696m³ was being held in the enclosed odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	<p>No comment to add</p>



Boundary odour monitors (H2S) & odour log

The monitors recorded evidence of considerable odour activity from the *13th, into the **14th August. The storm tank activity for these days is recorded above.

The east side boundary monitor recorded a peak in excess of 0.03ppm from 19.25-20.25 on the 13 August.

The north side boundary monitor was active >0.02ppm over the period 21.55-02.55 on the 13 August.

The west side boundary monitor recorded a peak in excess of 0.03ppm lasting for 1 hour 22.55-23.55 on the 13 August.

An entry in the odour log showed that as part of the investigation, a Thames odour patrol went outside the site at 22.00 and again at 00.15. The digesters were monitored and it was recorded that no digesters were spilling over.

An entry in the odour log for the 14 August recorded that the open west side primary settlement tank 1B was odorous. The tank was given a manual scrape.

The odour activity recorded by several of the monitors over the 13/14 August is of concern. The trigger levels were breached on several occasions. These breaches prompt a response from Thames Water reference odour management plan version 1.7

As per section 3.4.1 of the odour management plan the breach of the trigger levels prompted a thorough odour investigation at the time. The site Operations Team carried out odour patrols to identify any sources of the odour.

After the investigation, it became apparent that the breaches of the trigger level were caused by more than one source, including the Storm Tanks, Digesters and Primary Settlement Tanks. As always, everything possible at the time was carried out to minimise odour.



<p><u>Odour complaints</u></p> <p>Several complaints were received by the council's night-time <i>Mogden Response Team</i> (MRT) on the 13-14 August, and the objective monitoring data recorded from some locations outside the site, exceeded the trigger levels.</p>	<p>The MRT contacted Thames Water at the time to notify them of the complaints they had received.</p>
<p>Digesters</p> <p>Digesters 8, 10 & 11 were gassing</p>	<p>Adjustments were made to reduce the chance off further 'gassing off'.</p>
<p>Odour management plan version 1.7</p> <p>The foaming/spillages from several digesters require a response in accordance with the requirements of the odour management plan</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.</p>



<p><u>Odour control unit performance data</u> See data set for 19 August, as set out below.</p>																																				
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I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	25 th August 2009
Attendees	Gerry McCarthy/Tony Bull, LB Hounslow Andrew Georgiades/ Andy Gingell , Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm Water Tanks</u></p> <p>Tank 1 was empty Tank 2 was in use and amajet 2 of tank 2a was not operating. Tank 3 was use and being emptied and amajets 2and 3 of tanks 3a were not operating Tanks 4 and 5 were in use Tanks 6a was empty and the amajets were being repaired. The tank had recently been flushed out. Tank 6b was empty. Tanks 7 and 8 were empty and over pumping of the hopper to tank 8b was taking place at the time of the inspection.</p> <p>The storm water tanks were not odorous at the time of the inspection and please confirm what action will be taken to ensure the defective amajets are repaired after storm water tanks 2 and 3 have been emptied.</p>	<p>Thames Water will always ensure faulty plant is returned to service at the earliest opportunity.</p>
<p><u>Sludge Dips Records</u></p> <p>24/8/09 930m³ W and 5162m³ E and total 6092m³. 21/8/09 1,000m³ W and 3095m³ E and total 4095m³ 20/8/09 160m³ W and 5524m³ E and total 5684m³ 19/8/09 160m³ W and 7696m³ E and total 7856m³</p> <p>This is compliant with the current Odour Management Plan.</p>	<p>No Comment to add.</p>



<p><u>Odour Monitor Records</u></p> <p>These were checked and were all below 0.02ppm with the exception of one odour spike on 23//809 at 23.55 and one a 01.54 on 24/8/09 on the north side monitor. The odour log shows that at the of these odour spikes storm water tanks 2,3 and 6 were being emptied. The Weavers Close area was also visited by Thames Water and no odours were detected. The digesters were also checked and found to be operating normally. Can you investigate and advise of the reason for these odour spikes.</p>	<p>The operative who investigated the increase of odour was unable to identify a specific source that could have caused such an increase.</p>
<p><u>Pasteurisation plant</u></p> <p>This was operating normally.</p>	<p>No Comment to add.</p>
<p><u>Digester Area</u></p> <p>There were some very recent spillages of digesters 5,9 and 14 noted at the time of the inspection which were not odorous and which were requested to be cleaned up at the time of the inspection.</p> <p>I am very concerned that this still occurring as I had been advised that a company was due to attends the sewage works on 29th June. Has the company attended and if so have they produced a report advising of remedial works necessary including a timescale for undertaking any necessary remedial works. Please forward this report as soon as it is available though I was advised that this is due to be forwarded to LB Hounslow this week.</p>	<p>As per the odour management plan, any digester foaming is promptly cleared.</p> <p>Report has been forwarded to LB Hounslow as of 26.08.2009</p>



<p><u>West Side Rectangular Primary Settlement Tanks</u></p> <p>Primary Settlement tanks 14a and 14b are currently out of use due to a failure of the scraper system.</p> <p>There was some gassing noted on tanks 15a and 15b.</p>	<p>The problem with the scraper system was fully resolved and tank no14 was bought back in to service.</p>
<p><u>General</u></p> <p>I advised that residents had experienced odour when the East Side OCU was out of operation for 12 hours on 24th August and that Thames need to ensure residents are fully advised of any further shut downs of the OCU in advance and a detailed explanation is provided to residents of the necessity of the shutdown.</p>	<p>As per odour management plan, any activities which may cause off site odour are detailed in advance by notification and the Thames Water website.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.02	0.2	
East ocu	0.01	0.05	
West ocu	0.01	0.05	
Sludge reception outlet	0.47	1	
Thickening plant outlet	0.30	1	
Pasteurisation plant outlet	0.1	0.6	
Transfer PS outlet	0.08	1	

No comment to add.

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	02 September 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Leader, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p><u>Storm water storage tanks</u></p> <p>Tank 2B contained odorous sludge</p>	<p>Storm water tank 2b was returned to the head of the works for processing as soon as the flows allowed.</p>
<p><u>Sludge levels</u></p> <p>Total sludge stock 7,540m³</p> <p>The sludge dip measurements from the same day recorded 890m³ held in the west side rectangular primary settlement tanks (PST's) and 40m³ held in the west side circular PST's.</p> <p>6,610m³ was being held in the enclosed, odour controlled east side PST's.</p> <p>This is compliant with the current Odour Management Plan.</p>	<p>No Comment to add.</p>



Boundary odour monitors (H2S) & odour log

The south-west boundary monitor recorded elevated odour level, peaking at around 0.06ppm on the evening of the 31 August. The trigger level was exceeded for around one and a half hours.

On the same evening, the north side boundary monitor recorded a level peaking at around 0.02ppm.

An entry in the odour log for the 31 August recorded there had been a large spike on the south-west monitor and odour spikes on the north monitor. In response to these readings, an entry in the odour log records that the digesters were checked and the screenings area was also checked and both sides were washed down.

The odour activity recorded by the south west monitor over the 31 August is of particular concern. The odour measured as H2S was high and of significant duration. The odour management plan trigger level was breached. This breach prompted an inspection response from Thames Water, reference odour management plan version 1.7 This odour activity recorded by the south west monitor may also have constituted an unacceptable sludge gas odour occurrence and a breach of a condition of the section 106 planning agreement.

The operative in charge carried out an investigation of the site.

It was noted in the odour log that the digester and inlet areas may have been the source of odour.

As a precautionary measure, the equipment was washed down to reduce odour.



