



# Acceptance of TWUL Network Waste – Chertsey STC

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## Key messages

Thames Water's 25 Sludge Treatment Centres (STCs) operate under IED EPR Permits which set out specific conditions on how the permitted activities must be carried out, including restrictions on the types of waste which can be handled and accepted.

This Standard describes the working practice to be adopted at the Chertsey STC to ensure the correct acceptance of TWUL Network Waste imports to the Network Screening Unit, based on two levels of waste verification.

- Waste Pre-acceptance (Section 5); and
- Waste Acceptance (Section 6).

This Standard also includes instruction on the reasonable steps to be taken to ensure that the Duty of Care is fulfilled.

## 1

## Scope



The scope of this Standard covers all persons, techniques, assets, and operations associated to, and/or included within the IED EPR Permit for the Chertsey STC that relate to the acceptance of TWUL Network Waste including from cleaning and maintenance of TWUL sewer network and associated assets.

The boundary of the site of asset is defined as detailed in the site Environmental Permit. Health and Safety Standards and Asset Maintenance Standards also apply across the STCs.



The requirements of this Standard must be communicated to all relevant employees and subcontractors, who must include the relevant control measures in method statements and risk assessments. Relevant Toolbox talks should be undertaken to communicate requirements on an on-going basis. This must include any developments to this Standard.

## 2

## Purpose



Thames Water is the operator of 25 Sludge Treatment Centres (STCs), each of which has an IED EPR Permit that allows imports of inter-site sludge and inter-site sludge cake waste.

The Chertsey STC also accepts network waste including sewer cleanings with high rag and grit content from the Thames Water (TWUL) network, delivered by third party contractors. Thames Water Chertsey STC permit includes a separate waste operation enabling the acceptance non-hazardous waste for treatment and storage at a waste reception point designed for the purpose.

The IED EPR permit sets out specific conditions on how permitted waste operation must be carried out. This includes restrictions to the types of waste that can be handled. A breach of permit could include accepting or managing a waste which the permit does not accept.

This document sets out TWUL current working practices used to ensure compliant acceptance of waste at our sludge treatment centres based on two levels of waste verification, namely:

- Waste Pre-acceptance (Section 5); and
- Waste Acceptance (Section 6).

The permitted wastes suitable for acceptance at the STC are listed in the Chertsey IED EPR permit, which is available on the Thames Water SharePoint EMS Portal via the 'My Sites and EMS' pages. (see also Table 1 below)

**It is essential that the operation of the screening unit complies with the requirement of the IED EPR Permit.**



## 3 Duty of Care

Thames Water has a legal duty, under Section 34 of the Environmental Protection Act 1990, often referred to as The Duty of Care, to ensure that any liquid or solid waste is disposed or recovered in the correct manner, without harming human health or the environment.

Responsibility for the compliant storage, treatment, and recovery (or disposal) of network waste lies with TWUL as permit holder, 'waste holder' and in contracting third parties to complete works on TWUL network that generate the network waste. Third-party contractors contracted to undertake sewer network cleaning on behalf of TWUL must also take all reasonable steps to ensure the Duty of Care is fulfilled including ensuring:

- Network cleaning waste has been adequately described.
- Network cleaning waste is securely contained to avoid its escape into the environment.
- That third party contractors are registered waste carrier authorised to carry waste.
- That necessary Annual Waste Transfer Note/s and / or Waste Transfer Note documentation is kept.

Waste must be managed in a way to ensure that its handling:

- Complies with relevant legislation and site-specific permit requirements.
- Does not cause harm to the environment and/or human health.
- Does not cause a nuisance; and
- Does not adversely affect public amenities or ecological receptors.

### 3.1 Waste Classification and Duty of Care Records

Network cleaning waste is transported by third party contractor. All movements of sewer network cleaning waste must be recorded. All loads must be discharged via flexible hose (using Bauer coupling) and / or by way of the discharge hopper which is an integral part of the Network Screening unit.

In either case a 'WASP' logger 'fob' must be used to initiate operation of network waste screener unit and gain access to the Liquid and solid waste discharge points

When logging on for a deposit using the unique issued fob, the third party driver must select the appropriate waste type before discharging the waste. The data from each transaction is then stored in the WASP system supporting Duty of Care requirements.

Incoming waste must be correctly classified as EWC 20 03 06 – 'waste from sewage cleaning' to meet requirement of the Chertsey STC Network Screening Waste Operation. Where an activity or 'job' produces waste requiring an alternative EWC code waste from the 'job' must be sent to a site authorised to accept the waste,

**Table 1: TWUL Network Screening waste - permitted Waste Descriptors and EWC codes.**

General Descriptions	List of Waste (EWC code)	EWC Description
Sewer network cleaning waste	20 03 06	Waste from sewage cleaning

## 4 Network Screening Waste Import Area



Chertsey STC includes a dedicated waste reception area for receiving the network waste direct to a Network Waste Screening unit. The screening unit is shown on the Chertsey STC 'Site Plan' (Appendix A.2\* and Process Flow Diagram (Appendix A.5\*))

The Network Screening Unit is located within Chertsey STW perimeter behind security fencing and security gates that control access enabling entry only to authorised persons. The unit is located on an impermeable area with sealed drainage to minimise risk of pollution from any run-off or spillages. The screening unit incorporates a dedicated hopper for receiving incoming waste whilst a WASP logger Unit with Bauer coupling and flexible hose, is supplied for discharge of liquid waste.

