

Environmental Management Plan

Site Name	Tilbury WRP (Water Recycling Plant)
Site Address	Fort Road Tilbury Essex RM18 &NR
Short Code / Ref No.	TILBST
Catchment	Essex and Cambridgeshire

This is a controlled template and should not be altered unless authorised.

The content of this document should be reviewed and signed off by the relevant managers on an annual basis and audited on a biennial basis by the business unit auditors. [C] [A]

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Introduction

This document has been designed to cover the Plan, Do, Check, Act methodology used in all Management Systems.

PDCA is the founding principle of this document and therefore the references throughout are in relation to these definitions:

P – Plan – what is the situation, what do we need to achieve and how are we to achieve it?

D – Do – what are the controls in place to ensure that we do our everyday actions without impacting the environment in this area?

C – Check – how do we check that these controls are working and how do we report when they are not?

A – Act – what is the escalation process/review process when things are checked and seen to be not performing?

1 Site Information

1.1 Site Description [P]

Tilbury Waste Water Treatment Plant serves a population equivalent of approx. 250,000. It serves the domestic catchments of West Thurrock, Grays, Chafford Hundred, Tilbury, Chadwell-St-Mary and Stanford-Le-Hope as well as the industrial customers along the Thames Corridor including Tilbury Docks. Sewage is pumped via various routes to the inlet works on site.

Within the boundary of the Waste Water plant a Sludge Treatment Centre (STC) exists.

The Biosolids plant includes imported sludge facilities for both liquid and cake, sludge blending, screening and batching prior to dewatering and then stored in a silo. The effect of which will produce a raw cake to be transported to other STC in the region.

As a site contingency temporary mobile equipment such as dewatering centrifuges and or lime stabilisation equipment may be brought to site for time limited use.

All odour extracted from the sludge tanks, sump, cake import, dewatering centrifuges and silos are treated through a chemical and biofilter odour plant.



1.2 Site location [P]

The site is located adjacent to the River Thames in Tilbury. It is between Tilbury 2 Port and Tilbury Fort and is about 2 kilometres from Tilbury Docks. There is a residential area approximately 1 kilometre away





1.3 Permits / Permissions / Licences [D]

This table highlights the permits, exemptions and licences that relate to the sites operation and its impact on the environment:

Ref No.	Description	Regulation	Location held
KP3090VY	Sludge Treatment permit	EPR – Waste	Sharepoint
B0531	Final Effluent discharge	EPR – Water	
B0532	Storm Discharge Consent	EPR – Water	

The conditions relating to these permits are held within the permits and summarised in section 3.2.5



2 Contact information

2.1 Operational Contacts [P] [D]

OMC 08457 145 145

2.2 Emergency Contacts [P] [D]

EA emergency incident number 0800 807060

OMC 08457 147147

Third party management

All third parties operating on AW sites will follow AW environmental controls or their own in house controls should they be more stringent.

All environmental incidents will be notified to the senior AW representative on site at the time of the incident or called through to the OMC should the site be unmanned.

AW site personnel are responsible for ensuring that adequate environmental controls are in place, for instance that third parties adhere to the clauses in the O&M standard contracts about environmental controls. (i.e. Contractors like Edina and WB Power). This will be reviewed at each appropriate contract review meeting.

3 Risks and mitigations

3.1 Risk Identification [P]

A risk assessment has been carried out and can be found here:
[Tilbury Environmental Risk Assessment.xls](#)

3.2 Risk Mitigation [P] [D]

3.2.1 Spill control

All Fuel/chemical tanks on site are double skinned and/or bunded. Spill Control equipment includes absorbent pads absorbent granules and booms which are located on site.

The management of on and offsite spillages is carried out in accordance with Anglian Water procedures.

3.2.2 Reporting an incident

All incidents on site will be reported to the OMC and Site Manager. Details of any actions taken on site, will be recorded in the site log book.

Any site consent failures are reported to and managed by the OMC and Site Manager.

Work Instructions and record requirements (templates), to assist with the management of site incidents are located on Sharepoint.

3.2.3 Odour event

All identified odours on site through operational activity will be reported to the OMC who will then report to the EA NIRS database. This will then be recorded in the on site odour diary.

Any external odour complaints will be dealt with immediately with feed back to the OMC and EA and logged in the on site odour diary.

The Policy, Standards and Procedure for managing odour are located on Sharepoint.

3.2.4 Damage to a habitat

No reason to be off road on site, A Plan of mitigation will be produced by the Biodiversity Team in the future if needed. Mitigation is limited access to areas and more details are in the biodiversity section of the plan

3.2.5 Permit conditions

Issue	Reporting Conditions	Who
Waste permit	Quarterly returns	WROL provide data, site manager to complete return
	Less than 250,000 tonnes a year imported	WROL to track imports and exports. Treatment manager to manage imports on site

Specific Plans

Each site has a comprehensive library of documents that support the efficient and successful operation of the site. The following sections include hyperlinks to these plans

3.4.1 Odour

A documented plan for the management of odour at Tilbury WRC, Odour Management Plan, is located here:

[Tilbury STW Odour Management Plan.doc \(sharepoint.com\)](#)

O

3.4.2 Gas

Following the closure of the dryer at Tilbury WRC, management of gas at Tilbury WRC is no longer a requirement

3.4.3 Business Resilience

The Response and Recovery Plans contain information to assist with the response to operational events, and, the recovery post event.

The response and recovery plan for Tilbury WRC is located on Sharepoint.

