Notice of request for more information

The Environmental Permitting (England & Wales) Regulations 2016

Thames Water Utilities Limited

Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Application number: EPR/FP3435LA/V006

The Environment Agency, in exercise of its powers under paragraph 4 of Part 1 of Schedule 5 of the above Regulations, requires you to provide the information detailed in the attached schedule. The information is required in order to determine your application for a permit duly made on 10/03/2023.

Send the information by email by 04/07/2023. If we do not receive this information by the date specified then we may treat your application as having been withdrawn or it may be refused. If this happens you may lose your application fee.

Email address:: sarah.raymond@environment-agency.gov.uk

Name	Date
Sarah Raymond	06/06/2023

Authorised on behalf of the Environment Agency

Notes

These notes do not form part of this notice.

Please note that we charge £1,200 where we have to send a third or subsequent information notice in relation to the same issue. We consider this to be the first notice on the issues covered in this notice.

The notes in italics that appear before information requests in the attached schedule do not form part of the notice. The notes are intended to assist you in providing a full response.

Schedule

Section 1 – EWC codes

1) Anaerobic Digestion EWC codes

You have requested the following EWC waste codes for acceptance to be treated in the anaerobic digestion process EWC codes:

- *16 10 02 - Aqueous liquid wastes other than those mentioned in 16 10 01 (comprising but not limited to: Centrate liquor, Final effluent from wastewater treatment works), and*
- *19 08 09 - Grease and oil mixture from oil / water separation containing only edible oil and fats*

According to your process flow diagram, all filtrate and centrates leave the site boundary as an indirect discharge, we cannot locate how/where centrate liquor and final effluent from wastewater treatment works (16 10 02) will be accepted as part of the process.

We would expect the addition of 19 08 09 would cause the digester outputs to fall outside of the sludge use in agriculture regulations and mean that your site would be undertaking co-digestion. As such we require further information on the classification of this waste.

a) **Describe how and where you intend to accept 16 10 02 into the installation activity or confirm the removal of this 16 10 02.**

b) **For code 19 08 09 provide:**

   i. **The source of the waste.**
   ii. **Your understanding of why the acceptance of 19 08 09 would not be co-digestion.**

c) **If you confirm this waste as co-digestion:**

   i. **Either confirm the removal of 19 08 09, or**
   ii. **Provide a non-technical summary and BAT assessment to demonstrate how you will operate the site for co-digestion.**

Section 2 – Emissions to Air

2) Standby Generators

You have requested within your application the consolidation of permit EPR/MB3295YC which includes emission point A11 and A12 (standby generators 1 and 2). You confirmed in an e-mail response dated 30/03/2023 that emission points A11 and A12 do not meet the definition of a directly associated activity (DAA) to activity S5.4 A(1) (b)(i) being applied for, and have agreed to not progress the consolidation of standard rules permit EPR/MB3295YC.

a) **Confirm that you agree not to consolidate permit EPR/MB3295YC**

b) **Update 'Figure 2 Installation Boundary and Air Emission Points' plan to remove A11 and A12.**

c) **Update all relevant document to reflect the removal of emission point A11 and A12.**

Section 3 – Best Available Techniques (BAT)

The Best Available Techniques (BAT) Reference Document for Waste Treatment provides standards to which facilities should comply with. In line with this guidance, we require responses to the following questions:

3) Waste acceptance and pre-acceptance

Under BREF guidance BAT conclusion 2 you must set up and implement a waste characterisation and pre-acceptance procedure and set up and implement waste acceptance procedures. We have reviewed the following procedures:

- *Acceptance of TWUL Inter-site sludge and cake, and*
- *Acceptance of Third-Party Waste Imports*

These are generic and not directly applicable to the site you are applying to permit. Your procedures must reflect the activities being carried out on site. On further review of your procedures these do not meet the requirements of Biological waste treatment: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk). Key areas that require addressing include but are not limited to non-conformance/rejection, sampling and visual assessment.

Provide a waste pre-acceptance and waste acceptance procedure in line with guidance Biological waste treatment: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk) that is specific to the site you are applying to permit.

