Mark McAree
Jacobs
2 Colmore Square
Birmingham
B4 6BN

Date: 07/04/2026

Dear Mark,

We need more information about your application

Application reference: EPR/MP3097FY/V007
Operator: Severn Trent Water Ltd
Facility: Sewage Treatment Works, Strongford, Barlaston Old Road, Stoke On Trent, ST12 9EX

Thank you for your application received on 26/01/2024.

Unfortunately, the application payment you sent is incorrect and we cannot locate your payment. The application charge is estimated to be £48,619.70; however we would request that you contact us within the 10 working days to confirm this and ensure payment is made.

You application charge is as follows:

- Surrender of activity AR1 for the S5.3 A(1) (a) (iii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving blending or mixing prior to submission to any of the other activities listed in S5.3 A(1).– 1.16.1.3 – **Charge £4,800**
- Surrender of activity AR2 for the S5.3 A(1) (a) (i) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment. – 1.16.1.1 – **Charge £4,800**

*Note: In line with section 5.1 our guidance **Environmental permits: when and how you are charged** "To remove an activity from your permit that does not have an area of the site associated with it, you need to apply for a minor variation and pay the minor variation charge for that activity."*

- Application for a S5.4A1(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 – 1.16.2.1 - **Charge £13,984**
- Application for a S5.4A1(a)(i) Disposal of non hazardous waste with a capacity exceeding 50 tonnes per day by biological treatment in relation to the aerobic liquor Treatment Plant (LTP) at a 90% reduction – 1.16.2.1 – **Charge £1,398.40**
- Application for a S5.4A1(a)(ii) Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day by physico-chemical treatment (via chemical scrubbing in relation to the addition of a new ammonia recovery plant at a 90% reduction – 1.16.2.2 – **Charge £1,344.30**
- Substantial variation of waste activity AR13 for the head of works to add a self bunded, covered, holding tank at the works inlet, increase the total tonnage

accepted and add additional waste codes. 1.16.12 – **Charge £7,137** (Note; if this activity does not intend to increase the volume of waste to be accepted, and the EWC codes to be accepted this would proceed as a normal variation charge)

- Addition of a physical treatment waste activity in relation to a cellulose recovery plant which recovers cellulose fibres from the incoming urban waste water. 1.16.13 – **Charge £7,930**
- Normal variation of waste activity AR14 to increase the total volume of waste accepted. 1.16.13 – **Charge £3,965**

Management plans

- 1.19.6 Odour Management Plan **- £1,241**
- 1.19.5 Bioaerosol Risk Assessment **– £1,241**
- 1.19.2 Habitats Assessment **- £779**

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

*Note that for all **new** activities that you are applying to add to the permit (which includes the cellulose pant, Ammonia plant, ELOVAC system and increased volumes and wastes to the head of the works you will need to demonstrate how at point of permit issue how these activities will meet Best available techniques (for Installations activities only) and the relevant appropriate measures (for Installation and waste activities) or propose and alternative technique that will provide the same level of environmental protection.*

Where you cannot demonstrate or provide evidence for these new activities, we may take the decision to exclude these activities from this variation application. If you feel you do not have the available evidence to support the new activity applications, you do have choice to withdraw the relevant activity or activities and subtract the activity fee as listed above from the overall payment.

1) **Inclusion of the Waste water treatment works (WwTW) process**

Throughout your application you have included the treatment process of the wider WwTW. The WwTW does not form part of your permit, and any emission that is discharged to the WwTW will be treated as an indirect emission to water as per any other site regulated under IED.

Update your application to remove reference to the WwTW process that does not form part of your permit application.

2) **C6 application form**

On review of this form, you seem to have included the WwTW which does not form part of this permit and not included all relevant emissions to water.

Update form C6 to remove reference to the WwTW treatment processes and ensure that all emissions to water are included for the new processes applied for, this includes the cellulose treatment plant, ammonia plant and new waste to the head of the works.