<p><u>Odour complaints</u></p> <p>Complaints were received by the council's night-time <i>Mogden Response Team</i> (MRT) on the 31 August.</p>	<p>The MRT contacted the control room at Mogden and notified them of the complaints. An investigation was carried out as detailed on the previous page.</p>																																
<p><u>Digesters</u></p> <p>Digesters 6,11,14 & 16 showed evidence of recent spillages</p>	<p>There was some evidence noted of digester foaming onto the lip of the digester seals. Adjustments were made to the digesters and a clean up of the digester coping stones was carried out.</p>																																
<p><u>Odour control unit performance data</u></p> <p>See data set for 26 August, as set out below.</p> <p>Odour control unit (ocu) performance monitoring</p> <table border="1" data-bbox="190 991 1104 1299"> <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>0.10/0.16/0.12</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>0.32/0.31/0.37</td> <td>1</td> <td>yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.34/0.39/0.41</td> <td>1</td> <td>yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>0.1/0.1/0.1</td> <td>0.6</td> <td>yes</td> </tr> <tr> <td>Transfer ps outlet</td> <td>0.07</td> <td>1</td> <td>yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.10/0.16/0.12	0.2	yes	East ocu	0.01	0.05	yes	West ocu	0.01	0.05	yes	Sludge reception outlet	0.32/0.31/0.37	1	yes	Thickening plant outlet	0.34/0.39/0.41	1	yes	Pasteurisation plant outlet	0.1/0.1/0.1	0.6	yes	Transfer ps outlet	0.07	1	yes	<p>No comment to add.</p>
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**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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 McEvelly

Process Manager, Thames Water



LB Hounslow Mogden STW Site Inspection

Date of inspection	10 September 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tank 1, empty, clean no odours Tank 2A hoppers full of effluent Sludge on bottom of tank indicating possible failure of swingjet 3 to tank 2A Tank 2B hoppers full Tanks 3, 4, 5 in use Tank 6 filling and generating some odour Tank 7 in use Tank 8 empty Tank 2A requires urgent attention to remove the sludge and empty the hoppers</p>	<p>Swing jet 3 was found to have a jammed motor that only became apparent once the tank had been emptied. The blockage was removed from the motor and tank has been flushed through.</p>
<p>Sludge levels</p> <p>Total sludge stock 20,079m³ The sludge dip measurements from the same day recorded 1,266m³ held in the west side rectangular primary settlement tanks (PST's) and 0m³ held in the west side circular PST's. 18,813m³ was being held in the enclosed, odour controlled east side PST's.</p>	<p>No comment to add</p>



<p>Storm water storage tank log</p> <p>The log had been completed for the day and hoppers for tanks 2A and 2B were marked as 'full'.</p>	<p>No comment to add</p>
<p>Boundary odour monitors (H2S) & odour log</p> <p>The readings for the 04-06 September did not breach the trigger level. The south side monitor lost function on the 05 September.</p> <p>The pasteurisation plant chemical odour control unit (ocu) was shut down on the 07 September and the odour log shows that some odour was reported by staff around the ocu on the 08 September.</p> <p>The south west monitor recorded levels above the trigger level on the 10 September.</p> <p>The odour activity recorded by the south west monitor on the 10 September is of concern and is likely to have breached the odour management plan trigger level.</p>	<p>The elevated monitor levels were noted in the site log at the time. As per the Odour Management Plan, a local investigation was undertaken. The Control room noted that due to some 'gassing off' from Digester no.18. Adjustments made to reduce possibility of further gas release.</p> <p>It is likely that the odour activity recorded by the south west monitor at this time was caused by the digesters.</p>
<p>Odour complaints</p> <p>Complaints made on the 04-06 September cannot be supported by the boundary monitor odour readings.</p>	<p>On the dates in question the storm tanks were in use. These may have been the cause of the odours noted.</p>



<p>Pasteurisation plant ocu</p> <p>There was noticeable odour on site around the pasteurisation plant on the 10 September. There was also noticeable odour off site on the 10 September along part of Whitton Dene. The odours are most likely to be linked to the running up of the replacement biological ocu serving the pasteurisation plant.</p>	<p>An advance odour notification was sent to residents and posted on the Thames Water website to apologise for any increase of odour that maybe experienced during the reseeding of the new biological OCU.</p>
<p>Digesters</p> <p>Digesters 2,6 & 15 showed evidence of recent spillages. A clean up operation was in progress. Digester 8 was gassing via the annular seal.</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 Digester no. 8 to reduce further gas release.</p>
<p>Odour management plan version 1.7</p> <p>The foaming/spillages from several digesters require a response in accordance with the requirements of the odour management plan.</p>	<p>Please see digester comment above</p>
<p><u>Other comment:</u></p> <p>The readings obtained for the sludge reception outlet are close to the action level.</p>	<p>The site operations team closely monitor all odour readings to ensure compliance.</p>



<p>Odour control unit performance data</p> <p>See data set for 09 September, as set out below.</p>				<p>No comment to add.</p>																																
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I agree that this report is a true reflection of my site inspection findings on [date]

Michael Mehta

Pollution Control, London Borough of Hounslow



**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

Date of inspection	18 September 2009
Attendees	M. Mehta LB Hounslow
<p><u>Storm water storage tanks</u> Tanks 1-8 inclusive in use and at capacity. Tank effluent dark and surface sludge build up on tanks 2,3, 6 & 8. Odours noticeable in the immediate vicinity. <u>Tanks 2,3,6,8 require emptying.</u></p>	
<p><u>Sludge levels</u> Total sludge stock 12,155m³ The sludge dip measurements from the same day recorded 1,266m³ held in the west side rectangular primary settlement tanks (PST's) and 40m³ held in the west side circular PST's. 10,849m³ was being held in the enclosed, odour controlled east side PST's. One of the west side circular tanks was shown as being out of use.</p>	
<p>Due to the high amount of recent rainfall in the Catchment, the storm tanks have been in use. Once the storm tanks are at full capacity and if the flow into the site has not subsided, pre-treated screened flows are discharged into the River. The Environmental Agency is notified before this occurs and Thames Water work alongside the Agency to maintain the River's water quality.</p>	
<p>As per section 5.1 of the odour management plan. A notification was posted on the Thames Water website to apologise for any increase in Odour residents may experience during the essential maintenance work on one of the West Side PSTs.</p>	

Storm water storage tank log

The log had been completed for the day and the entry accurately recorded that all the tanks were in use. Entries for the days preceding are as follows:

17/09 –all tanks full

16/09- all tanks full

15/09- flushing of tanks

14/09-sludge in tanks

No comment to add.

Boundary odour monitors (H2S) & odour log

In broad terms, most odour activity was recorded by the south west odour monitor, including activity for the 11/12 September.

This supports the council's observations that the odour being released by the replacement biological odour control unit (ocu) to the south west of the works caused these odour spikes.

These 'odour spikes' were noted in the odour log.

The odour activity recorded by the south west monitor particularly on the 11/12 September is of concern

An advance odour notification was posted on the Thames Water website on the 4th September apologising to residents of any increase of odour during the reseeding of the replacement odour control unit. This was likely the cause of the odour activity recorded on the South West monitor on the 11th and 12th of September. Due to the OCU not performing to the required standard, it was shut down on the 12th September to mitigate the chance of further odour release. The chemical odour control unit was again used in its place thereafter.

Odour complaints

A council officer reported noticeable off site sewage odours along Hall Road/Whitton Dene/Tesco car park on the afternoon of the 17th September. The source is most likely to be the poor performance of the replacement biological ocu.

