

Permitting Decisions - Environment Agency Initiated Variation

We have issued an Environment Agency initiated variation for Sheffield IBA Facility operated by Blue Phoenix 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/ZP3492EG/V006.

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 Non-hazardous and inert waste: appropriate measures for permitted facilities and the relevant requirements of the BAT Conclusions for Waste Incineration, 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.

Issued date: 10/07/2024 Page 1 of 16

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.

Issued date: 10/07/2024 Page 2 of 16

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".

Issued date: 10/07/2024 Page 3 of 16

The Non-hazardous and inert waste: appropriate measures for permitted facilities 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 13/07/2023.

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 received in response to the Regulation 61 Notice titled.
 - 'BPUK Sheffield 220220 BATC Return Spreadsheet SH Location Plan'.

Issued date: 10/07/2024 Page 4 of 16

- BPL QMS Storage and Handling of IBA-IBAA.
- BPL EMS P005 Waste Acceptance Criteria Response to questions 1 to 7 of the RFI and documents titled 'P22053-SMCE-ZZ-XX-DR-Z-1005-P02-Existing Site Layout showing discharge point at site', dated 28/02/24.
- Site layout plan showing dust monitoring locations referenced "Current Sheffield-Dust Monitoring Locations".

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 2.3.7 has been deleted because the site is not permitted to accept hazardous waste and as such the condition is no longer relevant.
- Conditions 2.4.1 and 2.4.2 have been added to implement the improvement programmes associated with this variation.
- Condition 3.1.2 has been added to specify that the limits in Table S3.1 shall not be exceeded.
- Conditions 3.6.1 3.6.4 of this variation have been added to implement the monitoring requirements introduced by this variation.
- Condition 4.3.7 deleted because it is not relevant to the site operations.
- Table S1.1 as referenced in Condition 2.1.1 has been amended to clearly define the activities that are undertaken at the site and to apply relevant limits to them.
- Table S1.2 as referenced in Conditions 2.3.1 and 2.3.2 has been amended 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 IC4.
- Table S3.1 as referenced in Conditions 3.1.1 (a) and 3.6.1 and 3.6.4 has been amended for monitoring of point source emission to water.
- Table S3.2 as referenced in Conditions 3.6.1 (b) and 3.6.4 has been added for monitoring of process parameters ambient air.
- Table S3.3 as referenced in Conditions 3.6.1 (c) and 3.6.4 has been added for monitoring of ambient air.
- 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.
- Table S4.4 as referenced in Conditions 4.2.2 (c) and 4.2.3 (b) has been amended to include relevant forms.

Issued date: 10/07/2024 Page 5 of 16

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 some of the existing interpretations.

Issued date: 10/07/2024 Page 6 of 16

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

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 they are compliant with BAT 1 and the site operates ISO 14001 and ISO 9001 management systems that are externally audited annually to maintain standards. 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 Incinerator prior to treatment. Storage of recovered IBAA and residual waste after treatment. Storage of rac materials. Blending of IBAA fractions with virgin/primary. Collection of uncontaminated roof and surface water in a lagoon for reuse at site or discharge to surface water. Collection and storage of contaminated water in a lagoon for re-use on site or discharge to surface water. The site is located on an industrial area, where woodlands bound the site to the southwest and to the south the upper River Don is also at the site boundary. The nearest residential receptor is a house located at Middlewood Road, which is approximately 190m to the south-west from the site. There are also industrial buildings immediately to the eastern side of the site boundary. Predominantly the treatment activities are undertaken inside a processing building but there is a screening treatment and storage activities that are happening outside. There are no channelled emissions to air or discharges to foul sewer, but there is a discharge to surface water. The site is equipped with an impermeable surface and a sealed drainage system. Waste water flows to a concrete catch pit to remove settled solids and then to butyl lined lagoon with a capacity of approximately 1500m³ where the water is temporarily stored. The water is used for dust suppression or discharged to surface water if excessive rainfall results in exceedance of the storage capacity of the lagoon. The operator is required to comply with an improvement condition that relates to BAT AELs for direct emissions to a receiving water body.
Waste pre-acceptance, acceptance and tracking appropriate measures	CC	The operator has sent in a waste acceptance procedure. They outlined that they follow the voluntary industry protocol to provide reliable classification and assessment of the incinerator bottom ash. The stocks of IBA that are waiting for classification results are stockpiled in separate batches according to the sample dates and by material source. Batch signs will be posted indicating the stockpile position and ID.

