

# Crawley, Not Duly Made Request for Further Information, 15th March

Date: 27 March 2024 One Glass Wharf, The West Wing,

Project name: STC IED Temple Quay, Bristol,

Project no: B22849AZ BS2 0ZX

Attention: Sarah Raymond United Kingdom
Company: Thames Water www.jacobs.com

Prepared by: Tamsin Potter

Document no: C.240328-6

## Dear Sarah Raymond

Thank you for your not duly made RFI and payment request letter on 15th March 2024. Please see below for the answers to your questions, with the numbering format used by the EA:

## **Application fee**

Unfortunately, the application payment you sent is incorrect. The correct application charge is £20,767. **This leaves a balance of £173 to pay.** Further guidance in relation to application charges can be located at: <a href="https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-

- £13,984 application fee for S5.4 1) (b) () Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving biological treatment.
- £3,965 application fee for the physical treatment of non-hazardous waste relating to the waste import to the head of the works.
- £793 application fee for the physical treatment of non-hazardous waste relating to the temporary storage of digested cake.

Additional Assessments (see below for further details)

- Odour management plan a fixed charge of £1,246
- Habitats assessment a fixed charge of £779

#### Answer

We have reviewed the application payment and note the balance of £173 to be paid. We request the EA can take the balance of £173 out of the TW remittance number PSCAPPTHAMES103.

#### 1. Application form F1

On review of your re-submitted F1 form this has not been completed

Please resubmit a completed F1 form.

#### **Answer 1**

An updated Form F1 is provided as "TW\_STC\_EPR\_22a\_CWY\_FF1"

## 2. Emission from head of works waste activity

The head of the works waste activity produces effluent and is discharged off site to the Wastewater Treatment Works. Effluent discharged to the head of the works is a point source emission to sewer. Non-hazardous and inert waste: appropriate measures for permitted facilities requires that you must assess the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance. We acknowledge that applicants may not hold this information inform a quantitative risk assessment for existing discharges. duly making, provide the following information:

- a) Provide a summary of the sampling and analysis methodology of the effluent discharged and specify the likely pollutants in the effluent (guidance here <u>Monitoring discharges to water:</u> guidance on selecting a monitoring approach GOV.UK (www.gov.uk) and <u>Surface water</u> pollution risk assessment for your environmental permit GOV.UK (www.gov.uk)).
- b) Provide a written statement with a commitment that those undertaking the sampling and analysis will be by accredited to MCERTs or provide evidence of equivalent standards.
- c) Provide a revised emission pointy plan which identifies the effluent sampling point and emission point for the effluent discharge from the head of works waste activity.
- d) Provide transfer notes to demonstrate that the requested are already accepted on the site.; or if waste is not currently accepted.
- e) Provide an assessment of the fate an impact of the substances emitted to water from this activity following the Environment Agencies <u>risk assessment guidance</u> in line with relevant guidance (<a href="https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities/6-emissions-control">https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities/6-emissions-control</a>)

## Answer 2a – b.

Thames Water commits to undertaking the waste sampling and testing, to MCERTS or equivalent standard, where available. Thames Water requests that detail of the sampling and analysis requirements to be added to the permit as an improvement condition.

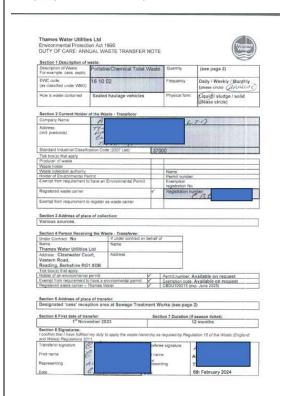
## **Answer 2c**

There is no sampling point for the effluent offloading point. In line with Thames Water's management systems, sampling of tankered wates is undertaken at the tanker, and not at a fixed sampling point. As

tankers differ in size and volume, as well as parking in different locations within the offloading area, a single grid reference does not accurately reflect where the samples will be taken from.

#### **Answer 2d**

Please find below an example Portable Toilet Waste, Annual Waste Transfer Note and on page 2 confirmation Crawley STW is a TWUL site used by the customer. Note: customer details redacted solely for the purpose of this response.



Thames Water Utilities Ltd
DUTY OF CARE: ANNUAL WASTE TRANSFER NOTE
Environmental Protection Act 1990
Please select which sites you will be disposing at:



Thames Water Sites	Site Environmental Permit Ref. No. / T21 Exemption Ref. No.	Please tick which sites you will dispose at :	Please provide estimated total annual input at each site (cubic metres):
Alton STW	RPS277		50
Aylesbury STW	RPS277	/	50
Banbury STW	RPS277	/	50
Basingstoke STW	RPS277	/	100
Beckton STW	RP5277		50
Beddington STW	RPS277		50
Bicester STW	RPS277	/	50
Bishops Stortford STW	RP5277		50
Camberley STW	RPS277		50
Chertsey STW	RPS277	/	50
Cirencester STW	RPS277		So
Crawley STW	RPS277	/	50
Crossness STW	RPS277		50
Dartford, Long Reach STW	RPS277		So
Deephams STW	RPS277	/	50
Didcot STW	RPS277	/	50
East Hyde STW	RPS277		50
Farnham STW	RPS277	/	50
Guildford STW	RPS277		SO
Little Marlow STW	RPS277	/	100
Maple Lodge STW	RP5277	/	50
Mogden STW	RPS277		5.0
Newbury STW	RPS277	/	50
Oxford STW	RPS277	/	50
Reading STW	EPR/MP3338LU		166
Rye Meads STW	RPS277		50
Sevenoaks Dunbrik Depot (Kent County Council)	Ref. Kent County Council		
Slough STW	RPS277	/	100
Swindon STW	RPS277	/	50
Wantage STW	RPS277	-	MILES ELECTION
Wargrave STW	RP5277		100
Witney STW	RPS277	-	50
Woking STW	RPS277	//	50
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#### **Answer 2e**