3) **Sludge imports to the THP plant**

You identified the import of waste to the THP as a waste activity, however this is currently permitted as a directly associated activity and will remain as such. The EWC codes identified for acceptance 19 02 06, 19 06 06, 19 08 05 and 20 03 04 do not match the current permitted process which allows for the "Operation of THP unit for pre-treatment of imported and indigenous sludge, and the sterilisation of imported waste".

a) **Confirm the waste codes to be accepted at the THP only.**
b) **Provide evidence of the total volume of waste currently accepted at the THP for 2023, 2024 and 2025.**

You have stated that "raw sludge may also be subject to temporary storage in a dedicated bay on the cake pad pending transfer to the THP" This is highly odorous waste and in line with 'Biological waste treatment: appropriate measures for permitted facilities' "You must store highly putrescible wastes, including odorous and ammonia-rich wastes and wastes containing animal by-products, in a contained or enclosed building." And "For liquid wastes this is either a sealed tank fitted with an air control system which may include air circulation, local extraction to a gas recovery plant or engineered abatement system"

c) **Confirm the maximum storage to be held on site at any one time.**
d) **Confirm the maximum time raw sludge will be held on site**
e) **Explain how you will store raw sludge in a contained building or equipment with appropriate abatement or provide an alternative measure that will provide an equivalent level of environmental protection.**

4) **Vacuum methane degassing equipment.**

You have identified as part of your application that you will be implementing a new 'vacuum methane degassing equipment which will include vent points but provided no further details on these vents. On review on your BAT assessment, we cannot locate how this has been included and your process flow is not legible. Note: should the below not be provided we will not be able to take this element of your application forward.

a) **Update your application to include a clear process flow on the vacuum methane degassing equipment.**
b) **Update your application to include a BAT assessment and assessment against Biological waste treatment: appropriate measures for permitted facilities'" for the vacuum methane degassing equipment, paying particular attention to BAT 14.**
c) **Provide a clear explanation of how the vents will operate.**

5) **Ammonia Recovery Plant**

Your application includes a new 'ammonia recovery plant', but on assessment of your application this includes limited information and is missing key assessments. For the 'ammonia recovery plant' provide the below information. Note: should the below not be provided we will not be able to take this element of your application forward.

a) **Update your application to include a BAT assessment and assessment against Biological waste treatment: appropriate measures for permitted facilities'.**
b) **Update your application to include a clear process flow that includes all inputs, outputs and assets relating to the ammonia recovery plant.**

The ammonia recovery plant includes an indirect emission to water, and we can locate no assessment of emissions to water in line with our guidance 'Surface water pollution risk assessment for your environmental permit'. Our guidance is clear that "If you do not have discharge monitoring data (for example for new discharges that are not yet discharging), use estimated data for the screening tests."

c) **Provide an assessment in line with guidance 'Surface water pollution risk assessment for your environmental permit' of the indirect emission to water from the ammonia recovery plant. Where you do not have actual data use estimated data. (Note: This should be provided in the form of a H1 screening tool, with modelling if required and include a full explanation of how you have completed your assessment in line with the above guidance)**
d) **Ensure that your emission point plan includes the sampling and discharge locations for this emission.**

You have stated that you plant will include a 0.6MWth boiler but provided no assessment of emissions to air in line with our guidance Air emissions risk assessment for your environmental permit as you have stated that this is temporary.

f) **In line with our guidance Medium combustion plant: when you need a permit, explain how your boiler will meet the requirements of a mobile boiler, or not be required to assess emissions**
g) **Provide an assessment of your emissions from the boiler in line with our guidance Air emissions risk assessment for your environmental permit**
h) **Update you emission point plan to include the boiler**

We are also unclear if the ammonia recovery plant will include emissions to air from diffuse, points source or emergency processes. You state that a carbon filter may be added to a stack, this would need to be included as part of any permit application.

i) **Clearly explain in writing and identify within your process flow any emissions to air from diffuse, point source or other means from the ammonia recovery plant.**
j) **Explain how the carbon filter will be effective at treating emissions to air from the ammonia plant and ensure that the carbon filter is included in all relevant management plan i.e. OMP and emission point plan.**

6) **Existing activity BAT assessment**

On review of 'Updated BAT Reg61 Response for Strongford' submitted on the 04/2/2026 this will be used to review your compliance against your revised section 5.4 activities for the AD and LTP. On review of this it includes references to improvements that should have been carried out, does not address BAT 20 for indirect emissions to water and your LTP, and references the WwTW which does not form part of this permit application.

Update and resubmit Updated BAT Reg61 Response for Strongford' to reflect your current site status and remove reference to the WwTW.

