

FICHTNER

Consulting Engineers Limited



Hillhouse IBA Processing Facility



Fortis IBA Limited

Dust Management Plan

Document approval

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1 Introduction

1.1 Background

This Dust Management Plan (DMP) has been prepared by Fichtner Consulting Engineers Limited (FCE) on behalf of Fortis IBA Limited (the 'Operator') to support an Environmental Permit (EP) application submitted to the Environment Agency (EA) for the storage and treatment of up to 350,000 tonnes of incinerator bottom ash (IBA) at Hillhouse IBA Facility (the 'Proposed Facility'). The Proposed Facility will be located at the Hillhouse Business Park, Thornton-Cleveleys, Lancashire FY5 4GR (the Site).

IBA will be imported to the Site before undergoing dry processing and treatment to recover metals and convert the residue into a marketable product in the form of a sustainable recycled aggregate known as Incinerator Bottom Ash Aggregate (IBAA). This product will then be exported from the Site for reuse in construction projects.

The Site is located approximately 2.7 km east of Cleveleys, 3.1 km south west of Stalmine, 4.2 km south of Fleetwood and 8.1 km northeast of Blackpool.

There are approximately 300 residential properties located within 1 km of the Site to the south. The closest residential receptor is Flint's Caravan Site which is located approximately 0.04 km south of the Site.

The Site is not located within a current or proposed Air Quality Management Area (AQMA). The nearest AQMA (Chapel Street AQMA) is approximately 3.9 km south of the Site in Poulton-le-Fylde and is designated for nitrogen dioxide (NO₂).

An installation boundary and the indicative layout of storage areas is presented in Appendix A.

This report has been completed in accordance with the following guidance:

- Control and monitor emissions for your environmental permit¹;
- Technical guidance note M17 Monitoring Particulate Matter in Ambient Air around Waste Facilities (Version 2)²; and
- Example Dust & Particulate Emissions Management Plan (version 10)³.

1.2 Implementing the DMP

The Site Manager, who is also the technically competent manager (TCM), will ensure that the procedures in this DMP are adhered to. The Site Manager will have the authority to modify or stop operations to reduce emissions on a temporary or permanent basis until the risk of emissions has subsided.

¹ EA, DEFRA (2022). *Control and monitor emissions for your environmental permit*. Available at: <https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit> [Last Accessed: 19 April 2024].

² EA (2013). *Technical guidance note M17 Monitoring Particulate Matter in Ambient Air around Waste Facilities* (Version 2). Available at: https://assets.publishing.service.gov.uk/media/5a7eced140f0b62305b834f1/TGN_M17_-_Monitoring_of_particulate_matter_in_ambient_air_around_waste_facilities.pdf [Last Accessed: 19 April 2024].

³ EA (2018). *Dust & Particulate Emissions Management Plan (version 10)*. Available at: https://consult.environment-agency.gov.uk/psc/e16-2ax-metro-london-g-b-limited/supporting_documents/Example%20Dust%20Emissions%20Management%20Plan%20vr%2010.pdf [Last Accessed 19 April 2024].

The Site Manager will ensure that all members of staff are aware of the dust management procedures. Staff at all levels will receive the necessary training and instruction in their duties relating to the control of all operations and the potential sources of dust emissions.

1.3 Review of the DMP

This DMP will be reviewed as follows:

- When changes are made to your site, operations or equipment that affect the activities covered by your permit;
- Whenever an application is made to change ('vary') the permit;
- After any accident, complaint or breach of your permit; and
- If a new environmental problem or issue is encountered, and you have implemented new measures to control it.

Any revisions or changes will be logged in a revision history table at the beginning of the document.

2 The Facility

2.1 Deliveries to the Facility

All materials transferred into and out of the IBA facility are delivered by road within enclosed or covered vehicles to reduce dust emissions. The IBA will be deposited and stored in the stockpiles shed for maturation prior to processing.

2.1.1 Incoming waste

IBA is characterised as non-hazardous waste and typically comprises a combination of glass, aggregate, clinker and ash from the Energy from Waste (EfW) burning process. The waste types to be accepted at the Site are listed in Table 1 below.

