

Permitting Decisions - Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Brentford Aggregate Materials Recycling Facility operated by Day Group 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/BB3232RX/V005.

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>Non-hazardous 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 13/04/2023. 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.

Use of Quality protocol aggregates

A Directly Associated Activity (DAA) AR4, has been included within the permit to cover the blending of aggregates with incinerator bottom ash aggregate (IBAA). This DAA covers the blending of IBAA with virgin aggregate and other non-waste aggregate such as quality protocol compliant (QP) aggregates. In this instance the Environment Agency has concluded that QP compliant aggregate being brought onto site is destined for use as a sub-base in construction and that, falls into one of the listed end-uses in Section 4 of the Aggregates Quality Protocol. The Environment Agency concluded if the aggregate is produced in accordance with the QP and satisfies the other requirements stated within the QP it could be considered to have met end of waste and can be imported and stored at the site for blending with IBA as a non-waste. Further to this, the operator does not require to declare the imported QP compliant aggregate on their waste returns.

However, it is considered that the output of blending of QP compliant aggregate and IBAA is a waste that is subject to the waste control requirements.

Regulation 61 Response

The Regulation 61 notice response from the operator was received on 11/07/2023.

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:

Documents titled:

- "BATC Return Spreadsheet Brentford 11.07.2023"
- Points 4.a to 13 of "Brentford Reg 61 Response Appropriate Measures"
- "Method Statement Processing of IBA (Brentford)"
- "IBA Acceptance Quarantine and Production Recording"
- Response to Questions 1 11 of "Reg 61 Further Information Brentford BB3232RX", list of wastes document and including drawings:
 - BE008-04 Rev3 General Arrangement
 - o BE008-02 Rev3 Drainage Layout
 - o BE008-15 Rev0 Air Quality Assessment Arrangement Zones

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	Amendment
Conditions 1.2.1, 1.3.1, 2.1.2 and 4.2.2	Activity references in the conditions have been updated.
Condition 2.3.4 (a)	Reference to table S2.4 removed as this waste table has been removed from the permit.
Conditions 2.4.1 and 2.4.2	Improvement programme condition have been added to implement the improvement conditions in Table S1.3.
Conditions 3.1.1 and 3.5.1	Table references in the conditions have been updated.

for emissions monitoring. The follow-on condition has been renumbered.Table S1.1 as referenced in condition 2.1.1Activities table updated in-line with modern standards and current site activities. Activity for glass recycling has been removed.Table S1.2 as referenced in condition 2.3.1Operating techniques updated with documents received in response to the regulation 61 notice and request for additional information. Outdated documents have also been removed.Table S1.3 as referenced in condition 2.4This table has been added to implement the Improvement conditions 1C1 - IC3.Table S2.2 and S2.3 as referenced in condition 2.3.4List of waste tables updated to reflect site activities and remove agreed waste codes.Table S3.1 as referenced in conditions 3.5.1 (a) and 3.5.4Emission point to air from the dust extraction unit added. The follow-on tables have been renumbered.Table S3.2 as referenced in conditions 3.5.1 (a) and 3.5.4Emissions to surface water updated in-line with BAT.Table S3.4 as referenced in conditions 3.5.1 (a) and 3.5.4Emissions to sever updated in-line with BAT.Table S3.4 as referenced in conditions 3.5.1 (a) and 3.5.4Process monitoring added in line with modern template.Table S3.4 as referenced in condition 3.5.1 (a)Reporting parameters updated.Table S3.4 as referenced in condition 3.5.1 (a)Process monitoring added in line with the modern template.Table S3.4 as referenced in condition 3.5.1 (a)Reporting parameters updated.Table S4.4 as referenced in conditions 4.2.3 (a) and (b)Production and treatment reporting updated.Table S4.4 as referenced in <b< th=""><th></th><th></th></b<>		
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Schedule 6 Interpretations updated	Schedule 6	Interpretations updated