7) **Cellulose recovery plant**

On review of section '9.2 Appropriate Measures Assessment for Cellulose Recovery Plant' this is limited and does not provide enough information to demonstrate how you will meet the relevant appropriate measures.

a) **Update section '9.2 Appropriate Measures Assessment for Cellulose Recovery Plant' to provide detailed explanation of how the plant will meet the requirements of the 'Non-hazardous and inert waste: appropriate measures for permitted facilities'**
b) **Confirm the EWC code to be accepted into the Cellulose Recovery Plant and explain why this code has been applied.**

We are also unclear if this process will include emissions to air from diffuse, points source or emergency processes. You state that a carbon filter may be added to a stack, this would need to be included as part of any permit application.

f) **Clearly explain in writing and identify within your process flow any emissions to air from diffuse, point source or other means from the cellulose plant.**
g) **Explain how the carbon filter will be effective at treating emissions to air from the cellulose treatment plant and ensure that the carbon filter is included in all relevant management plans i.e. OMP and emission point plan.**

8) **H1 assessment for the Cellulose plant indirect emission to water**

On initial review of the H1 assessment provided for the cellulose recovery plant only. You will need to address the following points prior to determination.

a) **Provide the laboratory results for the determinants that are reported as being 'below the limits of detection'**
b) **On review upstream sampling points are available, update your assessment to include actual background data for determinants where available**
c) **Update your H1 summary to explain how you have met the requirements in guidance Surface water pollution risk assessment for your environmental permit, this should include but not be limited to the raw data used, evidence of sampling to UKAS standards or an explanation of the standards used, an explanation of how you have determined your limits of detection, an explanation of how the Q95 has been applied, an explanation of how the flow rates have been calculated, operational mode of the discharge, a justification of why your assessment is representative of the discharge, and explanation of the receiving waters and what tests have been applied.**
d) **Explain how you have considered Predicted No Effect Concentration (PNEC) determinants?**

You initial H1 assessment has failed the H1 screening tests, your indirect discharge is to freshwater and as such the environment agency would carry out the modelling in line with our guidance Surface water pollution risk assessment for your

environmental permit, however you have not provided the relevant information for us to undertake this.

e) **Provide the relevant data in line with our guidance Surface water pollution risk assessment for your environmental permit for the Environment Agency to carry out the required modelling.**

9) Process flows

The process flows provided in section A.1.3 are not consistent with your non-technical summary. Process flows should be clear, include all relevant assets (not just high levels overviews), inputs (such as waste, raw materials) and outputs (such as emissions, waste, products)

Update your process flows to include all assets and ensure the process that you are applying for is fully represented.

10) Emission point plan

You emission point plan does not seem to include all relevant emissions to water and air.

Update your emission point plan to include all point source emissions to air and water.

11) Flaring of biogas

You have stated within your application that "There are also two existing, permitted, emergency flares located at the site. One provides an outlet for excess gas from the CHP engines that can combust biogas when there is excess biogas that cannot be combusted by the CHP or when the CHP is offline for maintenance. The other flare supports the biogas upgrading plant and is used when upgraded biomethane cannot be injected into the national gas grid e.g. if there is a quality problem with the upgraded biomethane." The flaring of non-complaint biogas is not BAT as flaring should only be for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns)

For the flare, explain how you will manage your flares so that they are only used for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns)

12) Tank Inventory

The tank inventory provided in the document,'18 Tank Inventory' does not seem to include all tanks and has used a different naming convention to that provided in your non-technical summary. We are also unclear if open tanks have been enclosed in line with your improvement programme identified in your letter dated 31/07/2025.

a) **Update and resubmit this table to include all tanks and ensure consistency in tank naming across your application.**
b) **Include a column to identify if tanks are enclosed or open, and have diffuse emissions from open vents, limpet boxes or other sources.**
c) **Provide the final detailed designs for the enclosure of open tanks**

13)Tonnages

Your current permit allows.

"Annual throughput of waste at the site (aggregated for all activities) shall not exceed: 430,000 tonnes of non-hazardous waste; and 34,750 tonnes of hazardous waste. (These quantities do not include indigenous UWWTD derived sludge from within the waste water treatment works). On review of your application, you have requested an increase in the total site volume broken down as follows:

Activity	*Annual volume*
S5.4 A1(b)(i) – anaerobic digestion	*7,003,985*
S5.4A1(a)(i) – liquor treatment plant	*478,720 (included in AD initial volume*
S5.4A1(a)(ii)	*253,440 (included in AD initial volume*
Waste activity Head of works	*500,000(t)pa*
THP import	*15,000(t)pa*
Receipt of digested sludge for dewatering and temporary storage	*20,000(t)pa*
Cellulose recovery	*1,460(t)pa*

This would suggest that for the head of works activity you are significantly increasing the volume of waste to be accepted, and we also note that you have included new EWC codes that previously were not permitted. If you intend to increase the total tonnage accepted to the head of the works provide the following:

a) **For the increased waste codes and tonnage provide an assessment of the indirect emission to water in line with our guidance Surface water pollution risk assessment for your environmental permit.**

Or alternatively

b) **Provide evidence of the current EWC codes accepted at site in the form of waste transfer notes.**
c) **Provide evidence of the total volume of waste currently accepted to the head of works for 2023, 2024 and 2025.**
d) **Confirm the total volume of waste to be accepted per year at the head of works under existing activity AR13**

Note: It is our intention to permit your site based on existing operations and we will use any evidence provided above to undertake this.