As noted above. The replacement odour control unit was not being used for odour suppression at this time. The chemical odour control unit was operating efficiently in its place. A thorough investigation was carried out on the 17th September after the control room received an Odour Complaint. Storm tank activity was a likely source for the offsite odour noted by the Council Officer.

Pasteurisation plant ocu

The replacement biological ocu had been replaced by the original chemical ocu.

<p><u>Digesters</u> Digesters 10 and 11 showed evidence of recent minor spillages.</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 Digesters 10 and 11 to prevent further foaming</p>
<p><u>Odour control unit performance data</u> See data set for 15 September, as set out below.</p>	

LB Hounslow Observation	Thames Water Action / Response																												
Main pumping station 0.024/0.018/0.016																													
Sludge reception outlet 0.79/0.72/0.78																													
Thickening plant outlet 0.47/0.49/0.47																													
Pasteurisation plant outlet 0.1/0.1/0.1																													
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Transfer ps outlet	0.04	1	yes	
<p><u>Odour management plan version 1.7</u> The foaming/spillages from two digesters require a response in accordance with the requirements of the odour management plan.</p>				Please refer to comments above.
<p><u>Other comment:</u> The readings obtained for the sludge reception outlet are close to the action level. Please refer to comments in report of 10 September.</p>				The site operations team as always will be closely monitoring all odour readings to ensure compliance.

LB Hounslow Mogden STW Site Inspection

Date of inspection	25 September 2009
Attendees	M. Mehta LB Hounslow
<p><u>Storm water storage tanks</u> Tank 1A empty, clean and dry Tank 1B approximately one third of the base of the tank was covered in odorous sludge. Tank 2 in use. Effluent being returned Tank 3 tank full. Tanks 4,5, 6 & 7A in use Tank 7B empty Tank 8, three hoppers full <u>Tank 1B requires urgent washing down of the sludge and the three full hoppers to tank 8 require emptying.</u></p>	
<p><u>Storm tank log</u> The log entries showed that on the 21/09 tanks 1-8 were full, on the 22/09 all tanks were ¾ full, on the 23/09 all tanks were 1/3 full & on the 24/09 tanks 3, 5 & 7 were in use.</p>	
<p><u>Sludge levels</u> Total sludge stock 15,346m³ The sludge dip measurements from the same day recorded 515m³ held in the west side rectangular primary settlement tanks (PST's) and 0m³ held in the west side circular PST's. 14,831m³ was being held in the enclosed, odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	
<p>Tank 1B was washed down the same day to remove a small amount of grit/sludge that had been left after one amajet had tripped out during the returning of the tank.</p>	
<p>As per the odour management plan, the storm tank log is completed daily and notes the condition of each tank. Every effort is made to return the storm tanks as soon as possible,</p>	
<p>No comment to add.</p>	

Boundary odour monitors (H2S) & odour log

Entries in the odour log recorded odour activity recorded by the east side monitor (<0.02ppm) was attributable to use of the storm tanks. Some night time odours from the storm tanks were recorded.

All the odour monitors recorded very low levels(<0.02ppm) for the 22/09.

On the 23/09, the east side monitor recorded intermittent odour spikes, attributed to pumping back of the storm tanks.

A pollution officer noted odour along the Twickenham Road at around 18.00 the same day. This observation is supported by the east side monitor recording an H2S level around 0.014ppm.

On the 24/09, the odour log records a complaint from a resident of Northcote Road. However, all H2S odour levels were low (<0.02ppm). The east side monitor spiked at around 0.022ppm during the night and the log shows that the site was checked by Thames Water staff and there was nothing to report.

As noted by LBH, the boundary odour monitor readings for this period were all below the trigger level. As a matter of good practice the control room investigates all notable variation in odour monitor readings.

After the resident complaint on the 24/09, an investigation was carried out. The boundary monitors recorded no significant odour and no obvious sources were found on site.

Odour complaints

Several complaints were received during the week preceding the inspection, including from Kings Terrace on the 22/09, Beaumont Place, St. George's Road and Heathfield South on the 23/09 and Northcote Road on the 24/09.

The complaints were processed and responded through the Thames Communications Team.

Digesters

Digesters 6 &10 showed evidence of recent foaming from the annular seal and one digester was gassing

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 digester which was releasing gas around the annular seal

<p><u>Odour management plan version 1.7</u> The foaming/spillages from the digesters require a response in accordance with the requirements of the odour management plan.</p>	<p>Please see response above</p>
<p><u>Other comment:</u> The measurements for the sludge reception outlet are very close to the action level values.</p>	<p>The site operations team as always will be closely monitoring all odour readings to ensure compliance.</p>



LB Hounslow Mogden STW Site Inspection

Date of inspection	07 October 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow observation	Thames Water response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive, full. Effluent causing odour on site in the immediate vicinity of the tanks. For those tanks with amajets in use, the agitation of the effluent was contributing to the prevailing odour.</p> <p>Tank 8 was empty. The hoppers were full of a mix of non-odorous groundwater and rainwater.</p>	<p>The use of the amajets is essential to ensure the tank surface is left clean once emptied. The jetting action can occasionally cause some localised odour during the final stages of tank cleaning.</p> <p>The non-odorous groundwater and rainwater contained in the hoppers of storm tank no .8 were pumped out the following day</p>
<p>Storm tank log</p> <p>The log entry for the 07 October recorded 'tanks full 1-7'.</p>	<p>No comment to add</p>
<p>Sludge levels</p> <p>Total sludge stock 12,229m³</p> <p>The sludge dip measurements from the same day recorded 960m³ held in the west side rectangular primary settlement tanks (PST's) and 20m³ held in the west side circular PST's.</p> <p>11,249m³ was being held in the enclosed, odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	<p>No comment to add</p>



<p>Boundary odour monitors (H2S) & odour log</p> <p>The odour monitors for the 02 & 03 October recorded levels which did not exceed the trigger level. On the 04 October, eastside monitor recorded a level > 0.04ppm. The odour log entry for the 04 October says that a fault condition was found in the east odour control unit (ocu) and this fault was re-set.</p> <p>The trigger levels were not exceeded on the 05 October. A notification had been released by Thames Water regarding a shut down of the east ocu from 8-11am.</p> <p>On the 06 October the eastside monitor recorded some odour activity with one peak above the trigger level. The odour log entry recorded all storm tanks full for both the day and night.</p> <p>On the 07 October, the south west monitor recorded activity exceeding the trigger level-see other comments.</p> <p>Several complaints were received including from Queens Terrace on the 02/10 and Crane Avenue on the 07/10.</p>	<p>As noted the East OCU was reset and returned to normal operation.</p>
<p>Digesters</p> <p>Several operatives were already on site cleaning up a digester spillage(s). Digester 11 was gassing actively via the annular seal.</p> <p>The digester area was generally odorous.</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>Adjustments were made to the digester 11 reduce further 'gassing'. We have also been using an antifoam additive to reduce foaming.</p>