Table 1: Proposed waste types

EWC code	Description (from WM3 ⁴)	Comments
19 01 12	Bottom ash and slag other than those mentioned in 19 01 11.	Incinerator Bottom Ash
19 12 12	Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11.	For Incinerator Bottom Ash Aggregate (IBAA) returned to site

The proposed throughputs are a maximum of 350,000 tonnes per annum.

2.1.2 Waste acceptance procedures

Fortis IBA has already implemented waste acceptance and pre-acceptance procedures at its existing facilities. Therefore, the procedures will be revised to ensure that they are application for the Facility. Examples of the existing procedures are provided in Appendix G.

In accordance with the waste acceptance procedures, a record shall be kept of the types and quantities of waste delivered and removed from the Facility. These records will be retained on-site and available for inspection by Environment Agency officers for a minimum of 6 years. The records will be kept secure from loss, damage or deterioration. The records of waste accepted and removed from Site will include the following information:

- time and date received or removed from Site;
- vehicle registration and waste carrier details;
- producer's name and address, SIC Code, and Waste Hierarchy declaration;
- description of the waste by EWC category and quantity in tonnes;
- details of the onward site for wastes removed from Site; and

⁴ EA (2021). *Guidance on the classification and assessment of waste (1st Edition v1.2.GB)*. Available at: https://assets.publishing.service.gov.uk/media/6152d0b78fa8f5610b9c222b/Waste_classification_technical_guidance_WM3.pdf [Last Accessed: 19 May 2024].

2.2 IBA Reception

The incoming IBA has an elevated moisture content (typically between 20% and 25%) on arrival, as a result of the quenching process within the waste incineration process. If, when unloaded, the IBA is found to be unusually dusty, it will be dampened down to prevent dust generation from its storage.

2.2.1 Sampling and testing protocol

A sampling and testing protocol will be put in place to determine whether the incoming IBA is hazardous or non-hazardous. In accordance with the WRc Report UC 9390.05, the IBA received on Site will need to be tested by the waste producer. Every two weeks, Fortis IBA will be informed of the results: when Fortis IBA receives confirmation that each stockpile of the IBA received is non-hazardous, it can proceed to processing. If the IBA is classed as hazardous, the stockpile of IBA will be segregated and quarantined. A quarantine area is located to the northeast of the stockpiles shed (refer to Appendix A).

Any IBA which is required to be quarantined will be managed in accordance with a quarantine procedure. The quarantine procedure will be based on Fortis's existing quarantine procedures for its operational IBA processing facilities.

A visual check will be conducted by the plant operator when the load is tipped. If unburnt waste is identified, the following actions will be taken:

- the load will be quarantined and the Technically Competent Manager (TMC) will be informed;
- a photograph will be taken of the load and sent to the waste producer;
- records of the loss on ignition (LOI) or Total Organic Carbon (TOC) test results will be requested from the EfW operator; and
- a non-conformance will be raised; and
- the load will be returned to the EfW for disposal.

Due to the two-week period between sampling and receipt of the results, the storage of IBA will be undertaken in recorded batch stockpiles. Therefore, in the unlikely event of a test result returning showing that the IBA is hazardous, this will allow for the easy identification of the batch and its removal to a suitably permitted facility for disposal or recovery.

IBA will not be transferred for processing, until the test results showing that it is not hazardous has not been received. On this basis, Fortis IBA will not knowingly accept any hazardous IBA at the Facility.

Refer to Appendix G for the ESA sampling protocol.

2.2.2 IBA storage

Imported material will be tipped in the stockpiles shed and subsequently stacked in windrows using an excavator. IBA is then stored in this form for six to eight weeks to allow oxidation, hydration and carbonation reactions to occur. These chemical reactions require water and, therefore, the moisture content and pH of the IBA reduces.

The maturation process is exothermic and results in the core of the stockpiles heating up to about 70°C, subsequently forming a crust on the outer layer of the stockpiles. During dry weather, water will be sprayed over the stockpiles to promote the ageing process, as well as to mitigate against any potential dust emissions.

2.3 IBA Processing

A loading shovel feeds the IBA into a feed hopper and is transported by an overland covered conveyor to the IBA processing building. A material feeder regulates the flow rate of material entering the plant. A primary magnet recovers the large ferrous metals, which are subsequently transferred for recovery.

