



Bespoke Permit Application

Tilbury Water Recycling Centre

Anglian Water Services Ltd
May 2022 (Update April 2024)
Version 2.0

Contents

Bespoke Permit Application for Waste Operations at Tilbury WRC.....	3
Non-technical Summary and Overview	3
1.1 Environmental Setting	4
1.2 Document content and structure	4
1. Part A – About you.....	7
Director details (question 5)	7
Contact details (question 6, 7).....	7
2. Part C2 - General – vary a bespoke permit.....	8
2.1 Discussions before your application (question 1a/b)	8
2.2 Site details (question 2)	8
2.3 About the site.....	8
2.4 Technical ability (question 3)	8
2.4.1 Details of the technically competent managers	9
2.4.2 Your ability as an operator, continued (question 3)	9
2.5 Management Systems (question 3b).....	9
2.5.2 Roles and Responsibilities.....	10
2.5.3 Compliance monitoring.....	11
2.6 Supporting Information (question 5).....	11
2.6.1 Site Layout.....	11
2.6.2 Site Condition Report.....	11
2.7 Environmental Risk Assessment (question 6).....	11
2.7.1 Introduction	11
2.7.2 Summary of site and sensitive receptors.....	12
3. Part C4 - New bespoke waste operation permit.....	14
3.1 Waste Operations (question 1).....	14
3.1.1 Types of waste accepted (question 1 continued).....	14
3.2 Emissions to air (question 2).....	15
3.2.1 Point source emissions to water (other than sewer).....	15
3.2.2 Point source emissions to sewer, effluent treatments or other transfers off site	15
3.2.3 Point source emissions to land	15
3.3 Operating techniques (question 3)	16
3.3.1 Technical standards	16
3.3.2. Treatment Process (question 3 continued)	17

3.3.3 Acceptance of wastes	17
3.3.4 Cake Management	18
3.3.5 General requirements (question 3b)	18
3.3.5 Fugitive Emissions - Odour.....	18
3.3.6 Fugitive Emissions - Noise.....	19
3.3.7 Monitoring (question 4).....	19
4. F1 Form – Charges and declarations.....	19
Working out charges (Question 1).....	19
Payment (Questions 3).....	19
Additional Payment 2024 (Questions 3).....	20
Confidentiality and National Security (Question 5)	20
Appendix A – Site Location Plans.....	21
Appendix B – Tilbury Site Permit Boundary Plan.....	22
Appendix C – Tilbury WRC Inlet Site Schematic.....	23
Appendix D – Tilbury WRC Sludge System Schematic	24
Appendix E – Tilbury Site Infrastructure Plan	25
Table 1a: Waste operations which do not form part of an installation.....	14
Table 2: Waste codes accepted at Tilbury WRC	15
Table 3 Technical Standards	16

[Bespoke Permit Application for Waste Operations at Tilbury WRC](#)

Non-technical Summary and Overview

This Environmental Permit application has been made by Anglian Water Services (AWS) Limited for Tilbury Sewage Treatment Centre (now referred to as Water Recycling Centre; WRC) located at Tilbury Water Recycling Centre, Fort Road, Tilbury, Essex RM18 7NR (NGR: TQ 65521 75777), hereby referred to as Tilbury WRC. Tilbury WRC operates under the Urban Wastewater Treatment Regulations (UWwTR) for the treatment of indigenous sewage sludge. The site’s operation is a non-hazardous waste activity which is currently carried out under a waste operation permit (EPR/KP3090VY/V002). The waste activity comprises of physio-chemical treatment of indigenous sewage, and the import of wastes for storage and treatment. Tilbury WRC temporarily stores raw biosolid cake produced at other AWS sites in a silo before it can be treated. Tilbury WRC also imports domestic wastes at the head of works. No hazardous waste is imported or treated at Tilbury WRC. The site has a standalone Water Discharge Activity Environmental Permit which will remain an independent permitted activity (B0531).

The pre-application reference from the Environment Agency is EPR/KP3090VY/V003. An another pre application letter (EA/EPR/KB3603UB/A001) clarified where sewage sludge (19 08 05) is tankered in

independently (i.e. not mixed loads), it is excluded from permitting requirements by Regulation 3(2)(a) of Controlled Waste Regulations 2012.

AWS are applying for a bespoke waste operation permit for the WRC waste activity, due to the Environment Agency's decision to change the SR 2008 No 19 standard rules permit to SR 2021 No 10 for anaerobic digestion activities. Tilbury WRC does not carry out anaerobic digestion on the site therefore AWS must apply for new bespoke waste operation permit. AWS is seeking to set the total quantity of imported waste accepted at the WRC as 250,000 tonnes per annum (tpa), in line with the existing SR 2008 No 19 permit limit.

The bespoke permit is to operate a WRC for both indigenous and imported wastes. The site receives imports of domestic cess and septic wastes, sludges, and cake from other AWS sites for treatment. The site receives blue loo wastes (from chemical toilets) mixed into the domestic imports, and these wastes require an EPR permit. All domestic wastes are fed into the treatment process at the head of the works. The process reduces the volume of sludges, via dewatering and thickening (physical treatment). The WRC treatment process is not included in this bespoke permit as this operates under the Urban Wastewater Treatment Regulations.

No additional infrastructure or site operations will be changed or installed as part of this permit application.

1.1 Environmental Setting

Tilbury WRC serves a population equivalent of approximately 250,000 and receives flow from a catchment area of Tilbury and surrounding areas. The discharges from site are managed on an existing discharge permit, and this will remain a separate independent permitted activity.

The site sits outside 200m of an a European Site, Ramsar Site, or a Site of Special Scientific Interest (SSSI). The closest designated is South Thames Estuary and Marshes SSSI, just over 1.9km to the south east of the site. Mucking Flats and Marshes is designated as a SSSI, approximately 3.3km to the east of the site.

The site is not within an Air Quality Management Area; the closest AQMA is in Gravesend approximately 1.1 km south west at the closet extent.

There are no point source emissions to land from the waste operation. There are no point or fugitive emissions to surface water or groundwater during normal operation.

Refer to the Environmental Risk Assessment and Environmental Management Plan for the risks and mitigation measures in place at Tilbury WRC.

1.2 Document content and structure

The following application forms have been completed to support the application and have been submitted as stand-alone documents, as well as referenced throughout this supporting document:

- Part A: About You
- Part C2: Vary bespoke permit

- Part C4: Vary a bespoke waste operation permit
- Part F1: Charges and declarations

The main body of the permit application document ('Tilbury Non Technical Summary') includes all the supplementary information required in response to relevant questions within the Part A, Part C2, Part C4 and Part F1 application forms for which there was insufficient space on the forms to answer the questions in full.