4) Waste Tracking and Inventory

Under BREF guidance BAT conclusion 2c you must set up and implement a waste tracking system and inventory. In response to this you have advised "Item c is broadly not met, due to the nature of the operations on site. Waste tracking is not undertaken as imported materials are not stored or held separately on site. The imported waste (excluding UWWTD derived waste from the sewer system) is tracked through the pre-acceptance process and to which discharge point it was discharged into the process. Retention times within the process are understood, and digestate outputs are tracked to land via BAS." This response does not meet BAT and you are required to demonstrate how you will meet BAT for the Installation activities that you are applying for. Guidance on tracking can be found in our guidance Biological waste treatment: appropriate measures for permitted facilities - 6. Waste pre-acceptance, acceptance and tracking - Guidance - GOV.UK (www.gov.uk).

a) Explain how you will meet the requirements of BAT conclusion 2c in relation to the implementation of a waste tracking and inventory system.

b) Provide a written description of the waste tracking system in line with BAT conclusion 2a.

5) Emission Points

Under BREF guidance BAT conclusion 3 you must establish and maintain an inventory of wastewater and waste gas streams. On review of your inventory the national grid references (NGR) provided for some of emission points do not match the locations on your emission point plan.

(Note: The inventory was provided in response to question 3g of the Request for further information dated 27/01/2023 and should be updated)

Provide an updated emissions inventory, and if required an updated emission point plan that addresses the below points.

a) **You identified national grid references (NGR) for emission points A13, A14, A15, A17, A18 and A19 that do not match the location on the emission point plan. Provide the correct NGRs for emission point A13, A14, A15, A17, A18 and A19**

6) **Adequate storage capacity**

Under BREF guidance BAT conclusion 4 you must ensure adequate storage capacity. On assessment of your application, you have advised that you will be accepting 600,000(t) per year of indigenous and imported liquid sludge with a HRT (hydraulic retention time) of between 12 and 15 days and an daily capacity of 1,500 tones. We would like to confirm if this volume is correct as your tonnages should be provided in wet tonnes/total tonnes received and it is not clear if this is the case. i.e. Total tonnage of waste received in wet tonnes at the point of acceptance to site (Picket fence thickeners, SAS tank, Raw Sludge tank and Sludge reception tank)

Example AD calculation once dewatered.

27,256/12 = 2,271m^3/d,
2,271m^3/d x 365 days = 829,036m^3 per year digestion volume

a) **Provide calculations to clarify the request for capacity to treat the 600,000(t) of waste requested per year.**

b) **Confirm that your requested total tonnage accepted per year is in wet tonnes/total tonnes.**

7) **Site Plan**

You have provided 'Figure 2 Installation Boundary and Air Emission Points' submitted 10/02/2023. This includes "tanks excluded from permit scope" identified as "VFA balancing tanks". It is unclear why these have been excluded and we require clarification as to how these tanks are not included within the installation process being applied for.

a) **Explain why you have excluded these tanks from your permit boundary.**

b) **If the tanks are to be included, update and resubmit your site plan and all relevant documents affected by this change.**

8) **Appropriate Abatement**

Under BREF guidance BAT conclusion 14d you must collect and direct emissions to an appropriate abatement system. Appropriate abatement systems are outlined in BAT conclusion 34 and 53. On review of your application you confirmed in your response dated 10/02/2023 that "Thames Water commits to covering permitted open tanks at the facility in accordance with the IED and BAT 14" and that "Thames Water will take a risk-based approach, including use of PAS110, to determine our approach to abatement if required for individual tanks at Maple Lodge". While this provides a commitment to abate tanks we require further details on what abatement will be proposed, and that it will meet the requirements of BAT 14, BAT 34 and BAT 53.

