



# Trade effluent explained

Your guide to discharging trade effluent in the Anglian Water region

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## Introduction

This booklet has been produced to provide information about the discharge, treatment and regulation of trade effluent within the Anglian Water region.

It deals with non-domestic effluent discharged from premises via drains and pipes into public sewers. In particular we aim to explain:

- the purpose of trade effluent control
- our role as a regulator
- the importance of obtaining a consent to discharge trade effluent and complying with its conditions.

The booklet has been written primarily for businesses who are in the retail market but it will also be of use to wastewater retailers and those who simply want to gain a better understanding of the trade effluent process.

We've answered the most frequently asked questions but if you're still unsure please contact your retailer and they will answer your query or contact us on your behalf. You must not contact us directly if you are a business customer. If you are a business customer and you do not have a retailer you should select one. You can find out more about selecting your water and/or wastewater retailer at www.open-water.org.uk.

If you discharge trade effluent from a household premises you can contact Anglian Water directly for advice on trade effluent services – you'll find our contact details in section 23 at the back of this booklet.

## First a little history...

In the UK the need to address the increasingly serious problems caused by the uncontrolled discharge of industrial waste waters was recognised in most quarters by the turn of nineteenth century.

In 1903 the Royal Commission on Sewage Disposal recommended that local authorities should be required to provide sewers and sewage treatment works of sufficient capacity to take trade effluents as well as domestic sewage.

In 1937 the first piece of dedicated trade effluent control legislation was introduced in England and Wales. This legislation gave the occupier of a trade premises the right to discharge trade effluent into the public sewer subject to the consent of the regulatory body. Consent could be given unconditionally, or subject to various conditions which could include the sewer into which the effluent could be discharged, the nature and composition, flow, and quality standards with which the discharge must comply. It became an offence under criminal law, punishable by a fine, to discharge without consent or in breach of conditions included in a consent.

Subsequent Acts of Parliament extended and strengthened the powers of the regulator in controlling trade effluent discharged to public sewers and also made provision for the recovery of costs in respect of their reception, treatment and disposal.

Today trade effluent control in England and Wales is carried out under the Water Industry Act 1991 by the Water Services Companies in their role as sewerage undertakers. This Act of Parliament consolidated all previous trade effluent legislation. Scotland and Northern Ireland have their own legislation although the content is similar. At a European level the Anglian Water treats used water from a population equivalent to over 6.7 million people

#### Anglian Water treats around 63 million litres of trade effluent every day

Urban Waste Water Treatment Directive requires all member states to implement a trade effluent control regime, to preauthorise such discharges and to review those authorisations on a regular basis. The Water Industry Act 1991 enables us to meet all of these requirements.

The Water Act 2014 introduced competition for non-household customers and also the concept of wholesalers and retailers. Anglian Water is a wholesaler and is responsible for the infrastructure, treatment processes and the regulation of trade effluent discharges made into its sewers. Retailers undertake billing, meter reading and customer services activities. The new market came into effect in April 2017 and applies to most trade effluent dischargers. It enables eligible businesses to choose and switch their retailer.

## 2 What is Trade Effluent?

Trade effluent is any effluent that is produced from a process or activity undertaken at premises that are used to carry out a trade or industry.

However, it doesn't include domestic sewage - for example used water from hand-washing and flushing of toilets.

Trade effluent is produced from the

activities that many of us enjoy.