This environmental permit application document ('Tilbury Non Technical Summary') consists of four main parts:

- '1: Part A' provides information relating to Form A and contact details,
- '2: Part C2' provides the general information required to inform Form C2 relating to the application of a new bespoke permit,
- '3: Part C4' provides the more detailed information required to inform Form C4 relating the new bespoke waste operation permit; and
- '4: Form F1' covers the required financial information required for payment of the application fee

Additional information included as part of this submission and not as stand-alone documents, are found in the following appendices:

- Appendix A – Site location plan
- Appendix B – Site permit boundary plan
- Appendix C – Basic Hazop site schematic WRC inlet
- Appendix D - Basic Hazop site schematic WRC sludge system
- Appendix E – Tilbury Site Infrastructure Plan

Stand-alone documents included as part of this submission, are detailed below:

- Environmental Risk Assessment
- Environmental Management Plan
- EA guidance requirements for management systems - AW Tilbury summary
- Climate Change Risk Assessment
- Tilbury Odour Management Plan 2023
- Certificates – ISO 9001, ISO 14001, CMS for technical competence
- Drainage Plan - Tilbury STW Hazop Drawing Area 1
- Drainage Plan - Tilbury STW Hazop Drawing 13 Sludge System
- Tilbury Site Condition Report
- Tilbury Site Permit Boundary Plan
- Habitats Screening (EA)
- Bioaerosol Risk Assessment
- Letter of Delegation
- AWS Convictions up to May 2023
- Anglian Water Services Limited Proposal Q740629 - signed

- Form A
- Form C2
- Form C4
- Form F1 amended
- Tilbury Form F1 additional fees

1. Part A – About you

Anglian Water Services is a registered company. The company registration number is 02366656, registered 1 April 1989.

Director details (question 5)

Director and Company Secretary contacts:

Barry, John Richard (Mr) – [REDACTED]

Ceeney, Natalie (Ms) - [REDACTED]

Courtice, Veronica Anne (Dame) - [REDACTED]

Donnelly Anthony – [REDACTED]

Nassuphis, Alexandros – [REDACTED]

Ogier, Batiste Thomas Degaris – [REDACTED]

Patel, Zarin Homi (Ms) - [REDACTED]

Phillips-Davies Paul Merton Alistair – [REDACTED]

Rivaz Rosalind Catherine (Dr) – [REDACTED]

Simpson, Peter (Mr) - [REDACTED]

Vassileva, Albena Simeonova – [REDACTED]

Russell, Claire (Ms) - [REDACTED]

Directors dates of birth should be redacted wherever this application is made public.

Contact details (question 6, 7)

Application contact:

Name: Don Haymes

Address: Anglian Water Services, Lancaster House, Lancaster Way, Huntingdon, PE29 6XU

Phone number: 07811 606787

Email: dhaymes@anglianwater.co.uk

Operational contact:

Name: Oliver Harriman

Address: Tilbury Water Recycling Centre, Fort Road, Tilbury, Essex, RM18 7NR

Phone number: 07815 011077

Email: oHarriman2@anglianwater.co.uk

2. Part C2 - General – vary a bespoke permit

2.1 Discussions before your application (question 1a/b)

The pre-application reference from the Environment Agency is EPR/KP3090VY/V003.

The permit is for a permanent site not a mobile plant.

2.2 Site details (question 2)

Site address: Tilbury Water Recycling Centre, Fort Road, Tilbury, Essex, RM18 7NR

Grid reference: TQ 65521 75777

This is application for a substantial variation to a waste operation site

This application does not involve consolidation with other permits.

2.3 About the site

The application is for a waste operation permit, and no activities regarding treatment of batteries or ship recycling will take place.

A full description of the site is given in the Non Technical summary above.

2.4 Technical ability (question 3)

No relevant person in AWS relating to this permit application has been convicted of any relevant offence. Any information relating to previous AWS convictions is provided in the standalone document AWS Convictions up to May 2023 which has the most up to date information and includes the last conviction.

Operational management is provided by qualified individuals and considered to be technically competent. All staff on site are trained to manage and operate activities without causing pollution. Competency in terms of the requirements of the environmental permit will be ensured through the appropriate training of all staff, covering:

- Awareness of the regulatory implications of the Permit for the permitted activity and their own work activities;
- Awareness of all potential environmental effects from operation under normal and abnormal circumstances;
- Awareness of the need to report any deviation from the Permit; and
- Prevention of accidental emissions, and action to be taken when accidental emissions occur.

All staff are aware of the implications of activities undertaken including the operation of the site. Skills and competencies necessary to work on site are documented and records of training needs and training received for these posts are maintained.

Currently AWS uses the AWS developed technical competency course to demonstrate that personnel have the appropriate technical skills and knowledge to manage the activities undertaken. The AWS scheme is independently certificated as meeting the requirements of the Standard. The

Competence Management System (CMS) enables Operators to demonstrate technically competent management on the basis of corporate competence and employees' individual competence. Individual competence remains a key component with each employee having the relevant technical competences required to carry out their role.

AWS engage a third-party certification body (LRQA) to audit and certify the CMS. The CMS certificate has been included in the application pack for reference.

Anglian Water are however in the process of moving from LRQA to BSI as the accredited certification body for the CMS system. Therefore, a copy of the contract that is in place with BSI has been provided which includes the Tilbury site as part of the schedule listed on page 10 of the document.

2.4.1 Details of the technically competent managers

Oliver Harriman

Ben Bailey

Willem Vorster

Jonathan Hunt

Kate Forshaw

All those listed are trained on the CMS system and deemed technical competent, or will be within 12 months of permit issue.

2.4.2 Your ability as an operator, continued (question 3)

Oliver Harriman is not the treatment manager for any other sites that have a EPR waste permit.

2.5 Management Systems (question 3b)

AWS's water recycling operations department has internal quality procedures for the operation, maintenance, and monitoring of its treatment assets. AWS continues to develop these standards, policy and procedures to improve environmental performance at its treatment plants.

An Environmental Management Plan (EMP) is in place, prescribing requirements for (where necessary):

- establishing an environmental policy;
- determining environmental aspects and impacts of products / activities / services through a risk assessment process;
- planning environmental objectives and measurable targets;
- implementing and operating programs to meet objectives and targets;
- ensuring compliance with environmental legislation including the requirements of environmental permits;

- checking and corrective action; and
- management review.

The EMP allows for the auditing of environmental performance against given criteria and those within the Environmental Permit to demonstrate continual improvement as part of the Plan, Do, Check, Act methodology.

