

Application reference: EPR/DP3492ZX/V003
Applicant: YORKSHIRE WATER SERVICES LIMITED
Facility: Sandall Waste Water Treatment Works, Wheatley Hall Road, Doncaster, DN2 4NU

Deadline 05/02/2024
Submitted 05/02/2024

1. Application Fee

Unfortunately, the application payment you sent is incorrect. The correct application charge subject to confirmation of the waste activities identified is £31,524. This leaves a balance of £15,053 to pay as our records show that you have only paid £16,471. Further guidance in relation to application charges can be located at: <https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance> The application charge is made up as follows:

Application Fee

- £13,984 application fee for - S5.4 A(1) (b) (i) 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.
- £7,930 application fee for the addition of the dewatering activity as identified in table C3:1b-2 – Types of waste accepted – Imported wastes for dewatering/storage only (prior to recovery). Note: We will only progress this activity if the information is provided in line with the further questions below.

Payment Requested		YW Comment
Section 5.4 a(i) and (b)(i) – Non-hazardous waste installation – biological treatment	£13,984	OK – payment already made.
Emissions Management Plan	£1,241	OK – payment already made.
Odour Management Plan	£1,246	OK – payment already made.
Habitats Assessment	£779	To raise
Application fee for the addition of the dewatering activity as identified in table C3:1b-2 – Types of waste accepted – Imported wastes for dewatering/storage only (prior to recovery). Note: We will only progress this activity if the information is provided in line with the further questions below.	£7,930	Table C3:1b-2 was left in the resubmission as an error. YW is not requesting this activity and this table can be discounted. Please see

		response to Q2 for further on this matter.
Application fee for the physical treatment of non-hazardous waste relating to temporary storage of cake	£3,965	There will be no physical treatment of non hazardous waste.
- Application fee for a - Minor variation fee to remove activities R13 and R2 relating to the sludge conditioning activities. (see section 3.4.2 of guidance https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance)	£2,379	R13 is still applicable in regards storing of waste prior to digestion in addition to storage of waste post digestion. It is also applicable with regards gas storage. This code is to remain in the permit please. Fee raised for the removal of R2, which is no longer required.

The payment is currently going through the approval's process. Please see the following screenshot as evidence that this payment has been raised.

The screenshot shows a payment interface for 'Sandall Additional IED Costs' (Request details / PR259610). It includes 'Withdraw' and 'Edit' buttons. The summary section shows 'Ship to' (Western Way, Halifax Road (PO Box 500) Bradford YKS BD6 2SZ United Kingdom), 'Charge to' (GL Account (0000502370 (ContractedServices))), and 'Total Cost' (£3,158.00 GB). Below this is a 'Show advanced options' link. The 'Items (1)' section lists one item: 'Woodhouse Mill IED Additional Application Costs' (0040001103 (Environment Agency SSCL)) with a quantity of 1, a price of £3,158.00 GBP, and an amount of £3,158.00 GBP. The unit of measure is 'each'.

- £3,965 - Application fee for the physical treatment of non-hazardous waste relating to temporary storage of cake
- £2,379 - Application fee for a - Minor variation fee to remove activities R13 and R2 relating to the sludge conditioning activities. (see section 3.4.2 of guidance <https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance>)

Additional Assessments (see below for further details)

- Odour management plan – a fixed charge of £1,246
- Habitats assessment – a fixed charge of £779
- Emission Management Plan – a fixed charge of £1,241

2. New assets

You have identified within your application that you will be undertaking the “installation of two new thickening drums, including new polymer dosing system, all contained within the existing drum thickener building. The existing drum thickeners will be removed but all existing pipework into and out of the thickener building will remain. The polymer dosing tanks will be fully bunded and will meet BAT requirements. These new drums will be installed during Quarter 1 2024” On review of your application we can see no further information on these assets or a BAT assessment for them. Please note that any new assets will need to meet BAT from the date of permit issue. If you do not provide relevant information within your application, we will not be able to progress the addition of these assets and you will need to apply for a separate variation.

For the new assets identified as two new thickening drums and new polymer dosing system, provide an assessment to demonstrate how these will meet all relevant BAT requirements in line with guidance https://eippcb.jrc.ec.europa.eu/sites/default/files/2019-11/JRC113018_WT_Bref.pdf

As per the attached drawings (2. SLUDGE THICKENING PLAN VIEW and 2. THICKENER BUILDING OVERALL PLAN VIEW (1)), the majority of the installation is within the building with an impermeable surface to drainage. The polymer system is bunded and poly dosing pipework is double-skinned with leak detection. The thickener feed pumps outside the building are mounted on an impermeable slab with drainage and the dosing pipework between the pumps and the building are double-skinned. Therefore the entire installation is compliant with BAT/CIRIA/IED.