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	CC	 The operator confirmed that the company is certified to ISO 14001 and ISO 9001, the site operates a management system with site specific elements. The site activities include: 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 and after treatment. Process water collection and storage for re-use on site or discharge Blending of IBAA with non-waste materials Construction and demolition waste recycling and reclamation The facility is located at Transport Avenue, Brentford. The centre of the Installation is approximately at National Grid Reference TQ1631978221. The nearest residential housing is at Boston Gardens, approximately 400m northeast of the C&D and IBA recycling facilities. Other industrial sites boarder the site boundary. Syon Park SSSI is approximately 1.6km to the southeast of the site boundary. The site is located within Air Quality Management Area (AQMA) for Nitrogen Dioxide (NO2). The treatment process involves removal of ferrous and non-ferrous metals through the use of vibrating screens, over-band magnets, trommeling, eddy current separation and manual picking. These processes separate out metal fractions and produce IBA fractions. Material is transported via enclosed conveyors. Processing of IBA takes place in enclosed buildings. There is a channelled emission to air. There are discharges to foul sewer and surface water. The treatment and storage areas are made up of both an impermeable surface with a sealed drainage system and areas of hardstanding. Inert wastes are permitted to be stored on hardstanding. Surface waters flow to a number of collection features such as gullies or settlement pits. The outfalls from gullies and settlement pits discharge via sealed pipework to either the foul sewer network outside or the surface water discharge
Waste pre-acceptance, acceptance and tracking appropriate measures	СС	The operator has submitted a waste acceptance, quarantine and production recording procedure and outlined that they follow the voluntary industry protocol for classification and assessment of the IBA. The incoming waste IBA is windrowed in the storage building or external bay and marked with the relevant date, source and sample reference supplied by the Energy from Waste (EFW) facility. IBA is stored in this fashion while awaiting results of the classification. A process is in place if a hazardous result were to be received to ensure that this material would be removed from site.

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

		Waste operations only accept wastes which are listed in the permit. Notwithstanding the specification of permitted waste types, wastes which consist solely of, or mainly of dusts, powders, liquids, sludges or loose fibres are not to be accepted at the depot.
Waste storage, segregation and handling appropriate	СС	The operator has provided a waste acceptance, quarantine and production recording procedure and a Method Statement Processing of IBA (Brentford).
measures		These show that IBA is stored separately in windrows pending test results (as above) and is removed from site and taken to a suitably authorised facility if test results demonstrate that IBA is hazardous waste.
		IBA is delivered by road and deposited within the storage building in windrows.
		Unprocessed IBA is stored within the building for 2 to 4 weeks prior to treatment. IBAA is also stored outside for up to 4 weeks after treatment. The operator confirmed that waste will only be accepted on site if there is sufficient storage capacity.
		IBA is also accepted by rail. This has been matured before arrival on site and is taken directly for treatment rather than being stored in the building.
		IBAA is stored outside bays - these bays benefit from dust suppression to limit the risk of fugitive emissions.
		Construction and demolition waste is stored on site in a storage bay. The maximum capacity of the C&D storage bay is 20,000 tonnes and the permitted height of this storage is 7.5m. Inert wastes are permitted to be stored on hard standing but any other waste types must be stored on impermeable surfaces.
Waste treatment appropriate measures	СС	The treatment process involves separation of ferrous and non-ferrous metals from the IBA, grading of IBA into different sized fractions, and blending of IBA fractions to produce IBAA (0-4mm, 4-32mm and +32mm) which meets the relevant standard for the end-use. Blending of IBAA with aggregate material also takes place on site.
		The IBA processing plant is made up of vibrating screens, over-band magnets, trommeling, eddy current separation and manual picking. Material is transported via enclosed conveyors. Processing of IBA takes place in enclosed buildings.
		C&D waste is treated via crushing, magnetic separation, and screening. This produces aggregates and soils.
		The operator has identified the emissions and taken measures to control them. There is a channelled emission to air from the wet scrubber air extraction system that is fitted to the IBA feed hopper. Monitoring of dust is required at the release point, but we have not set any emissions limit on this

	because the abatement system is not a bag filter. There are discharges of contaminated and uncontaminated waters to foul sewer and surface water. We have set appropriate monitoring in the permit for discharges to water and sewer.
CC	There is a channelled emission to air from the air extraction system fitted to the IBA feed hopper. The site has an indirect discharge to foul sewer as well as a direct discharge to surface water. Waters generated from the C&D storage areas and treatment areas as well as IBAA storage area is directed to surface water following settlement and treatment via a Siltbuster as detailed within the RFI response. Waters generated within IBA storage and treatment areas are channelled to settlement pits prior to being discharged to sewer. Water can be reused on site in dust suppression systems. The BAT AEL's for indirect discharges to sewer and direct discharges to surface water have been added to the permit. The area officer has indicated that there are no issues with fugitive emissions at the site. A DEMP is in
<u> </u>	place for site though this has not been approved by the Environment Agency. An Improvement condition IC1 has been added to the permit to submit for approval a revised DEMP.
	There is a channelled emission to air from the air extraction system fitted to the IBA feed hopper. The site does have an indirect discharge to foul sewer as well as a direct discharge to surface water. Waters are generated from the C&D storage areas and treatment areas as well as IBAA storage area is directed to surface water following settlement and treatment via a Siltbuster as detailed within the RFI response. Waters generated in IBA storage and treatment areas are channelled to settlement pits prior to being discharged to sewer. Some of the waters are reused on site or dust suppression. The BAT AEL's for indirect discharges to sewer and direct discharges to surface water have been
	added to the permit. Although there are no historical issues with fugitive emissions at the site, the site does not have an approved DEMP. Accordingly, we have included an Improvement condition IC1 in the permit which
СС	requires the operator to submit a revised DEMP for approval. Raw materials and water are not being used in the treatment process but water generated from the site is being used on site for dust emission control. The operator is complying with appropriate measures associated with process efficiency and water use.
	CC

