

Why do the storm tanks at Mogden sometimes cause an odour nuisance ?

- Our policy is to return storm sewage held in the storm tanks back to the head of the works at the earliest opportunity as the fresher the sewage is the less odour is generated from it.
- If the flow to the treatment works remains high for long periods, as has often been the case in recent months, the sewage in the storm tanks becomes older and causes a greater odour nuisance.
- Often increases in the odour nuisance can be related to when the storm sewage is disturbed when pumped back to the head of the works for treatment and can be minimised by trying to keep the storm tank sewage relatively fresh.
- Wind direction also contributes to why odour nuisance experienced by some of our neighbours is not always continuous.

What is Thames Water doing to improve the situation ?

- The local team at Mogden endeavour to return storm sewage from the storm tanks back to the head of the works at the earliest opportunity when incoming flows reduce. Our aim is to keep the storm tanks empty.
- When empty, storm tanks are cleaned of any residual sludge which may cause an odour nuisance immediately.
- If it is not possible to empty the storm tanks fully, the local team recirculate the older storm sewage back into the works to keep the stored sewage fresher and replace with newer storm sewage, in an attempt to reduce odour nuisance.
- Rainfall has been above normal expected levels this year. If however, this level of rainfall is likely to become the norm, then it will be necessary for Thames Water to look at further methods for minimising odour nuisance as a result of using the storm tanks.

CONTACT NUMBERS

Thames Water	Environmental Health
Mogden STW : 020 7713 3500	M. Metha 020 8583 5176
Customer Centre : 0845 9200800	
Mogden Sewage Treatment Works, Mogden Lane, Isleworth, Middlesex, TW7 7LP	

MOGDEN SEWAGE TREATMENT WORKS

RESIDENTS NEWSLETTER

APRIL 2001

Dear Resident,

This is the second issue of the new residents newsletter which is being sent to all local residents living in the vicinity of Mogden Sewage Treatment Works.

Our intention is to keep you informed on a three to four monthly basis of any current issues and to provide relevant information relating to Mogden Sewage Treatment Works and Thames Water.

Since our last newsletter, we have continued to see extremely heavy rainfall and whilst the treatment process has coped very well in recent months, it has been compulsory to utilise the vast storm tanks on site to cope with the unusually high flows to the works.

Thames Water and the local team appreciate that the utilisation of storm tanks has on occasions caused odour nuisance to our neighbours. The local team here at Mogden are making every effort to minimise any odour nuisance caused, but unfortunately we are obliged to use storm tanks under these circumstances. We have included more information overleaf.

Finally, we hope you find these publications useful and informative and welcome any suggestions from you for future issues. Our local telephone number is on the back of this leaflet.

Yours sincerely

Shelley MAY
Production Manager
(Mogden)

John KINGDON
Operations Manager
(W. London-Waste water
services)

Storm Tanks

The storm tanks at Mogden Sewage Treatment Works have had to be used almost continually from September 2000 to April 2001

What are storm tanks ?

- Storm tanks are large open topped storage tanks which are filled with partially treated sewage when the incoming wastewater flow to the works is in excess of the maximum treatment capacity of the Sewage Treatment Process.
- When the flows reduce, the storm sewage is returned to the works for full treatment.

How big are the storm tanks ?

- At Mogden , there are 8 storm tanks, each the size of a football pitch.

What happens when the storm tanks are full ?

- Partially treated sewage can be discharged into the River Thames from the storm tank overflows.
- Discharges from the storm overflows are strictly controlled by the Environment Agency(EA) and Thames Water is legally obliged to comply with conditions set out by the EA.
- These conditions are that storm sewage can only be discharged to river when the maximum capacity of the treatment works is being utilised and all storm tanks are full. All storm flow to the river must also be partially treated as a minimum requirement.

What is 'partially' treated sewage ?

