

Permitting Decisions - Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Dunton Recycling Centre operated by KSD Recycled Aggregates Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/GB3635RB/V004.

We consider in reaching this decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

Permit Review

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits.

Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this activity and varied the notice to make a number of changes to reflect relevant standards and current best practice. These changes principally relate to the implementation of our technical guidance <u>Nonhazardous and inert waste: appropriate measures for permitted facilities</u> and the relevant requirements of the <u>BAT Conclusions for Waste Incineration</u>, which have been incorporated into our guidance.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator against our technical guidance.

As well as considering the review of the operating techniques used by the operator, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue.

Purpose of this document

This decision document provides a record of the decision-making process. It:

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision making process in the <u>decision considerations</u> section to show how the main relevant factors have been taken into account;
- highlights key issues in the determination.

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

Key issues of the decision

Environment Agency led variation – permit review

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires us to review conditions in permits issued and to ensure that the permit delivers compliance with relevant standards. This must be within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Incineration (the BATC) was published on 12 November 2019 following a European Union wide review of BAT, implementing decision (EU) 2019/2010. Relevant existing facilities must be in compliance with the BAT Conclusions within 4 years.

Our technical guidance <u>Non-hazardous and inert waste: appropriate measures</u> <u>for permitted facilities</u> explains the standards that are relevant for regulated facilities with an environmental permit to treat or transfer non-hazardous wastes. We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 14/04/2023. The notice required the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards in the Waste Incineration BAT Conclusions.

The notice required the operator to:

- 1. Confirm whether or not they are currently complying with the standards described in the relevant BAT Conclusion reference document providing a description of how they are meeting the standard.
- 2. Describe how and when they intend to comply with those standards that they are not meeting, as identified in paragraph 1, to ensure that they are fully compliant with relevant BAT Conclusions by 03/12/2023, being the date, referred to as the 'compliance date'.
- 3. Confirm:
 - a) If they intend to cease operating any activity which would be in breach of the relevant new BAT Conclusion (BATC) after the compliance date, and the date by which they intend to cease operation;

or,

- b) if they intend to continue operating in a manner which would fail to comply with the relevant new BAT Conclusion after the compliance date, what their justification for being allowed to do so is; and by what date they intend to come into full compliance, or a description of alternative measures to be adopted that will provide equivalent environmental protection.
- c) Where there is a BAT-Associated Emission Level (BAT-AEL) specified in the BAT conclusion, with which they will not comply with by the compliance date and they wish to continue operating, they should request a derogation. To do that, they must provide sufficient technical and commercial information to demonstrate that achieving these emissions levels would lead to disproportionately higher costs, compared to the environmental benefits, due to:
 - i. the geographical location of their installation; or
 - ii. the local environmental conditions around their installation; or
 - iii. the technical characteristics of their installation.

The operator is required to explain which of these criteria is relevant and why, refer to the relevant Defra's published guidance. Their justification of cost and benefits should use a methodology equivalent to that outlined in the Environment Agency Guidance risk assessment guidance.

4. Complete the WI BATCs operator returns spreadsheet and the accompanying tab titled "IBA AMs".

The <u>Non-hazardous and inert waste: appropriate measures for permitted facilities</u> guidance was published on 12 July 2021. This technical guidance explains the standards that are relevant to regulated facilities with an environmental permit to store, treat or transfer non-hazardous waste, providing relevant standards (appropriate measures) for those sites. The operators were notified about the new guidance and were advised to consider them in their submissions.

The standards described in our technical guidance are split into chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

Our assessment of the responses received from the operator are summarised in Table 1.

The Regulation 61 Notice required the operator to confirm whether they could comply with the standards described in <u>BAT Conclusions for Waste Incineration</u>. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

- CC Currently Compliant
- FC Compliant in the future (through improvement conditions set in permit)
- NC Not Compliant; Improvement/New Condition included.

Regulation 61 Response

The Regulation 61 notice response from the operator was received on 19/07/2023.

We considered that the Regulation 61 notice response did not contain sufficient details for us to commence the determination of the permit review and we needed further information to complete the permit review assessment.

These responses are available on our public register.

The documents submitted by the operator which now form part of the operating techniques that the operator must implement are specified in table S1.2 in the environmental permit. These include:

 Document titled 'BATC Return Spreadsheet', 'IBA Process Flow Chart & Plant List' and 'Site Plan 2018'.

