

Mrs Anita Manns
Mott MacDonald
Mountbatten House
Grosvenor Square
Southampton
SO15 2JU

Our ref: EPR/BP3296SB/V004

Date: 21/11/2024

Dear Anita,

We need more information about your application and underpayment of application charge

Application reference: EPR/BP3296SB/V004

Operator: Southern Water Services Limited

Facility: Ashford Sludge Treatment Centre, Kinneys Lane, Off Canterbury Road, Bybrook Ashford, TN24 9QB

Thank you for your updated application received on 20/12/2023.

Unfortunately the application payment you sent is incorrect. The correct application charge may be as follows, but will be subject to confirmation of the activities being applied for. We have currently calculated this as £28,348. This leaves a potential balance of £28,348 as we cannot locate any payment against this application. Please confirm this fee prior to payment and submission of the information provided below.

Application fee

- £12,586 Substantial variation application fee for - S5.4 (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.
- £1,398.4 – 10% application fee for the liquor treatment plant activity (Note; please confirm treatment type and correct payment).
- Application fee for the variation of the head of works activity – 1.16.12 - £2,379
- Application fee for the physical treatment of non-hazardous waste relating to temporary storage of cake and other wastes (Grit screenings) – 1.16.12 - £3,965
- Application fee for the dewatering activity – 1.16.12 - £793
- Potential surrender of dryer plant - £3,961

Additional Assessments (see below for further details)

- Odour management plan – a fixed charge of £1,246
- Habitats assessment – a fixed charge of £779
- Emissions management plan (BRA) - £1,241

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

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 below questions.

1) Application scope

You application includes reference and information to the WwTW throughout. You are not applying to permit the WwTW, and this will not form part of your permit boundary.

Update your 'Main Supporting Document 790101_MSD_Main_FOR' to reflect the activities you are applying for and remove reference to WwTW which will not form part of this application.

2) Site layout plan

You have provided '790101_SiteLayoutPlan_ASH December 2023' on review of the permit boundary this does not include your current permitted boundary.

Update and resubmit '790101_SiteLayoutPlan_ASH December 2023' to include your full permit boundary. Please note you will need to ensure that all documents that include this site plan are also updated, or remove it and reference the updated plan.

3) National Grid references (NGR)

You national grid reference TR 0213 4330 is outside of your permit boundary.

Update 'Main Supporting Document 790101_MSD_Main_ASH' and any other relevant documents to include a NGR that is inside your permit boundary.

4) Sludge Drying plant

You have advised within your application that "The sludge drying plant and digested sludge import facility on-site have been mothballed" and state that "The variation application is to modernise the conditions of the existing physical treatment activity (A16) as authorised under the permit reference EPR/BP3296SB, where required, and to add the scheduled activity for Anaerobic Digestion to the same permit". On initial review of your application you have not included emission points within your emission point plan, you have not demonstrated how this activity will interact with your existing permitted processes.

- a) Confirm if it is your intention to surrender this activity (not including the land) as part of this permit variation or if you intend to keep this activity.**
- b) Explain using guidance 'Understanding the meaning of regulated facility' (RGN2) (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/964487/LIT_6529.pdf) if this will be a directly associated activity (DAA) to the section 5.4 anaerobic digestion activity.**
- c) If this is a DAA provide an assessment against BAT, and update all relevant documents, site plans, emission points etc to include the activity.**
- d) If this is not a DAA update all relevant documents and site plans (Odour, BRA, LDAR, waste acceptance, site plans, etc to include the drying plant waste activity.**

5) Combined heat and power MWth input

Table 1.1: Combustion Plant Details of document '790101_MSD_Main_ASH December 2023' provides the MWth output and not input.

Update table 1.1 and re-submit document '790101_MSD_Main_ASH December 2023' to include the MWth input.

6) Liquor Treatment Plant

You have identified a Sequencing Batch Reactor for treatment of liquor within your application, but not provided information on how this operates, what equipment is included, treatment capacity etc. If this plant treats over 50 tonnes per day it could be an section 5.4 installation activity. We do not have enough information to be able to assess this as part of your application.