Issued date: 10/07/2024 Page 7 of 16

		The EFW plant will inform the blue phoenix site when it is going to take the sample from its raw ash. Once a sample is taken by the EFW and the raw ash is delivered to the blue phoenix site; where a new batch will be started, and its location and name added to the site ESA Protocol Board. A new batch will only be started when the EFW take a new sample of raw ash.
Waste storage, segregation and handling appropriate	FC	The operator has provided a storage and handling procedure "BPL QMS P002 Storage and Handling of IBA-IBAA".
measures		This shows that IBA is stored separately in batches by the EFW site pending test results. This is removed from the EFW site and taken to a suitably authorised facility i.e. Blue Phoenix if test results from the EFW demonstrate that IBA is non-hazardous waste.
		Unprocessed IBA is stored outside for 3 to 6 weeks prior to treatment. IBAA is also stored outside for up to 30 weeks after treatment. The operator confirmed that waste will only be accepted on site if there is sufficient storage capacity. Currently, IBA and IBAA stored outside are not protected from prevailing winds on all sides and therefore there is potential risk of dust generation. There is also a screening operation that is taking place outside. Given this, we have added Improvement Conditions (IC1 and IC1b) which require the operator to review the existing waste treatment, storage and handling equipment at the site to ensure that they are in accordance with the requirements specified in the Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and BAT 24 of the Waste Incineration BAT Conclusions.
Waste treatment appropriate measures	FC	The treatment processes involve the receipt of raw unprocessed incinerator bottom ash (IBA), separation of ferrous and non-ferrous metals from the IBA, production of different fractions of IBAA (coarse IBAA 40mm and fine IBAA 14mm) and blending of IBAA fractions with virgin aggregates.
		The operator has identified the emissions and measures they are taking to control them. They have a processing shed for treatment which contains vibrating screens and magnetic separation. One of the screeners is operated outside. There is a direct emission to surface water from the treatment which is which is currently being monitored in accordance with discharge consent issued by the Environment Agency. The requirements to monitor this discharge and the need to put in treatment controls will be reviewed under IC2a of this installations permit.
		We have also included Improvement Conditions IC1a and IC1b 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 Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and BAT 24 of the Waste Incineration BAT Conclusions.

Issued date: 10/07/2024 Page 8 of 16

Emissions control appropriate measures	FC	The operator has indicated there are no channelled emissions to air. The site does have an EA discharge consent for a direct discharge to the River Don which is monitored by the operator. The runoff from site flows to a concrete catch pit to remove settled solids and then to butyl lined lagoon with a capacity of approximately 1500m3. The water is temporarily stored so that it can be used in dust suppression. The operator did not discharge any wastewater in 2023 but given there is an option to discharge to surface water, the relevant parameters, BAT AELs and monitoring frequencies have been included in Table S3.1 of the permit. Monitoring results provided show an exceedance in suspended solids. We
		have therefore included IC2a and IC2b which require Blue Phoenix to submit proposals for waste water treatment and implement any necessary measures to ensure that they are in compliance with the BAT AELs.
		There are no concerns or complaints with regards to fugitive emissions at the site. However, the Regulation 61 response has stated that the storage area does not have protection on all sides from prevailing winds and that a screening activity is taking place outside.
		We have included Improvement Conditions IC1a and IC1b 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 Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and BAT 24 of the Waste Incineration BAT Conclusions.
		The Regulation 61 response also highlighted that the operator needs to undertake integrity testing of their impermeable surface to ascertain if is suitable to CIRIA 736 standard. We have included Improvement Condition IC3 for the operator to undertake a review of the site surfacing and drainage to ensure they are in line with or equivalent to the standards required in CIRIA Report C736.
Emissions monitoring and limits appropriate measures	FC	The operator indicated that there are no channelled emissions to air. The site does have an EA discharge consent for a direct discharge to the River Don which is monitored by the operator. The runoff from site flows to a concrete catch pit to remove settled solids and then to butyl lined lagoon with a capacity of approximately 1500m3. The water is temporarily stored so that it can be used in dust suppression.
		The operator did not discharge any wastewater in 2023. The operator did not discharge any wastewater in 2023 but given there is an option to discharge to surface water, the relevant parameters, BAT AELs and monitoring frequencies have been included in Table S3.1 of the permit. Monitoring results provided by Blue Phoenix show an exceedance in suspended solids. We have therefore included IC2a and IC2b which require Blue Phoenix to submit proposals for waste water treatment and implement any necessary measures to ensure that they are in compliance with the BAT AELs.