A series of overband and drum magnets recover mainly batteries and small ferrous metals which are present throughout the entire process and are subsequently transferred for recovery.

Screens are used to sort the material into a minimum of three fractions based on particle size:

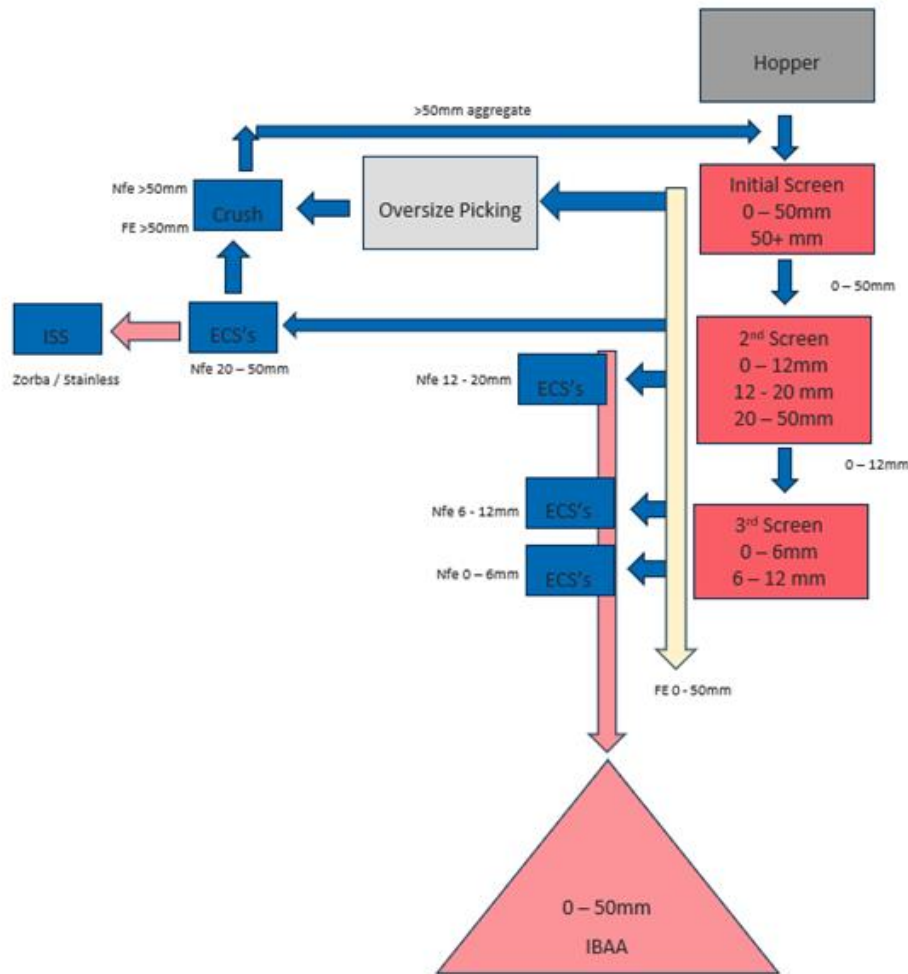
- fine (0-6 mm);
- medium (6-12 mm); and
- large (12-50 mm).

The three fractions are then passed over a series of eddy current separators and induction sorting machines to recover non-ferrous metals, which are subsequently transferred for recovery.

The remaining material is clinker, which is blended back into the IBAA. The different grades of material are blended back together to form the fully processed Fortis IBAA. This is marketed and sold successfully across the construction industry being exported from the Site by Heavy Goods Vehicles (HGVs).

An indicative process schematic for IBA processing is presented in Figure 1:

Figure 1: Process flow diagram



2.3.1 IBA import and IBAA export

IBA will be imported and IBAA will be exported from Site in sheeted HGVs. IBAA is marketed and sold successfully as a substitute for primary aggregate subbase in the construction industry.

2.3.2 Overview of emission controls

The Site will be operated in accordance with EA and Environmental Services Association⁵ (ESA) guidance for IBAA operations to ensure there is no impact on human health or the environment.