<p>Odour control unit performance data</p> <p>See data set for 07 October, as set out below.</p>																																				
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<p>Other comment</p> <p>The measurements for the sludge reception outlet are again very close to the action level values.</p>	<p>The site operations team as always will be closely monitoring all odour readings to ensure compliance.</p> <p>As per section 3.4.2 of the Odour management plan, Odournet, have recently attended site to carry out the annual independent olfactometry performance tests on each OCU. We are awaiting the results.</p>
<p>Other comments/observations:</p> <p>Contractors 'ERG' were on site to check/maintain the pasteurisation plant chemical ocu.</p> <p>Contractors were on site checking the operation of a digester valve whessoe valve.</p> <p>Immediately prior to the inspection, I subjectively noted significant odour along Whitton Dene, stretching from Arnold Crescent to the Mogden Lane roundabout. This would appear to be linked to the relative high odour readings being recorded by the southwest monitor. Odour was noticeable throughout the digester area including from the embankment. It seems probable that there are several sources contributing to the odour, including digester spillages, digester gassing & work in progress on the pasteurisation plant ocu. This should not be taken as an exhaustive list. There may be other source(s) as yet unidentified.</p>	<p>ERG who installed and maintain the pasteurisation plant OCU were on site carrying out maintenance of the unit to ensure its operation.</p> <p>The contractors checking the digester relief valve were carrying out planned preventative maintenance, as required on all site plant.</p> <p>During the time of the inspection Digester no.11 was 'gassing', this was likely to be the main source for the on site odour at the time. As noted above adjustments were made to reduce further 'gassing'.</p>



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	14 October 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water

LB Hounslow observation	Thames Water response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive, full. Tank 8 in use. Storm tank 6, Amajets in use and releasing significant odour detectable around the tanks.</p>	<p>The Amajets clean the storm tank by jetting effluent at high pressure along the base. This cleaning action by its nature can occasionally produce a small amount of localised odour. This only occurs during the final stages of the tank emptying and is essential to leave the tank clean.</p>
<p>Storm tank log</p> <p>The log entry for the 14 October recorded 'tanks 1-8 in service'.</p> <p>Entries showed that all tanks were in use on the 13/10, tanks 1-7 were either full, or in use throughout the period 06/10 –12/10.</p>	<p>No comment to add</p>
<p>Digesters</p> <p>Digesters 10 & 11 were actively gassing via the annular seals.</p>	<p>Adjustments were made to the digester 10 and 11 to reduce further 'gassing'.</p>



<p>Sludge levels</p> <p>Total sludge stock 6,617m³</p> <p>The sludge dip measurements from the same day recorded 1,712m³ held in the west side rectangular primary settlement tanks (PST's) and 0m³ held in the west side circular PST's.</p> <p>4,905m³ was being held in the enclosed, odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	<p>No further comment to add</p>																																
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Boundary odour monitors (H2S) & odour log

On the 08/10 the southwest monitor slightly exceeded the 0.02ppm trigger level in the early evening. A complaint was received by Thames and the perimeter roads were checked for odour.

On the 09/10 (night) the pasteurisation plant ocu 2nd stage was tripping.

On the 10/10 (day) there is nothing in the log to show any odour problems. All monitors recorded levels below 0.02ppm. There was some odour activity detected by the eastside monitor < 0.02ppm.

On the 10/10 (night) there was a sludge spill in the digester area & storm tanks were full and Mogden was discharging to river. There was a significant spike recorded by the east side monitor, peaking at 0.065ppm at 20.46.

On the 11/10 (night) the eastside monitor recorded a level >0.02ppm.

On the 12/10 (day), an odour complaint was received by Thames and investigated. The pasteurisation plant was checked and noted that this area was odorous.

On the 12/10 (night), the pasteurisation ocu was recorded as failing. There was some odour activity recorded by the eastside monitor. Storm tanks were full.

On the 13/10 (day), maintenance contractors were on site attending to the pasteurisation plant ocu.

On the 13/10 (night) the monitors recorded a great deal of odour activity with the eastside monitor recording a peak of 0.037ppm at 19.15. Storm tanks were being pumped out.

On the 14/10 (day), the southwest monitor recorded a small increase in odour around 11am <0.02ppm.

On 08 October 2009, hydrogen sulphide readings from the southwest monitor peaked at 0.0224ppm and lasted for one hour. An investigation was carried out and no spillages or foaming was found in the digester area (where the monitor is located).

On 09 October 2009 (night) the boundary odour monitors all showed readings below 0.02ppm. The Pasteurisation OCU had tripped and was promptly reset; otherwise, operatives did not report any other unusual odours.

On 10 October 2009, there was a minor sludge spill that was promptly cleaned up within 1 hour of it occurring. At the time, many of the storm tanks were in use which may have been the cause of the increase in hydrogen sulphide levels.

On 13 October 2009, many of the storm tanks were being emptied. This may have been the cause of the increased odour activity recorded by the boundary monitors.



Other comment:

The council is receiving a significant number of complaints both during the evenings and during the daytime. Multiple complaints indicate that residents were concerned about odour on the 10th and 12th October. It is noted from the odour log that Thames has also been receiving complaints. Complaints on the 10th and 12th suggest that the storm tanks and the pasteurisation plant and/or the attendant ocu are the most likely sources of off site odour.

The operation and performance of the pasteurisation plant odour control unit continues to be of concern.

We acknowledge that there has been some odour related to the recent technical difficulties from the pasteurisation plant and would like to apologise to anyone who may have noticed any odour.

We are working very closely with the manufactures of the pasteurisation plant odour control equipment to try and resolve the technical problems that we have been experiencing.



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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	
Date of inspection	22 October 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
LB Hounslow observation	Thames Water response
<p>Storm water storage tanks</p> <p>Tanks 2,3,4 & 5, in use. Tank 6B held no effluent but had a layer of sludge on the tank base. Tank 8A empty but hoppers full of effluent and were odorous. Two hoppers to tank 8B were full of effluent.</p> <p>Tanks 6 & 8 respectively had been recently drained down but now require action to clear settled sludge and drain down hoppers.</p>	<p>The hopper on tank 8B was drained by over-pumping.</p> <p>The 'settled sludge' that remained on the surface of tanks 6 & 8 was washed down using hoses on that same day.</p>
<p>Storm tank log</p> <p>The log entry for the 22 October 6B 'sludge in tank' and '8A/B 'needs flushing'. My observations agreed with these log comments.</p>	<p>No comment to add</p>



<p>Sludge levels</p> <p>Total sludge stock 15,060m³</p> <p>The sludge dip measurements from the same day recorded 1,782m³ held in the west side rectangular primary settlement tanks (PST's) and 0m³ held in the west side circular PST's.</p> <p>13,278m³ was being held in the enclosed, odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	<p>No further comment to add</p>
<p>Digesters</p> <p>Recent incidents of spillage/foaming had been effectively cleaned up. There was no active spilling or gassing 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</p>



Odour control unit (ocu) performance monitoring (22nd Oct)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.02/0.01/0.03	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.6/0.52/0.67	1	Yes
Thickening plant outlet	0.45/0.32/0.41	1	Yes
Pasteurisation plant outlet	0.1/0.1/0.1	0.6	Yes
Transfer ps outlet	0.03	1	Yes

- Main pumping station outlet action level 0.2, compliant
- East ocu reading 0.01 action level 0.05, compliant
- West ocu reading 0.01 action level 0.05, compliant
- Sludge reception outlet action level 1ppm, compliant
- Thickening plant outlet action level 1ppm, compliant
- Pasteurisation plant action level 0.6ppm, compliant
- Transfer ps outlet reading 0.08 action level 1ppm, compliant

No comment to add.