4 Site Management [D]

This section looks at the management of site to minimise impact to the environment.

4.1 Waste Management

Waste management is a highly regulated activity and as a site we have regulatory obligations with regards to importing and treating waste as well as the standard Duty of Care obligations. This section looks at those obligations.

4.1.1 Identification of wastes [P]

The activities on this site generate a wide range of wastes. Primarily though we generate:

EWC code	EWC Description	AW Description
19 08 05	Sludges from treatment of urban waste water	Treatment of raw sewage
20 03 04	Septic Tank sludge	
19 08 01	Screenings	Screenings from Inlet and inter process screens
19 09 02	Waste from desanding	Grit
20 01 21	Light Bulbs (Fluorescent)	Fluorescent Tubes
15 01 03	Packaging Wood	Pallets
13 02 04	Oils Lubricating	Lubricating Oil
20 01 01	Paper and cardboard	Paper
20 03 01	Mixed municipal waste	General Waste

4.1.2 Location of wastes

Waste storage on this site is part of our normal operations the table below highlights areas where wastes are stored in skips and other waste containers. The processes that treat waste are labelled.

Waste Type	Location	Container
Sludges	Import Area	Tanks and Silos
Septic Tank	South Works	Direct to inlet
Screenings	Inlet Screens and Strain presses	Skips
Light Bulbs	Store room	Wheelie Bin
Wood	Outside Dryer	Skip
Oils	Outside Stores	IBC

4.1.3 Management of contractors exporting waste [D]

Anglian Water has 8 waste streams removed from this site. These are managed and controlled in the following manner:

EWC Code	EWC Description	Carrier	Broker	Disposal Route
19 08 05	Sludges from treatment urban waste water	Anglian Water and approved sub-contractors	WROL	Sent to sludge treatment centres for treatment
19 02 06	sludges from physico/chemical treatment			Sent to sludge treatment centres for treatment
19 08 01	Screenings	Biffa		Landfill
19 08 02	Waste from desanding			Recycled off site
20 03 01	Mixed municipal waste			Landfill
20 01 01	Paper and cardboard			Recycled
15 01 03	Wood			Recycled
20 01 21	Fluorescent tubes and other mercury containing waste			Recycled
13 02 04	Other engine gear and lubricant oils			Recycled

AWS manage the movements of raw cake between sites. This is undertaken by WROL and their approved sub-contractors, all of whom supply their duty of care documents prior to working on site.

Copies of the Waste Transfer Notes and Consignment Notes for these waste movements (skips and the like) can be found in either the local Admin office or the WROL office. Wastes that are disposed of to land by WROL and Biosolids have comprehensive records held by WROL and Biosolids and can be obtained from The Biosolids office in Cambridge.

4.1.4 Management of importing waste

Waste is imported to this site as part of the waste operations. Domestic Waste is also accepted (20 03 04 cess and septic, 16 10 02 chemical toilet wastes).



This site does accept transfers of AW waste falling under the classifications:

19 08 01	20 03 06	16 10 02
19 08 02	20 03 04	
19 08 05	19 02 06	

Copies of the Waste Transfer Notes for the import of Domestic wastes (20 30 04, 16 10 02) are covered by the signing in process and with a sampling regime to ensure that the waste is the correct classification, These are held in the WRC office and sent monthly to WROL.

Wastes that are imported by WROL and Biosolids have comprehensive records held by WROL and Biosolids and can be obtained from The Biosolids office in Cambridge

Copies of the Waste Transfer Notes for the import of Cess and Septic are covered by the signing in process and with a sampling regime to ensure that the waste is the correct classification.

4.2.3 Biodiversity

Anglian Water has a 'duty' to have regard for the conservation of biodiversity in exercising its functions under the Natural Environment and Rural communities (NERC) Act 2006, in addition to maintaining compliance with various other pieces of environmental legislation. AW has identified priority species and habitats on its landholdings through the AW Biodiversity Action Plan (BAP) which brings us in line with Government strategy.

4.2.1 This Site [P]

The biodiversity on this site has been surveyed whilst AW has been in ownership.

Findings from the biodiversity surveys are held on the biodiversity database and will eventually be mapped on to overlays of each site. All sites - no tree or hedge works during the bird breeding season from 1st March to 31st July. Some birds, such as wood pigeon, don't follow the rules and will nest outside of this period. It is an offence to destroy the nest of any wild bird so this needs to be a consideration at all times of the year.

All sites with water courses – otters have now spread extensively and we are finding them on most rivers when looking. This should be a consideration for works within ~5m of a water course.

This site has been identified as having:

- Reptiles – specifically Adders, have been recorded on site.
- We own a small section of salt marsh and mud flats along the estuary which provides habitat for wading birds.



- There is a potential for migratory birds, action to support this is the maintain the scrubby vegetation.

4.2.2 Active biodiversity

All AW personnel are encouraged to act as the “eyes and ears” of the company and report any species that they see that has not previously been identified on the site. Any records can be emailed to biodiversity@anglianwater.co.uk. Here the surveys will be looked at and used to inform company decisions and so that the biodiversity team can provide support to the site.

4.2.3 Rules for biodiversity

There are some general rules which have been developed for operation on sites:

- Do not drive on the grassed areas unless specifically authorised to do so.
- Report all damage to trees and habitats caused on site.
- No tree/hedge/scrub removal during bird nesting period form 1st march to 31st July.
- Prior to tree works check with local Authority to check whether any Tree Preservation Orders have been enforced.

5 Other documents

None at date of this revision