The following emission controls will be implemented on Site:

- IBA and IBAA will be stored within the stockpiles shed which will be a three-sided building with a roof. The open side of the building faces north east, which is opposite the prevailing wind directions. This will mitigate fugitive emissions of dusts from stockpiles.
- IBA processing will be undertaken within the IBA processing building which will be a fully enclosed building. This will mitigate fugitive emissions of dusts during processing.

⁵ <http://www.esauk.org/what-we-do/raising-standards/guidance/iba-guidance>

- A drainage system and water tank will be installed that will collect contaminated water from the run-off within the IBA processing building. This will provide the water for the dust suppression system and will be supplemented by rainwater and mains fed water.
- Water tanks will be used to collect surface water run-off from the IBA/IBAA storage shed roofs. The overflow from the water storage tanks will discharge into Royles Brook.
- A vehicle wash will be installed at the access road on-site to mitigate tracking mud and dust on to or off the Site.
- The IBA/IBAA storage area and processing plant area is surfaced in concrete and has a sealed drainage system.
- The standard method used to reduce the potential impact from dust emissions on Site is to keep windrows moist. This will also promote carbonation and cementation of the fine particles by coating particle surfaces and partial filling of pore space. The crust that forms will partly mitigate airborne dust emissions until the stockpile is disturbed and is known as thatching.
- Rain guns will be strategically located within the stockpiles shed to provide coverage of all stockpiled materials.
- A spray bar will also be installed at the end of the IBAA discharge conveyor to prevent emissions from this location.
- Spare pump components and a backup generator are stored on Site to ensure contingency measures are in place to overcome failure of key parts or failures of power.

2.3.3 Potential dust sources

Identified sources for fugitive dust emissions from the Site should no mitigation measures be implemented are:

- Vehicles entering and/or leaving the Site with mud on wheels, and tracking dust on to or off the Site;
- Road vehicles tipping waste;
- Wind whipping from stockpiled waste;
- Breaking out of windrow stockpiles to transfer matured materials for physical treatment;
- Physical treatment of waste, including wastes dropping from conveyors into stockpiles; and
- Particulate emissions from the exhaust of vehicles/plant/machinery on Site.

2.4 Meteorology

Unlike many other atmospheric pollutants, the generation of fugitive dust is particularly dependent upon weather conditions and the nature of the operations.

The prevailing meteorological conditions at any site will be dependent upon many factors, including its location in relation to macroclimatic conditions as well as more site specific, microclimatic conditions.

The most important climatic parameters governing the release and dispersal of emissions are:

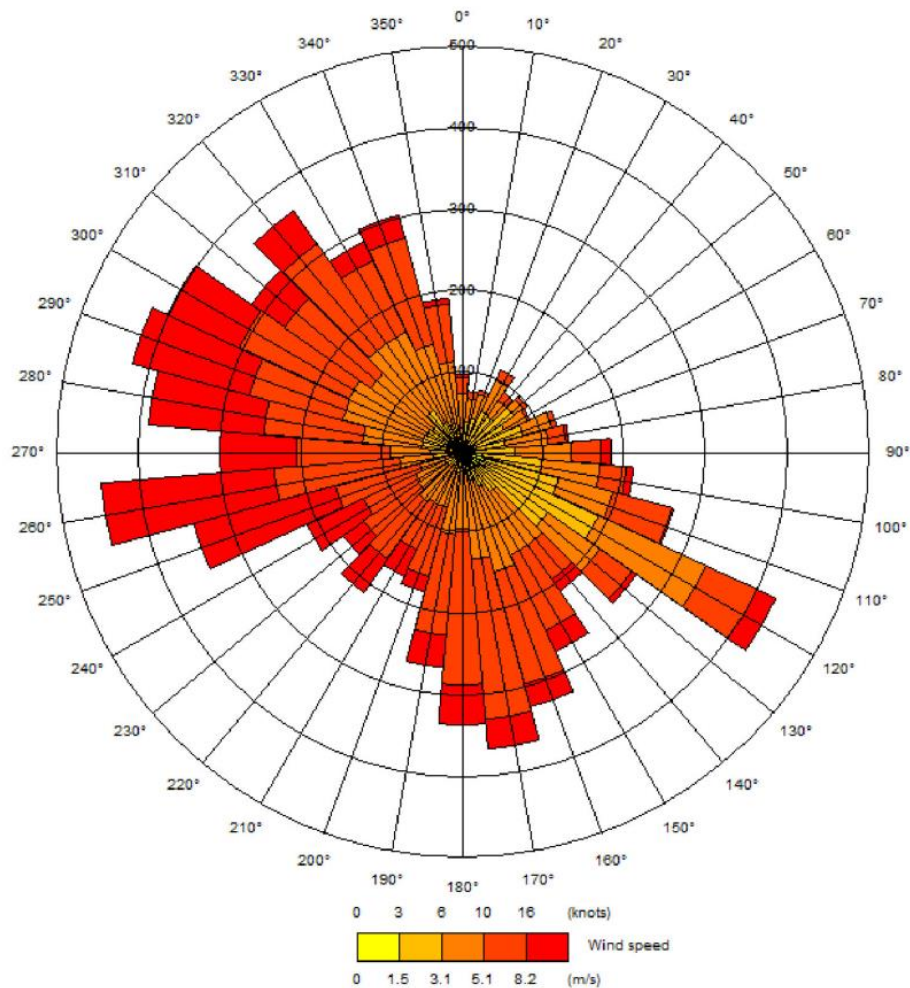
- **Wind direction** determines the broad transport of the emission and the sector of the compass into which the emission is dispersed; and
- **Wind speed** will affect the ground level emission by increasing the initial dilution of pollutants in the emission. It will also affect the potential for entrainment of dust.