a) **Specify the abatement technology that will be implemented in line with BAT 14d and BAT 34.**

b) **Provide a written statement which explains why the abatement plant will be effective at treating point source waste gas and odour emissions.**

c) **Confirm the sources/tanks that the abatement plant will serve.**

9) **Leak Detection and Repair Plan (LDAR)**

Under BREF guidance BAT conclusion 14h you must provide a LDAR programme. On review of 'Leak Detection and Repair Plan (LDAR) – Maple Lodge' dated 1 July 2022 we have identified some inconsistencies with your application which require clarification/amendment. Section 2.1 'identifying Assets' identifies biogas assets that are scheduled for routine proactive inspection. These assets do not match what you have applied for in your permit, or your emission point plan i.e. you have identified two emergency flare stacks, but only one in your application.

a) **Update and resubmit Section 2.1 of your LDAR plan to reflect the biogas assets that will be permitted under this application.**

10) **Gas Recovery System**

Under BREF guidance BAT conclusion 14 you must contain, collect and treat diffuse emissions, storing, treating and handling waste and material that may generate diffuse emissions in enclosed equipment. Under BREF guidance BAT conclusion 15 BAT is to use flaring only for safety reasons or for non-routine operating conditions by ensuring the correct plant design and plant management. In your clarification response received on the 10/03/2023 you stated in relation to the floating roof digesters that "Thames Water commits to implementing an engineering design, which may result in replacement of tanks or reduction in number of applicable tanks. The plan will include any proposed amendments to gas utilisation plant, gas storage infrastructure for the biogas produced during anaerobic digestion, pressure relief valves and gas pipework that may be required." We require further information on how you will ensure the correct plant design to meet BAT.

a) **Explain the solution that will be implemented to prevent the diffuse emissions from the floating roof digesters.**

b) **Explain the solution that will be implemented to provide the provision of a gas recovery system with sufficient capacity and the use of high-integrity relief valves.**

11) **Secondary Containment**

Under BREF guidance BAT conclusion 19 you must undertake techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels with techniques identified as the provision of secondary containment.

On review of 'Maple Lodge STC – Containment Options Report' you have provided two separate containment areas advising a total containment capacity of 15,600m^3 (25% of the total tank volume) however we cannot identify how this volume has been achieved in the containment areas identified. For the secondary digester containment area, you have advised a containment area of 44.2m with a bund wall height of 2m (including freeboard), and for the Primary Digesters and SAS area 2000m^3 plus canal storage area 5,700m^3. Your containment options report should clearly identify the bund volume against the containment requirements.

a) **For the secondary digester area, update and resubmit 'Maple Lodge STC – Containment Options Report' to:**

   i. **Identify the total containment volume of the proposed solution for this area.**

   ii. **Provide evidence that it will contain 25% of the total tank inventory, or 110% of the single largest tank in line with CIRIA 736 requirements.**

iii. **Provide evidence, including spill modelling to clearly show that the containment solution will provide adequate containment in the event of a catastrophic failure.**

b) **For the Primary Digesters and SAS assets containment area, update and resubmit 'Maple Lodge STC – Containment Options Report' to:**

i. **Identify the total containment volume of the proposed solution for this area, including the canal storage area.**

ii. **Provide evidence that it will contain 25% of the total tank inventory, or 110% of the single largest tank in line with CIRIA 736 requirements**

You have identified a 'Canal below ground spill area' within your proposed containment solution. It is not clear that this area will meet the requirements of CIRIA 736 once repurposed.

c) **For the area identified as 'Canal below ground spill retention area' update 'Maple Lodge STC – Containment Options Report' to confirm that this area once repurposed will meet the requirements of CIRIA 736.**

You have identified the volume of the sludge tank and SAS storage tank as 525m^3. This does not match the volumes identified all you Accident Management Plan or non-technical summary.

d) **Update and resubmit 'Maple Lodge STC – Containment Options Report' to include the correct tank volumes for the sludge tank and SAS storage tank and ensure your containment solution has sufficient volume to include any updated tank volumes.**

You have provided 'Figure 3.3 – Primary Digesters and SAS asset area contained model' to demonstrate how your proposed solution will contain volumes in the event of a spill. On review of this it is not clear how the proposed solution would contain spills from the 'Primary Digester tanks 5-8 with only a flow guiding wall in place. You must clearly demonstrate how your proposed containment solution will mitigate the risk from all tanks.