Issued date: 10/07/2024 Page 9 of 16

		There are no concerns or complaints with regards to fugitive emissions of dust at the site. However, we have included ambient air monitoring to help identify dust issues if they occur. We have also included a review of the dust and emissions management plan in an improvement condition which should include details of optimum moisture ranges and details of monitoring methods and frequency as below.
		The operator shall submit a revised Dust Management Plan (DMP) to the Environment Agency for approval. The revised plan shall include an assessment of the risk of dust pollution associated with the permitted site operations, and a proposal for optimum moisture ranges and details of the moisture monitoring method and frequency for the IBA and IBAA.
		The plan shall take into account the appropriate measures for dust control specified in the Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and Control and monitor emissions for your environmental permit.
		Once the DMP is approved by the Environment Agency, the operator shall carry out site operations in accordance with the approved DMP, and any subsequent revisions agreed in writing by the Environment Agency.
Raw Material, Process efficiency and Water Use appropriate measures	CC	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.

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

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 site operates with ISO 14001 and ISO 9001 management systems that are externally audited.
BAT 3 - monitoring of specified process parameters	CC	The operator currently has an EA discharge consent for a direct discharge. This requires flow, PH and conductivity to be measured. This permit variation will incorporate PH and conductivity but not flow (as this is not a continuous discharge). The permit also includes monitoring of other parameters as specified in Table S3.1. The EA discharge consent needs to be surrendered by the operator.
BAT 6 - monitor emissions to water from FGC and/or bottom ash treatment with at least the frequency	FC	The operator has provided results of monitoring of emissions to water. One of these results shows an exceedance of suspended solids. Given this, the below Improvement Conditions have been added to the permit.

Issued date: 10/07/2024 Page 10 of 16

given below and in accordance with EN standards		IC2a The operator shall submit proposals for wastewater treatment, including measures on how to reduce the level of suspended solids in the waste water to the Environment Agency for approval. The proposals shall include detail of improvements to wastewater treatment systems on site to ensure that the discharge of wastewater from the site to the surface water is in compliance with the appropriate BAT AELs specified in the Waste Incineration BAT Conclusions. IC2b Following the completion of IC2a, the operator shall implement the approved improvements, including measures on how to reduce the level of suspended solids in the waste water, by the deadline specified in this improvement condition unless otherwise agreed in writing with the Environment Agency.
BAT 10 - quality output management system part of EMS where bottom ash treatment is carried out	СС	The operator has stated that they have a quality management system in place at the site. The site operates ISO 14001 and ISO 9001 management systems that are externally audited annually to maintain standards.
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	The operator stated that measures in line with BAT 12 will be in place by 03/12/2023. They have stated that they are currently not conducting integrity checks on the site impermeable surface. The operator has not provided any evidence that the impermeable surface is designed to meet the standards outlined in the CIRIA 736 report. Based on this, we have included Improvement Condition IC3 which requires the operator to
		undertake a review of the site surfacing and drainage systems for all areas where waste storage and treatment are taking place. The review shall ascertain the state, design and construction standard of impermeable surfaces and sealed drainage systems on site to confirm that they are in line with, or equivalent to the standards required in CIRIA Report C736. The report of the review shall be certified by a suitably qualified engineer and submitted to the
		Environment Agency for approval together with details of any improvements.
BAT 23 - in order to prevent or reduce diffuse dust emissions to air from the	FC	The operator has stated that their EMS includes the features listed under BAT 23 to identify, reduce and monitor diffuse dust emissions.
treatment of slags and bottom ashes, BAT is to include in the environmental management system (see BAT 1) the diffuse dust emissions management features		Based on the information the operator has given, treatment predominantly is inside a processing shed and water sprayers are used to keep the waste moist. However, there is no stockpile protection on all sides of the site. The conveyors do not adjust to vary the height and there is screening taking place outside of the process building.
		We have included Improvement Conditions IC1a and IC1b 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 Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and BAT 24 of the Waste Incineration BAT Conclusions.
		This review shall include but not limited to an assessment of:

Issued date: 10/07/2024 Page 11 of 16

		 The screening activities taking place outside. Stockpile protection. Discharge height of conveyors Following the review, the operator is required to submit a written report to the Environment Agency for approval outlining the results of the review and measures and procedures that are in place to prevent fugitive emissions of dust. The report shall include recommendations for improvements and installation of new infrastructure, including timescales for implementation of the identified improvements.
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 measures listed under sub-section a , d and e of BAT 24 table are in use at the site. They have also stated in their RFI response that the measures listed under subsection f of BAT 24 table are not in use. They indicated that measure f is not in use because the IBA is delivered to the site a moisture content of around 20%. They also stated that sub-atmospheric conditions are generally required for sites that have potential issues with dust and odour. They indicated that they have a Dust Management Plan in place at the site which contain details of procedure to prevent fugitive emissions. They accepted that the material has a faint earthy smell, but this has never been raised as an issue.
		The operator stated that BAT 24 b and c are not in use. Accordingly, we have included IC1a and IC1b which require the operator to review existing waste treatment, storage and handling measures to ensure that they are in accordance with the requirements specified in the Nonhazardous and inert waste: appropriate measures for permitted facilities guidance and BAT 24 of the Waste Incineration BAT Conclusions.
		This review shall include but not limited to an assessment of:
		 The screening activities taking place outside. Stockpile protection. Discharge height of conveyors
		Following the review, the operator is required to submit a written report to the Environment Agency for approval outlining the results of the review and measures and procedures that are in place to prevent fugitive emissions of dust.
		The report shall include recommendations for improvements and installation of new infrastructure, including timescales for implementation of the identified improvements.
BAT 26 - use a bag filter if treating air from treatment of IBA under subatmospheric conditions.	NA	The operator stated that this BAT is not applicable because the IBA is not being treated under sub- atmospheric conditions at the site.

Issued date: 10/07/2024 Page 12 of 16

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	FC	The operator stated that all run off water is collected in a site lagoon and that all water is collected and used in dust suppression. Given that all water is collected for reuse, segregation of wastewater streams is not applicable. Where the capacity of the lagoons is exceeded during peak rainfall there is a release to surface water. There is a risk of Suspended solids breaching the BAT AEL limit based upon the lab assessments provided by Blue Phoenix. Given this we have included the improvement conditions IC2a and IC2b listed below. The operator shall submit proposals for wastewater treatment, including measures on how to reduce the level of suspended solids in the waste water to the Environment Agency for approval. The proposals shall include detail of improvements to wastewater treatment systems on site to ensure that the discharge of wastewater from the site to the surface water is in compliance with the appropriate BAT AELs specified in the Waste Incineration BAT Conclusions. Following the completion of IC2a, the operator shall implement the approved improvements, including measures on how to reduce the level of suspended solids in the waste water, by the deadline specified in this improvement condition unless otherwise agreed in writing with the Environment Agency.
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	FC	The operator stated that there are no direct or indirect emissions to water from bottom ash treatment. However, we interpret treatment of bottom ash to include the storage and handling of IBA and IBAA and not just the actual treatment taking place in the 4 sided processing building. The site currently has an EA discharge consent and can directly release to surface water if required. They have also provided monitoring results that show exceedance of BAT AELs for total suspended solids. Given this, we have included an improvement condition for the operator to review the water treatment systems on site to ensure that the discharge to water is compliant with the BAT AELs.
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 used: a, b, c, d and e . The operator indicated that they are currently not using technique f . The site does not have the capability to wash the IBA.