The dewatering of digested cake and the temporary storage of digested cake will be separated as waste activity on any revised permit issued. Therefore, please confirm the below:

e) **The total volume of digested cake to be accepted per year for temporary storage only.**
f) **To demonstrate that this is representative of the process being carried out on site provide evidence of the total volume of digested cake accepted for temporary storage for 2023, 2024 and 2025.**
g) **The total volume of digested cake to be accepted per year for dewatering only.**

h) **To demonstrate that this is representative of the process being carried out on site provide evidence of the total volume of digested cake accepted for dewatering for 2023, 2024 and 2025.**

14) Waste codes

You have provided EWC code tables, Table C3-1bi – Waste accepted for installation to THP ONLY, Table C3-1bii – Waste accepted for Head of the Works import waste activity ONLY and Table C3-1c – Wastes for dewatering waste activity ONLY. However we cannot locate the EWC code tables for the Cellulose recovery plant, or the Anaerobic digestion process.

Update your EWC code tables to clearly identify wastes that will be accepted into the following processes.

a) **S5.4A1(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**
b) **Waste to be accepted at the THP process only**
c) **Digested cake to be accepted for temporary storage only**
d) **Digested cake for dewatering only**
e) **Tankered waste to the head of the works**
f) **Waste to be accepted at the cellulose recovery plant**

Note: We have assumed from your application that not external wastes will be accepted at the LTP and ammonia plant.

15) Secondary containment

The document 'IED Containment Assessment – Risk Identification Report', ADBA assessment and 'Strongford Digesters and Sludge Tank IED Containment Assessment - Proposed Options Report' do not include all relevant tanks and assets that are part of your application. It is also unclear if part of these works have been completed.

a) **Update 'IED Containment Assessment – Risk Identification Report', ADBA assessment and 'Strongford Digesters and Sludge Tank IED Containment Assessment - Proposed Options Report' to include all relevant tanks and assets.**
b) **Where tanks are provided with self bunding or are to be included in the wider containment system clearly identify this in your tank inventory list,**
c) **Provide an update in relation to relation to the secondary containment implementation plan timescales identified in your letter dated 31/07/2026**

16) Emissions to air

You identify within your application emission points A21 and A24 as ventilation systems for the SAS belts and imported sludge screenhouses. We can find no explanation of how these emission points operate or meet BAT14 which requires that "In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate

combination of the techniques which include the containment, collection and treatment of diffuse emissions via appropriate abatement."

a) **For emission point A21 - Ventilation system (SAS belts), and emission point A24 - Ventilation system (Imported Sludge Screenhouse) explains how this meets BAT 14, or an alternative technique will provide an equivalent level of environmental protection.**
b) **If it does not currently meet BAT or provide an alternative approach that will provide an equivalent level of environmental protection, explain how you intend to meet BAT.**

17) Changes to your application

Where you have made changes to your application ensure that all relevant documents submitted as part of your application are updated to provide consistency and no contradicting information

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

You must send us the information and or payment by 21/04/2026.

Pay online by credit or debit card

Pay online at this link www.gov.uk/payments/permitting-applications-installations/permitting-application-payment-installations

You need to create your own reference number. Your reference number must follow this format: PSCAPPINSTXXXXXYYY. It should include the first five letters of the company name (replacing the X's in the above reference number) and a unique numerical identifier (replacing the Y's in the above reference number). Email us the reference number and the payment date so we can track your payment.

If we do not receive this by this deadline we will return your application.

If we receive what is missing by the deadline, we will 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 email 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. This maximum amount we'll retain is capped at £1,613. Further information on charging can be found at: https://www.gov.uk/government/publications/environmental-permits-and-abstraction-licences-tables-of-charges

Note: Our email system has a file size limit of 25MB, if your information exceed this limit you will have to arrange an online file transfer. Please ensure the file transfer link does not have a time limit on it.

If you have any questions, please phone me on 07557 139052 or email sarah.raymond@environment-agency.gov.uk.

Yours sincerely

Sarah Raymond
Principal Permitting Officer – Installations