manufacturing processes associated with

many everyday items and also through

#### These include:

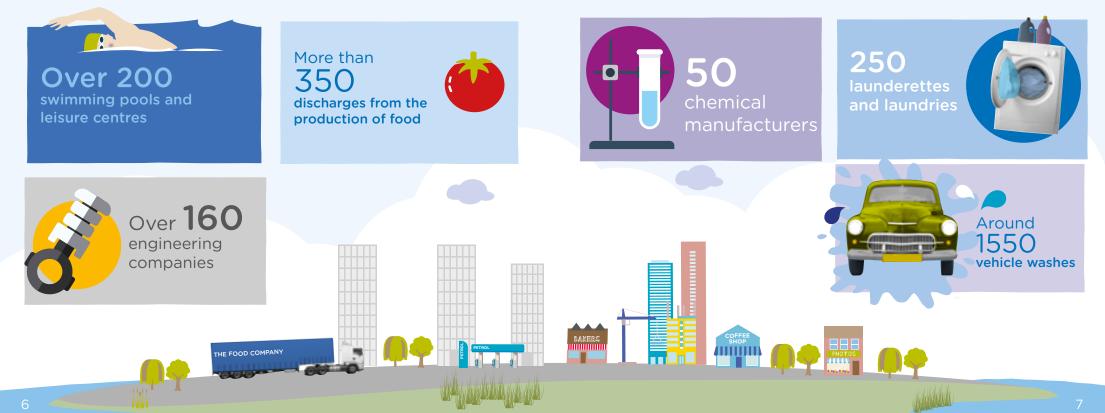
- food and drink production
- chemical manufacture
- engineering
- swimming pools and leisure centres
- laundries
- vehicle washing

#### There are more than 3900 consented discharges of trade effluent in the Anglian Water region including...

#### TTP

You can find the full legal definition of trade effluent in section 141 of the Water Industry Act 1991 or you can contact your retailer for further advice. Many essential services, such as hospitals and local authorities, may also produce trade effluent.

Water used by industry and the discharge of trade effluent to the foul sewer forms an important part of human interaction with the water cycle.



## 3 How does my business fit into the water cycle?

Fresh water is a precious resource. This is particularly true in our region which is both the driest in the UK and experiencing significant growth. It's a limited resource which we all need to use carefully.

The water you use is abstracted from rivers, reservoirs and groundwater sources before being treated and put into the network of pipes which deliver water to your door. Most uses of water will result in the generation of effluent.

This effluent is usually disposed of into the foul sewer. It then travels through the sewers to the local water recycling centre where it is cleaned by various physical, chemical and biological processes before being discharged safely back into the environment. This may be a river from which water is abstracted before being treated for drinking water purposes or one that is used for irrigation or recreational activities. The water recycling treatment process also produces solid material known as biosolids which is generally recycled to land as valuable soil conditioner.

**Reservoirs, boreholes and rivers** - We monitor quality and collect water from abstraction points across our region including over 200 ground water sources and our 9 water supply reservoirs.

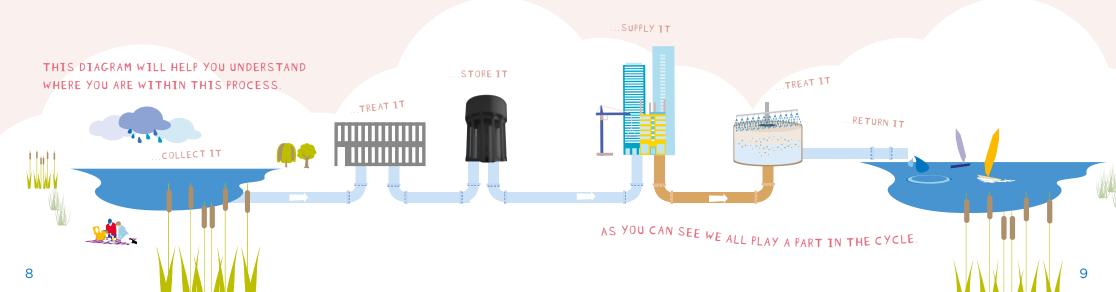
Water treatment works - We operate 143 water treatment works, monitoring and safeguarding your water supply 24 hours a day, 365 days a year.

Water towers and service reservoirs -More than 320 water towers and service reservoirs store water ready for supply across our region. Water mains – We supply over a billion litres of water every day, pumping it through over 38,000 kilometres of water mains

Our sewers and water recycling centres form part of a complex, regulated used water management system. They are there for everyone's benefit and play a vital role in protecting public health and maintaining a clean, healthy environment - one that we can all enjoy. When used appropriately, that's exactly what they'll do, but if the system is misused it can have serious consequences for both people and the environment.