<p>Boundary odour monitors (H2S) & odour log</p> <p>On the 16/10 the southside monitor exceeded 0.04ppm in the late afternoon.</p> <p>On the 17/10 (day) the southwest monitor recorded a very significant spike in excess of 0.06ppm, the log records that this was noted and two possible causes were suggested-pasteurisation plant and/or digester spills.</p> <p>On the 17/10 (day) the log records a 'large spill at digesters'.</p> <p>On the 17/10 (night) the odour monitors recorded activity; the most obvious being the eastside >0.02ppm and the log records a complaint from a TW2 resident and the cause being 'spill at digesters'.</p> <p>On the 18 & 19 October, all odour trends were low <0.02ppm.</p> <p>On the 19th into the 20th October the southwest monitor registered a spike (no mention in log).</p> <p>On the 20/10, the central monitor recorded a slight spike >0.02ppm</p> <p>On the 21/10, the southwest monitor recorded a slight spike <0.02ppm which is likely to reflect a spill in the digester area.</p>	<p>As noted, the likely source of the spike on the 17/10 was a combination of the digester spill, which was promptly cleared, and background odour from the pasteurisation plant.</p> <p>The East odour monitor activity on the 17/10 (night) lasted for one hour. An inspection carried out by the site operators identified the most likely source was the digesters.</p> <p>The spike on the South West monitor, which was not noted in the odour log, lasted for less than 30 mins. As per the OMP, this did not trigger an investigation.</p>
<p>Other comment:</p> <p>The odour log requires management comments and explanation for all odour levels which breach the trigger level(s).</p>	<p>The odour log has been fully updated with management comments.</p>



**London Borough
of Hounslow**



I agree that this report is a true reflection of my site inspection findings.

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 McEvelly

Process Manager, Thames Water



LB Hounslow Mogden STW Site Inspection	
Date of inspection	05 November 2009
Attendees	Michael Mehta, LB Hounslow Operational Team Manager, Thames Water
LB Hounslow observation	Thames Water response
<p>Storm water storage tanks</p> <p>Tanks 1-7 full. Over pumping from hoppers in tank 8A into feed channel in operation. Tank 8B empty, except for hoppers. No flow in feed channel. Low volume of effluent. Sludge on surface of effluent. Action required to treat channel effluent.</p> <p>The log showed that tanks 1-7 were in service for the 03/11 & 04/11</p>	<p>The storm tank feed channel was flushed through to remove the surface sludge.</p>
<p>Storm tank log</p> <p>The log entry for the 05 November had been completed and reflected my observations.</p>	<p>No comment to add</p>
<p>Sludge levels</p> <p>Total sludge stock was 12,080m³.</p> <p>The sludge dip measurements recorded 1,336m³ held in the west side rectangular primary settlement tanks (PST's) and 0m³ held in the west side circular PST's.</p> <p>10,744m³ was being held in the enclosed, odour controlled east side PST's. This is compliant with the current Odour Management Plan.</p>	<p>As noted, the highest sludge levels are being held in the enclosed primary tanks.</p>



Boundary odour monitors (H2S) & odour log

On the 01/11 (day) the eastside monitor was recorded as showing an odour spike (although <0.02ppm) and this was attributed to the weiring of storm tanks and very high flows.

On the 03/11, the day shift recorded noticing an odour spike on the eastside monitor and some smell on the east side around 13.00. This peaked at @0.028ppm. The log shows that in response to this, the ground around the rag skips was hosed down.

On the 04/11, the eastside monitor peaked at @ 0.031ppm at @21.31 and the log record shows that the eastside monitor recorded activity and that the storm tanks were smelly and still filling.

On 01 November 2009, many of the storm tanks were in use. Although the recorded odour spike remained below the 0.02ppm trigger, the storm tank use may have been the cause for the increase of odour.

On 03 November 2009, operatives noticed that the rag skip area was more odorous than usual. A hose down of the area was promptly carried out to prevent any further odour. This is inline with the guidelines stated in section 3.2 of the OMP.

The odour monitor activity recorded on 04 November 2009 was most likely to be caused by storm tank usage at the time.

The site operations team regularly inspect and monitor the storm tank area and when necessary, carry out remedial actions to reduce any odour.

Digesters

At the time of inspection, there were no significant incidents of 'foaming' or spillage from any of the digesters.

Due to recent foaming incidents, the operations team have increased the frequency of digester inspections. This means any incidents are promptly dealt with and any foaming can be swiftly cleaned up.

We are also dosing the sludge with an antifoaming agent to further reduce any gassing off and spills caused by foaming.



Odour control unit (ocu) performance monitoring (5 October 2009)

Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.00/0.00/0.001	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.42/0.39/0.45	1	Yes
Thickening plant outlet	0.37/0.42/0.45	1	Yes
Pasteurisation plant outlet	0.27/0.26/0.24	0.6	Yes
Transfer ps outlet	0.03	1	Yes

- Main pumping station outlet action level 0.2, compliant
- East ocu reading 0.01 action level 0.05, compliant
- West ocu reading 0.01 action level 0.05, compliant
- Sludge reception outlet action level 1ppm, compliant
- Thickening plant outlet action level 1ppm, compliant
- Pasteurisation plant action level 0.6ppm, compliant
- Transfer ps outlet reading 0.04 action level 1ppm, compliant

No comment to add.



<p>Other comment:</p> <p>The odour log requires management comments and explanation for all odour levels which breach the trigger level(s).</p> <p>The pasteurisation plant is presently being drained, further to which the pasteurisation plant odour control unit is to receive an inspection.</p>	<p>The site odour log has been updated with management comments to explain occurrences where odour levels breach the 0.02ppm level.</p> <p>The pasteurisation plant is being drained down during normal sequencing to allow for an inspection of the odour control unit which serves the plant to take place.</p>
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I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	13 th November 2009
Attendees	Gerry McCarthy (LBH), Zak Espi-Castillo, Martin Foster (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm Water Tanks</p> <p>Tanks 1, 2, 3, 4, 5, 6 and 7 were in use and effluent was discharging to the river from the tanks. The hoppers to tank 8 were full due to the heavy rainfall but not odorous</p> <p>On 12th November it was noted that amajet 6 to tank 1b was reset, amajet number 2 of tank 3a was faulty, amajets 4 and 5 of tank 4b were faulty, amajet number 2 of tank 5b and amajet 4 of tank 7a was reset. Please confirm that the faulty amajets are to be repaired as soon as each of the relevant storm water tanks are emptied.</p>	<p>The storm tank check list is completed on a daily basis. It details the condition of each tank including the hoppers and any faulty plant that may require repair. The hoppers which require further emptying after rainfall are emptied by over pumping.</p> <p>Any faulty plant is communicated to the maintenance team.</p> <p>If a tank develops a fault with one or more amajets, the maintenance team will plan the repair work to be carried out as soon as the tank can be emptied.</p>
<p>Boundary Odour Monitors</p> <p>It was noted that the northside monitor had gone off line on 11th November but was back online at the time of the inspection.</p> <p>Similarly the east side monitor went off line on 12th November but was back online at the time of the inspection.</p> <p>There was a spike on the eastside monitor on 7th November and this was attributed to the use of the storm water tanks, which were discharging to the river.</p> <p>There was a further spike on 12th November at approximately 22.40, which was due to the storm water tanks being in use and discharging to the river.</p>	<p>The site boundary odour readings are continuously monitored throughout the day by the operations team. If a monitor develops a fault a work order is raised and communicated to the maintenance team for repair.</p> <p>As detailed in the site odour log the likely source of the odour spike on the eastside monitor was most likely due to the use of the storm tanks at the time.</p>



<p>Complaints</p> <p>No complaints were received during the previous week</p>	
<p>Sludge Levels</p> <p>Total sludge stock levels 13/11 5924m³ (515m³ W and 5419m³ E) 12/11 6309m³ (890m³W and 5419 m³ E) 11/11 6309m³ (1336m³W and 5781m³ E) 10/11 960m³ (960m³W and 6008m³ E)</p> <p>This is compliant with the current Odour Management Plan</p>	<p>No comment to add</p>
<p>Digesters</p> <p>It was noted that there was a slight spillage of effluent at digester 11 via the annular seal.</p> <p>Digester 13 was vigorously gassing through the annular seal and while the level of the roof was low the amount of sludge entering the digester needed to be controlled as otherwise there would have been a significant spillage of sludge if the level of the roof had been high. Please confirm that appropriate remedial action was taken immediately to deal with this matter.</p>	<p>As per section 3.1.2 of the odour management plan any foaming or spillages of the digesters is always promptly cleared and washed down.</p> <p>Adjustments were made to digester no. 13 to control the gassing off.</p>