- Email containing response to questions 1 11 of the RFI, including the documents titled 'Site Plan Dunton' and 'EMS Dunton 2024'.
- Site Layout Plan, drawing number LD162/DN/005, dated June 2024.
- Email providing details about the waste operation activities, EWC codes, storage capacity of the IBAA and IBAA/other aggregates

Changes to the permit conditions

Following the assessment of the information provided by the operator in response to the Regulation 61 Notice, summarised in table 1 and the additional information received in response to the request further information, we have made the following changes to the permit conditions:

- Conditions 2.3.1 and 2.3.2 have been added because they are relevant installation conditions. The follow-on condition has been renumbered.
- Condition 2.3.5 of the previous variation has been deleted because the site is not accepting hazardous waste.
- Conditions 2.4.1 and 2.4.2 have been added to implement the improvement programmes associated with this variation.
- Condition 3.5.1 (a) of the previous variation has been deleted because there is no point source emission to surface water and/or sewer. Conditions 3.5.1 (a) and (b) have been added to implement the process and ambient air monitoring requirements introduced by this variation.
- Conditions 3.5.4 has been amended to replace the point source emission to sewer with the process monitoring table as Table S3.1 and add Table S3.2 for ambient air monitoring.
- Conditions 3.6.1 and 3.6.2 have been deleted because the operator is not storing combustible waste.
- Conditions 4.2.2 (b) and (c) have been amended to refer to the appropriate tables.
- Condition 4.2.3 has been added because it is a relevant installation condition. The follow-on conditions have been renumbered.
- Table S1.1 as referenced in Condition 2.1.1 has been amended to clearly define the activities that are undertaken at the site, to apply relevant restrictions to them and to add activity AR3.
- Table S1.2 as referenced in Conditions 2.3.1 and 2.3.2 has been added to incorporate operating technique documents submitted in response to the Regulation 61 Notice.
- Table S1.3 as referenced in Condition 2.4.1 has been added to implement the improvement conditions IC1 – IC7.
- Table S3.1 of the previous variation has been deleted because there is no point source emission to surface water and/or sewer.

- Table S3.1 as referenced in Conditions 3.5.1 (a) and 3.5.4 has been added for process monitoring of moisture content.
- Table S3.2 as referenced in Conditions 3.5.1 (b) and 3.5.4 has been added for ambient air monitoring of dust emissions.
- Table S4.1 as referenced in Conditions 4.2.3 (b) and (c) has been added to implement reporting of process and ambient air monitoring. The followon tables have been renumbered.
- Table S4.4 as referenced in Conditions 4.2.2 (c) and 4.2.3 (b) has been amended to include relevant forms.
- Schedule 6 as referenced in condition 4.4.1 has been amended by adding additional interpretations that are relevant to the changes made as a result of this variation and by updating/deleting some of the existing interpretations.

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
General management appropriate measures and brief non-technical description of the regulated facility	СС	The main installation is for the treatment of non-hazardous Incinerator Bottom Ash (IBA) by washing in a closed loop wet process to produce an Incinerator Bottom Ash Aggregate (IBAA), including metal extraction and separation of ferrous and non-ferrous metal. The installation facility is permitted to accept up to 100,000 tonnes of IBA per year and to carry out the following activities:
		 S5.4 A(1) (b) (iii) - Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving treatment of slags and ashes.
		 Storage of waste prior to treatment.
		 Storage of wastes recovered from the IBA treatment processes.
		 Collection and storage of process water in a storage tank.
		 Collection and storage of site surface water via a sump in a storage tank.
		 Storage of raw materials including fuel and lubrication oils.
		Unprocessed IBA received at the site is stored outside up to 4 weeks in separate bays and batches under a traffic light system. Red bays are for IBA that has come in from a specific EfW plant. The incoming IBA batch is held pending the outcome of the test results to ascertain whether the waste is hazardous or non-hazardous. If the results show that the waste is non-hazardous, the bays are signed off as green and are ready to be processed on site. If the test results come back as hazardous, the batch is signed off as brown pending its removal from site to an authorised landfill. The accepted IBA stockpile is processed through a washing plant. The IBA is fed into a rinser, and the wet process separates the fines (less than or equal to 4mm size fraction) from the aggregate to produce IBAA. The material goes through metal separation processes and then the IBAA is screened to fractions and stockpile for reuse in the construction industry.
		IBA pending processing is stored on an impermeable surface. The surface water runoff from the IBA storage area is captured in a separate drain, which runs to a water storage tank housed within the IBA plant. A French drain runs under the plant from the manhole within IBA storage area to a sump located within the IBA plant. Water from the sump is then pumped into a steel storage tank that sits on an impermeable concrete pad and has a capacity to hold 40,000 litres of water. The IBA treatment