- a) **Update your main supporting document to include a non-technical summary of how the Sequencing Batch Reactor for treatment is operated, what it includes, expected throughput, will be an installation.**
- b) **Provide a BAT assessment if it meets the requirements of an installation activity, and ensure that it is included in all relevant plans and documents.**
- c) **Pay the relevant fee as identified above**

7) Air quality impact assessment

8) Flare operation

BAT 15 states that "BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns) by using both of the techniques given below. "which are identified as providing the correct plant design which includes the provision of a gas recovery system with sufficient capacity, and plant management which includes balancing the gas system and using advanced process control."

You have advised in your application that "This is part of a biogas programme of projects to ensure assets are correctly sized and operate within the requirements. It is accepted that not all BAT requirements are currently met and a plan outlining the measures to be completed to meet BAT will be provided within 6 months of permit issue" This statement does not meet BAT and proposals must be submitted with your application.

- a) **Provide your solution for compliance with BAT 15.**
- b) **Explain if you current flare is monitored and how many hours on average it is operating,**
- c) **If it is operating over then update your air quality impact assessment to include the flare.**

9) Open tanks

On review of aerial photographs we are unclear if you have open tanks within your permit boundary. 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.

- a) Provide a list of all tanks used within the process that you are applying to permit. Confirm the tank volume and whether they are enclosed or open.**
- b) For all open tanks, confirm that you will undertake the following:**
 - i. 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.**
 - ii. 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.**

10) Process flow

The process flow provided in '790101_MSD_Schematics_ASH 25062021.pdf' includes the WwTW which does not form part of your applied for activity, references 'new processes', does not include the waste activities that you have applied for, and includes tanks such as the TSST that are not referenced within your main document. For new processes these must be BAT from the point of permit issue.

- a) Update and resubmit your process flow to clearly show which assets will form part of your permit boundary, and which assets in the process flow are part of the WwTW, ensuring that it includes all processes that you have applied for with tanks names being consistent with your main supporting document.**
- b) Confirm when the processes that you have identified as 'new' were implemented, if these are new update your application to demonstrate how they will meet BAT from point of permit issue.**

11) Form C2.5

We cannot locate form C2.5 and you have applied to add medium combustion plant to your site. Guidance on how to complete this form can be found here.

<https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-c25-vary-to-add-a-new-mcpsg-or-change-an-existing-mcp-or-sg-permit>

Provide a completed C2.5 form.

12) Site Condition report (SCR)

On review of your site condition report this includes activities in the wider WwTW which do not form part of your permit boundary or the activities you have applied for. We can also not located Appendix B. Landmark Envirocheck Report.

- a) Update your SCR to reflect the permit area and application you are applying for, removing activities that will not be included within your permit, or clearly**

identifying activities that that are not part of the permit being applied for.

- b) Provide 'Appendix B. Landmark Envirocheck Report', and all supporting information identified in section 'supporting information'.

13) Missing documents

On review of your application we cannot locate the following documents. (Note your application will not be duly made until these have been checked)

- 790101_MSD_DrainagePlan_ASH
- 790101_MSD_Directors_ASH December 2023
- 790101-MMD-IED-ASH-CA-C-001 –IED Risk Register Ashford
- 790101-MMD-IED-ASH-SIM-M-101 DoNothing(Rainfall Included)
- 790101-MMD-IED-ASH-SIM-M-102 DoNothing(Tank Failure Only)
- 790101-MMD-IED-ASH-SIM-M-103 Option1(Rainfall Included)
- 790101-MMD-IED-ASH-SIM-M-104 Option1(Tank Failure Only)
- 790101-MMD-IED-ASH-SIM-M-105 Option2(Rainfall Included)
- 790101-MMD-IED-ASH-SIM-M-106 Option2(Tank Failure Only)

Provide a copy of the above re-submitted/updated documents

14) Odour Control unit

You have identified that your OCU is a 'wet scrubber'. BAT 34 requires that "Water, acid or alkaline scrubbers are used in combination with a biofilter, thermal oxidation or adsorption on activated carbon."