We all need to play our part in ensuring that sewerage systems are only used for the purpose for which they have been designed. Within industry this means making sure that all trade effluent is discharged legally in accordance with a consent. We'll talk more about consents later in this booklet. For all of us, whether at home or at work, it means preventing fat, oil, food waste and sanitary items being flushed into the sewer. These can cause blockages within our sewers and pumping stations which may result in the flooding of properties or the pollution of watercourses. You can find out more about keeping our sewers clear on our website.

## OUR GOAL:



## Why does Anglian Water need to control trade effluent?

#### One of our key roles is to support businesses by offering an effective trade effluent collection and treatment service.

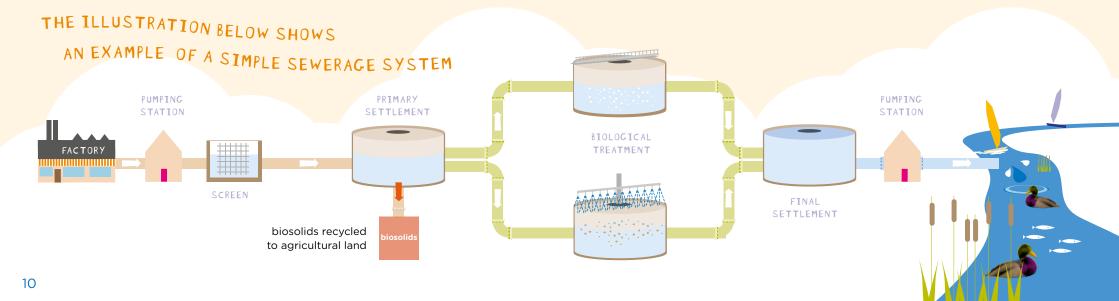
However, we also need to make sure that public health, including that of our staff and contractors, our operations and the environment are fully protected. This includes complying with Environmental Permits issued to Anglian Water by the Environment Agency for our own discharges from water recycling centres into rivers and other watercourses. We control trade effluent to ensure that all of this happens.

Trade effluent discharges range in size from just a few litres to hundreds of thousands of litres entering our sewers every day. As well as the volume, the composition of trade effluent discharges can vary considerably. For example the effluent from a small launderette will usually be a low volume and will contain detergents and residues from the washing of clothes. This is very different to effluent produced during an electroplating process which may be a large flow and may contain persistent and potentially toxic substances such as some metals. Trade effluent from a food processor will probably be different again in that the effluent may contain a significant organic load. It's this variability, together with varying capacity in our sewers, treatment works and the watercourses into which they discharge, which means that we need to carefully assess and regulate all discharges of trade effluent made into our sewerage systems.

We treat over **1.6 billion litres** of used water every day - this includes both domestic sewage and trade effluent

## We have over **1100** water recycling centres...

...and over **4700** used water pumping stations... ...served by over **76,000** kilometres of sewers



### 5 What is a consent?

A consent is a legal document issued by Anglian Water in our role as a regulator and under powers set out in the Water Industry Act 1991.

The consent will contain a number of conditions including those that control the quality and quantity of the discharge. Most consents will contain numeric limits for one or more of the parameters listed below.

In addition the consent may also include conditions which limit or require the elimination of any persistent or potentially harmful substances – for example metals and flammable materials such as solvents. To ensure that we set consent conditions consistently and scientifically, we use limit setting methodologies that are applied throughout the Anglian Water region. Our approach comprises standard conditions for some sectors, statistical assessment, modelling and consultation both within Anglian Water and externally with the Environment Agency where required. As a result of this process we also ensure that headroom (the difference between the actual discharge and the consent limit) is managed in a way that maximises available capacity for further economic growth.