Table 1 – Summary of our assessment of the operator's Reg 61 response

		 process is a closed loop system. Water generated from the process is collected and re-used in the washing process. In addition to the IBA treatment activities, the site is also permitted to undertake physical treatment of up to 400,000 tonnes per year of non-hazardous waste. The treatment operations consist of sorting, separation, screening, crushing, washing and blending of waste to produce soil, soil substitutes and secondary aggregates for re-use in the construction industry in accordance with the WRAP Quality Protocol. Surface water runoff from the soil/aggregates production area is captured in a concrete wall lagoon and reused in the process. All activities are carried out in the open. There are no channelled emissions to air or discharges from the site to sewer or controlled waters.
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	 The operator has waste pre-acceptance, acceptance and rejection procedures which are included in the document titled <i>'EMS Dunton 2024'</i>. The operator confirm that they are adhering to the test and release protocols set out in the ESA IBA characterisation. IBA is stored pending test results and only released once written confirmation - including test results are provided to the operator by their clients. IBA imported to site is held in separate bays in batches under a traffic light system. Red bays are for IBA that has come in from a specific EfW plant, the batch is complete, and the material is to be held pending test results. If the results come back as non-hazardous then the bays are signed as green and are able to be processed on site. If the test results come back as hazardous then the batch is signed off as brown pending removal from site to landfill. The weighbridge operator is responsible for: Ensuring waste booked in at the weighbridge is done so in accordance with the waste acceptance procedure. Any incidents of non-compliance are handled in accordance with the non-compliance procedure and all incidents logged in the site dairy. Recording the daily weather conditions. Ensuring any waste leaving the site has a duly completed waste transfer accompanying it. Requesting all vehicles leaving the site to sheet their load. Completion of site documentation and records.

		Plant operatives are responsible for:
		• Checking the material tipped in their waste processing area is compliant with the site acceptance criteria and for actioning non-compliance procedures where necessary.
Waste storage, segregation and handling appropriate measures	FC	Waste processed on site consists of dry inert and non-hazardous materials that are suitable for reprocessing into recycled aggregates or soil. The permitted annual throughput of these types of waste materials is 400000 tonnes of inert and 100000 of IBA. Waste imported to site for processing is not stored for longer than 6 months and is generally processed within 2 months of being unloaded on site.
		No more than 75,000 tonnes of waste imported onto site, pending treatment, shall be stored on site at any one time. Processed waste at any one time, would not exceed 25k tonnes for IBAA and 75k tonnes total for both IBAA and recycled aggregates.
		IBA storage and treatment operations are all undertaken on impermeable surfaces and sealed drainage.
		Currently the crushing and screening operations for the inert waste are undertaken on hard standing but are in the process of being relocated on to the concrete pad – which is an impermeable surface. This will be completed well before the timescales set out in table S1.3 of the permit.
		We have included Improvement Conditions IC6 and IC7 in table S1.3 which require the operator to carry out an infrastructure improvement plan and to cover any area where the waste operation activities are being undertaken with an impermeable surface, sealed drainage and containment systems.
Waste treatment appropriate measures	FC	The accepted IBA stockpile is processed through a washing plant. The IBA is fed into a rinser, and the wet process separates the fines (less than or equal to 4mm size fraction) from the aggregate to produce IBAA. The material goes through metal separation processes and then the IBAA is screened to fractions and stockpiled for reuse in the construction industry.
		Given that all of the treatment activities are currently being undertaken outside, we have included Improvement Conditions IC2 and IC3 which require the operator to carry out a detailed review of the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the <u>Non-hazardous and inert waste: appropriate</u> <u>measures for permitted facilities</u> guidance, <u>Waste Incineration BAT Conclusions</u> and to install a new building or enclosure around the treatment operations currently taking place outside to prevent and/or reduce fugitive emissions of dust, odour and noise.