3. Permit Boundary

Your application advises that “YW will be submitting an application for partial surrender of some areas of land included within the conditioning permit that is the subject of this variation application. This will be undertaken as a ‘low risk’ surrender. This intention was communicated to the Environment Agency and it has been agreed that a separate surrender application will be submitted”. We

cannot locate this partial surrender on our system, and on assessment of your proposed permit boundary this does not include your existing boundary. Update your permit boundary to include your existing permit boundary.

The partial surrender has now been submitted and this supports the boundary that has been submitted with the IED resubmission of 20/12/23. The partial surrender was submitted to NPS on Friday 2 February 2024.

4. **Indirect emissions to the WwTW.**

The waste anaerobic digestion process produces effluent and is discharged off site to the Sandall Wastewater Treatment Works. Effluent discharged to the head of the works is a point source emission to sewer. [BAT conclusion 3](#) requires operators to have an emissions inventory for the effluent. On assessment of your application you have provided table C2: 6.8 – proposed analytical suite: Sandall return liquors characterisation programme – BAT 3, however this limits potential parameters. BAT 3 requires you determine the composition of **all** relevant pollutants to enable full characterisation of your emissions. Guidance [Surface water pollution risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](#) requires you must “identify the pollutants released from your plant”. The guidance states, that you must “Make sure the laboratory tests for all pollutants which you expect to find in the discharge and that they use an appropriate ‘minimum reporting value’ (MRV) (usually 10% of the environmental quality standards (EQS)).”

1.
 - a. Provide a written statement with a commitment to undertake the sampling and analysis in line with BAT3.

Sampling and analysis will be undertaken in line with BAT3.

- 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.

Sampling and analysis will be undertaken by those accredited to Mcerts standards.

5. **Dispersion stacks to be connected to an OCUs and**

BAT 34 and 53 require that in order to reduce emissions, BAT is to use one or a combination of defined abatement techniques. You have identified within your application that the below assets identified as the import tank, sludge pumping station, two thickener feed tanks and the SAS chamber all require abatement through the connection to odour control units (OCUs). To progress your application, we will need to you to provide the following information.

- a. Confirm the emission points for the proposed OCUs and update these on all relevant plans.

We're not in a position to provide this information yet as the work requires investigation. This investigation project will begin imminently but is expected to be 6month until it concludes.

YW understands that failure to provide the emission point as part of this application will mean a permit variation is required in advance of them being put into operation. It's hoped we will have this information during the permit determination phase of this IED permit.

- b. Confirm the OCU type i.e. Biofilter/Carbon filter/chemical scrubber, including if it will be a one or two stage process

This information can't be provided until the investigation concludes and determines the best technology for the OCUs.

- c. Confirm if the OCU will be open or closed system.

Any installed OCU(s) will always be a closed system.

You have also identified that you will be looking to re-instate the two existing OCUs which you have identified as dry media scrubbing units. It is not clear if these units meet the requirements of approved techniques identified in BAT 53 which are adsorption, biofilter, thermal oxidation or wet scrubbing, or that they will provide the same level of environmental protection.

- a. Confirm if the two OCUs identified as dry scrubbing media units meet the techniques identified in BAT 53

These are activated carbon scrubbers, treating odour via adsorption. They will be refurbished (media replacement and any other identified remedial works) in order to comply with BAT 53.

- b. If they do not meet the techniques identified in BAT 53, clearly explain how they will provide the same level of environmental protection or explain how you will meet BAT 53.

N/A

6. Addition of waste activity relating to table C3:1b-2 – Types of waste accepted – Imported wastes for dewatering/storage only (prior to recovery).

We have identified that you have applied for a directly associated activity to the section 5.4 activity identified as “Treatment of digested sludge produced at Sandall STF or other YW sites (including physical handling and dewatering)” which we believe reflects the codes you have applied for in table C3:1b-2 – Types of waste accepted – Imported for dewatering/storage only (prior to recovery). It is our understanding that waste identified in table C3:1b-2 will not undergo anaerobic digestion and as such this activity is not a DAA to the section 5.4 activity but a separate waste activity. In order to progress this activity, you will need to provide all information identified within our application process, this includes but is not limited to the below. (Please note it is your responsibility to ensure that information is provided in line with our requirements, failure to provide this will mean that we will not be able to progress this element of your application:

- a. Payment as identified above.
- b. Non-technical summary, and process flow including how you will keep this activity separate from your installations activity (<https://www.gov.uk/guidance/waste-environmental-permits>)
- c. Assessment against Non-hazardous and inert waste: appropriate measures for permitted facilities <https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities>
- d. Completion of relevant forms – B4 new bespoke waste operation – <https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-b4-new-bespoke-waste-operation>
- e. Updating and inclusion of this activity in all relevant management plans such as the Odour management plan, accident management plan, residue management plan etc.

Table C3: 1b-2 – Types of waste accepted – Imported wastes for dewatering/storage only (prior to recovery) was left in the resubmission incorrectly. All sludges received at Sandall STF will undergo treatment through anaerobic digestion.

No additional information or payment has been provided.