<p>General</p> <p>It was noted that the Thames Water website had not had any inspections uploaded since September. All outstanding reports need to be placed on the website without delay in the interest of good community relations with residents.</p>	<p>Owing to a technical fault, some of the reports were not showing on the website. This has been amended and we would like to apologise for any inconvenience caused.</p>																																
<p>Odour control unit (ocu) performance monitoring (20/01/2009)</p> <table border="1" data-bbox="190 657 1099 949"> <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>0.01</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>0.72</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Thickening plant outlet</td> <td>0.62</td> <td>1</td> <td>Yes</td> </tr> <tr> <td>Pasteurisation plant outlet</td> <td>0.31</td> <td>0.6</td> <td>Yes</td> </tr> <tr> <td>Transfer Pumping Station</td> <td>0.6</td> <td>1</td> <td>Yes</td> </tr> </tbody> </table>	Plant	Reading (ppm)	Action Level (ppm)	Compliant	Main pumping station outlet	0.01	0.2	Yes	East ocu	0.01	0.05	Yes	West ocu	0.01	0.05	Yes	Sludge reception outlet	0.72	1	Yes	Thickening plant outlet	0.62	1	Yes	Pasteurisation plant outlet	0.31	0.6	Yes	Transfer Pumping Station	0.6	1	Yes	<p>No comment to add.</p>
Plant	Reading (ppm)	Action Level (ppm)	Compliant																														
Main pumping station outlet	0.01	0.2	Yes																														
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Thickening plant outlet	0.62	1	Yes																														
Pasteurisation plant outlet	0.31	0.6	Yes																														
Transfer Pumping Station	0.6	1	Yes																														

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	20 th November 2009
Attendees	Gerry McCarthy (LBH), Zak Espi-Castillo, Martin Foster (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm Water Tanks</p> <p>Tanks 1 to 7 were all in use and tank 8 was empty and the hoppers were being over pumped. There was some sludge noted in the corner of tank 6b and the aamjet to this tank had failed and could not be reset. The contents of this tank were due to be returned to the inlet works for treatment to enable the amajet to be repaired. The storm water tanks have been in use since 13th November but the contents have been returned to the inlets works and the tanks have been filled again due to the volume of sewage entering the works.</p>	<p>The increase of flows into site has meant that Mogden's storm tank facilities are in use more often.</p> <p>Any stored storm flows are returned to the head of the works for processing at the earliest practical opportunity.</p>
<p>Sludge Stocks</p> <p>19/11/09 961m3 west side and 4228m3 east side = 5189m3 18/11/09 583m3 west side and 2055m3 east side = 2640m3 17/11/09 1030m3 west side and 1799m3 east side = 2829m3 16/11/09 1110m3 west side and 2161m3 east side = 3271m3</p> <p>This is compliant with the current OMP</p>	<p>No comment to add.</p>



<p>Boundary Odour Monitors</p> <p>Levels of H₂S were below the trigger level except one occasion when there was an odour spike on the East Side monitor, which is due to the storm water tanks discharging effluent to the river.</p>	<p>As noted, the storm tanks were in use at the time of these are the most likely cause of the hydrogen sulphide spike.</p>
<p>West Side Primary Settlement Tanks</p> <p>Tank 13 is currently out of service due to a scraper failure and a notification had been issued regarding this.</p> <p>Tank 14b was gassing during the inspection</p>	<p>As per site odour management plan, tank was drained, so that repairs can be completed, and odour source removed.</p>
<p>General</p> <p>There was a spillage of screenings on the west side of the works, which needed to be cleaned up immediately.</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>The spilled screenings were cleaned up immediately.</p> <p>Owing to construction challenges, there have been some delays to our work on converting the Westside primary tanks.</p> <p>The higher winter flows into the works have meant we need to reconsider how the tanks are commissioned.</p> <p>Our contractors are working hard to complete their work as soon as possible and we plan to have the tanks in use in spring 2010.</p>



Odour control unit (ocu) performance monitoring (20/11/2009)			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.12	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	0.21	1	Yes
Pasteurisation plant outlet	Faulty	0.6	Yes
Transfer Pumping Station Outlet	0.06	0.6	Yes

No comment to add.

I agree that this report is a true reflection of my site inspection findings.

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

Date of inspection	26 th November 2009
Attendees	Gerry McCarthy (LBH), Andrew Georgiades (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm Water Tanks</p> <p>Tanks 1-7 were in use and discharging to the river with the exception tank 8. It was noted Tank 3b was gassing and the contents of this tank need to be returned as soon as is reasonably practicable for treatment. It was noted on the storm water tank log that tank 8b had a blocked amajet and this needs to be repaired when the hoppers are emptied and the hoppers were being over pumped at the time of the inspection.</p> <p>The storm water tanks have been in regular use in the last week and on 25th November tanks 1-7 were in use, 24th November tanks 1-5 and 7 were in use with tanks 6 and 8 being empty and tanks 1-7 were in use on 23rd and 22nd November.</p>	<p>Heavy rain fall has meant we have needed to use the storm tanks.</p> <p>We are returning the contents to the head of the works at the earliest opportunity.</p>
<p>Sludge Dips</p> <p>26/11/09 890m3 west side and 8677 m3 east side = 9567m3 25/11/09 890m3 west side and 7229 m3 east side = 8119m3 24/11/09 515m3 west side and 6400 m3 east side = 6915m3</p>	<p>No comment to add.</p>



<p>Boundary Odour Monitors</p> <p>Readings have been low for the last week but there was one spike on 22nd November which was below the trigger level on the East side monitor which was attributed to the use of the storm water tanks which were discharging to the river.</p> <p>There was a peak above 0.02ppm on 25th November and during this time the storm tanks were discharging to the river.</p> <p>There was also a peak above 0.02ppm on 26th November and when this occurred the storm water tanks were in use and discharging to the river.</p>	<p>Site investigations did not report any unusual activities. At the time the storm tanks were in use and this may have been the cause of the spike.</p>
<p>Digester Area</p> <p>There was a sludge spillage in the area of digester 6 which needed to be cleaned up immediately</p>	<p>The area has been cleaned by operational staff as per Mogden's Odour Management Plan.</p>
<p>General</p> <p>I have not received any comments on my inspection reports of 13th and 19th November and all outstanding reports need to be agreed and placed on the website without delay in the interest of good community relations with residents.</p>	<p>These reports are online.</p>
<p>West Side Rectangular Primary Settlement Tanks</p> <p>Tank 14b was gassing</p>	<p>This was resolved after the next automated scrape.</p>



Odour control unit (ocu) performance monitoring			
Plant	Reading (ppm)	Action Level (ppm)	Compliant
Main pumping station outlet	0.18	0.2	Yes
East ocu	0.01	0.05	Yes
West ocu	0.01	0.05	Yes
Sludge reception outlet	0.34	1	Yes
Thickening plant outlet	0.59	1	Yes
Pasteurisation plant outlet	0.49	0.6	Yes
Transfer Pumping Station Outlet	0.04	0.6	Yes