AWS has a site specific environmental management plan for each waste permitted AWS site, including Tilbury WRC. The site specific environmental management plan (refer to EMP in application folder) was developed to identify potential risks of the activities carried out, manage and control these impacts. The EMP also acts as a signposting tool for staff to understand what plans and mitigation are in place for:

- risk mitigation,
- odour control,
- reducing impacts on biodiversity.

AWS has a number of policies and procedures covering the O&M and monitoring of wastewater treatment processes that include sludge treatment plants; these policies and procedures fall within AWS's overarching management systems. The key procedures are called POSWASTES, POSMAINT and POSTEL.

POSWASTES includes policies, procedures and standards covering all aspects of wastewater treatment operation, including day-to-day operation, training requirements for operators and sampling / testing. POSMAINT covers policies and standards for the maintenance of assets such as planned preventative maintenance and reactive maintenance. POSTEL covers AWS remote monitoring telemetry systems, including policies and standards for alarm action codes, response times and data collection.

Tilbury WRC is an existing site and has not experienced any issues with pests (vermin, rodents etc) from the routine operation of the site. As there is no issue currently and the site is not proposing to change it's operations, there is no need for a pest management plan at present. Any issues that arise will be controlled as needed through a 3rd party contractor.

2.5.2 Roles and Responsibilities

The Treatment Manager is supported and advised by experts within the Energy Team, Process Science team and the Environmental Regulation team. The Treatment Manager has a staff of works technicians reporting to them.

The Waste Permitting Scientist located within the Environmental Quality team for AWS provides CMS training to all appropriate AWS personnel and the Treatment Manager, and once issued, training will be provided in respect of the obligations of the Environmental Permit for the site.

ISO 14001 Environmental Management only covers WROL's activities on site and sludge and cake movements between AWS sites. The WROL environmental management system manages the impact of the activities carried out by the team as detailed below:

- Cake storage on site and it's compliance to the waste permit,

- Haulage of AWS cake to and from the WRC,
- Spreading biosolids on land – the regulation of this activity is covered under a separate mobile plant permit.

The scope of ISO 14001 covers the activities that WROL carry out, rather than the site itself as the site's responsibility lies with the Water Recycling team (the site owners). Locations that are listed on the ISO 14001 certificate relate to the main office bases for the WROL team.

The Water Recycling team own and manage the permit and have operational control over the WRC, and work in conjunction with WROL who oversee cake movements and storage of cake on site. Any complaints received proven to be specific to WROL's operations will be passed on to WROL's Environmental Compliance Team for further investigation.

2.5.3 Compliance monitoring

AWS ensures compliance with both relevant legislation and appropriate standards (for example Environmental Permit conditions) by undertaking regular legislation reviews to identify updates to legislation and guidance applicable to the Plant and its management. The Strategic Waste Planner monitors waste imports into site to ensure they are below permitted limits.

The Treatment Manager is in regular contact with several colleagues regarding operational and compliance issues.

2.6 Supporting Information (question 5)

2.6.1 Site Layout

Refer to Appendix A for the Site location plans

Refer to Appendix B for the Site plan

2.6.2 Site Condition Report

A site condition report has been completed as part of this permit application. No groundwater or soil investigations have occurred as part of this application. Refer to the stand-alone document entitled Site Condition Report for more information.

As this is a new bespoke permit application, only the relevant sections 1-4 inclusive have been completed.

2.7 Environmental Risk Assessment (question 6)

2.7.1 Introduction

Using the methodology outlined in with the EA's environmental management guidance 'Risk Assessments for your environmental permit', this section provides a revised assessment of the effects of releases from the site on the environment. It also provides a justification that the measures in place for their control will adequately protect the environment. Emissions resulting in insignificant effects have been screened out; where further detailed assessments of potential environmental impacts are required this is also noted. A full description of the nature of the releases and measures to control them is provided in Section 3.2 below.

2.7.2 Summary of site and sensitive receptors

Tilbury WRC is located to the south of Tilbury, and is an semi-industrial setting; immediately surrounded by an electricity station and various industries to the east and north. The site is bordered by the watercourse Bill Meroy Creek to the west and the River Thames to the south. Tilbury Fort is to the west. Across from green open space to the north west, the closest residential property is 0.5km to the north west, across from the railway line.

Tilbury WRC is not within 200m of an a European Site, Ramsar Site, or a Site of Special Scientific Interest (SSSI). The closest designated is South Thames Estuary and Marshes SSSI, just over 1.9km to the south east of the site. Mucking Flats and Marshes is designated as a SSSI, approximately 3.3km to the east of the site. Refer to EA's Habitats Screening Report for maps of the sensitive receptors near the site. The Environmental Risk Assessment and Environmental Management Plan describe any potential impacts to sensitive receptors and mitigation measures to adequately control the impact on the environment.

A climate change risk assessment has been carried out as a part of this application, and additional information can be found within the Environmental Management Plan. A total screening score of 7 was found using the Climate Change Risk Screening in Part B2 Form; The site will be used for at least 40 years, the site has a very low or low risk of flooding, and mains water is used for site operations, although final effluent (FE) is used were possible. Therefore the Climate Change Risk Assessment was completed, and further information was added to the Environmental Management Plan.

The site is situated in an primarily industrial area and therefore even where odour may increase with increasing temperatures, there is a very limited risk on sensitive receptors. Odours are proactively managed in line with the odour management plan.

Flooding from surface water is shown to be a very low risk to the sites operations as Tilbury WRC. Flooding from rivers and the sea was deemed a very low risk as the site is suitably above sea level. There has never been a flooding event at Tilbury WRC ¹. Tilbury WRC is not in Air Quality Management Area ² (AQMA; Figure 1).