e) **Update and resubmit 'Maple Lodge STC – Containment Options Report' to include spill modelling that demonstrates that your proposed containment solution will mitigate the risk for all relevant tanks.**

f) **Should your proposed containment solution not mitigate the risk from all relevant tanks, update and provide your revised solution to address this.**

You have advised in Section 4.2.1 that jetting distance has been calculated to be up to 9m and this distance is not met due to space constraints. Section 6.3.1 of CIRA 736 sets out the requirements for the consideration of jetting and identified alternatives where bund walls are constricted.

g) **Update and resubmit 'Maple Lodge STC – Containment Options Report' to include solutions for jetting in line with CIRIA 736.**

You have proposed bund walls of 2m. CIRIA 736 (section 6.3.1) addresses the height of bund walls and requires that generally bund walls should not exceed 1.5m in height outlining the reasons why. CIRIA further states that there may be circumstances where it will be necessary to exceed 1.5m, but risk assessments should be completed with the HSE and, if appropriate fire and rescue services consulted.

h) **Confirm that you will undertake risk assessment for all bund walls over 1.5m in line with section 6.3.1 CIRIA 736 requirements.**

You have advised within your containment report that "The rainfall volume has not been included in the design, as according to CIRIA if the critical volume is 25% of the net volume of tanks onsite, no specific allocation for rainfall is required." Section 4.3.3 of CIRIA 736 set out the requirement to include rainfall. We are unclear where you have identified that rainfall should not be included.

i) **Update and resubmit 'Maple Lodge STC – Containment Options Report' containment solution to include rainfall, or clarify under what section in CIRIA 736 you have identified that rainfall should not be included within your solution.**

12) Flood Gates

On review of 'Maple Lodge STC – Containment Options Report' you have in identified in your preferred option the use of flood gates. CIRIA C736 states that for Class 2 and 3 containment, penetrations of the bund should be avoided. Where it is impracticable to provide sufficient containment, you should demonstrate how you have considered remote secondary containment and/or tertiary containment.

Where flood gates are the only option available (due to specific site issues i.e. space constraints) you will need to clearly demonstrate how flood gates will be able to withstand the hydraulic pressure of a catastrophic failure. and demonstrate how they will be managed, maintained, inspected, operated and tested to remain effective and leak proof. Written procedures should also be provided operating techniques to ensure the flood gates are properly sealed when not in use and that there will be no accidental opening of the gates.

a) **Provide an explanation/justification to demonstrate why flood gates are the only viable option demonstrating how you have considered potential remote secondary containment solutions.**

b) **Should flood gates not be the most viable option, update and resubmit 'Maple Lodge STC – Containment Options Report' to provide your preferred secondary containment solution.**

c) **Should your preferred containment solution require the permit boundary to be amended, update and resubmit all relevant site plans to reflect the new site plan.**

d) **Should flood gates be the only option, update and resubmit your 'Maple Lodge STC – Containment Options Report' to include:**

   i. **An explanation of how flood gates will be operated to ensure any spill is contained.**

   ii. **An explanation of how any flood gate will be able to tolerate any outward hydraulic pressure from a catastrophic tank failure.**

   iii. **An explanation of how flood gates will be properly sealed when not in use.**

   iv. **A systematic procedure demonstrating how you will ensure no accidental opening of the flood gates. It should also establish who is responsible for the opening and closing of flood gates during a 24-hour period.**

   v. **An explanation of how long it would take any spill to reach the flood gates.**

   vi. **A description of the leak testing, and frequency of testing that would be carried out on the flood gates.**

vii. **A maintenance/inspection regime that would be implemented to ensure that any flood gates remain effective for the lifetime of their operation.**

13) Waste water emissions during storm overflow conditions at the WwTW

Routine emissions to the WwTW from the installation will be controlled via monitored emissions as an indirect discharge (as defined in the Waste Treatment BREF). However, as WwTW periodically discharge sewage during storm conditions, it's possible that wastewater 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 wastewater from the installation from bypassing the WwTW treatment processes directly to surface water during storm overflow conditions.

a) **Provide written procedures that describe the site's contingency arrangements to prevent digestate and process 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 in 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.