Explain how you will meet BAT 34 for the wet scrubber.

15) Emissions to air from odour control unit

Under BREF guidance BAT conclusion 8, BAT is to monitor channelled emission to air at agreed frequencies and standards. On review of submission you have identified the monitoring of H₂S and NH₃, however we can see no mention of parameters for the 'Treatment of water-based liquid waste' (TVOC and HCl), or evidence that TVOC and HCl have not been identified as relevant in the waste gas stream. Your activity includes prior to the AD process (the biological treatment of waste) the thickening and dewatering process which is a directly associated activity of the AD process. The odour control units identified serve this directly associated activity. The BAT AELs are appropriate for the activity defined under the BREF as 'Treatment of water-based liquid waste'. 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'. The treatment of this waste in the dewatering and thickening stage and the subsequent emissions to air from connected abatement could be subject to the BAT AELs specified within BAT conclusion 8.

- a) **Confirm that you will characterise emissions from the odour control units in line with BAT 3 to demonstrate if TVOC and HCl are present in the waste gas stream.**

- b) Confirm that if TVOC and HCl are identified as relevant in the waste gas streams that you will monitor these emission in line with BAT requirements.**

16) Secondary containment

BAT conclusion 19 requires that tanks for liquids must be located in a suitable secondary containment, and that impermeable surfacing must be provided. Under guidance Control and monitor emissions for your environmental permit - GOV.UK (www.gov.uk), you must prevent leaks or accidental release of liquids that could cause pollution from tanks, sumps, containers bunds. You have provided '790101_MSD_ContainmentPlan_ASH December 2023' with no written explanation, and '790101_MSD_PermeabilityPlan_ASH December 2023'. We cannot locate your secondary containment solution within your application.

Provide an update secondary containment report that clearly identifies the containment solution proposed, the containment volumes, an explanation of how your proposals meet BAT and CIRIA C736.

Please note that a failure to clearly address this key risk will result in this application being returned.

17) Anaerobic digestion Activity Capacity

Table 6.1 of your main supporting document advises that you are applying for an annual capacity of 297,031m³ per annum, or 700m³ per day for the AD. This volume seems low in relation to the dewatering process and we require further confirmation that this volume is correct. Also your volume must be provided in tones not meters cubed. Provide the following information:

- a) Total tonnage of indigenous and imported wet tones to be received at the sludge treatment centre.**
- b) Total tonnage per annum to be accepted at the anaerobic digesters**
- c) Digester hydraulic retention time**

18) Waste codes accepted

You have provided table 'A.1 Waste imported for anaerobic digestion'. This table includes EWC code 16 10 02 in which you have listed waste types that you intend to accept under this code. (some would not meet the WM3 requirements for 16 10 02). To accept a varied list under 16 10 02 would cause the digester outputs to fall outside of the sludge use in agriculture regulations meaning that your site would be undertaking co-digestion. As such we require further information on the classification of this waste.

- a) Provide the source of 16 10 02 that you intend to accept for anaerobic digestion.**
- b) Explain why accepting 16 10 02 would not be co-digestion.**
- c) If you are applying for co-digestion, update and re-submit your application to reflect co-digestion.**
- d) If you do not require 16 10 02 for acceptance to the anaerobic digestion process confirm that this code is to be removed.**

Table A.2 – please note that we do not permit controlled waste regulation codes, as such these will not be included on any permit issued.

e) Confirm your acceptance of the above

19) Import of grit and screenings from sewer cleaning and the temporary storage of digested sludge cake

You have identified in Table A.2 - 19 08 01, 19 08 02 and 19 09 01 for the import of grit and screenings from sewer cleaning for receipt at skips on-site, and 19 02 06 for raw/digested cake import. (Note: 19 06 06 is digested, 19 02 06 is raw). It is our understanding that these wastes 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.**

20) Dewatering activity

You have identified EWC code 19 06 06 which you have stated is accepted for “intersite transfers of post digested liquid sludge as per EMS480. Common example of this is if centrifuges are offline which necessitates exports of digested liquid. Definition is with reference to RPS231. <https://www.gov.uk/government/publications/waste-codes-for-sewage-sludge-and-sludge-containing-other-materials-rps-231/wastecodes-for-sewage-sludge-and-sludge>.” It is our understanding that these wastes 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 (if less than 50 tonnes per day). 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.**

21) 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, it's possible that waste water from the installation could bypass the WwTW treatment processes and be emitted as a direct discharge to water. It is 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.**
- b) **Provide a description of the buffer storage proposals to control or hold emissions to the event of storm overflow conditions at the WwTW.**
- 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.**

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.