Wind speed and direction data have been obtained from Blackpool Airport meteorological recording station for the period 2017 – 2021. Blackpool Airport is approximately 13 km to the south of the Facility and is the closest and most representative meteorological station available.

The predominant wind hails from a south westerly direction. Wind speed and direction data are presented as a wind rose in Figure 2.

According to the Beaufort wind force scale⁶, winds exceeding 13 mph are taken to be capable of entraining dust from surfaces. Wind speeds exceeding 13 mph occur 20 % of the time. Winds from the west south-west are most prevalent, blowing 18 % of the time, with winds exceeding 13 mph for 5 % of that time.

Figure 2: Wind Rose – Blackpool Airport 2022



⁶ <https://www.rmets.org/resource/beaufort-scale>

3 Potential Sensitive Receptors

Locations with a high sensitivity to dust include habitats sites, hospitals, schools and convalescent facilities. These are areas which are considered to be more susceptible to the adverse effects of exposure to high levels of dust and particulates.

The distance from the source to the receptor location plays an important role in the potential impact experienced as airborne dust: detection concentrations fall off rapidly with increasing distance from the source. The very largest dust particles usually only travel 10m to 20m before being deposited and the vast majority of dust is deposited within 100m of the source.

There are a number of residential receptors located within 500m of the Site. The closest residential receptor is Flints Caravan Park which is located approximately 40 m south of the Site.

The potentially sensitive receptors within 500 m of the Site are presented in Table 2 and shown on Figure 3 in Appendix A of the DMP.

Table 2: Sensitive receptor locations

ID	Receptor	Type of receptor	Distance from permit application boundary (m)	Direction from permit application boundary	Location in relation to prevailing wind direction
1	Flint's Caravan Site	Residential	40	South	Upwind
2	Wyre Estuary Country Park	Social	80	South east	Upwind
3	Morecambe Bay Ramsar Site	Ecological	80	North east	Downwind
4	Wyre Estuary Site of Special Scientific Interest (SSSI)	Ecological	80	North east	Downwind
5	Residential properties on Bentley Green	Residential	400	South east	Upwind

3.1 Other dust / particulate emitting operators

The Site is located in Hillhouse Business Park which contains several other potential dust/particulate emitting operators. Other potential dust/particulate emitting operators identified within proximity of the Site are presented in Table 3 and identified in Figure 4 in Appendix A of the DMP.

Table 3: Other dust / particulate emitting operators

ID	Operator	Type of business	Processes	Distance from permit application boundary (m)	Direction from permit application boundary	Location in relation to prevailing wind direction
1	Victrex plc	Manufacturing	Plastic processing	500	North west	Upstream

Vehicle movements associated with the operations of local businesses as well as users of the nearby roads are likely to produce fugitive emissions from vehicle movements and point source emissions from exhausts. It should also be noted that events such as construction works and harvesting, which are temporary, may from time to time generate elevated dust levels and soiling over short durations. Due to the distance between sensitive receptors and the Site, together with employed mitigation, cumulative dust effects are not anticipated from the proposed waste operation. Best practice mitigation measures are included in section 4 within this document and will be implemented at the Facility.