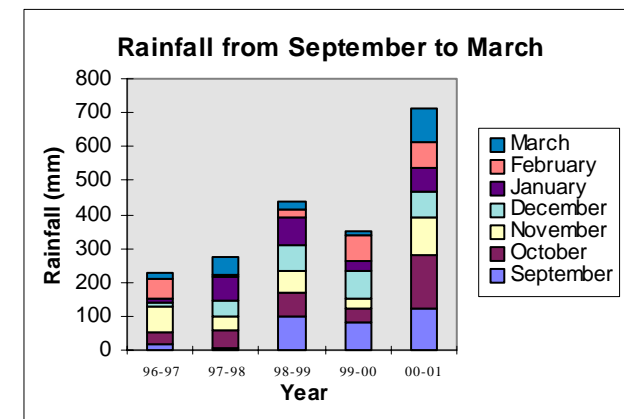
- Partially treated sewage has been screened to remove the majority of rag and grit from the flow and the sewage has also had several hours of sedimentation in the storm tanks which removes a large quantity of solids and hence pollution from the flow.

What would happen if the storm tanks were not used under high storm flow conditions ?

- Storm sewage would enter the River Thames. Discharging untreated storm sewage into the watercourse would be a breach of Thames Waters legal obligations set out by the Environment Agency and would lead to prosecution.
- Untreated sewage into the River Thames would also cause major pollution to the river and a significant effect to wildlife and the environment.

Why have the storm tanks at Mogden been used so much this year ?

- Recent news articles have reported that this year has been the wettest year recorded since records began in 1947
- This additional rainfall means flow to the treatment works has substantially increased.
- The following graph shows the rainfall figures for the period from September to March for the last 5 years. The data shows that over the last 7 month period we have had almost double the amount of rainfall compared to previous years.



- This increase in rainfall has substantially impacted on all Sewage Treatment works in the Thames Water region making the use of storm tanks a necessity.

Mogden Sewage Treatment works has only just been extended. Why do Thames Water still have to use the storm tanks?

- We are now able to treat 810 Million Litres per day.(An increase of 160 Million litres per day to previous capacity). As the graph above illustrates, this year, increased rainfall has led to unpredictably high flows compared to the normal operationally expected flows in previous years. This year we have seen peaks of 1800 Million litres per day entering the works. Storm tanks continue to provide a necessary emergency storage when flows are excessively high.

Mogden update

November 2005

Welcome



Welcome to your November edition of the Mogden newsletter.

This newsletter is to let you know about what we are doing at Mogden Sewage Treatment Works. We have sent it to you as you live near to the site.

If you would like to ask us about anything featured in this update, please visit www.thameswateruk.co.uk/mogden, write to us at **mogden@thameswateruk.co.uk** or phone our contact centre on **0845 9200 800** quoting ref BB676630.

Andy de Bell
West London Operations Manager

Reducing odour at Mogden



Thames Water is carrying out long-term investment at Mogden Sewage Treatment Works, including a project to reduce odour by covering parts of the site.

These improvements, which will take until 2008 to complete, involve covering parts of the treatment process and installing equipment to extract and treat the air from inside the covered areas.

We have used independent tests to ensure we target our work to reduce odour as much as possible with the available funds.

We are sorry that some residents in the immediate area around the works find the level of odour unacceptable at times, and we are confident that these improvements will significantly reduce odours from the site.

New sludge thickening equipment installed

New sludge thickening equipment was put into operation in February 05. It removes water from the sludge as part of the sewage treatment process. This new equipment replaced old sludge thickening tanks. The new thickeners are better at dealing with sludge than the equipment that they are replacing as they are of a different design



and they are more efficient. In addition, they are contained in an odour-controlled building, which is fitted with equipment to extract and treat the air.

Now that the old thickeners have been taken out of service, the overall effect is a reduction in smell from Mogden.

The Project to improve odour at Mogden

We recently appointed an engineering firm, Birse, to carry out the odour improvement work. Birse has worked on similar projects at other sites in the UK. Planning and design work is well underway and more details will be made available regularly via our website, newsletters and email.