22) Waste acceptance and pre-acceptance

You have advised in 'Southern water – Duty of care' that "There are no specific pre acceptance procedures for sludge imports, they are acceptable for importing to any of Southern Water's 16 permitted Sludge Treatment Centres (STCs)". This does not meet the requirements of BAT 2.

Provide a waste pre-acceptance and acceptance procedure for imported and indigenous sludge. Guidance on what this should include can be located at <https://www.gov.uk/guidance/biological-waste-treatment-appropriate-measures-for-permitted-facilities>.

23) Indirect emission to water

You have identified indirect emissions to water from:

- *Condensate from the gas pipelines and gas storage bag*
- *Boiler blow down to minimize damage from high mineral content water*
- *Drain down of plant*
- *Uncontaminated roof water from buildings.*
- *Run off from impervious surfaces*
- *Domestic facilities (note this would not be permitted as part of the installation)*

- Washwater

This however does not seem to include all emissions such as liquors returning to the head of works. To confirm the WwTW does not form part of your permit boundary, effluent discharged to the head of the works/WwTW is a point source emission to sewer. BAT conclusion 3 requires operators to have an emissions inventory for the effluent. You must identify all emissions and clearly identify where these can be sampled and where they will leave the site boundary.

- a) Update Table 6.3 in '709101_MSD_Main_CAN' to include all emissions.**
- b) Update your emission point plan to ensure all that all indirect emissions to water are included, and clearly explain which emission point includes which waste water stream.**
- c) Provide a written statement with a commitment to undertake the sampling and analysis in line with BAT3.**

24) Existing head of works activity

You have provided table A.3 'wastes to import under a waste activity'. This includes new EWC codes in the form of 16 10 02 and 19 09 06. For existing wastes we would consider these wastes as existing operations and would look to implement an improvement condition to assess the fate and impact of the substances emitted to water. The IC would also be in line with the requirements of 'Non-hazardous and inert waste: appropriate measures for permitted facilities' section 6.4 <https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities/6-emissions-control>.

For waste not currently imported to the head of works we would require an assessment of the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance, and this would not be able to be captured in any improvement condition implemented.

Therefore, please provide:

- a) Evidence that you are currently accepting 16 10 02 and 19 09 06. (Note: This can be a single waste transfer note demonstrating that this waste stream has been accepted at site.)**
- b) If you are not currently accepting the EWC code identified, provide an assessment of the fate and impact on the receiving waters in line with *the Environment Agency's risk assessment guidance*.**
- c) Confirm the EWC codes to be accepted at the head of works and the total volume to be accepted per year.**

25) Head of works In-direct emission point

The head of works waste activity is discharged off site to the Wastewater Treatment Works. Effluent discharged to the head of the works is a point source emission to sewer. The 'Non-hazardous and inert waste: appropriate measures for permitted facilities' requires operators to 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 in order to inform a quantitative risk assessment for existing discharges. For this application 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 [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 the [‘Non-hazardous and inert waste: appropriate measures for permitted facilities’](#)**
- 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) **Provide a revised site plan which identifies the effluent sampling point and emission point for the effluent discharge from the head of works activity.**

Please send the information and payment, quoting the above application reference, to:
Sarah.raymond@environment-agency.gov.uk

Please send the information and payment within 10 working days of this letter. Details of how to pay are given in Part F of the application form.

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

If we do receive the requested information and payment 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 07557 139052 or email sarah.raymond@environment-agency.gov.uk.

Yours sincerely
Sarah Raymond

Senior Permitting Officer - Installations