Emissions control appropriate measures	FC	The operator indicated that there are no channelled emissions to air and no discharge of wastewater from site to sewer or controlled waters.
		Fugitive emissions to air and groundwater are likely due to the nature of the waste and the current state of the site operations and infrastructure.
		We have included Improvement Conditions IC1, IC2 and IC3 which require the operator to submit a Dust Management Plan (DMP), and to carry out a detailed review of the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the <u>Non-hazardous and inert waste: appropriate measures for permitted facilities</u> guidance, <u>Waste Incineration BAT Conclusions</u> and to install a new building or enclosure around the treatment operations currently taking place outside.
		We have also included Improvement Conditions IC6 and IC7 in table S1.3 which require the operator to carry out an infrastructure improvement plan and to cover any area where the waste operation activities are being undertaken with an impermeable surface, sealed drainage and containment systems.
		Improvement Conditions IC4 and IC5 require the operator to review and ascertain the state of the site areas that are currently covered by an impermeable surface and sealed drainage systems and determine if the design and construction of the impermeable surface and sealed drainage systems are in line with or equivalent to the standards required in CIRIA Report C736.
Emissions monitoring and limits appropriate measures	СС	The operator indicated that there are no channelled emissions to air and no discharge of wastewater from site to sewer or controlled waters. As a result, we have not included any channelled emission monitoring or BAT AEL limits in the permit.
		Conditions on site are monitored throughout the day by the site manager and the site foreman. The prevailing weather conditions are also closely monitored to identify the need for dust suppression measures to be action. The rate of dust suppression is adjusted to suit the conditions observed, ensuring the site water coverage is sufficient to prevent fugitive emissions to air. In extreme circumstances, if there is any evidence of significant amounts of dust, all production activities will stop until the affected area has been doused with sufficient water preventing emissions to air. In addition to dust prevention monitoring the site boundary will be checked daily to ensure material is not causing a nuisance. If a complaint is received an Incident Report form will be completed. Any corrective and preventative actions will be recorded.
		Although the operator stated that they have a DMP at the site, the DMP is not detailed and has not been assessed or approved by the Environment Agency. We have therefore included Improvement Conditions IC1 which requires the operator to submit a DMP to the Environment Agency for approval.

Raw Material, Process	СС	Raw materials and water are not being used in the treatment process, but water generated from the
efficiency and Water Use		site is being used on site for dust emission control. The operator is complying with appropriate
appropriate measures		measures associated with process efficiency and water use.

Appropriate measures	Compliance status	Assessment of the installation's compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator
BAT 1 - EMS	CC	The operator confirmed that the site operates an EMS that complies with all points listed in BAT 1.
BAT 3 - monitoring of specified process parameters	NA	The operator stated that process monitoring is carried out in line with BAT 3 requirements; however, we consider that this BAT is not applicable given that there are no discharges from the site to sewer or controlled waters.
BAT 6 - monitor emissions to water from FGC and/or bottom ash treatment with at least the frequency given below and in accordance with EN standards	NA	The operator stated that there are no discharges from site to sewer or controlled waters. They indicated that the BAT-AELs are therefore, not applicable to the site's operation because they are only applied to emissions to water at the point where the emission leaves the installation.
BAT 10 - quality output management system part of EMS where bottom ash treatment is carried out	СС	The operator indicated that they have a quality management system in place at the site.
BAT 12 - in order to reduce the environmental risks associated with the reception, handling and storage of waste, BAT is to use both of the techniques listed in the corresponding table	FC	Although the operator stated that measures in line with BAT 12 are in place, we have included improvement Conditions IC4 and IC5 require the operator to review and ascertain the state of the site areas that are currently covered by an impermeable surface and sealed drainage systems and determine if the design and construction of the impermeable surface and sealed drainage systems are in line with or equivalent to the standards required in CIRIA Report C736. We have also included Improvement Conditions IC6 and IC7 in table S1.3 which require the
		operator to provide an infrastructure improvement plan and to cover any area where the waste operation activities are being undertaken with an impermeable surface, sealed drainage and containment systems.