Volume and flow rate are controlled to prevent flooding and to make sure our sewers and water recycling centres are not overloaded.

pH, which is a measure of acidity or alkalinity, is controlled to ensure that our sewers, pumping stations and water recycling centres, including their processes, are protected.

Temperature is controlled in order to protect our staff working in our

Chemical oxygen demand is a measure of the capacity of an effluent to consume oxygen during the decomposition of organic matter

and the oxidation of inorganic chemicals. We control COD to ensure

that there is no detrimental impact on our water recycling centre's

Suspended solids is a measure of the particles in the trade effluent.

We control suspended solids to ensure that there are no blockages in

sewers and to ensure that odours are minimised.

biological processes.

the sewers due to settlement.

Temperature

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Volume and flow rate

Chemical oxygen demand

Suspended solids

Fat, oil and grease

Sulphate

Sulphate is controlled to prevent the corrosion of concrete sewers and the production of odours.

Fat, oil and grease, also known as FOG, is controlled to prevent blockages in our sewers and pumping stations and to protect our water recycling processes.

#### 6 Do I need a consent?

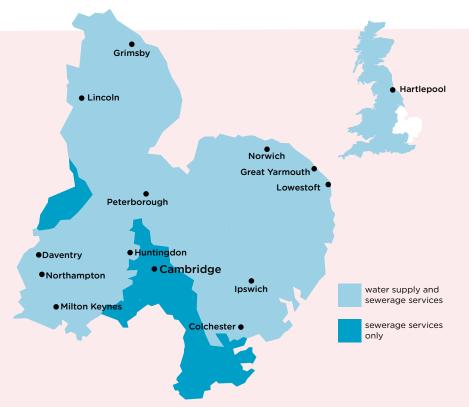
If you are within our region and are proposing to discharge trade effluent to the public foul sewer you will need the prior written consent of Anglian Water.

This map showing our sewerage boundary, which is different to our water supply boundary in some areas, will help you decide whether you are in our area. Your retailer will also be able to confirm which wholesaler's area you are in.

If you require a consent, or think that you might, we suggest that you contact your retailer as early as possible with your proposals. They can contact us on your behalf and we may be able to advise you in advance of any specific discharge requirements or restrictions that might be put in place. Please note that you may need more than one consent for your site.

It is an offence under section 118 of the Water Industry Act 1991 to discharge trade effluent without consent, so it's important that you obtain one prior to making a discharge. Failure to obtain a consent may lead to enforcement action being taken by Anglian Water and this may result in prosecution.

If you're currently discharging trade effluent without a consent you must contact your retailer immediately.





If you are proposing to discharge trade effluent you'll need to contact your retailer. They will help you complete an application form called a Trade Effluent Notice.

Once we've received your fully completed Trade Effluent Notice we'll begin processing your application. This will include assessing your requirements against the capacity available in our sewers and at our water recycling centre. Your retailer will be able to help you with any queries you have regarding the application process. We'll acknowledge receipt of your application and keep your retailer informed of progress at key stages throughout the process.

If you need to make a connection into our sewerage network you'll need to do this before you apply for a consent. Please contact your retailer for further information.

In some cases a consent may not be appropriate and we may choose to regulate your discharge by another method, such as via a regulatory position statement. If this is the case we will let your retailer know.

## B Can Anglian Water refuse to give consent?

ves if we feel that the proposed trade effluent is unsuitable for discharge into the sewer we will not issue a consent.

Similarly we are not under any obligation to issue a consent which accommodates all requirements stated within your application. Consent conditions will be implemented to ensure that the trade effluent control objectives we've referred to earlier in this booklet are met. If we cannot accommodate any of your requirements you will be advised of this at the earliest opportunity.

## Is there an application fee?

Application fees may apply, you should contact your retailer for further information.



## Do I need to comply with the consent conditions?

at all times. If you don't comply with the consent conditions it is an offence under Section 121 of the Water Industry Act 1991.