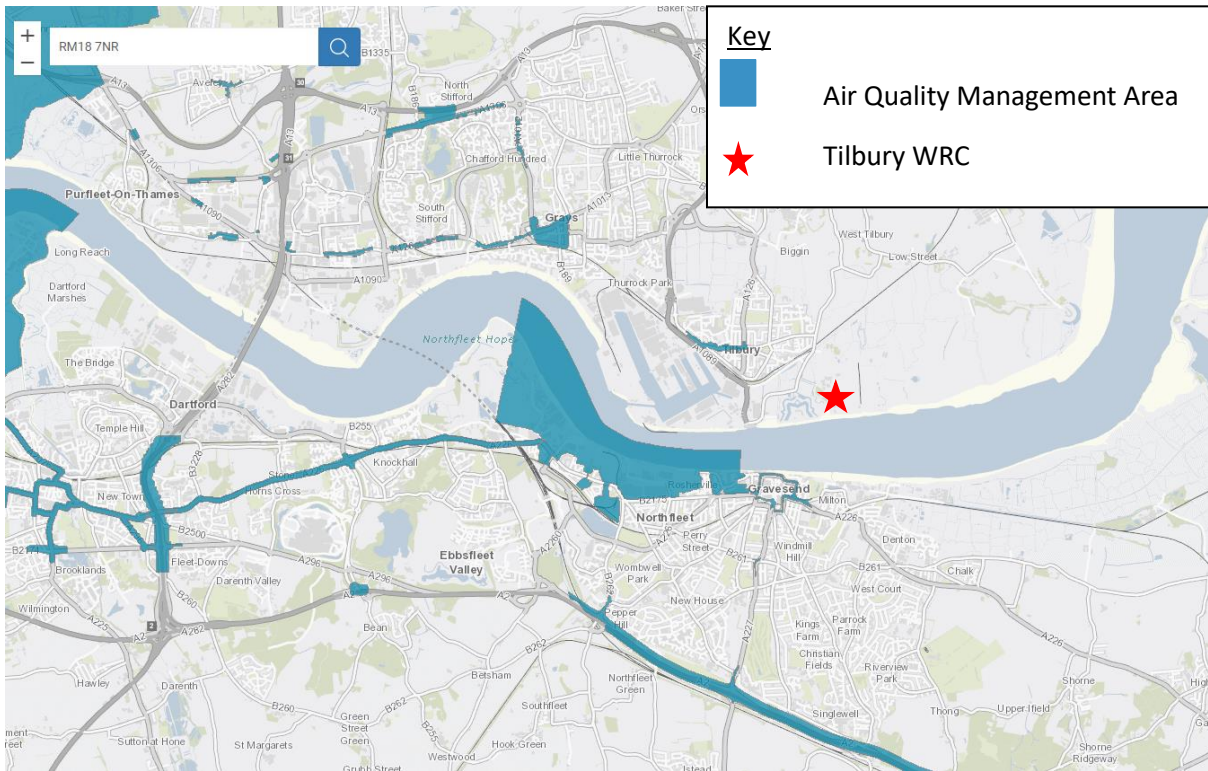


Figure 1: Air Quality Management Areas

¹ Source: The government 'Check the long term flood risk for an area in England' tool: <https://flood-warning-information.service.gov.uk/long-term-flood-risk/risk>

² Source: DEFRA's UK Air Information Resource <https://uk-air.defra.gov.uk/aqma/maps/>

3. Part C4 - New bespoke waste operation permit

3.1 Waste Operations (question 1)

Tilbury WRC is currently permitted to accept a total quantity of 250,000 tonnes per annum (tpa), as on a current permit, EPR/KP3090VY/V003. This application does not propose to change the current permit therefore should remain as 250,000 tpa. The R and D codes are also the same as the current permit apart from D13 which has been added. No hazardous waste is treated at Tilbury WRC.

Table 1a: Waste operations which do not form part of an installation

Name of the waste operation	Schedule 1 or other references	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Non-hazardous waste treatment capacity
Tilbury WRC	Storage	The transfer of cake into and off site - Non-hazardous waste transfer station (cake storage and transfer)		
		Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the Site where it is produced).	R13	
	Treatment	Discharge of domestic wastes to head of works		
		Blending or mixing prior to submission to any of the operations numbered D 1 to D 12	D13	
		Recycling/reclamation of organic substances which are not used as solvents	R3	
	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	R13		
	Physico chemical treatment of non-hazardous waste (dewatering of sewage sludge)			
For all waste operations	Total storage capacity			250,000 tonnes
	Annual throughput ¹			

3.1.1 Types of waste accepted (question 1 continued)

Only the following waste codes are accepted as imports to Tilbury WRC. No hazardous waste is accepted. The total quantity of waste accepted will be 250,000 tonnes per annum.

Table 2: Waste codes accepted at Tilbury WRC

Waste Code	WM3 Description of waste	Anglian Water Description
16 10 02	Aqueous liquid wastes other than those mentioned in 16 10 01	Domestic waste (chemical toilets and cess waste)
19 02 06	Sludges from physico/chemical treatment other than those mentioned in 19 02 05	Raw cake
19 08 01	Screenings	Screenings
19 08 02	Waste from desanding	Grit
19 08 05	Sludges from treatment of urban waste water	Liquid sludge
20 03 04	Septic tank sludge	Domestic waste (non chemical toilets, septic tanks).

The code 19 02 06 is required to reflect the recent changes to the Environment Agency’s interpretation of biosolid cake from a waste water treatment works. 19 08 05 has also been included as requested in the pre application advice EA/EPR/KB3603UB/A001.

16 10 02 has been included as the site imports domestic wastes from chemical toilets (porta-loos) and cess waste.

3.2 Emissions to air (question 2)

There are no point source emissions to air, land, or water as part of normal operations. There is a standby back up generator on site for emergency/back up use only.

3.2.1 Point source emissions to water (other than sewer)

There are no point source emissions to water from the site. There are no point source emissions to water as part of the proposal. There are no soakaways on site.

3.2.2 Point source emissions to sewer, effluent treatments or other transfers off site

There are no point source emissions to water from the site other than sewer. There are no point source emissions to water as part of the proposal. Discharges are permitted under a separate permit as highlighted above.

3.2.3 Point source emissions to land

There are no point source emissions to land from the site. There are no point source emissions to land as part of the proposal.

3.3 Operating techniques (question 3)

3.3.1 Technical standards

The table below provides further information in relation to the activity at the site. The table lists the technical guidance relevant to the site, used to inform the techniques and measures proposed to prevent and reduce waste arising and emissions of substances and heat, including during periods of start-up and shut-down, leaks and momentary stoppage/malfunction.

The Environmental Management System and Environmental Risk Assessment (refer to documents in application folder) indicate that, given the current and continued use of appropriate management measures, there are not expected to be any significant risks to the environment arising as a result of the proposed continuation of site operations. Where a risk has been shown in these documents, appropriate mitigation measures have been put in place to minimise the risk to the environment.

Technical Guidance

Table 3 Technical Standards

Description of the operation	Relevant Technical guidance	Document reference
Tilbury WRC	Environmental management - guidance Developing a management system: environmental permits	https://www.gov.uk/guidance/develop-a-management-system-environmental-permits
	Environmental management - guidance Control and monitor emissions for your environmental permit	https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit
	Environmental management - guidance Risk Assessment for your environmental permit	https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit
	Biological waste treatment: appropriate measures for permitted facilities - Biowaste Appropriate Measure Guidance	Biological waste treatment: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk)

3.3.2. Treatment Process (question 3 continued)

There are no proposed changes to the treatment process as a result of this permit application. The processes are the same that happen on the existing waste operation permit. The current treatment process is outlined below.