Table 1 – Summary of our assessment of the operator's Reg. 61 response

BAT 23 - in order to prevent or reduce diffuse dust emissions to air from the treatment of slags and bottom ashes, BAT is to include in the environmental management system (see BAT 1) the diffuse dust emissions management features	FC	The operator confirmed that they have an EMS which includes the features listed under BAT 23. To ensure that diffused dust emissions from all site operations are reviewed and considered, we have included Improvement Conditions IC1, IC2 and IC3 which require the operator to submit a Dust Management Plan (DMP), and to carry out a detailed review of the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the <u>Non-hazardous and inert waste: appropriate measures for permitted facilities</u> guidance, <u>Waste Incineration BAT Conclusions</u> and to install a new building or enclosure around the treatment operations currently taking place outside.
BAT 24 - In order to prevent or reduce diffuse dust emissions to air from the treatment of slags and bottom ashes, BAT is to use an appropriate combination of the techniques in the corresponding table	FC	The operator confirmed that the following measures listed in the table of BAT 24 are in use at the site: b) limit height of discharge, c) protect stockpiles against prevailing wind, d) water sprays, e) optimise moisture content. The measures outlined in sub-section f) of the BAT 24 table (operate under sub-atmospheric pressure) is not applicable given that the IBA treatment is a wet process. Based on our knowledge of the site and to address the requirement of sub-section a), we have included Improvement Conditions IC1, IC2 and IC3 which require the operator to submit a Dust Management Plan (DMP), and to carry out a detailed review of the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the <u>Non-hazardous and inert waste: appropriate measures for permitted facilities</u> guidance, <u>Waste Incineration BAT Conclusions</u> and to install a new building or enclosure around the treatment operations currently taking place outside.
BAT 26 - use a bag filter if treating air from treatment of IBA under sub-atmospheric conditions.	NA	The operator stated that this BAT is not applicable because IBA is not being treated under sub- atmospheric conditions. The treatment process is a wet process and there is no need for an extraction equipment.
BAT 32 - in order to prevent the contamination of uncontaminated water, to reduce emissions to water, and to increase resource efficiency, BAT is to segregate wastewater streams and to treat them separately, depending on their characteristics	СС	The operator stated that the measures listed under BAT 32 are used. IBA pending processing is stored on an impermeable hard standing with any surface water captured and running to a separate drain, which runs to a separate water storage tank housed within the IBA plant and is reused in the processing of IBA. The IBA treatment process is a closed loop system, with very little wastewater being generated. Any surface water generated by the processing plant drains to the water collection tank and the waste water is reused in the process.

		A French drain runs under the plant from the manhole within IBA storage area to a sump located within the IBA plant, water from the sump is then pumped into a steel storage tank that sits on an impermeable concrete pad and has a capacity to hold 40,000 litres of water. Any surface water is drains to this French drain, which is completely separate and isolated from the rest of the site drainage system. There are no discharges from the site to sewer or controlled waters. The operator confirmed that they will arrange for wastewater to be taken off site for disposal/treatment at a suitably licensed facility should there be a need - for example in circumstances where IBA wastewater storage tanks are at capacity.
BAT 34 - in order to reduce emissions to water from FGC and/or from the storage and treatment of slags and bottom ashes, BAT is to use an appropriate combination of the techniques in the corresponding table, and to use secondary techniques as close as possible to the source in order to avoid dilution	NA	There are no discharges from the site to sewer or controlled waters. Wastewater from the site is captured and reused at the site. The operator confirmed that they will arrange for wastewater to be taken off site for disposal/treatment at a suitably licensed facility should there be a need - for example in circumstances where IBA wastewater storage tanks are at capacity.
BAT 36 - in order to increase resource efficiency for the treatment of slags and bottom ashes, BAT is to use an appropriate combination of the techniques in the corresponding table based on a risk assessment depending on the hazardous properties of the slags and bottom ashes.	CC	The following measures listed in the table of BAT 36 are in use at the site: a) screening and sieving, d) magnetic separation, e) ageing and f) washing . The operator stated that they are not using technique b) crushing and c) aeraulic separation at the site.
BAT 37 - in order to prevent or, where that is not practicable, to reduce noise emissions, BAT is to use one or a combination of the techniques in the corresponding table	CC	The operator confirmed that they are using all techniques listed in this BAT: a) appropriate location of equipment and buildings, b) operational, c) low-noise equipment and d) noise attenuation measures. The operator also confirmed that they have inspection and maintenance procedures for plant and equipment which is operated by trained and experienced staff. They clarified that no operations are carried out at night and where available they have retrofitted noise reducers to plant.