Covers will be built and air extracted and treated on the first 2 storm tanks that are used, the inlet works on the east and west of Mogden, and some of the primary settlement tanks (PSTs) on the east side of the works. We are still considering whether to cover the other PSTs on the east side or

whether to convert them to a different type of tank.

Construction work is planned to start in early 2006 and the programme shown below sets out the progress so far and future timescales.

Activity	2004	2005												2006	2007	2008	2009	2010
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec					
Business plan agreement with Ofwat	■	■																
Agreement of scope with Ofwat	■	■	■	■	■													
Project team formed		■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Contract award								■	■									
Start on-site													■					
First benefits														■				
All work complete																■		

News about Mogden: www.thameswateruk.co.uk/Mogden

If you want to know about what is happening at Mogden and the latest about the project to improve odour, you can register to receive email news about Mogden.

If you don't have access to email but would still like to receive news about Mogden, please contact us on 0845 9200 800 quoting ref BB676630.



The new website is easier for us to update quickly than our old website was, so it is a step forward in being able to keep you up to date about what's happening at Mogden.

- **Mogden news** contains news about Mogden and the odour improvement project.
- **Site improvement** includes details on the project to reduce odour and other improvements we are making.
- **Environmental impact** contains information on odour and mosquitoes and what we are doing to combat mosquitoes at Mogden.

In addition, there is information on the work we are doing with the local

community and local councils, how sewage treatment works, plus a short history about Mogden.

Keeping in touch

There are four ways to contact Thames Water about Mogden:

- via our contact centre 0845 9200 800
- via our website at www.thameswater.co.uk/mogden
- by email to mogden@thameswater.co.uk
- by post at, Thames Water Utilities Ltd, POBox 436, Swindon SN38 1TU

This leaflet can be supplied in large print, braille or audio-tape upon request.



If undelivered please return to:
Blake House, Manor Farm Road,
Reading, RG2 0JN

Newsletter - March 2006 Issue 1

Mogden Sewage Treatment Works

Reducing odour

Thames Water aims to significantly reduce odour from Mogden Sewage Treatment Works by July 2008. We will cover over part of the site and install new equipment to extract and clean the air.

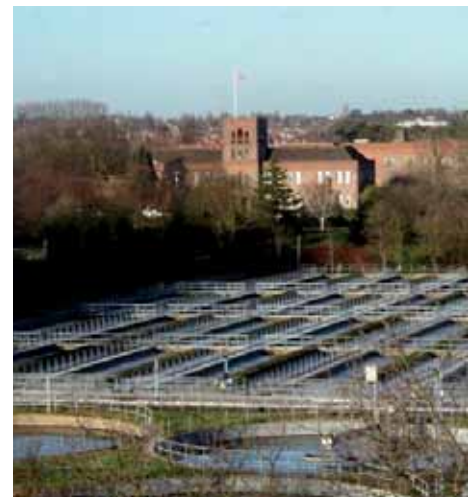
We are covering tanks and channels with a total area of more than 3½ football pitches (nearly 23,000m²).

During our improvement work, we will continue to treat the sewage and wastewater for around 1.9 million people.

Our contractor, Birse, is experienced in this type of project in the UK. Together with them, we have started construction and are increasing our site security.

We aim to finish the project in July 2008, however you will notice the first benefits of the project before then.

Andy de Bell
West London Operations Manager



Odour Reduction Construction work has started

We are pleased to announce that work has started to build the odour reduction equipment needed for our storm tanks and Primary Settlement Tanks on the east side of Mogden.

On the storm tanks, our work will include installing cleaning equipment and making changes so that the tanks drain down more easily. We will then cover the first two tanks that we use. These improvements will reduce the likelihood of odour and mosquitoes at storm tanks.