14) Bioaerosol Risk assessment (BRA)

You provided in response to the request for further information (RFI) dated 27/02/2023 an updated 'Maple Lodge STC Bioaerosol Risk Assessment' (BRA). On review of this document, we require some points of further clarification.

Table 1: Point Source emissions to air includes air emissions that have been removed from your application. (A6 and A7 Biogas flare, and A11 and A12 standby Engines 1 and 2 which you have confirmed are not DAA's to the installation activity being applied for)

a) **Update 'Table 1' of your BRA to include only the emission points that you have applied to be permitted.**

b) **Specify if the Biofilter identified in emission point A10 is an open or closed biofilter.**

Section 4 – Odour Management Plan

Odour Management plans should be completed in line with guidance Environmental permitting: H4 odour management and *Best Available Techniques (BAT) Reference Document for Waste Treatment. Revise the OMP addressing the questions below:*

15) Wind Rose

Under H4 guidance wind direction should be taken into consideration. On assessment of your OMP section 2.3 you have taken into consideration wind direction, but the data is from 2019 only and it is not clear how this is representative.

Update and resubmit your OMP to include a representative wind rose and reference data.

16) Activity Description

You have provided section 2.5.3 'Sludge Treatment Centre Permit Activities' this advises that you have two ground mounted flares. It is our understanding that this is not the case anymore. You have also applied for activities to import waste to the head of the works and to import and temporarily store cake from third party sites as part of your application. Your OMP should reflect the activities you are applying to carry out.

Update and resubmit your OMP to reflect and include all activities you are applying to carry out. This should include all activities in relation to:

- **The S5.4 A(1)(b)(i) for the recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day.**
- **The physical treatment of non-hazardous waste relating to Table C3-1b(iii): Waste accepted for temporary storage and transfer**
- **The physical treatment of non-hazardous waste relating to table Table C3-1b(ii): Waste accepted at the head of works import point.**

17) Odour Risk Assessment

You have identified in section 4.1 an 'Odour Risk Assessment' as Appendix 1 of your OMP however this has not been provided.

Provide Appendix 1 'Odour Risk Assessment'.

18) Inventory of Odorous Material

Under H4 guidance your OMP must include an inventory, with descriptions and quantities, of all potentially odorous solid, liquid and gaseous materials held on site. On assessment of your OMP you have provided 'Table 4.1 Odorous materials for sludge treatment centre permit' this does not include the raw materials you have identified as being used as part of your process.

Update and resubmit table 4.1 of your OMP to include raw materials used within the process and ensure that potential odour from raw materials is addressed within your OMP.

19) OCU/abatement system effectiveness

Under H4 odour management guidance you need to demonstrate you have assessed your odorous substances emissions and have procedures in place to manage your control measures to ensure they are effective. On assessment of your OMP you have not advised any process parameter monitoring for odour control.

For the OCU identified as emission point A10, update and resubmit your OMP to describe how you will control the process and maintain process parameters to ensure effectiveness. For each abatement plant, support your description addressing the following points:

a) **Optimum flow rate through the system to allow for effective treatment.**

b) **Adsorption material type and frequency of / triggers for replacement.**

c) **The monitoring techniques of process controls to ensure effective operation.**

d) **The trigger levels/ranges for action if processes monitoring parameters are breached/ outside optimal parameters.**

e) **Odorous components in the gas stream and concentrations of emissions.**

f) **Physical properties of the air stream at point of control i.e. humidity, optimum temperature, PH for effective odour control.**

g) **Based on the above information provided, explain why the abatement system has sufficient capacity and is appropriately designed to effectively treat the odorous air stream(s).**

20) Monitoring

H4 guidance states that appropriate monitoring must be undertaken for every stage of process control (i.e., emissions, dispersion and impacts). The interpretation of monitoring results should be considered in advance and, where appropriate, monitoring trigger values should be specified for the implementation of contingency measures. You have provided Table 4.3 and 4.5 in your OMP which describes specific odour management tasks, but does not include trigger for action, or timescales for remediation. Section 4.4 'routine monitoring also provides monitoring but no trigger levels for action, or the action to be carried out if trigger levels are reached. You have also stated that "Odour monitoring is carried out following receipt of an odour complaint. See section 6.3 Investigation a complaint for full details. Should an influx of odour complaints be received, the need for proactive monitoring will be assessed." BAT conclusion 12 requires that you have in place a protocol for conducting monitoring. Monitoring only in the event of an odour complaint would not meet BAT.