The site receives imports of raw sludges from AWS WRCs which is fed into the treatment process via the sludge storage tanks.

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 STCs in the region.

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

The site also receives mixed imports of domestic waste; cess, septic, and blue loo wastes (from chemical toilets). All domestic wastes are fed into the treatment process at the head of the works.

There is adequate site drainage around the import points to reduce the risk of pollutions. This is sealed so excess liquid and surface water can drain back to the head of the works for full treatment.

3.3.3 Acceptance of wastes

There will be no changes to the current waste acceptance procedure as followed under the current waste operation permit. No hazardous waste will be accepted. Only wastes listed in Table 2 above are accepted at Tilbury WRC.

Incoming vehicles delivering imported sludges from other Water Recycling Centres are directed to the sludge storage tanks. At the sludge waste acceptance point, there is a light system in place so delivery drivers are aware when discharges can be made. Imported cake is imported from other AWS sites, and is stored in a silo prior to treatment. The discharge points are located on impervious surfaces with drainage diverted to the head of the Water Recycling Centre.

The following acceptance procedures are in place:

- Quantity of cake delivered is measured;
- Unloading is undertaken by trained operative; and
- Vehicle movements are managed by WROL.

Given all sludges and cake is from other Anglian Water sites, AWS is aware of the composition of the waste, handling requirements and the EWC codes to ensure that these are compliant with the EWC codes of waste that can be accepted as contained in the Environmental Permit. The reception area is regularly inspected to ensure that there are no cracks or damage to the integrity of the impervious areas. The reception area has drainage to ensure that any spillages are collected and contained and transferred to the head of the Water Recycling Centre for treatment.

Domestic waste tanker companies must have a consented licence, issued from AWS, before any domestic imports are accepted. Only tanker companies with consents issued from Anglian Water

may import into Tilbury WRC. Drivers must sign in on site and record their imports. Random sampling is taken by competent persons on site and failed samples are investigated thoroughly and enforcement action is taken where necessary. A minimum of 1 sample per month is taken, in line with POSWASTE.

3.3.4 Cake Management

The Water Recycling team own and manage the permit and have operational control over the site, and work in conjunction with WROL who oversee cake movements. Any complaints received proven to be specific to WROL's operations will be passed on to WROL's Environmental Compliance Team for further investigation.

Due to the wet form of the biosolids stored on the site, they do not pose a fire risk. Therefore an Fire Prevention Plan is not required for the site.

3.3.5 General requirements (question 3b)

The site has been constructed and operational for a number of years. All elements of the site have been constructed to appropriate standards and are maintained by the existing management systems outlined.

The revised Environmental Risk Assessment and Odour Management Plan indicate that, given the current and continued use of appropriate management measures, there are not expected to be any significant risks to the environment arising as a result of this permit application. There are no emission limits for operations at Tilbury WRC.

Passive controls were considered within the design process of the WRC; The tanks, pipes and valves are designed to appropriate industry standards at the time of the build (WIMES). Regular checks on cake storage area integrity are undertaken as part of the ongoing monitoring regime.

3.3.5 Fugitive Emissions - Odour

The scope the permit application does not directly impact on odour risk as no site operations are changing as part of this permit application. An odour management plan is already in place for the site as is followed to rectify any odour issues.

Tilbury WRC has received 8 odour complaints since 2018. On the site, regular site inspections and sniff tests are undertaken as part of the complaint procedure.

Since April 2023 there have been three notifications of possible odour issues, there were no known issues on site during these periods likely to cause odour. Two of these occasions were considered unlikely to be caused by this treatment works due to the wind direction on that day and the distance from the STW that the odour was observed.

The Odour Management Plan has been included in the application folder.

3.3.6 Fugitive Emissions - Noise

Noise modelling was not carried out as part of this application as the current normal operation of the site has not resulted in any noise complaints. As such it is taken that the continuation of the site's activities will have minimal impact on the noise levels of the surrounding area and no noise modelling is required.

Refer to the Environmental Management Plan for further guidance; due to the very low noise impact on the surrounding area a Noise Management Plan has not been created. The pre application advise letters mentioned above did not request the creation of a Noise Management Plan. Despite this, appropriate measures have been considered for noise as all equipment on site is maintained under the AWS internal management system, POSMAINT, and there is an existing complaints procedure in place in case there are any complaints in the future.

Furthermore, the control measures implemented for fugitive emissions to land and water were considered during the construction of Tilbury WRC. Spillages on site are appropriately dealt with at the time of the incident, and all sludge treatment handling and storage is conducted on impermeable surfaces with drainage which flows to the head of the works for treatment. Any release of process waters are also rerouted to the head of works for treatment. Flows and levels of tanks have fill level meters to reduce the potential for leakages and overfilling.

All storage tanks are built of suitable materials, which are resistant to the vessel content. Site surfaces surrounding liquid storage areas and transfer pipes are constructed of impermeable material and equipped with appropriate drainage structures to prevent escape of fluids to surface waters.

3.3.7 Monitoring (question 4)

The site currently does not have requirements for any monitoring of activities, emissions or the environment. This is a waste permit application for a site with no point source emissions like generators or engine, therefore there is no monitoring proposed.

4. F1 Form – Charges and declarations

Working out charges (Question 1)

The pre application advise confirmed that this application is has the baseline fee of £7,137 for Physical and chemical treatment of waste

1.16 of the charging scheme, row 1.16.14.

Payment (Questions 3)

Payment will be by BACS payment.

Unique reference number for the application: PSCAPPANGLI017

Who is paying: Anglian Water Services Ltd

Fee paid: £8,383

Break down of fee:

- New permit application 1.16.14 £7,137
- Odour Management Plan £1,246

Date PO order sent: 31/05/2022

[Additional Payment 2024 \(Questions 3\)](#)

Payment made by credit card 18/04/2024 with payment reference : 230815702352508.