The Primary Settlement Tanks are the largest area we will be covering. Before



we can cover them, we are making improvements to the mechanical and electrical equipment in them. It will take until June 2008 to complete the work on these tanks.

Together, the Primary Settlement Tanks cover an area larger than the rugby pitch at Twickenham.



Mosquitoes in Richmond and Hounslow

We will be getting in touch with you soon with information about mosquitoes. If you are worried about them, please contact us or your Environmental Health department.

London Borough of Hounslow

Telephone – **0208 583 5082**

Email – pestcontrol@hounslow.gov.uk

London Borough of Richmond upon Thames

Telephone – **0208 891 7994**

Email – commercialeh@richmond.gov.uk

Odour survey results

In September 2005, we carried out our fourth annual odour survey at Mogden. The results showed that odour at the site has reduced every year since 2002.

We used the results of these surveys to decide where to build the covers as part of the project to improve odour. We can also use them to improve the way we run the plant.

Keeping in touch with Thames Water

We will continue to send you updates about the project, or you can get in touch with us using the following methods :

- via our contact centre on **0845 9200 800**
- at www.thameswater.co.uk/mogden
- by email to Mogden@thameswater.co.uk
- by post to **Thames Water Utilities Ltd
PO Box 436
Swindon
SN38 1TU**



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Newsletter - July 2006 Issue 2

Mogden Sewage Treatment Works

Project to reduce odour is progressing well

Thames Water's project to reduce odour at Mogden Sewage Treatment Works is going to plan and we expect to have completed the building work by August 2008 or before.

At the moment, we are working on the primary settlement tanks on the east side of the works. These have been identified as one of the most odorous areas at Mogden.

We are building supports in the tanks, for the covers to sit on top of.

We have also started building the Odour Control Unit for the east of the site. This will treat the air from underneath the covers on the primary settlement tanks, the storm tanks and some other small areas.

Andy de Bell
West London Operations Manager



Working for a cleaner Thames

What we want to do

When there is a lot of rain, we are not able to treat all of the wastewater that flows into Mogden Sewage Treatment Works (STW). Instead, we store it in storm tanks until there is room in the STW, and then we pump the wastewater in the storm tanks back into the main treatment works.

When there is just too much rainfall, the storm tanks fill up and overflow into the River Thames. We need to carry out some work to reduce the likelihood of this happening.

This proposed work will mean that there will be less use of the storm tanks and less risk of overflows into the River Thames. This will help to boost oxygen levels in the river, which

will improve the habitat for fish and other aquatic life, and will benefit the water quality in the tidal section of the Thames.

How we will improve the site

The improvements will include new tanks, machinery and buildings. These will have odour control equipment to the same standard as the new equipment, which is being built now. We also plan to landscape the areas round the new tanks so that they fit in with the existing site.

As the improvements will be located within the operational STW, the new tanks, machinery and buildings should not be visible from outside of the STW.

Planning Application

In the autumn, Thames Water will be submitting a planning application to the London Borough of Hounslow to request permission to carry out the work. As with any planning application, you will be invited by the Council to comment on our proposed plans.

If you want to find out more, please contact us to request leaflets or visit our website.



Keeping odour to a minimum

The building work that we are doing to reduce odour is only part of what we do to reduce odour at Mogden. We run the site using an Odour Management Plan, which we share with the local authorities.

Over the past few years, we have made improvements to how we run the site, which have resulted in a reduction in odour every year since 2002, as shown on the annual odour surveys.