You will be informed when a sample has failed one or more of the consent limits or when we become aware of any other breach of consent. However, it is your responsibility to ensure compliance with the consent and we expect you to take all steps necessary to achieve this at all times. We recommend that any member of your staff who may influence the quantity and/or quality of the discharge is made aware of the consent conditions. You will need to carefully manage your discharge using good on-site practice in order to ensure compliance. In some cases this may require the installation of a trade effluent treatment plant on your site or the use of an alternative disposal option.

In summary Anglian Water will not tolerate persistent non-compliance or discharges which impact, or have a potential to impact, upon public health, our operations or the wider environment. In these cases enforcement action will be taken which may ultimately result in prosecution.

You can find out more about our approach to enforcement on our website.

#### PLEASE NOTE

Failure to comply with the consent may result in unlimited fines in the Magistrates Courts or Crown Court.



#### Will Anglian Water take samples of my trade effluent?

from time to time we will visit your Yes premises and may take a sample of your trade effluent discharge.

Samples are taken to assess compliance with the consent and may also be taken for wholesale charging purposes. It is your responsibility to ensure that a safe, accessible monitoring point is provided that will enable us to obtain representative samples of your trade effluent. The frequency that we take compliance monitoring samples will be based on an assessment of your effluent and the sewerage system into which you discharge. Some types of trade effluent are relatively innocuous and may not be sampled frequently but more significant discharges may be sampled on a weekly basis. In some cases we may also ask you to monitor your effluent and provide us with sample results.

We take over 10,000 trade effluent samples each year...

...equating to over

Do Anglian Water staff have a right of access onto my site?

our staff have a legal right of access under the Water Industry Act 1991 in order to carry out monitoring and enforcement activities.

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This includes sampling of your trade effluent and investigating pollution incidents. All of our staff carry Anglian Water identification. You can also confirm their identity by calling us on 03457 145145.

#### <sup>13</sup> Who is responsible for the health & safety of Anglian Water staff whilst on my site?

You have a duty of care under the Health & Safety at Work Act 1974 to identify and notify our employees of any health and safety risks that they may face whilst visiting your premises in connection with their trade effluent duties.

All associated risk assessments must be made available to our employees on entering your premises and all significant hazards brought to their attention.



If you're proposing a change of process which may impact on the quantity or quality of your trade effluent or which is not stated in your consent, you must contact your retailer at the earliest opportunity and prior to the change being made.

You will also need to contact your retailer if there's a change of name or occupier or vou are to cease discharging.

These changes may require the issue of a variation to your existing consent and your retailer will apply for this on your behalf. Your retailer will be able to advise you if a charge will be made for the application. You'll need to comply with the consent that is in force at all times.

A consent to discharge trade effluent relates to a specific premises and cannot be transferred if you move site. If you do intend to move within our region and still wish to discharge trade effluent from your new premises, you must contact your retailer and obtain a new consent in advance. As we've already said, the discharge of trade effluent without consent is an offence under the Water Industry Act 1991.

Will Anglian Water review the consent?

we will review your consent on a regular basis to ensure that it remains appropriate and fully protects public health, our operations and the environment.

The review process may result in the need for Anglian Water to vary one or more of the conditions contained within vour existing consent. If this is the case we'll let your retailer know at the earliest opportunity. If through our review we discover a change that should have been notified to us we will advise your retailer and request that you formally apply for this. Your retailer will be able to advise you whether an application fee will be applied under these circumstances.

OUR GOAL: 60,000 individual chemical tests

NO ACCIDENTS



#### Does the Environment Agency also regulate trade effluent discharges?

Although we are primarily responsible for controlling trade effluent discharged into our sewers, there are occasions where the Environment Agency is also involved.

The operation of some industrial processes may require an Environmental Permit and in some cases discharge conditions may be included in the permit. This normally applies to larger operations including chemical manufacture, landfill sites and larger electroplaters. If you need further clarification regarding the Environmental Permitting process we suggest that you contact the Environment Agency - see section 24 for details.