Thames Waters waste reception areas are constructed and maintained in accordance with the requirements set out in TWUL Asset Standards. TWUL operates a maintenance programme for these assets and all ancillaries.

Network waste is imported by tanker and consist of liquids, sludge and solid wastes from, for example the sewer network generated as a result of sewer line and wet well cleaning. Due to its origin, this imported waste may contain a high inorganic content such as rags and plastics, which require screening out to prevent blockage and contamination of downstream process.

Access to the offloading point is controlled by the issue of a fob (or swipe card) issued by Thames Water to approved contractors who have undergone appropriate waste pre-acceptance checks on the material produced whilst undertaking Thames Water contracted works. Each delivery tanker drivers must 'unlock' the screening unit using their Thames Water issued fob to enable the discharge of waste into the screener. Each delivery is recorded, and a WASP data logger records the volume of liquid waste transferred. Where necessary, for example due to high solids content, tankers are able to discharge directly into a screw hopper that conveys the waste to the coarse screen. Both data logger and hopper require use of the fob to enable use.

Imported waste is screened using a coarse screen followed by a fine screen. Captured material from the coarse screen is transferred by a screw compactor and deposited into skips. The screw conveyor also separates liquid wastes which are pumped to a hydrocyclone along with the liquid fraction from the coarse screen.

In the hydrocyclone, the liquid is screened to remove finer wastes including sands and grits, which are transferred by a screw compactor and deposited into a skip for offsite disposal. Screened liquid waste is pumped to the Liquor Return Pumping Station via site drainage, where it is returned to the works inlet for treatment.

\*see TWUL IED AD Permit Application

## 5 Waste Pre-acceptance



Chertsey STC Network Screening Unit must only receive network cleaning waste produced by TWUL sewer network cleaning activities and / or similar wastes from maintenance of other TWUL wastewater network assets. No third party wastes must be accepted.

TWUL's third-party contract for the TWUL sewer network cleaning ensures the provenance and characteristics of the waste to be accepted at TWUL Sludge treatment centre as being that of network cleaning wastes derived from TWUL owned and operated sewer networks and assets.

The suitability of individual loads of Network waste is to be considered by TWUL and the Third-party contractor when managing each network contract 'job' the type of the 'job' partly informing the likely suitability of Chertsey STC Network Screening unit as the end destination for the waste produced.

TWUL and its contractors undertake checks as part of sewer cleaning activities prior to arrival at the site to assess suitability of the waste. Waste deliveries may be made various vehicles tankers for example: combis, city flex each being directed to directly into a waste hopper and / or WASP logger unit.

The principal types of constituents of the sewer network cleaning waste include:

- Rag
- Grit
- Silt
- Debris contaminated with sewage.
- Wastewater
- Plastics
- Fat, oil and grease (FOG)

Operationally, sewer cleaning wastes and other TWUL network waste may contain a variable amount of the above for example: sewage rag, silt and/or debris contaminated with sewage and quantities of fat, oil, and grease. The above wastes are suitable for treatment using the Network Screening Unit.

The unit is able to separate waste inputs into three outputs, these are two solid outputs - grits and rag screenings, and a liquid waste. The two solid outputs are disposed off site with the liquid output being discharge to the head of the works to be treated under the urban wastewater treatment process.

## 6 Waste Acceptance



Access to the offloading point is controlled and each driver / operative must use the TWUL issued fob to unlock the Network Screening unit before discharging the imported waste (see Section 4).

Each load of network cleaning waste received at the Network Screening Unit import area is monitored for the following parameters at point of discharge (Table 2).

**Table 2: Waste Acceptance Monitoring Data – Liquid sludge**

Parameter	Unit	Frequency	Method
Volume	Litres or m3	Each transaction	Import Logger / (WASP)
Duration	Mins/ Secs	Each transaction	Import Logger (WASP)

The WASP logger will also record the following data for each import of sewer network cleaning waste, these details supporting TWUL and Third parties Duty of Care:

- Time, date and place of transfer;
- Source of waste;
- Vehicle registration number.
- Description of the waste

The WASP system records and waste import data may be used for various purposes including any reporting required by the Environment Agency.

## 7 Non-conformity



If on visual inspection an incident has occurred, person/s shall use the contact number provided on site to notify Thames Water in order that an investigation may be undertaken. An incident or non-conformity can include, but is not limited to:

- A potential non-conforming import of sewer network cleaning waste will be identified at the time of waste deposit through.
- Breach of recording systems (e.g. Non adherence to data recording procedures and use of the WASP system);
- Unsafe behaviour (e.g. Incorrect PPE, not abiding to site rules);
- Damage to equipment; and
- a pollution incident

The event of an incident shall trigger contingency measures. In the event of an Incident, the system Safeguard will be updated to reflect results of the investigation and if further action is required.



## 8 Assurance



This Standard will be subject to an audit regime to ensure the process conforms to Thames Water's requirements and is effectively implemented and maintained.

Any identified actions arising are to be tracked to conclusion, with the learning points captured and cascaded. The findings of the assurance activities must be discussed inside of the Daily Huddle and site performance meetings.

Assurance findings will be reviewed by Senior Management and featured on performance dashboards monthly for review and learning.