

Mrs Helen Singer  
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160 Dundee Street  
Edinburgh  
EH11 1DQ

**Our ref:** EPR/ZP3031LJ/V005

**Date:** 14/06/2023

Dear Helen,

**We need more information about your application**

**Application reference:** EPR/ZP3031LJ/V005

**Operator:** United Utilities Water Limited

**Facility:** Ellesmere Port WwTW, Little Staney, Nr. Chester, Cheshire, CH2 4HZ

Thank you for your application received on 04/10/2022.

The application payment you sent is incorrect. The correct application charge is £16,009. This leaves a balance of £3,965 to be refunded. Please see below for an outline of the changes identified.

- £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.

**Additional Assessments (see below for further details)**

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

I need to ask you for some missing information before I can do any more work on your application. Please provide us with more information to the following questions .

**1) EWC code 19 08 99**

You have identified EWC code 19 08 99 (centrate) to be accepted by tanker directly to the centrate holding tank. This would be a bespoke waste treatment activity, or an installation activity depending on the primary purpose of the addition of 19 08 99 at this point within the process. (Note: It would not form part of the S5.4 A(1) (b) (i) activity as it is post AD.) As such you have not paid the relevant fee, not provided the relevant application forms, or given a summary of how you will comply with the relevant requirements. Additionally, we do not have sufficient information to be able to make an informed decision on the activity type. Therefore we will be unable to progress this as part of your application and you will need to remove EWC code 19 08 99 from your application.

- a) Confirm your agreement of this and update the relevant documents to reflect the removal of 19 08 99.

Permitting and Support Centre, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF  
Customer Contact Centre: 03708 506 506  
Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)  
[www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

## 2) Existing indirect emissions to water

You have identified existing indirect emissions to water from points (R1, R2, R3, R5, R6 and R7) which are produced from the waste anaerobic digestion process and discharged off site to the Ellesmere Port Wastewater Treatment Works. Effluent discharged to the main waste water treatment works is a point source emission to sewer. [BAT conclusion 3](#) requires operators to have an emissions inventory for the effluent. We note that you are proposing limited sampling of parameters for 'biological treatment', however your activity includes prior to the anaerobic digestion (AD) process (the biological treatment of waste) the thickening and dewatering process which is a directly associated activity of the AD process. The 'Treatment of water-based liquid waste' BAT AELs are appropriate for this DAA activity. The BREF provides examples of wastes that would be considered as water-based liquid wastes. These include wastes under the category '19 08 wastes from waste water treatment plants not otherwise specified'.

Further to this under BAT 3 you must provide "information about the characteristics of the waste water streams, such as: average concentration and load values of relevant substances and their variability (e.g. COD/TOC, nitrogen species, phosphorus, metals, priority substances / micropollutants);". The substances/parameters set out in BAT 7 provide the minimum monitoring and emission limit values for emissions. However, BAT 3 requires you to determine the composition of **all** relevant pollutants to be able to fully characterise 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))." We acknowledge that applicants may not hold this information in order to inform a quantitative risk assessment for existing discharges. For the purpose of duly making, provide the following information:

- a) Provide a summary of the sampling and analysis methodology of the effluent you discharge and specify the likely pollutants in the effluent (guidance here [Monitoring discharges to water: guidance on selecting a monitoring approach - GOV.UK \(www.gov.uk\)](#) and [Surface water pollution risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](#)).
- b) Provide a written statement with a commitment to undertake the sampling and analysis in line with BAT3 which requires you to determine the composition of **all** relevant pollutants to be able to fully characterise your emissions.
- c) 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.
- d) Confirm that sampling will be undertaken for emission point R1, R2, R3, R5, R6 and R7.

## 3) New Indirect emission to water

You have identified a new indirect emission to water (R4) from the Future SAS filtrate discharge point which is discharged off site to the Ellesmere Port Wastewater Treatment Works. Effluent discharged to the main waste water treatment works is a point source emission to sewer. [BAT conclusion 3](#) requires operators to have an emissions inventory for the effluent. As the SAS plant is a new plant, the design must be to BAT before we can permit the proposal. To demonstrate BAT, an effluent emission inventory and an environmental risk assessment is needed.

Provide a full emissions inventory of the effluent and submit a quantitative environmental risk assessment of the point source emission of effluent to the sewerage treatment works. Your effluent and inventory and risk assessment must include:

- a) An identification of emission points and pollutants released from the proposed facility.

- b) Data on pollutant concentrations of the untreated effluent (worst case concentrations should be assumed) and maximum & average discharge flow rates using actual measurements (with a sufficient sample size and to suitable accuracy). Guidance here [Monitoring discharges to water: guidance on selecting a monitoring approach - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/monitoring-discharges-to-water-guidance-on-selecting-a-monitoring-approach).
- c) A quantitative risk assessment demonstrating that any substances of 'significance' screen out. The risk assessment should calculate the resulting pollutant concentrations in the receiving water body and comparison against relevant EQS/EALs. Our H1 risk assessment tool can be used to undertake the quantitative risk assessment. Your risk assessment must use the criteria specified in our guidance [Surface water pollution risk assessment for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/surface-water-pollution-risk-assessment-for-your-environmental-permit) and <https://www.gov.uk/government/publications/h1-annex-d2-assessment-of-sanitary-and-other-pollutants-in-surface-water-discharges>.
- d) Where you have identified hazardous substances in the effluent, submit your risk assessment to include an assessment of hazardous substances in line with our guidance section ['Screening test: priority hazardous pollutants'](#).
- e) Provide a revised drainage plan which identifies the effluent sampling point and emission point for the effluent discharge from the installation.