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	СС	The operator confirmed that the company is certified to ISO 14001 and ISO 9001 and the site operates a management system with site specific elements.
BAT 3 - monitoring of specified process parameters	СС	The operator responded indicating that this BAT was not applicable, stating: "As surface water runoff is monitored and controlled by BAT6 and BAT 34 we do not consider BAT3 to be relevant." The EA considers that this BAT is relevant because there are discharges of process water from site. Waste water for bottom ash treatment plants as detailed in the BAT conclusion, covers waters generated at any point during the site's operations, including those generated as part of the waste storage operation. In line with BAT, monitoring of pH and conductivity have been added to the permit (but not flow
		because the discharges are not continuous discharges).
BAT 6 - monitor emissions to water from FGC and/or bottom ash	СС	The operator responded stating that monitoring was being carried out in line with BAT and that they will continue to monitor at the monthly frequency as in line with BAT.
treatment with at least the frequency given below and in accordance with EN standards		The relevant monitoring parameters have been included within the permit.
BAT 10 - quality output management system part of EMS where bottom ash treatment is carried out	СС	The operator indicated that a quality management system is in place at the site. The site operates ISO 14001 and ISO 9001 and all IBAA products are tested to relevant highways specifications.
BAT 12 - in order to reduce the environmental risks associated with the reception, handling and storage of	FC	The operator stated they are complaint with this BAT and provided an Impermeable Surfaces Design statement to demonstrate the standards to which the surfaces are engineered.
waste, BAT is to use both of the techniques listed in the corresponding		Further information was requested at RFI to confirm if any surfacing was not impermeable.
table		The following is part of the response provided by the operator "The C&D waste storage area, the area used for transfer of IBA from the rail wagons, and an area on the opposite side of the rail siding used for storage of equipment are surfaced with permeable hardstanding."
		Improvement conditions IC2 and IC3 have been included within the permit which requires the operator to cover, with impermeable surfacing, sealed drainage and containment systems, all areas where IBA, IBAA and other non-inert wastes are stored and treated. IC2 requires the submission of a proposal and IC3 requires the implementation of any improvements proposed.
BAT 23 - in order to prevent or reduce diffuse dust emissions to air from the	СС	The operator has stated that their EMS includes the features listed under BAT 23 to identify, reduce and monitor diffuse dust emissions. A DEMP is in place for site though this has not been

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

treatment of slags and bottom ashes, BAT is to include in the environmental management system (see BAT 1) the diffuse dust emissions management features		approved by the Environment Agency. An Improvement condition IC1 has been added to the permit to submit for approval, a revised DEMP. Based on the information the operator has given, treatment takes place in an enclosed system and storage is within the IBA reception building. IBA received by rail is not stored and is transferred directly for treatment. IBAA is stored in bays outside with dust suppression available.
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	CC	The operator confirmed that measures listed under sub-section a , c , d and e of BAT 24 are in use at the site. They have also stated that "(<i>f</i>) is stated as only applicable to low moisture bottom ashes. All incoming ash is quenched and the process is deemed semi-dry" therefore, this is deemed to be not applicable. They indicated that IBA is delivered with a moisture content of around 18-20%. Whilst onsite IBA is monitored for moisture and that there is a Dust Management Plan in place to prevent any fugitive emissions.
		The operator stated that point b of the BAT 24 is not in use as this is not possible considering the locations of the walls for IBAA storage bays. The walls protect the stockpiles from wind whipping and the conveyors cannot be adjusted as they feed over the top of the walls. A dust suppression system operates on the bay walls to maintain the correct level of moistures within the waste as it is discharged into the bays.
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 at the site. We agreed with the operator's assessment given the nature of the IBA.
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 waste water streams and to treat them separately, depending on their characteristics	CC	The operator responded stating that they are compliant with this BAT requirement. Waste water streams are segregated into IBA leachate, clean uncontaminated surface water and contaminated surface water run-off. Some of the waters are reused on site for dust suppression. Any water not being reused in the dust suppression system is discharged to either surface water or foul sewer depending upon where on site it originates from. Any runoff from IBA areas is directed to foul sewer. Run off from C&D activities and from IBAA storage is directed to surface water following settlement and treatment via a Siltbuster as detailed within the RFI response.
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	CC	The operator responded stating that they are compliant with the requirements of this BAT conclusion. They have stated that (a) is being utilised as the treatment process is optimised to maximise metal recovery. A is appropriate for the incineration plant and not the IBA treatment plant. They have further stated however, that settlement pits are used to settle out suspended solids before discharge of run-off.
techniques in the corresponding table, and to use secondary techniques as		The BAT AEL's for indirect and direct discharges have been added to the permit and the operator will be monitoring for relevant parameters.