4 Mitigation and monitoring

4.1 Mitigation measures

As mentioned previously, the wastes to be treated on Site will arrive damp and therefore have a negligible potential to create dust when handled. Table 4 presents the source pathway receptor model for the Site. The table applies to all receptors listed in Table 2.

Table 4: Source-Pathway-Receptor routes

Source	Pathway	Type of Impact	Where the relationship can be interrupted
Vehicles entering and/or leaving the Site	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Visual soiling, also consequent resuspension as airborne particulates	Remove mud in the wheel wash before vehicles leave Site. Use of road sweeper
Debris/dust falling from vehicles/mobile plant.	Atmospheric dispersion	Visual soiling, also consequent resuspension as airborne particulates	Cover lorries before leaving Site. Use of road sweeper.
Road vehicles tipping waste, wind whipping from stockpiled waste, breaking out of windrow stockpiles to transfer matured materials for physical treatment, and physical treatment of waste	Atmospheric dispersion	Visual soiling and airborne particulates	Minimise source strength by means of low drop heights, profiling and thatching of windrows to prevent wind whipping. Wetting of wastes using dust suppression measures.
Vehicle exhaust emissions	Atmospheric dispersion	Airborne particulates	Regulatory controls and best practice measures to minimise source strength.
Maintenance and cleaning operations (washdown, sweeping).	Atmospheric dispersion, dispersion via washdown water.	Visual soiling, airborne particulates, pollutants in water.	Road sweeping, damping down of roads in periods of dry weather, containment of process waters resulting from washdown.

Table 5 provides detailed mitigation measures to be employed at the Site. The proposed mitigation measures include preventative and remedial measures which will break the potential source-pathway-receptor linkages identified above.

Table 5: Summary of mitigation measures

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
Hardstanding of unmade ground	Creating a hard surface as opposed to unmade (rocky or muddy) ground within the Site and on-site haul roads. This will reduce the amount of dust generated at ground level by vehicles and site activities.	The storage and treatment of wastes will take place on an impermeable surface with a sealed drainage system. The Site surfacing will allow easy cleaning and prevent wind-whipping.	To be implemented throughout the lifetime of the Site as standard practice.
Reduction in operations (waste throughput, vehicle size, operational hours)	Reducing the amount of activity on the Site as well as associated traffic movements will result in reduced emissions and re-suspension of particulates from the Site.	The operation has been sized appropriately, with particular regard to dust, noise and vehicle movements and has been subject to Environmental Impact Assessment as part of the planning process. Annual throughputs will be limited to 350,000 tpa.	N/A
Site / process layout in relation to receptors	Locating particulate emitting activities at a greater distance from receptors may reduce receptor exposure.	The storage of IBA and IBAA is enclosed within a three-sided building. The open side of the building faces north east, which is opposite the prevailing wind directions.	N/A
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	Materials will be imported and exported from Site in sheeted HGV's.	To be implemented throughout the lifetime of the Site as standard practice.
Installed wheel wash	Provides a facility to wash vehicle wheels and lower parts (including under body).	Provision of a wheel wash located at on-site to prevent vehicles depositing material from their wheels or undercarriage onto public highways.	To be implemented throughout the lifetime of the Site as standard practice.

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
		<p>No HGV shall leave the Site unless its wheels and underside chassis have been cleaned to prevent materials, including mud and debris, being deposited on the public highway.</p> <p>Vehicles will be inspected on entrance to the Site. If the wheels are not clean they will be directed back through the wheel wash.</p>	
Site speed limit, 'no idling' policy and minimisation of vehicle movements on Site	<p>Reducing vehicle movements and idling will reduce emissions from vehicles.</p> <p>Enforcement of the speed limit will reduce re-suspension of particulates by vehicle wheels.</p>	Speed limit of 10 mph applied to all plant and vehicles operating on the Site.	To be implemented throughout the lifetime of the Site as standard practice.
All Site vehicles will be maintained in accordance with the manufacturer's instructions	<p>To ensure optimum operation conditions.</p> <p>Plant and vehicles will be regularly serviced and equipped with effective exhausts to minimise exhaust emissions.</p>	<p>All vehicles.</p> <p>Mobile plant would be fitted with vertical exhausts.</p>	To be implemented throughout the lifetime of the Site as standard practice.
Ceasing operation during high winds	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Weather station is in place to monitor wind speeds.	<p>To be implemented throughout the lifetime of the Site as standard practice.</p> <p>Operations may be ceased at the discretion of the Site manager should</p>