Not applicable

## 3. Diesel generators that are not directly associated activities

You have advised within your application that you have three diesel emergency generators currently operated under the existing Environmental Permit which will be merged with this permit that are not DAA's to the main anaerobic digestion activity. It is my understanding that these generators may meet the requirement of <a href="SR2018 No1">SR2018 No1</a>. If this is the case we will not be able to permit this combustion plant on your Installations permit as under guidance

https://assets.publishing.service.gov.uk/media/64b7d2fbef537100147aee80/Form-guidance-EPB-Part-B1-standard-facilities-permit.pdfstandard standard rules can only be issued on Installation permits if:

- They are discrete and self-contained
- Can be operated with no shared pollution prevention infrastructure including fire quarantine areas
- have no cross contamination or mixing of wastes and no transfer of waste between activities

- not take place on an installation where aggregated capacities are applicable (see Regulatory Guidance Series, No RGN 2 "Understanding the meaning of regulated facility")
- a) Confirm if the generators meet any standard rules requirements.
- b) If they do meet the standard rules requirements you will need to apply for a partial surrender of the generators from permit EPR/HP3632TS

As this is a Medium Combustion Plant (MCP) and Specified Generator (SG) there will be no charge for removing this from your permit, however we would charge a minor variation fee for issuing a new permit with this combustion unit removed which would be £3,042. (1.16.19). However, in light of the current IED application EPR/HP3632TS/V005 that you have submitted we would be able to undertake the minor variation to remove these combustion units free of charge.

You would then need to re-apply for the generators under the relevant standard rules. To ensure there is no lapse in compliance we would be able to arrange both permits to be issued on the same day.

#### **Answer 3**

A permit surrender application for the identified generators has been submitted separately to PSC on 26<sup>th</sup> March 2024.

### 4. Open tanks

Under BAT conclusion 14 you must ensure that diffuse emissions are contained. This includes techniques such as storing, treating and handling waste and material that may generate diffuse emissions in enclosed buildings and/or equipment, and collecting and directing the emissions to an appropriate abatement system. If digestate is still biologically active, and you are producing combustible biogas you must take steps to collect the biogas. Biogas should not be vented to the environment. If the source does not produce an explosive environment (i.e. less biologically active) you will need to propose plans to enclose, collect and direct the waste gas emissions to an appropriate abatement system.

For all open tanks post AD, confirm that you will undertake the following:

- a. If digestate is still biologically active and you are producing combustible biogas you will take steps to collect the biogas and direct this to your gas collection system in line with BAT 14.
- b. For open tanks that do not produce an explosive environment (i.e. less biologically active) you will enclose, collect and direct the waste gas emissions to an appropriate abatement system in line with BAT 14 and 34.

#### **Answer 4**

Thames Water is committed to meeting the requirements of BAT 14 and 34. A full BAT risk assessment is required to determine the potential need to cover open topped tanks. Thames is not able to commit to covering tanks by the stated deadline of 31<sup>st</sup> March 2025, delivery timescales will be subject to the outcome of the PR24 and subsequent price review discussions.

TWUL request the Environment Agency includes an Improvement Condition in the determined permit which addresses a and b.

## 5. Sludge contingency tanks

Your process flow identifies that the 'sludge contingency tanks' can be used by the THP dewatering feed buffer tanks (pre-AD) storage and post AD digested sludge buffer tanks. Clearly explain:

- a. How you will ensure that undigested sludge transferred from the THP dewatering feed buffer tank will not bypass the AD process following dewatering.
- b. Explain how you will ensure that digested and undigested sludge is not mixed within the sludge contingency tanks.

#### **Answer 5a**

Please see document "B22849AZ-JA-CRAWS1ZZ-LSX-DR-P-0001" P07 which confirms all transfers to the Sludge Contingency Tanks are abnormal flows - please also find attached a copy of OMP updated to include this process flow diagram.

The Sludge Contingency Tanks provide temporary contingency buffer storage. Each of the four Sludge Contingency Tanks are used independently on a contingency basis to receive sludge transfers. Undigested sludge can only be transferred into or out of these tanks by the site operatives installing temporary pipework to over-pump sludge. As soon as the AD Process is available again, all undigested sludge is returned to the THP Dewatering Feed Buffer Tank and is subject to pre-treatment and the AD process. Any of the Sludge Contingency Tanks used during this time would then be emptied, ready to be used in the future. Temporary pipework is then removed.

This ensures undigested sludge is not able to bypass the AD process.

#### **Answer 5b**

Digested and undigested sludges are not mixed in the Sludge Contingency Tanks. Digested sludge can only be put into an empty Sludge Contingency Tank or one which already contains digested sludge. Likewise, Undigested sludge can only be put into an empty Sludge Contingency Tank or one which already contains undigested sludge. Any one Sludge Contingency Tank can only be used for one type of sludge at any one time. All transfer of sludge requires operator manual intervention.

Both sludge flows, digested sludge from the Digested Sludge Buffer Tank and undigested sludge from the THP Dewatering Feed Buffer Tank, are abnormal flows that are not routinely used and make use of separate sludge transfer pipework. There is no cross-over between this transfer pipework.

Again, these tanks are only used on a contingency basis for temporary storage when downstream is not available for either undigested or digested sludge processing these being independent of each other. As soon as that process has been repaired and brought back into service the sludge in storage will be returned to the normal processing route so that the tank is left empty.