No 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

Date of inspection	3 rd December 2009
Attendees	Michael Mehta (LBH), Andrew Georgiades (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-6 inclusive were in use. The contents of tank 7 were being returned to the works for treatment. Tank 8 was empty.</p>	<p>High flows into site have meant we have needed to use the storm tanks.</p> <p>Tanks are returned to the head of the works for processing at the earliest opportunity.</p>
<p>Storm tank log</p> <p>The log entry for the 03/12 recorded the facts that tanks 1-7 were in service and tank 8 was empty. These comments support my observations. The log showed that for the period 27/11-03/12 inclusive, all the storm tanks were in service except tank 8.</p>	<p>High flows to site have meant we have needed to use the storm tanks.</p> <p>Tanks are returned at the earliest opportunity.</p>
<p>Sludge levels</p> <p>Total sludge stock 6,250m³ This is compliant with the current Odour Management Plan.</p>	<p>No comment to add.</p>



<p>Boundary odour monitors (H2S) & odour log</p> <p>On the 26/11 the eastside monitor recorded some activity and the log report showed that the storm tanks were all full and discharging to the river. On the 28/11 the eastside monitor recorded significant odour activity peaking at around 0.04ppm between 11.12am and 12.42pm. The log records that storm water was discharging to the river. On the 30/11 the southside monitor recorded odour activity peaking at around 0.04ppm at 7.07am. The log records that all the storm tanks were in use at the time and storm water was discharging to the river. This odour activity requires a management comment identifying the most likely source of the odour. All of the odour monitors had recorded very low levels (<trigger level) for the days 01-03 December.</p>	<p>Site operatives carried out investigations of the site relating to the spikes on 28th and 30th November. They were unable to identify a specific source of odour which could have caused such an increase.</p> <p>At the time of the odour spikes, the storm tanks were in use which may have contributed to some of the hydrogen sulphide recorded by the monitor.</p>
<p>Digesters</p> <p>There was no active spilling or gassing at the time of the inspection.</p>	<p>No comment to add.</p>



<p>Odour control unit performance data</p> <p>Refer to most recent data set for 03 December, as set out below. Main pumping station 0.00/0.00/0.00 Sludge reception outlet 0.13/0.16/0.16 Thickening plant outlet 0.14/0.16/0.18 Pasteurisation plant outlet 0.32/0.29/0.33 Main pumping station outlet action level 0.2, compliant East ocu reading 0.01 action level 0.05, compliant West ocu reading 0.01 action level 0.05, compliant Sludge reception outlet action level 0.8ppm, compliant Thickening plant outlet action level 0.6ppm, compliant Pasteurisation plant action level 0.6ppm, compliant Transfer ps outlet reading 0.02, action level 0.6ppm, compliant</p>	<p>No comment to add.</p>
<p>Other comment:</p> <p>The odour log requires management comments and explanation for all incidents where the boundary odour monitors show that the trigger level (0.015ppm) has been breached. Reference Odour Management Plan version 1.8.</p> <p>The pasteurisation plan is not presently in service.</p>	<p>Operational staff note any unusual odour activities on site, including any odour breaches from OMP1.7 (soon to be 1.8)</p> <p>Management review the log and add any further comments if necessary.</p>

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 McEvelly

Process Manager, Thames Water



LB Hounslow Mogden STW Site Inspection

Date of inspection	9 th December 2009
Attendees	Michael Mehta (LBH), Andrew Georgiades (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use. There was inverted sludge on the surface of the effluent in tank 3A/B. These tanks were giving rise to odour, which was noticeable on site, around the tank. Tank 8 was empty.</p>	<p>Heavy flows into the works have meant that we have needed to use the storm tanks.</p> <p>Tanks are returned to the head of the works, or refilled, at the earliest opportunity to keep sludge to a minimum.</p>
<p>Storm tank log</p> <p>The log entry for the 09/12 supported my observations. The log showed that for the period 03/12 (the date of the last inspection)-07/12 inclusive, all the storm tanks were in service except tank 8.</p>	<p>As mentioned above, heavy flows into the works has mean that we need to use the storm tanks.</p>
<p>Sludge levels</p> <p>The uncovered west side rectangular primary settlement tanks (pst's) held 585m³, the uncovered west side circular pst's held 0m³ and the covered (and odour controlled) east side pst's held 5,057m³. Total sludge stock 5,642m³ This volume and distribution is compliant with the current Odour Management Plan.</p>	<p>No comment to add.</p>



<p>Boundary odour monitors (H2S) & odour log</p> <p>All of the odour monitors had recorded low or very low levels (<trigger level) for the period 03/12 (the date of the last inspection)-09/12 (the date of the present inspection). At the time of the inspection, the values for H2S being recorded by the boundary monitors were as follows: northside 0.0008ppm; westside 0.0026ppm; southside 0.004ppm; eastside 0.0027ppm & southwest monitor 0.003ppm. The central monitor is presently away for servicing.</p>	<p>No comment to add.</p>
<p>Digesters</p> <p>Digester 5 was gassing audibly via the annular seal. There was a strong odour detectable within the perimeter of the digester farm, related to the gassing from this digester. No other digesters were exhibiting significant gas leakage.</p>	<p>Adjustments were made to the digester to prevent further 'gassing off'.</p>
<p>Odour control unit performance data</p> <p>Refer to most recent data set for 03 December, as set out below. *</p> <p>Main pumping station 0.00/0.00/0.00 Sludge reception outlet 0.13/0.16/0.16 Thickening plant outlet 0.14/0.16/0.18 Pasteurisation plant outlet 0.32/0.29/0.33 Main pumping station outlet action level 0.2, compliant East ocu reading 0.01 action level 0.05, compliant West ocu reading 0.01 action level 0.05, compliant Sludge reception outlet action level 0.8ppm, compliant Thickening plant outlet action level 0.6ppm, compliant Pasteurisation plant action level 0.6ppm, compliant Transfer ps outlet reading 0.02, action level 0.6ppm, compliant</p>	<p>No comment to add.</p>



<p>West side primary settlement tanks (pst)</p> <p>Further to Thames Water’s notification posted on the 08 December, pst 14 is being drained down to facilitate repair work. PST 14A contained effluent and inverted sludge on the surface, which was giving rise to noticeable on site odour around the tank.</p>	<p>A notification was sent out as a precautionary measure as there can be odours associated with draining down the rectangular primary tanks.</p>
<p>Other comment:</p> <p>The emptying of storm water storage tank 3A/B was to be given priority.</p> <p>A further powerhouse engine was to be operated to burn biogas and reduce the leakage of gas from digester 5.</p> <p>The pasteurisation plan is not presently in service.</p> <p>*Performance readings for the odour control units are to be recorded on the 10/12</p>	<p>As noted above:</p> <p>Tanks are returned and refilled to make sure that septic sludge does not develop.</p> <p>Adjustments were made to the digester to prevent further ‘gassing off’.</p>

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

Date of inspection	16 th December 2009
Attendees	Michael Mehta (LBH), Andrew Georgiades (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use. There was no noticeable odour on site, arising from the use of the tanks. Tank 8 was empty.</p>	<p>Owing to the high flows coming into the works, we have needed to use some of the storm tanks.</p> <p>All tanks are returned to the head of the works for processing at the earliest opportunity.</p>
<p>Storm tank log</p> <p>The log entry for the 016/12 recorded that storm tanks 1-7 inclusive were full and that tank 8 was empty. The log also recorded that the hoppers to tank 8 had been pumped out on the 15/12. The log showed that for the period 10/12 -16/12 inclusive, the storm tanks were in service (either 'full' or 'in use').</p>	<p>No further comment to add.</p>
<p>Sludge levels</p> <p>The uncovered west side rectangular primary settlement tanks (pst's) held 445m³, the uncovered west side circular pst's held 80m³ and the covered (and odour controlled) east side pst's held 4076m³. Total sludge stock was 4,601m³ This volume and distribution is compliant with the current Odour Management Plan.</p>	<p>No comment to add.</p>