Issued date: 10/07/2024 Page 13 of 16

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	The operator confirmed that techniques a , b , c , d and e are all utilised to reduce noise. There have been no issues with noise at the site.	
Reg. 61 Request for Further Information (RFI)	Assessment of response received	
Provide information on the parameters and the frequency of monitoring for your emission to water in accordance with BAT 6 of the Waste Incineration BAT conclusions.	The operator has provided external laboratory assessment results which it currently carries out in compliance with the EA discharge consent. The discharge to surface water will now be regulated by the installations permit. Table S3.1 in the permit details the relevant parameters and frequency of monitoring in line with the Waste incineration BAT. The laboratory results provided by the operator showed an exceedance of suspended solids, so we have included an improvement condition for the operator to review the water treatment systems on site to ensure that the discharge to water is compliant with the BAT AELs. As the discharge is not continuous, the operator will not be required to measure flow but will need to monitor pH and conductivity within the revised permit. The existing EA discharge consent will need to be surrendered to prevent duplicated regulation.	
Provide a site layout plan that shows the locations of the drainage infrastructure and routes, including information on your discharge points	The operator has provided "P22053-SMCE-ZZ-XX-DR-Z-1005-P02-Existing Site Layout" showing the discharge point at site.	
Confirm that the design of your impermeable surface, sealed drainage and any bunding arrangements at the site are suitable and in line CIRIA 736 and that you have measures in place to ensure integrity checks are carried out on the impermeable surfaces as required under BAT 12.	The operator has provided a risk assessment that was completed as part of the current Sheffield site extension application. However, this did not contain details on whether the current site surface is compliant with CIRIA 736. Given this we have added an Improvement condition (IC3) to the permit which requires the operator to undertake a review of the site surfacing and drainage to ensure they are in line with or equivalent to the standards required in CIRIA Report C736.	
Provide reason(s) why you are not treating and storing the waste within an enclosed building and/or enclosed equipment.	The operator has confirmed that the treatment is carried out in a 4-sided building. They have also provided a document referenced "Assessment of Benefits and Risk for storing material outside". As there is a screening activity and storage of material without protection from prevailing winds on all sides, we have included improvement condition IC1 which requires the operator to review and implement appropriate measures with regards to enclosure of that screening activity.	
Provide reason(s) why you think that you don't need to contain your	The operator stated that sub atmospheric conditions are generally required for sites that have potential issues with dust and odour and that they have a Dust Management Plan in place to prevent any fugitive emissions. The dust management plan needs to be reviewed in line with improvement condition IC4:	

Issued date: 10/07/2024 Page 14 of 16

treatment under sub atmospheric	The operator shall submit a revised Dust Management Plan (DMP) to the Environment Agency for approval.
conditions.	The revised plan shall include an assessment of the risk of dust pollution associated with the permitted site operations, and a proposal for optimum moisture ranges and details of the moisture monitoring method and frequency for the IBA and IBAA.
	The plan shall take into account the appropriate measures for dust control specified in the Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and Control and monitor emissions for your environmental permit.
	Once the DMP is approved by the Environment Agency, the operator shall carry out site operations in accordance with the approved DMP, and any subsequent revisions agreed in writing by the Environment Agency
	The operator accepted that the IBA material has a faint earthy smell, but this has never been raised as an issue. They also highlighted that the IBA is received with a moisture content of around 20%.
Provide clear information on the moisture content of the waste from the point of receipt to the treatment and storage of the resultant IBAA. Advise us on whether you have or intend to install a dust extraction unit within	The operator has said that there are no plans to install a dust extraction treatment system as the last process of the EfW is to quench the IBA. It is then loaded onto lorries and delivered to site, typically around 20% moisture content.
	Data on moisture content of the IBA and IBAA has not been provided. We have given the operator an improvement condition (IC4) which will ensure that the dust management considers optimum moisture ranges frequency of monitoring and representative methods of monitoring moisture.
your treatment system	The operator shall submit a revised Dust Management Plan (DMP) to the Environment Agency for approval.
	The revised plan shall include an assessment of the risk of dust pollution associated with the permitted site operations, and a proposal for optimum moisture ranges and details of the moisture monitoring method and frequency for the IBA and IBAA. The monitoring methods may include for example, the use of moisture probes or dry/wet analysis or any other alternative methods that are suitable for establishing the optimum moisture range for effective dust emission control.
	The plan shall take into account the appropriate measures for dust control specified in the Non-hazardous and inert waste: appropriate measures for permitted facilities guidance and Control and monitor emissions for your environmental permit.
	Once the DMP is approved by the Environment Agency, the operator shall carry out site operations in accordance with the approved DMP, and any subsequent revisions agreed in writing by the Environment Agency.
Provide any further details of sampling and testing data regarding your discharges to controlled waters	Sampling data was provided. This shows exceedance of the total suspended solid BAT AEL. Given this we have added an Improvement condition IC2a and IC2b to the permit listed below:

Issued date: 10/07/2024 Page 15 of 16

IC2a The operator shall submit proposals for wastewater treatment, including measures on how to reduce the level of suspended solids in the waste water to the Environment Agency for approval. The proposals shall include detail of improvements to wastewater treatment systems on site to ensure that the discharge of wastewater from the site to the surface water is in compliance with the appropriate BAT AELs specified in the Waste Incineration BAT Conclusions.

IC2b Following the completion of IC2a, the operator shall implement the approved improvements, including measures on how to reduce the level of suspended solids in the waste water, by the deadline specified in this improvement condition unless otherwise agreed in writing with the Environment Agency

Issued date: 10/07/2024 Page 16 of 16