Keeping in touch with Thames Water

We will continue to send you updates about the project, or you can get in touch with us using the following methods:

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**PO Box 436
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Newsletter - February 2008

Noon Products Ltd fined for pollution of the sewerage system

A Southall-based ethnic food products company has been ordered to pay nearly £50,000 for illegally discharging fat, oil and grease into the sewerage system in breach of the terms of their consent. Thames Water brought the prosecution after tests showed that Noon Products were illegally discharging trade effluent, including cooking fat, oil and grease, from its premises in Windmill Industrial Estate in Southall in breach of the terms of the consents granted to it by Thames Water. In some cases, the company was three times over the legal limit set by the consents for effluent discharges. The trade effluent discharged from the premises occupied by Noon Products is treated by Mogden Sewage

Treatment works. The result of this prosecution is a very positive step in the regulation of our trade effluent customers and sets an example to other companies in the area. Fat, oil and grease discharged into the public sewerage network causes a huge problem for Thames Water, as it hardens and blocks the sewers, causing flooding to homes and properties. In 2007, we cleared 70,000 sewer blockages, of which we estimate 60% were caused by fat, oil and grease being poured down drains. The recommended way to dispose of household fat is to let it solidify in an old tin, then put it in the dustbin. In Winter, fat can be mixed with seeds and food scraps, then hung out in the garden to provide extra nourishment for hungry birds.



Website www.thameswater.co.uk/mogden

Site improvement: See updated site photos of the odour improvement project.
Mosquitoes: Information on how to stop mosquitoes breeding.

Peel Here

Mogden Sewage Treatment Works Odour Improvement Plan Update

The odour improvements project is on programme and many key milestones have already been achieved. The (chemical) odour control unit for the East side of Mogden STW has been operational since January 2007 and now treats odorous air from the screenhouse, two of the three grit removal channels, two of the four secondary settlement tanks, and the two first-to-fill storm tanks. The covering of large areas of Mogden STW has required much of our existing mechanical equipment to be modified. The modifications have included the installation of new screenings handling equipment, a new system for the removal of sludge from the covered secondary settlement tanks, new grit removal equipment and new storm tank cleaning equipment. The two key areas of outstanding work are the covering of the remaining two settlement tanks, which is well underway, and the decommissioning of the primary settlement tanks, a complicated piece of work which is currently in the planning stage.



Work on the West side of Mogden STW is almost complete. The (biological) odour control unit for the West side of Mogden STW is now treating odorous air from the vast majority of areas that require odour control. The remaining areas that require odour control include small openings around the inlet screens, and the enclosure over the skips into which removed grit is deposited.

ISO 14001 Accreditation

'Mogden STW, along with all its associated catchment sites is currently undertaking a development programme to implement a fully sustainable Environmental Management System to meet the requirements of the internationally recognised ISO14001 environmental standard. The standard requires the site to implement key control measures to demonstrate a commitment to pollution prevention, ensuring it meets all regulatory requirements, understands the aspects of its processes and their impacts and potential impacts on the environment. The standard also requires detailed control processes, that are supported by a structured system of auditing and continual improvement. The ISO system will be fully implemented and independently certified by an external certification body who will, if satisfied, award Mogden Sewage Treatment Works a certification to ISO 14001. All the Mogden team are fully committed to this and delivery will be completed by late spring 2008.'

Jason Sharp,
IMS Consultant for Thames Water.



Ofwat visit Mogden Sewage Treatment Works

Gordon Allen, Ofwat's Odour specialist, visited Mogden STW on 8 October 2007 to inspect the progress being made on the Odour Improvement Project. He spent two hours walking round the works, accompanied by Project Manager Nick Fawcett and Mogden Catchment Manager Keith Gardner. Mr Allen's objective for the visit was to confirm that the scope of works agreed with Ofwat were being delivered, and to see for himself how advanced the construction activities are on site. After the visit he pronounced himself satisfied that the works were progressing in accordance to the agreed scope and time.

Working for a Cleaner Thames Progress Update

The details of the specific effluent quality consent to be applied at Mogden after the planned extension have taken longer than anticipated to finalise with the Environment Agency, which has caused a delay to submitting our planning application for the scheme. As a result, we now expect our planning application will be made early in 2008.



Contact us about Mogden

If you would like to receive email bulletins about Mogden, send us an email to mogden@thameswater.co.uk

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