<p>Boundary odour monitors (H2S) & odour log</p> <p>No odour incidents had been recorded in the odour log for the 09/12. None of the boundary odour monitors recorded any odour level on the 09/12 which exceeded 0.02ppm.</p> <p>On the 10/12, the eastside monitor recorded an elevated odour level from 20.44-21.14 peaking at 0.038ppm. The most likely explanation being the return to treatment of the contents of the storm water storage tanks.</p> <p>On the 11/12, the southside monitor recorded an elevated odour level from 3.16-3.47 peaking at 0.026ppm. A record in the daily event log showed that there was some gassing off from a digester prompting a draw down from digester 12.</p> <p>On the 12/12, the southside monitor recorded an elevated odour level from 3.20-4.20 peaking at 0.034ppm, followed by further odour activity recorded by the southside monitor at a lower level. There is no entry in the odour log to explain the reason for this activity.</p> <p>On the 13/12, most odour activity was recorded by the southside monitor however the level did not exceed 0.02ppm.</p> <p>Odour trends recorded by all of the boundary monitors for the 15/12 & 16/12 were all low < 0.02ppm.</p>	<p>On 10 December, site operatives were returning a number of the storm tanks to keep them fresh until they could be emptied. This may have been the cause of behind the increase of Hydrogen Sulphide.</p> <p>On 11 December, operatives noted that one of the digesters was starting to gas off and made adjustments to the digester to reduce any odour.</p> <p>On 12 December, site operatives did not note any unusual activities that could have caused any increase in odour.</p> <p>Besides the observations detailed, we have no further comment to add.</p>
<p>Digesters</p> <p>All digesters were inspected and on this occasion, there were no visible signs of any sludge spillage or 'foaming' from around the annular seals. The digesters were not exhibiting any significant gas leakage. Odour levels in and immediately around the digester farm were low.</p>	<p>Thames Water will continue inspection and monitoring of the area as per the Odour Management Plan.</p>



<p>Odour control unit performance data</p> <p>Please refer to most recent performance data set for 10 December, as set out below.</p> <p>Main pumping station 0.01/0.00/0.001 Sludge reception outlet 0.21/0.22/0.21 Thickening plant outlet 0.17/0.18/0.15 Pasteurisation plant outlet 0.41/0.38/0.37</p> <p>Main pumping station outlet action level 0.2, compliant East ocu reading 0.01 action level 0.05, compliant West ocu reading 0.01 action level 0.05, compliant Sludge reception outlet action level 0.8ppm, compliant Thickening plant outlet action level 0.6ppm, compliant Pasteurisation plant action level 0.6ppm, compliant Transfer ps outlet reading 0.02, action level 0.6ppm, compliant *Action levels as per Odour Management Plan (OMP) version 1.8. All odour control unit performance checks are compliant with the OMP.</p>	<p>No comment to add.</p>
<p>West side primary settlement tanks (pst)</p> <p>Further to Thames Water's notification posted on the 08 December, normal operation of primary settlement tank 14 had resumed. The tank contained effluent. There was no noticeable site odour associated with the tank.</p>	<p>No comment to add.</p>
<p>Other comment:</p> <p>The pasteurisation plant is not presently in service.</p>	<p>No comment to add.</p>



**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

Date of inspection	24 th December 2009
Attendees	Michael Mehta (LBH), Andrew Georgiades (Thames Water)

LB Hounslow Observation	Thames Water Action / Response
<p>Storm water storage tanks</p> <p>Tanks 1-7 inclusive were in use. There was no noticeable odour on site, arising from the use of the tanks. Tank 8A/B hoppers full of effluent. Some sludge in 8B.</p>	<p>Tank 8 was in the process of being returned to the head of the works. Thames Water staff empty storm tanks at the earliest opportunity whenever possible, to ensure that any stored storm water does become septic and odorous.</p>
<p>Storm tank log</p> <p>The log entry for the 24/12 recorded that storm tanks 1-7 inclusive were full and that tank 8 was empty and that action was to be taken to pump out the hoppers.</p>	<p>No comment to add.</p>
<p>Sludge levels</p> <p>The uncovered west side rectangular primary settlement tanks (pst's) held 280m³, the uncovered west side circular pst's held 0m³ and the covered (and odour controlled) east side pst's held 6,248m³.</p> <p>Total sludge stock was 6,528m³</p> <p>This volume and distribution is compliant with the current Odour Management Plan.</p>	<p>No comment to add.</p>



<p>Boundary odour monitors (H2S) & odour log</p> <p>On the 17/12 & the 18/12, the Southside monitor recorded significant odour activity. On the 18/12 from around 3.30am-9am, the H2S activity exceeded 0.04ppm. A written note records that these trends were considered to be suspect and that there were no odour problems found around the site. A further note refers to a request for the monitor to be checked.</p> <p>On the 20/12, the southwest monitor recorded an elevated odour level peaking at 0.047ppm at around 10.26am. An entry in the odour log records that that the area was checked but no odour was found. On the 21/12, the southwest monitor recorded an elevated level of 0.068ppm between 8.58-9.58am. This was recorded in the odour log as a spurious spike</p> <p>On the 23/12, monitors including the Southside, central & southwest detected odour activity <0.02ppm at around 9.49am.</p> <p>There was good correlation between three monitors; however the cause of the activity is undetermined.</p> <p>On the 24/12 (inspection date), all six odour monitors were operating and all were recording levels < trigger levels.</p>	<p>17/12, 18/12, 20/12, 21/12, 23/12 - Site walk round inspections did not report any unusual odour within the vicinity of the peaking monitor. On all occasions investigations were carried out and monitoring equipment has been reset as a precaution.</p> <p>At the time of the odour spikes, storm tanks were being filled / returned on a number of occasions.</p> <p>24/12- Mogden is operating within set trigger limits.</p>
<p>Digesters</p> <p>All digesters were inspected and on this occasion, digesters 5 & 7 were gassing audibly via the annular seals and creating local odour detectable within the perimeter of the digester farm.</p>	<p>Adjustments were made to digesters 5 and 7 to reduce any gassing off.</p>



<p>Odour control unit performance data</p> <p>Please refer to most recent performance data set for 23 December, as set out below.</p> <p>Main pumping station 0.00/0.00/0.000 Sludge reception outlet 0.34/0.41/0.38 Thickening plant outlet 0.29/0.35/0.30 Pasteurisation plant outlet 0.22/0.18/0.17</p> <p>Main pumping station outlet action level 0.2, compliant East ocu reading 0.01 action level 0.05, compliant West ocu reading 0.01 action level 0.05, compliant Sludge reception outlet action level 0.8ppm, compliant Thickening plant outlet action level 0.6ppm, compliant Pasteurisation plant action level 0.6ppm, compliant Transfer ps outlet reading 0.02, action level 0.6ppm, compliant *Action levels as per Odour Management Plan (OMP) version 1.8. All odour control unit performance checks are compliant with the OMP.</p>	<p>No comment to add.</p>
<p>West side primary settlement tanks (pst)</p> <p>All tanks operational. No significant odour detected in vicinity of tanks.</p>	<p>No comment to add.</p>
<p>Other comment:</p> <p>The pasteurisation plant is not presently in service.</p>	<p>No comment to add.</p>



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of Hounslow**



Michael Mehta

Pollution Control, London Borough of Hounslow

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Alan McEvilly

Process Manager, Thames Water