Unique reference number for the application: PSCAPPANGLI017

Who is paying: Anglian Water Services Ltd

Fee paid: £4,758

Break down of fee:

- New permit application 1.16.14 increase £793
- New permit application 1.16.12 50% of total fee £3,965

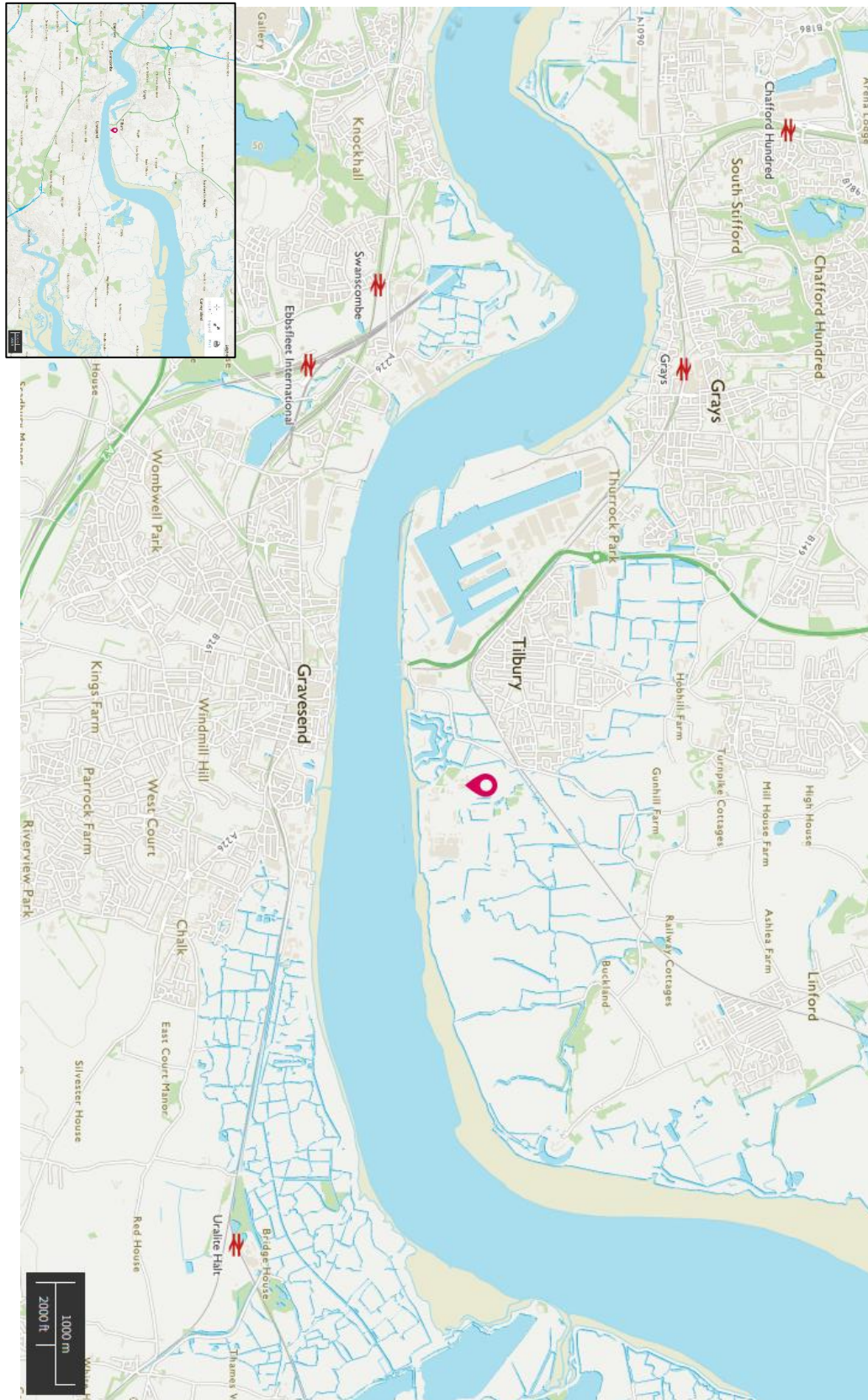
Date Additional F1 form sent: 16/04/2024

[Confidentiality and National Security \(Question 5\)](#)

AWS do not wish to claim confidentiality with this application. **Directors dates of birth should be redacted wherever this application is made public.**

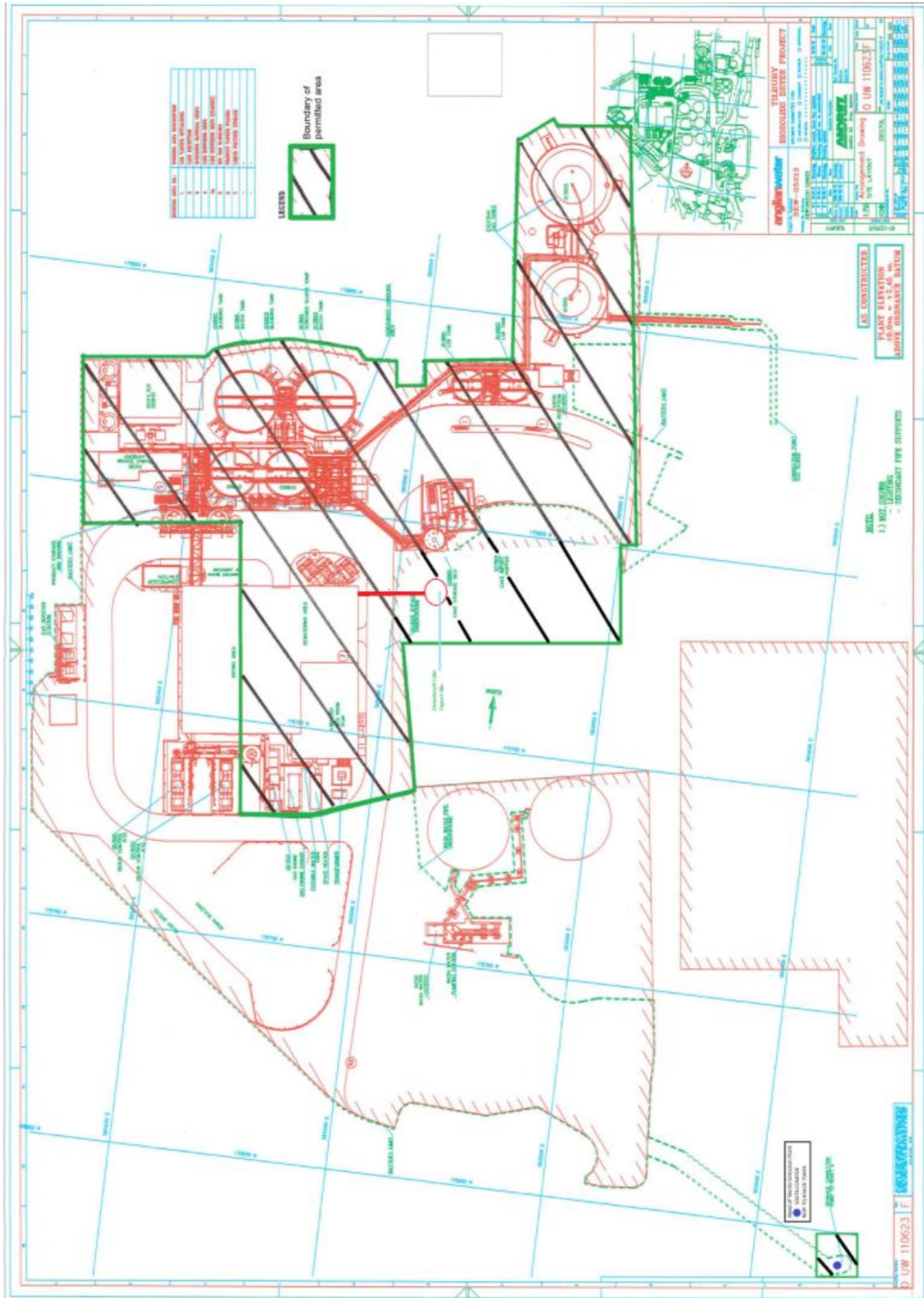
A full list of stand-alone documents which form part of the application can be found in section 1.2 above. References to all other questions are found in the MSD which makes reference to the question in the subtitle. Specific sections to the MSD are identified in the relevant forms.