Similarly the presence of certain Prescribed Substances or effluent derived from a Prescribed Process may require referral to the Environment Agency. These discharges are referred to as Special Category Effluent and the Environment Agency may wish to set discharge conditions which we will need to incorporate into the consent. For more information regarding Special Category Effluent please contact your retailer.

If you wish to discharge directly to a watercourse via your own pipe, you must contact the Environment Agency.

#### Can my consent be viewed by the public?

your consent will be placed on our Trade Effluent Register and will be visible to members of the public and to other businesses.

Maintaining a register is a legal requirement under the Water Industry Act 1991. A charge will be made for the provision of information from our Trade Effluent Register. This includes reports and document copies. Please note that a charge is also made for providing a discharger with a replacement copy of their consent. Please contact your retailer for further information.

#### Can I discharge trade effluent to a surface water sewer?

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the discharge of trade effluent to the surface water sewerage system isn't normally allowed.

Surface water sewers should be used for uncontaminated surface water only because they will ultimately discharge directly to a watercourse without any treatment. The discharge of trade effluent to a surface water sewer may result in the pollution of a river, stream or other waterbody. If you are currently discharging trade effluent to a surface water sewer you must cease the discharge. If you're unsure what type of sewer you are discharging into, please contact your retailer for clarification. Please note that some sewers are 'combined' systems, handling both foul and surface water. All effluent in these sewers is treated at a water recycling centre.

#### Can I discharge trade effluent directly via tanker?

we do not allow any tankered effluent into our water recycling centres apart from domestic used water and sewage from cess pits and septic tanks.

If you wish to dispose of your trade effluent via tanker you will need to find alternative reception facilities. Information relating to licensed waste management companies offering this service will be available via the internet and local business directories.

#### 20 What if I'm unhappy with Anglian Waters' service?

We aim to work closely with both dischargers and retailers and to address any issues that may arise.

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However, if you're unhappy with the conditions of a consent, our refusal to give you consent or the time it has taken us to process it, please contact your retailer who will contact us on your behalf and we will endeavour to resolve the problem. However, if we can't resolve the issue between us and you're still concerned, there is a formal appeal process through the Water Services Regulation Authority (WSRA, also known as Ofwat). Ofwat has produced an information note regarding appeals which should be available from your retailer or from the WSRA website. Their contact details can be found at the back of this booklet.

How does charging work?

For information on charging you must contact your retailer.

## Where can I get technical advice?

In our role as a regulator we don't provide specific technical advice regarding trade effluent discharges.

However you can contact your retailer who may be able to help or alternatively there are a number of specialist companies who can offer you further advice regarding effluent management and compliance. Information on companies offering this service will be available via the internet and local business directories.

#### 3 How can I contact Anglian Water?

#### Excluding emergencies, which are referred to below, your retailer will contact Anglian Water on your behalf.

If you are discharging, or proposing to discharge trade effluent, from a nonhousehold premise and currently do not have a retailer you should select one. If you are discharging from a household premise you can contact us as follows:

#### Call us on: 03457 145145

Write to us at: Anglian Water PO Box 4994 LANCING BN11 9AL

Go online at: anglianwater.co.uk/trade-effluent

Please note that if you have an operational emergency which may impact on Anglian Water assets you must contact our Operational Call Centre immediately on 03457 145145

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#### Other useful contacts

#### Retailers

You should find contact details for your current retailer on your latest bill. A full list of retailers can be found online at www.open-water.org.uk

#### **The Environment Agency**

National Customer Contact Centre PO Box 544 Rotherham S60 IBY

Telephone: 03708 506506

Email: enquiries@environment-agency.gov.uk www.gov.uk/government/organisations/ environment-agency

www.environment-agency.gov.uk

Water Services Regulatory Authority (Ofwat) Centre City Tower, Birmingham B5 4UA

Telephone: 0121 6447500

Email: casemanagementoffice@ofwat.gsi.gov.uk www.ofwat.gov.uk watrs.org

#### **Further information**

Water UK is the national body representing the UK water and sewerage companies. More information regarding trade effluent can be found on their website at www.water.org.uk.