Submit a revised OMP which updates table 4.3 and 4.6 of your OMP to:

a) **Explain for each odorous activity identified in the OMP what process parameters (e.g. temperature, flow concentrations, storage durations and amounts) will be monitored and what triggers (e.g. max threshold above which odour will be an issue) are used to ensure odour on site is minimised.**

b) **Outline the actions to be taken if the processes identified in the OMP are outside their optimum process parameters, or trigger levels are not met.**

c) **Include time scales for rectification of trigger actions identified, and responsibilities for who will carry out the actions identified.**

21) Sniff Testing

Section 4.4 of your OMP provides your monitoring process. We cannot locate a sniff test procedure in line with H4 requirements, you have not provided your odour complaint form to record sniff testing results, you have not provided a frequency of sniff testing or how the sniff testing will be carried out using what method, or by who. No mention of how you have taken into account the effectiveness of sniff testing has been provided. As such you have not met BAT 12 requirements.

Submit a revised Odour Management Plan which:

a) **Includes how you will carry out sniff testing as a monitoring method, demonstrating that your methodology is complaint with H4 odour management guidance.**

b) **Provides a written explanation of how you have considered the effectiveness of sniff testing in line with H4 guidance i.e., preventing adaptation/desensitisation to odour.**

Section 4 – Head of works

22) Waste activity for the head of works

Under guidance https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities/6-emissions-control you must assess the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance. On review of your proposal for acceptance of waste to the head of works you have not included an emission point for the discharge to the head of the works, or assessed the fate and impact of substances discharged to the head of the works.

It is unclear within your application which waste codes you are currently accepting, and which codes will be accepted in the future for the head of works activity. (Note: EWC codes that are currently being imported to Thames Water's head of works we will consider as existing operations and would look to implement an improvement condition (IC) to assess the fate of impact of the substances emitted to water in line with the improvement condition provided previously. 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 Thames Water's head of works where you have not assessed 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 we will be unable to permit these EWC codes unless you provide an assessment of the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance.

a) **Submit an updated 'Figure 2 Installation Boundary and Air Emission Points' to include an emission and sampling point for emissions returned to the head of the works as a result of the acceptance of waste to the head of works (Table C3-1b(ii): waste accepted at the head of the works import point).**

b) **Provide a written statement with a commitment to undertake the sampling and analysis in line with Environment Agencies Risk assessment guidance for the wastewaters discharged to the head of works emission point.**

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 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)) or alternatively confirm your acceptance of the attached draft improvement condition.**

e) **For all waste codes requested for acceptance at the head of works, confirm for each code if they are currently being accepted.**

f) **For codes not currently accepted to the HoW provide an assessment of the fate and impact of the substances emitted to water and sewer following the Environment Agency's risk assessment guidance, or confirm that these codes are removed from your application.**

23) Controlled Waste Regulation EWC codes

You have identified EWC codes 19 02 06, 19 06 06, 19 08 05, 19 12 12, 20 03 04 and 20 03 06 as required to be accepted to the head of works which can be accepted without a permit under the controlled waste regulations.

- *Codes 19 02 06, 19 06 06, 19 12 12 can be accepted at the head of works without a permit as long as it is sewage sludge only.*
- *Code 19 08 05 can be accepted at the head of work without a permit as this is raw untreated sludge.*
- *Code 20 03 04 can be accepted to the head of the works without a permit as this is septic tanks sludge.*
- *Code 20 03 06 04 can be accepted to the head of the works without a permit providing it is simply sewage to enable cleaning/repair. Not suitable is fatberg material.*

As such we would not permit these waste types as they can be accepted without a permit.

a) Confirm the removal of codes 19 02 06, 19 06 06, 19 08 05, 19 12 12, 20 03 04 and 20 03 06, or

b) Provide a clear explanation of the source, and why they do not fall under the controlled waste regulations.