Appendix A – Site Location Plans



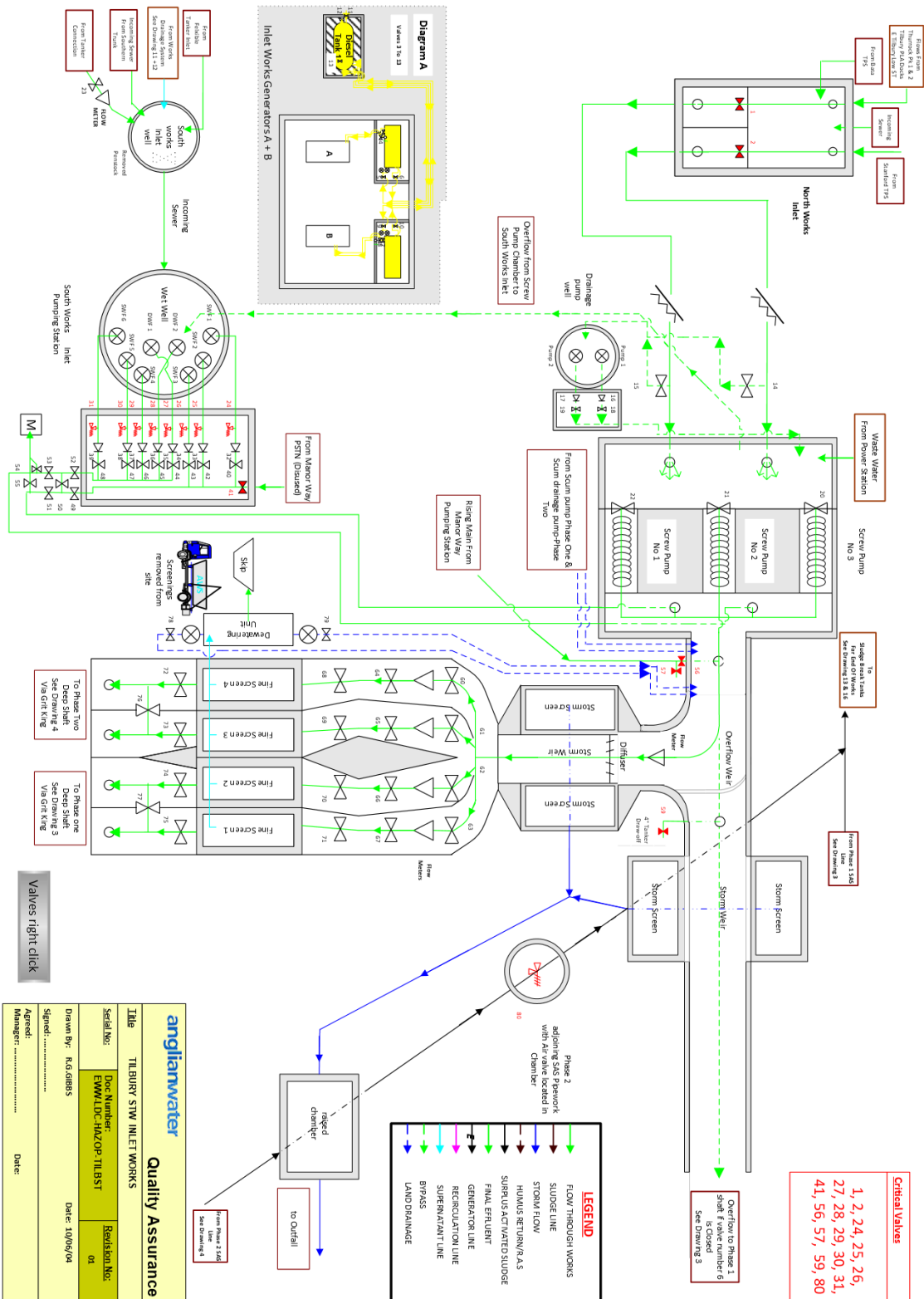
Appendix B – Tilbury Site Permit Boundary Plan

This site plan is also available as a standalone document in the application folder.