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
			wind speeds exceed 13mph and there are visible emissions from stockpiles.
Standard good practices for site haulage to be implemented.	Avoiding abrupt changes in direction and evenly loading vehicles to avoid spillages.	All vehicles	To be implemented throughout the lifetime of the Site as standard practice.
Water suppression with rain guns	Installation of rain spray guns around Site, at potential emission points like stockpiled waste and conveyors. Very effective at controlling point source emissions of dust and particulates.	The main method of dust suppression to be utilised on Site is through the implementation of fixed and mobile rain guns, which will cover all areas of waste storage. A spray bar will be installed on the exit to the IBAA conveyor. Refer to section 2 for further details.	To be implemented throughout the lifetime of the Site as standard practice. From November to February the guns will be manually controlled as and when required (i.e. should dust be seen to be entrained from stockpiles). The spray bar at the IBAA discharge conveyor will be in use whenever the conveyor is operational.
Water suppression with bowser	Using bowzers is a quick method of damping down large areas of the Site with large water jets. To minimise fugitive emissions on internal haul roads and access roads.	Surfaces will be dampened and without saturating, to prevent wind whipping and dust entrainment within the Site boundary.	To be implemented throughout the lifetime of the Site as standard practice.
Use treatment plant within their respective design capacity and maintaining good standards of all plant and equipment.	To minimise dust emissions during the physical treatment process.	All relevant plant.	To be implemented throughout the lifetime of the Site as standard practice.
On-site sweeping	Sweeping is effective in managing larger debris and dust but may also	Employed to prevent off Site emissions as part of general Site maintenance.	To be undertaken as often as necessary to keep roads clear of visible debris or

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
	<p>cause the mobilisation of smaller particles.</p> <p>Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.</p>	There are regular inspections and maintenance of hard surfaces.	dust during operational hours, in accordance with the day to day requirements of the Site as triggered by daily dust monitoring (see Table 6).
Road sweepers	Road sweeping vehicles damp down dusts whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.	To be employed in order to prevent mud on public highway.	As above.
Good Site Management	Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.	All staff.	To be implemented throughout the lifetime of the Site as standard practice.
Staff training	<p>Provide training to the Site personnel on dust mitigation.</p> <p>Training should also cover 'emergency preparedness plans' to react quickly in case of any failure of the planned dust mitigation.</p>	All staff.	To be implemented throughout the lifetime of the Site as standard practice.
Communication	Maintain good communication to help alleviate anxieties between the Operator and the surrounding communities.	All staff.	To be implemented throughout the lifetime of the Site as standard practice.

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
	Display the name and contact details of person(s) accountable for air quality and dust issues on the Site boundary.		
Site/process layout in relation to receptors	Locating certain dusty activities at a greater distance and downwind from receptors, to reduce receptor exposure.	The technology provider will implement an efficient layout as part of good practice.	To be implemented throughout the lifetime of the Site as standard practice.
Regular visual inspections	This will allow for timely mitigation / remediation once build-ups of dust and litter have been identified.	Regular visual inspections will be undertaken as part of documented procedures at the Site. This will also extend to periodic inspections of Site access roads and haul routes within the vicinity of the Site for trackout/spillage of materials from vehicles. Inspections and subsequent actions will be recorded, with mitigation measures implemented if necessary. Visual checks will also be undertaken on HGVs leaving the Site.	Inspections will be undertaken on a periodic basis in accordance with documented procedures.
Use of high integrity equipment	Selection of high integrity, modern and advanced equipment can reduce the generation of particulates and dust.	It can be confirmed that high integrity equipment will be installed at the Facility, with additional mitigation such as dust suppression sprays installed on processing equipment where technically/economically feasible. Regulatory controls and best-practice measures will be implemented for vehicles/mobile plant to confirm they	High integrity equipment will be selected by the technology provider when undertaking the detailed design of the Facility. Should it be identified during the lifetime of the Facility that equipment is no longer 'fit-for-purpose' or is otherwise resulting in significant fugitive emissions, it will be repaired or replaced as appropriate.