Re In	g. 61 Request for Further formation (RFI)	Assessment of response received
1. - - - -	Provide a detailed and an annotated site layout plan(s) that shows: the locations of your waste storage and treatment activities, including screeners, crusher, and washing plants associated with IBA and soil/aggregate treatment operations. the extent of the impermeable surface. the locations of emission control measures. the location and direction of flow of your drainage including the emission and monitoring points. the locations of nearby receptors.	In the response received on the 28/06/2024, the operator provided a Site Layout Plan, drawing number ' <i>LD162-DN-005</i> ', dated June 2024 which was considered detailed and sufficient.
2.	Provide details of your maximum storage capacities at any one time for IBA, IBAA and soil and aggregate treatment facility and demonstrate that you have enough storage capacity for each activity.	The operator stated that their current permit does not specify a maximum storage capacity for IBA. The current permit is a consolidation of permits EPR/GB3635RB/VAR002 and EPR/GB3633RY – the former permit states that up to 100,000 tonnes of IBA can be accepted, stored and processed at any one time. The operator in their response on the 08/05/2024 indicated that they are allowed to process up to 100k of IBA per annum, based on previous processing history and contingency measures, however, they requested that they need a maximum storage capacity of IBA to be limited to 40,000 tonnes at any one time. This would be separate and in addition to the 75,000 tonnes of other waste stored at any one time. In another response received on the 04/09/2024 the operator indicated that the storage requirements for AR3 & AR4 - processed waste at any one time, can be restricted to 25,000 tonnes for IBAA and 75,000 tonnes total for both IBAA and recycled aggregates. These storage restrictions have been added to the permit.
3.	Review the list of waste table - Table S2.3 of your permit (included as Appendix 1 of this notice) and assess if the waste codes highlighted in	The operator advised that following codes can be removed because they have not used them and are unlikely to do so in the future: EWC 02 02 02, 10 01 01, 10 01 02, 10 01 05, 10 01 07 & 10 01 15. They want other codes highlighted in yellow in the RFI to be retained because they are currently in the process of creating a business plan looking at producing compost. The operator acknowledged that they will have to apply for a

YELLOW are suitable to be accepted under Activity A6 of your permit.	 permit variation in the future if they want to go ahead and add shredding and composting on the permit. They stated that keeping the waste codes on the permit will enable them to produce a more robust proposal for our investors to consider. Given that the permit is meant to reflect the site situation, we rejected the request to retain 'unused' waste codes in the permit. In a response received from the operator following their review of the draft permit #2, the operator agreed that the EWC codes highlighted in sky blue and those marked in yellow and crossed out (02 01 07, 02 02 02, 03 01 01, 03 03 01, 10 01 01, 10 01 02, 10 01 05, 10 01 07, 10 01 15, 17 02 01, 19 05 03, 19 08 99, 19 09 02 and 19 13 04) are all ok to be removed from table \$2.3 of the permit.
4. Provide clear details on how wastewater and surface water generated within the waste storage and treatment areas are handled and managed, including information on your water management infrastructure (e.g., design specification of the lagoon, tanks and the bunding arrangements).	The operator confirmed that IBA pending processing is stored on an impermeable hard standing with any surface water captured and running to a separate drain, which runs to a separate water storage tank housed within the IBA plant and is reused in the processing of IBA. The IBA treatment process is a closed loop system, with very little wastewater being generated. Again, any surface water generated by the processing plant drains to the water collection tank and the waste water is reused in the process. A French drain runs under the plant from the manhole within IBA storage area to a sump located within the IBA plant, water from the sump is then pumped into a steel storage tank that sits on an impermeable concrete pad and has a capacity to hold 40,000 litres of water. Any surface water is drains to this French drain, which is completely separate and isolated from the rest of the site drainage system.
5. Confirm if you are discharging wastewater and contaminated surface water from the site to sewer and/or controlled water?	The operator confirmed that they are not discharging any wastewater to any sewer or controlled body of water and that should there be a need, for example in circumstances where IBA waste water storage tanks are at capacity, they will arrange for waste water to be taken off site for disposal/treatment at a suitably licensed facility.
 Provide information on how your site's drainage system is designed to segregate contaminated from uncontaminated water. 	The operator stated that the site has a mains water supply that feeds the site office, toilets and welfare facilities. These areas drain to a sceptic tank which is regularly emptied by a licensed carrier and disposed of at a licensed facility. The IBA treatment process is a closed loop system, with very little wastewater being generated. Again, any surface water generated by the processing plant drains to the water collection tank and the waste water is reused in the process. The rest of the site has French drains that run along the northern and western side of the site boundary and into a 450m3 concrete water collection tank, located along the southern boundary of the site.