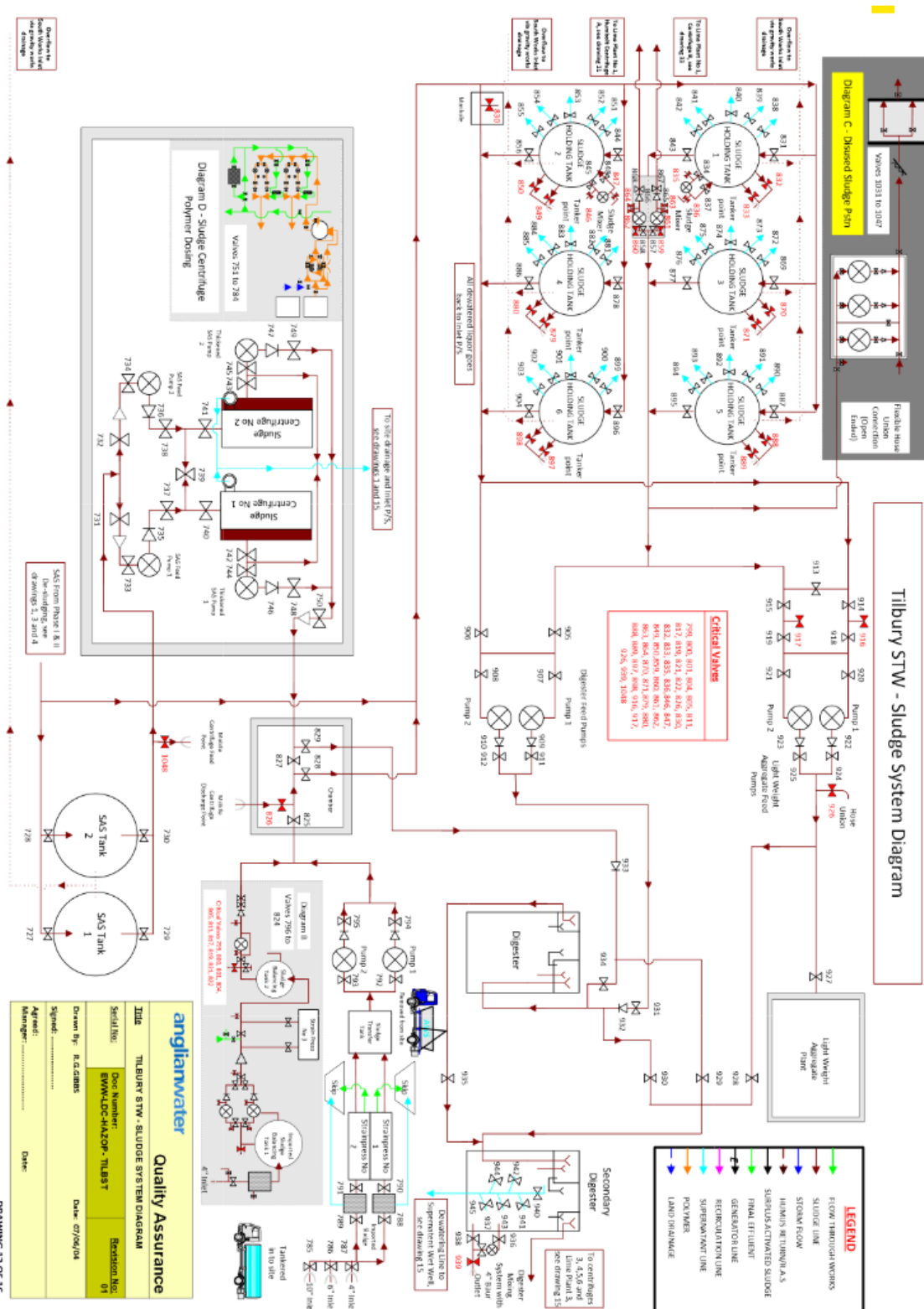
Appendix C – Tilbury WRC Inlet Site Schematic

This diagram is also available as a standalone document in the application folder.



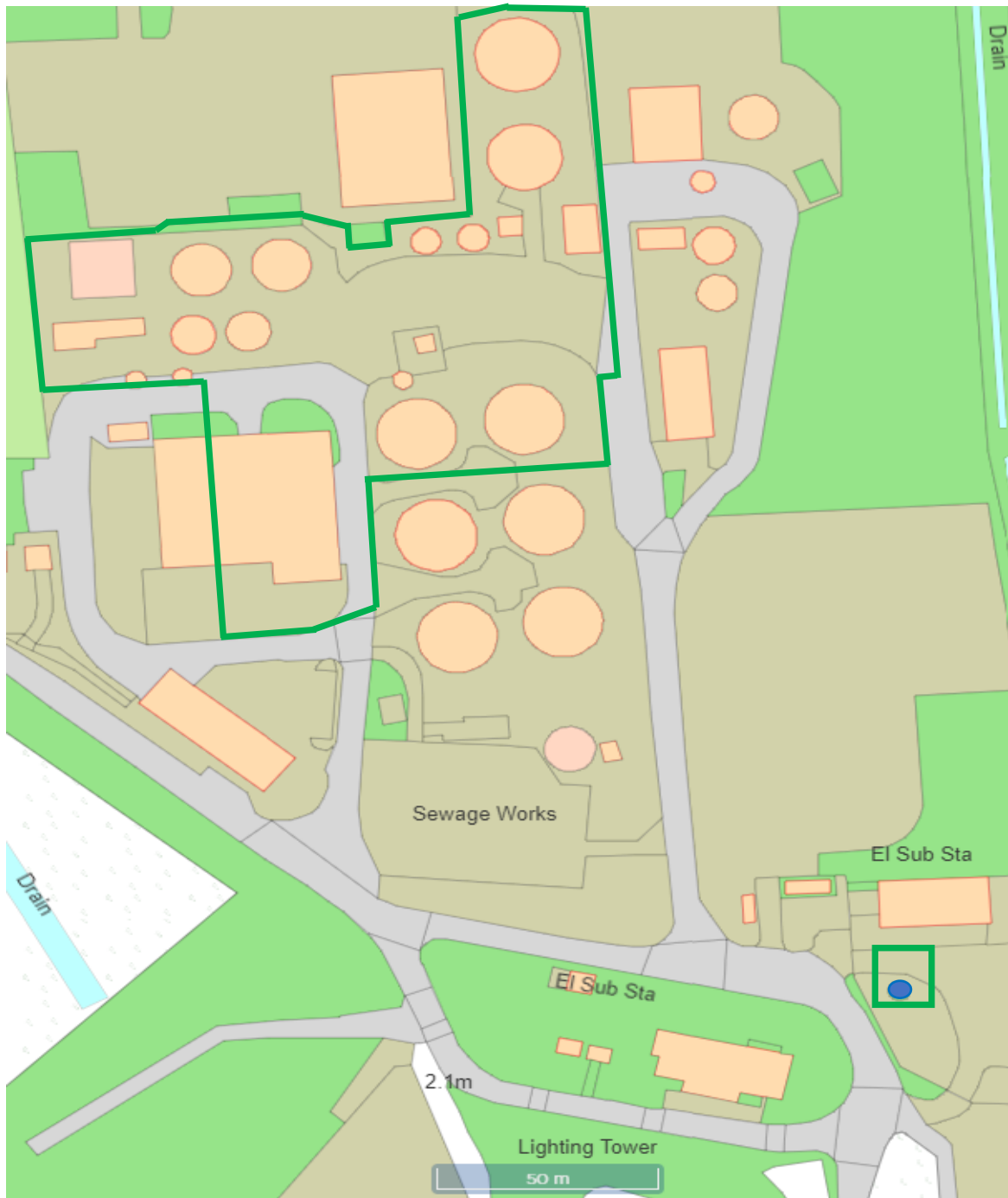
Appendix D – Tilbury WRC Sludge System Schematic






This diagram is also available as a standalone document in the application folder.



Appendix E – Tilbury Site Infrastructure Plan

This site plan is also available as a standalone document in the application folder.



 Permit Boundary	 Impermeable Surfacing
 Tanks and Buildings	 Site Access Roads
 Natural Grass Vegetation	