Note: Should you not be able to provide the above information the new SAS plant will need to be removed from your application

#### 4) Secondary Containment of new SAS thickening plant

You have identified assets associated with new SAS treatment infrastructure and advised that "Prior to operating the SAS thickening plant and associated assets, as a technically connected process to the main IED installation, United Utilities Water Ltd will ensure that the assets and operation satisfy the requirements of BAT 19. For the avoidance of doubt, this shall include secondary containment and spill monitoring. Due to timescales involved with delivering a permanent capital solution for secondary containment of the SAS thickening plant, we may need to consider a temporary BAT compliant containment solution as a stop-gap." BAT conclusion 19 requires that "in order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not practicable, to reduce emissions to soil and water, BAT is to provide impermeable surfacing and provide tanks with suitable secondary containment. We can see no evidence to demonstrate that your proposals are suitable for the tanks identified. You must clearly demonstrate how you will meet the requirements set out in BAT which are to provide impermeable surfacing and suitable secondary containment at the point of permit issue for new assets.

- a) Provide your final secondary containment proposals and implementation schedule to demonstrate that the assets associated with the new SAS tank will meet the requirement of BAT 19 at the point of permit issue.

Note: Should you not be able to provide the above information the new SAS plant will need to be removed from your application

#### 5) Secondary Containment existing assets

- a) On review of your 'Secondary containment modelling assessment' this does not include all relevant tanks i.e. partially submerged raw sludge tanks, and digested sludge buffer tank. Revise and resubmit your 'Secondary containment modelling assessment' to include all tanks.
- b) On review of your 'Secondary containment modelling assessment' we have identified that parts of your proposed containment solution is located outside of your permit boundary. Update your secondary containment report to propose a solution within the permit boundary.
- c) Your proposals identify sacrificial areas that will be made impermeable, however this does not include all areas identified as 'soft landscaping/made ground and 'mixed surfacing'. Update your secondary containment options report to demonstrate how you will meet the requirements of BAT 19 which is to provide impermeable surfacing.

- d) Your containment solution provides containment for all tanks within the bund area. While you have grouped your tanks, the grouped tanks do not have individual bunds proposed. Section 4.2.1 of CIRIA 736 is clear that

“Where two or more tanks are installed within the same bund, the recommended capacity of the bund is the greater of:

- 110 per cent of the capacity of the largest tank within the bund
- 25 per cent of the total capacity of all the tanks within the bund, except where tanks are hydraulically linked in which case they should be treated as if they were a single tank”

Update your ‘Secondary containment option report’ to clearly show that your containment solution can provide 25% of the total capacity of all tanks.

**6) Provide information in Application form Part C2 – General – varying a bespoke permit**

- a) **Question 1c Site Details** – You have provided address Ellesmere Port WwTW Sludge Treatment Facility, Little Staney, Nr. Chester, Cheshire CH2 4HZ. This does not match the address on your current permit to which has a postcode of CH4 5JA. Confirm that correct site address to be used, and provide evidence that the address to be used is correct.
- b) **Question 2a Type of variation** – You have applied for a normal variation. Under guidance <https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance#varying-a-permit-charges> a substantial variation is a change that “would make that activity a part A(1) activity in its own right”. Provide an updated form with substantial variation checked.
- c) **Question 2c Consolidating (combining) or updating existing permits.** – You have advised in response to this questions that you do not want to have a modern style permit. As per guidance [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/928048/Guidance-EPC-application-for-a-permit-Part-C2-general-varying-a-bespoke-permit.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928048/Guidance-EPC-application-for-a-permit-Part-C2-general-varying-a-bespoke-permit.pdf) “if the permits being consolidated (combined) are not modern permits we will map the existing conditions across to modern ones. Therefore your final permit will be a modern-style one” Confirm that you agree to a modern style permit.
- d) **Question 3b Technical ability** – You have provided a WAMITAB certificate issued 24/04/2019, provide your named technically competent persons continuing competency certificate.
- e) **Question 5 Supporting information** – You have provided ‘Appendix C Ellesmere Port Boundary Plan’ this does not seem to include all of your current permitted area.
- i. Update ‘Appendix C Ellesmere Port Boundary Plan’ to include all of your current permitted area
  - ii. Update all relevant site plans/procedures to include your current permitted area.

**7) Provide information in Application form Part C3 – Variation to a bespoke permit**

- a) **Q4a – Monitoring.** Requires that you provide environmental monitoring, for example, bio-aerosol monitoring, surface water, emissions to sewer or groundwater, noise, ambient air monitoring, process and land monitoring. For all relevant emissions as outlined in guidance [Part C3 varying a bespoke installation permit \(publishing.service.gov.uk\)](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/928048/Guidance-EPC-application-for-a-permit-Part-C2-general-varying-a-bespoke-permit.pdf), provide the national grid reference of the monitoring point.

Please reply directly to this email with your information and copy in sarah.raymond@environment-agency.gov.uk.

Please send the information within 10 working days of this letter.

If we do not receive the information within 10 working days we will return your application.

If we do receive the requested information within 10 working days, we'll continue to check your application. We'll check to see if there's enough information for the application to be 'duly made'. Duly made means that we have all the information we need to begin determination. Determination is where we assess your application and decide if we can allow what you've asked for.

We'll let you know by letter whether your application can be duly made. If it can't be duly made, we'll return your application to you.

If we do have to return your application we'll send you a partial refund of your application payment. We'll retain 20% of the application charge to cover our costs in reviewing your application and requesting information. This maximum amount we'll retain is capped at £1,500. Further information on charging can be found at:

<https://www.gov.uk/government/publications/environmental-permitting-charging-scheme-2019>

If you have any questions please phone me on 07557139052 or email [sarah.raymond@environment-agency.gov.uk](mailto:sarah.raymond@environment-agency.gov.uk).

Yours sincerely

**Sarah Raymond**  
**Senior Permitting Officer - Installations**