	Water held in the concrete collection tank slowly drains from one compartment to the next, filtering out fine particles and debris. The settled water is then reused on site for processing operations.
7. Provide justification as to why all of your treatment operations are located outside	The operator stated that the IBA has been stored and treated outdoors historically at their site, however with the inception of BAT 24a, processing of IBA outside presents little environmental risk to the local area. The main reason for carrying out operations in an enclosed space is to contain dust.
	They indicated that dust is managed effectively on site as per the attached Dust Management Plan (DMP) and as the IBA treatment process involves dampening the IBA down before separating it into different fractions, they stated that their process does not generate as much dust as a dry screening process. Again, the operator indicated that the site is quite isolated and there are no sensitive receptors close to the site. The plant was built in 2010 and enclosing it in a building would now be a difficult task and may not be financially viable.
	The operator further stated that they have been operating on site since 2000. Prior to this, the site was a sand and gravel quarry and then an inert landfill. The operations have always been undertaken outdoors as the machinery and plant used in such activities are not suited to be housed indoors. Their waste operations consist of tracked crushing and screening plant, wheeled excavators, loading shovels and dump trucks which are used to process waste concrete, bricks, stone and soils into recycled aggregates. The main risks from these activities are dust emissions and noise from the plant. They indicated that their inert soil washing plant was built in 2004, at the time the local authority and EA had no objections to it being constructed outdoors. The fact that the site is isolated from any neighbouring properties and not in the vicinity of any sensitive receptors meant that any potential issues from dust and noise emissions did not pose a significant risk to the environment, human and animal health outside of the site boundary. When the IBA plant was built in 2009/2010 these factors and the fact that BAT techniques did not stipulate then that such operations should be housed indoors, meant that the plant was constructed outdoors. Going forward, the operator agreed that the site improvement plan set out in the draft permit is workable within the suggested timescales.
	We have included Improvement Conditions IC2 and IC3 which require the operator to carry out a detailed review of the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the <u>Non-hazardous and inert waste: appropriate measures for permitted facilities</u> guidance, <u>Waste Incineration BAT Conclusions</u> and to install a new building or enclosure around the treatment operations currently taking place outside.
 Provide details of the measures you have in place for effective control of dust emissions at the site – i.e. from receipt and storage of IBA and other wastes to handling, crushing, screening and separation, including 	The operator provided a copy of their Dust Management Plan (DMP) that contains information on some of the control measures that they are implementing at the site. However, the DMP was sketchy and not detailed enough. As such we have included Improvement Conditions IC1 which requires the operator to submit an updated Dust Management Plan (DMP) to the Environment Agency for approval.

	storage and dispatch of IBAA and other outputs.	
9.	Provide justification and/or reasoning why you are not able to meet the requirements of BAT 37(b) and (e) of the <u>Waste Incineration BAT</u> <u>Conclusions</u> .	The operator confirmed that they have measures set out in both requirements and that they have inspection and maintenance procedures for plant & equipment which is operated by trained and experienced staff. They clarified that no operations are carried out at night and where available they have retrofitted noise reducers to plant.
10	Provide confirmation that your impermeable surface, sealed drainage and bunding arrangements are designed to meet the requirements of <u>CIRIA 736</u> or an equivalent approved standard.	The operator stated that having gone through the requirements of the standard they believe that they meet the standard required in CIRIA 736; however, they indicated that they are happy to appoint a consultant to investigate this further if there is a requirement for it to be verified independently by a suitably qualified person. We have included improvement Conditions IC4 and IC5 require the operator to review and ascertain the state of the site areas that are currently covered by an impermeable surface and sealed drainage systems and determine if the design and construction of the impermeable surface and sealed drainage systems are in line with or equivalent to the standards required in CIRIA Report C736. IC4 includes a requirement for the report to be certified by a suitably qualified engineer.
11.	Review your response to question 14 of the BAT Return Spreadsheet (IBA AM tab) by providing the information that you indicated was attached.	The operator provided the document titled 'EMS Dunton 2024', which contains information on the Environmental Management Plan, operations details, maintenance procedures, control systems and contingency measures.