7. Temporary storage of cake not produced on site

You have identified within your application that “the cake pad may also be used to serve certain contingency functions, for both operations at Sandall and to wider strategic regional sewage infrastructure operated by YW”. If you are importing cake for temporary storage and transfer of site without wastes being processed through the AD this will be a separate waste activity. In order to progress this activity, you will need to provide all information identified within our application process, this includes but is not limited to the below. (Please note it is your responsibility to ensure that information is provided in line with our requirements, failure to provide this will mean that we will not be able to progress this element of your application:)

- a. Payment as identified above.
- b. Non-technical summary, and process flow including how you will keep this activity separate from your installations activity
(<https://www.gov.uk/guidance/waste-environmental-permits>)
- c. Assessment against Non-hazardous and inert waste: appropriate measures for permitted facilities <https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities>
- d. Completion of relevant forms – B4 new bespoke waste operation – <https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-b4-new-bespoke-waste-operation>
- e. Updating and inclusion of this activity in all relevant management plans such as the Odour management plan, accident management plan, residue management plan etc.

All sludges received at Sandall STF will undergo treatment through anaerobic digestion.

No additional information or payment has been provided.

8. Bioaerosols Risk Assessment (BRA)

You have provided section 6-7 Bioaerosol assessment advising that you have carried out Bioaerosol monitoring, however we cannot locate these results within your application. You need to send us a Bio-aerosol Risk Assessment. This should meet the requirements of our M9 Position Statement (<https://www.gov.uk/government/publications/bioaerosol-monitoring-at-regulated-facilities-use-of-m9-rps-209/bioaerosol-monitoring-at-regulated-facilities-use-of-m9-rps-209>). This must show that the process and/or abatement measures adequately prevent, or where this is not possible, significantly reduce the risk of bio-aerosols release. It must show that the resulting activity will be unlikely to expose the nearest sensitive receptor to elevated concentrations of bio-aerosols.

The detail and level of risk assessment must be site specific, process and location dependent. You must have measures and process controls in place to control and minimise the risks identified. These must be clearly stated in your assessment.

Please see attached 8. Sandall Ambient Bioaerosols Monitoring September 2022

9. Accident Management Plan

You have submitted a risk assessment under section 6.7 of your submission in relation to accidents, however this does not meet the requirement set out in our guidance <https://www.gov.uk/guidance/develop-a-management-system-environmental-permits#accident-prevention-and-management-plan>. Provide a standalone accident management plan that meets the requirements of the above guidance.

Please see attached 9. Accident Management Plan_Sandall_v1

10. Air Dispersion modelling

- a. You have provided air dispersion modelling but have not provided your modelling files. Please provide a copy of your modelling files.
- b. You have not confirmed your combustions plants MWth input for each combustion unit. Update your air dispersion modelling report to clearly state this.

Please see attached 10. YW_Sandall_AERA_Model_Files

11. Secondary Containment

We cannot locate where you have undertaken spill modelling following the implementation of your proposed secondary containment solution to demonstrate that it will adequately contain the required volume. Update your secondary containment report to include spill modelling following the implementation of proposed containment solution.

- a. Your proposed containment solution is not within your permit boundary. Update your permit boundary and all relevant plans to include your proposed containment solution within your permit boundary.

This work has passed on to Arup for detailed design. All secondary containment will be within the installation boundary as submitted. The post mitigation spill modelling will be provided during permit determination stage.

12. Waste water emissions during storm overflow conditions at the WwTW.

Routine emissions to the WwTW from the installation will be controlled via monitored emission limits as an indirect discharge (as defined in the Waste Treatment BREF). However, as WwTW periodically discharge sewage during storm conditions, its possible that waste water from the installation could bypass the WwTW treatment processes and be emitted as a direct discharge to water. Its not clear from the application how this abnormal situation will be prevented. Operators of environmental permits cannot emit waste waters directly to surface waters without detailed risk assessment. You must therefore have procedures to prevent the discharge of waste water from the installation from bypassing the WwTW treatment processes directly to surface water during storm overflow conditions.

- a. Provide written procedures which describes the site's contingency arrangements to prevent digestate and effluent being discharged off site while the WwTW are in storm conditions.

All STF return liquors from the installation boundary are made downstream of the storm overflow point. There is no ability for return liquors to enter the storm tank or 6x channel and discharge during storm conditions.

- b. Provide a description of the buffer storage proposals to control or hold emissions to the event of storm overflow conditions at the WwTW.

Not required as there is no ability for return liquors to overflow in storm conditions.

- c. Should any contingency arrangements use storage tanks to act as a buffer, provide evidence that demonstrates the waste waters or digestates can be held in this storage during the period of storm overflows.

Not applicable

Note, this information can be included as an addendum to your accident management plans as part of BAT conclusion 21, Emissions from accidents and incidents.

Please send the requested information to sarah.raymond@environment-agency.gov.uk.

Please include '**EPR ref no. EPR/DP3492ZX/V003: Installations triage – additional information**' in your email response to ensure it is managed correctly.