close as possible to the source in order to avoid dilution		
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.	СС	The operations are using an appropriate combination of the measures listed in the table of BAT 36 including: a , b , d and e . Technique c is not relevant to the site operations; f is not in use because the site does not have the capability to wash the IBA.
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 techniques b , c , d and e are all utilised to reduce noise. There have been no issues with noise reported against the site.
Reg. 61 Request for Further Information (RFI)	Assessment	of response received
Confirm which emission sampling points need to be listed within the permit and the nature of these emissions and clearly show this on the site map. Further to this information, included within your response was information detailing that changes to the emission to surface water were being explored in July 2023. What is the current nature of this emission? Has this emission been connected to foul sewer? And have improvements been implemented to ensure the discharge is in compliance with the emission limit values included within the Waste Incineration BAT conclusions.	"Sample Point trade effluent "We did contin accept any gro the Thames V land owned by site. A submersible underground a tank. From he onto the IBA s	brovided the below responses: t 1 and Sample Point 2 both discharge into the foul sewer by the same connection point under one consent. Sample Point 3 is for monitoring of water to the surface water discharge into the canal." hue these investigations and found that the private pumping station on Transport Avenue cannot eater flows, so the only means of connecting to foul sewer would be to install a direct connection to Vater sewer and our own pumping station. This would also require making that connection through y others therefore we have instead sought to divert the surface water back into a treatment plant on a pump in the final chamber of the settlement pit at Sampling Point 3 will pump untreated water to a dirty water tank. The water will be pumped into a Siltbuster, treated and stored in a clean water re, the water will either be re-used for haul road dust suppression along the railway line or redirected site with sealed drainage where it can be further treated before discharge to foul if not required." emissions have been included within the permit alongside the appropriate BAT limits.

Provide a site plan which details the location of the air extraction system fitted to the IBA feed hopper, and the associated emission to air.	The operator provided the below response: <i>"Please see General Arrangement drawing BE008-004 Rev3. All of the extraction points in the IBA plant are</i> <i>passed through the wet scrubber with the air vented from one vertical stack above."</i> The emission has been listed in the permit.
Provide details of the locations for monitoring of fugitive emissions of dust on a site plan.	The operator provided the below response: "Not supplied, please see email." "I have not addressed question 3, asking for dust monitoring locations on a site plan as I ran out of time to agree the locations with our Operations Manager. We have agreed these now and could get the points added to a plan fairly quickly if you would accept it early next week. However, I then assumed if it will require an update to the DEMP to explain the monitoring method and locations and I'm not sure I'll achieve that early next week." Improvement condition IC1 has been included requiring the submission of a new DEMP inclusive on monitoring information required.
What is your operating moisture range – i.e. the moisture content of the waste at the various stages of your storage and treatment processes (i.e. from receipt of waste to final treatment point)?	The operator provided the below response: "Delivery of quenched ash: 18-20% Matured ash ready for processing: 10-16% IBAA stockpiles: 12-16% All of our whole and blended IBAA products are sold under the Specification for Highways Works 600 and 800 series as sub base or capping. These specifications require the aggregates to meet an Optimal Moisture Content (OMC) to allow compaction down to 95% of the material dry density. This provides the strength required of the aggregate while controlling the risk of heave. Under these standards the OMC varies by aggregate type with IBAA requiring a moisture content of 12-16%. The addition of natural stone to some of our IBAA products such as EcoBlend GA lowers the OMC of the IBAA as natural stone holds less moisture. Therefore, the moisture content of each blended product will vary according to the blend ratio and the Specification it was produced to." Moisture detail has been added to the introductory note of the permit and the range provided is aligned with the BAT/BREF. Moisture monitoring is included within the permit a process monitoring requirement.
Are moisture checks being conducted upon IBA stockpiles and confirm how these are being conducted?	The operator provided the below response: "Visual checks are carried out on incoming IBA and if the ash looks too wet or dry a moisture sample is taken to inform discussion with the supplying EFW. During maturation the IBA forms a hard crust on the outside which prevents the release of dust and is not broken into until ready for processing. A further visual assessment by trained staff is carried out while breaking into the IBA, wetter and drier areas are mixed to create a consistent moisture content and if required water added. This approach has been developed as a reliable method for getting the ash consistency correct for effective processing and minimal dust suspension.