Abatement measure	Description / Effect	Use on Site	Trigger for implementation
		comply with relevant emissions standards.	

4.2 Emissions monitoring

An automatic weather station will be installed at the Site offices to provide data on weather conditions; precipitation, wind speed and direction. The weather station will be used to support site management in proactively responding to adverse conditions in determining periods when there is an elevated risk of wind-blown fugitive dust.

Visual inspections of the following locations will be undertaken by the Site Manager or his nominee during each working day as set out in Table 6.

Table 6: Visual dust monitoring

Location	What are you looking for?	Actions
Visual monitoring locations are shown on Figure 6	Visual check for fugitive dust emissions across boundary.	See Dust Action Plan (DAP) below.
Site access roads and haul roads	Visual check for wind whipping of surfaces, do they require damping down?	Use bowser to dampen down.
Windrows/stockpiles and Processing Areas	Do dusty wastes or surfaces need damping down?	Use spray guns, bowser or mobile suppression unit to dampen down.
Site road between final wheel wash and public highway	Check it is clear of mud and debris, is action required? Are vehicle wheels/undersides clear as they are exiting the Site?	Call road sweeper. If necessary, vehicles will pass through the wheel wash a second time.
Public highway	Check it is clear of mud and debris, is action required?	Call road sweeper.

5 Following a Complaint

Following receipt of a complaint regarding dust, all dusty operations may be ceased, and the following actions should be taken:

- The complaint must be investigated fully and the source of the dust identified;
- Following identification of the dust source, suitable remediation measures will be employed as detailed above;
- Once the investigation has been carried out, the manager handling the complaint will contact the originator of the complaint and provide feedback on his findings and also the nature of any corrective action proposed;
- Once the dust source has been identified and mitigated, operations can be resumed;
- If the identified source of dust is deemed to require more thorough investigation or remediation i.e. the source of the dust is not immediately apparent, then dusty operations will be suspended until such a time as it has been identified;
- A record of the complaint together with the remediation actions and a completed Incident Report form will be kept on Site for senior management and/or the Environment Agency to review at any time; and
- In the unlikely instance that three or more complaints be logged for one event, operations will be ceased and the Site manager will escalate the event to senior management.

Reporting forms for incidents and complaints are presented in Appendix G.

Appendices

A Figures

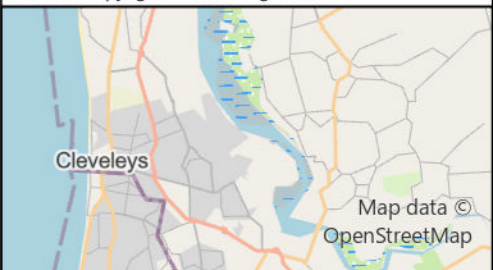


- Legend**
- Installation Boundary
 - ★ Dust Management Plan Receptors
 - Morecambe Bay Ramsar/SPA/Wyre Estuary SSSI

Client:	Fortis IBA Ltd
Site:	Hillhouse IBA Facility
Project:	Dust Management Plan
Title:	

Figure 3. Dust Management Plan Sensitive Receptors

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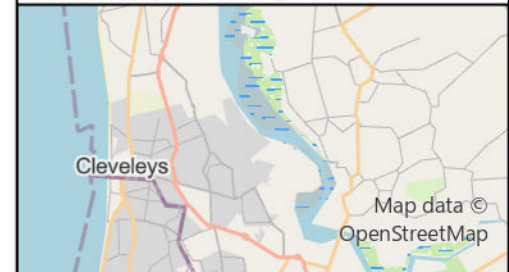
Legend

- Installation Boundary
- Victrex Main Process Areas

Client:	Fortis IBA Ltd
Site:	Hillhouse IBA Facility
Project:	Dust Management Plan
Title:	

Figure 4. Dust Management Plan Other Dust Emitters

Drawn by: SMN	Date: 25/07/2024
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