24) Waste Accepted at the Head if works

You have identified EWC codes 19 06 99, 19 09 02, 19 09 03, 19 09 06 and 19 13 08 for acceptance at the head of works. These wastes could be high in suspended solids, and/or not suitable for biological treatment at the downstream WwTW. We require more information detailing what you expect these wastes to consist of, both in terms of primary characterisation (sludge only, liquid etc.), potential contaminants (plastics, metals, etc.) and how these waste types are likely to have been generated at source. You will need to consider if they have the potential to contain components that have an inhibitory effect on the biological process. Please note we will not include wastes that cannot be demonstrated as suitable.

For EWC codes identified as 19 06 99, 19 09 02, 19 09 03, 19 09 06 and 19 13 08:

a) Provide an explanation of the how they will be generated at source.

b) Confirm if the waste is a solid or liquid.

c) Using the Framework for Assessing Suitability of Wastes Going to Anaerobic Digestion, Composting and Biological Treatment – Framework Guidance note, July 2013, demonstrate that the waste identified is suitable for biological treatment. You will need to do this assessment for each waste code.

d) Confirm that you will remove the relevant EWC code following the above assessment should it be unsuitable for biological treatment.

25) HoW Annex I (D codes) and Annex II (R codes) and descriptions

You have identified in your revised table C3-1a that you are requesting annex I (D codes) and descriptions including:

- *D9: Physico-chemical treatment of waste not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12*
- *D15: Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced)*

On review of your application we can see no information explaining the physico-chemical treatment that will take place for waste accepted to the head of works, and as such would require further justification to include this code. We would also request the consideration of code D13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 with evidence to demonstrate why this would or would not be applicable

Confirm the Annex I (D codes) and descriptions to be used for waste accepted at the head of works, and include an explanation for each D code on how it is applicable.

Section 5 – Temporary Storage of Waste

Guidance Biological Waste Treatment: Appropriate measures for permitted facilities standards to which facilities should comply with. In line with this guidance, we require responses to the following questions:

26) Storage of Cake Prior to Transfer off Site.

Section 4.3 of guidance https://www.gov.uk/guidance/biological-waste-treatment-appropriate-measures-for-permitted-facilities/1-when-appropriate-measures-apply requires that you must determine the actual physical capacity needed to manage, treat and store waste on your site without causing pollution. You application has requested to accept at the site, up to 10,000(t)pa for the temporary storage of EWC code 19 02 06 (sludges from physico/chemical treatment other than those mentioned in 19 02 05 (sewage sludge only)). You have stated that cake (19 02 06) will be imported to site for the 'shortest time practical' and checks will be undertaken to confirm if material complies with the requirements of SUiAR and BAS providing limited information on how your will manage this activity. We therefore require the following information in line with the above guidance. This is a bespoke waste operation and must be supported with a demonstration that all relevant appropriate measures will be implemented.

a) Provide an assessment of this proposed bespoke waste operation in line with guidance Non-hazardous and inert waste: appropriate measures for permitted facilities - Guidance - GOV.UK (www.gov.uk).

b) Confirm how you will keep any cake received for temporary storage separate from cake produced as part of activity S5.4 A(1)(b)(i) for the recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day.

c) Confirm the site location for cake received for temporary storage.

d) Specify the maximum volume to be held on site at any one time.

e) Specify the maximum storage duration of cake received for temporary storage.

f) Explain your rejection procedures for cake received at site that does not meet SUiAR or BAS.

g) Provide the location of the quarantine bay and explain how quarantine material will be kept separate from material produced as part of activity S5.4 A(1)(b)(i) for the

recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 100 tonnes per day.

h) **Explain how you will manage diffuse emissions to air from the handling of cake in line with section 11.8 of guidance https://www.gov.uk/guidance/biological-waste-treatment-appropriate-measures-for-permitted-facilities/11-emissions-control**

END OF NOTICE