What stages of your treatment and storage operations do you consider to be the highest risk points of dust emissions and what control measures do you have in place to mitigate the risk of dust emissions at those	Visual checks on IBAA moisture are carried out daily during loading of lorries to ensure the products will meet the customer requirements. Oven dried samples are carried out as part of our product testing plan to meet the required aggregates specifications approximately once per month, these are used to confirm the visual assessments are correct." Moisture monitoring is included within the permit a process monitoring requirement. Detail was provided on what areas are deemed to pose the greatest risk of dust and how these are mitigated. An improvement condition has been included for the assessment of the DEMP and its approval.
stages?	
Provide written confirmation from a competent engineer that the site surface and sealed drainage has been constructed to CIRIA 736 or an	The operator provided the below response: "The drainage plan BE008-02 Rev3 has been updated to show the site surfacing. The IBA processing areas surface and drainage design complies with CIRIA c736 as confirmed by our internal Engineering Department. If third party verification is required, we do not have this and will have to seek it.
equivalent approved standard.	The majority of the depot is concreted but this was not designed to CIRIA c736 either because it was installed prior to this being a requirement, or because not all activities require sealed surfaces.
	The C&D waste storage area, the area used for transfer of IBA from the rail wagons, and an area on the opposite side of the rail siding used for storage of equipment are surfaced with permeable hardstanding."
	An improvement condition, IC2 has been included for the operator to submit a proposal of improvements to cover all areas where IBA is stored or treated with impermeable surfacing. A further improvement condition, IC3 has been included to implement any identified improvements under IC2.
If accepted, where are non-inert wastes stored which are processed under the waste operation. Provide a site plan which clearly identifies any areas of hardstanding on site and the waste types stored upon them.	The operator provided the below response: "Please see the updated Drainage Plan BE008-02 Rev3 for site surfaces. The areas edge blue are permeable surfaces. Registered in England No. 432417 C&D wastes accepted are all inert. 170904 is only accepted where it contains a mix of other absolute non-hazardous wastes such as bricks with some hard plastics that can be easily
	removed by the picking station or concrete with some soil from known low risk sources. C&D waste containing soil (170504) are only accepted by prior arrangement where site investigation reports are required to demonstrate there is no contamination."
	An improvement condition, IC2 has been included for the operator to submit a proposal of improvements to cover all areas where IBA is stored or treated with impermeable surfacing. A further improvement condition, IC3 has been included to implement any identified improvements under IC2.

Review the attached list of waste table and provide an updated waste table.	Waste table (Table S2.3) was reviewed by the operator who identified and agreed on the list of waste codes to be removed.
Please provide further detail on what specific waste the below waste codes consist of: 01 01 01 – Wastes from mineral metalliferous excavation	01 01 01 and 10 12 12 were removed from the permit as they are not accepted. 17 09 04 justification was provided for why this waste is accepted. It covers concrete or C&D wastes.
10 12 12 – wastes from glazing other than those mentioned in 10 12 11	
17 09 04 – mixed construction and demolition wastes other than those mentioned in 17	
09 01, 17 09 02 and 17 09 03	
Confirm what materials are being blended with Processed IBA/IBAA	The operator responded: <i>"IBAA is blended with natural and recycled aggregates. The recycled aggregate is only that produced by us on this depot in compliance with the Quality Protocol for Aggregates from Inert Waste."</i> A DAA has been included within the permit for this blending activity.
Is the glass processing operation to be removed from the permit?	Activity removed as agreed with the operator.