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Consulting Engineers Limited

Redcar Energy Centre

Redcar Holdings Limited

Dust Management Plan – IBA facility

ENGINEERING CONSULTING

Document approval

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Document revision record

Revision no	Date	Details of revisions	Prepared by	Checked by
00	14/02/2022	For Client	KLH	JRS
01	29/03/2022	Minor updates following Client comments	KLH	JRS
02	28/06/2023	Updated terminology following Duly Making request	KLH	JRS

Contents

1 Introduction

Redcar Holdings Limited (Redcar Ltd) is developing the Redcar Energy Centre (REC) which will comprise a fuel preparation facility, an Energy Recovery Facility (ERF) to incinerate incoming non-hazardous waste, and an Incinerator Bottom Ash (IBA) treatment/processing facility (the IBA facility).

During pre-application discussions (EPR/TP3502MS/A001), the EA requested that a Dust Management Plan (DMP) for the IBA facility is developed and submitted with the EP application, due to the nature of the material that is handled at the IBA facility. The operation of the fuel preparation facility and ERF are not expected to give rise to significant dust emissions. Therefore, this DMP considers the operation of the IBA facility only.

Although the IBA will be maintained wet from initial quenching, the external storage of IBA and IBAA (including handling using bucket loaders) is considered to give rise to the potential for dust emissions. Therefore, the purpose of the DMP is to demonstrate that the control of dust and particulate emissions has been taken into account in the design of the IBA facility. Dust emissions and management during construction activities is already considered and regulated as part of the planning process and as such dust impacts arising from construction activities has been excluded from the scope of this document.

This DMP will be a working document and will be updated and refined following detailed design of the IBA facility, in line with specific measures to be implemented at the site. The DMP is intended to form an integral part of the site Environmental Management System (EMS), and operational staff will have easy access to the document via the site internal computer systems. The purpose of the DMP is to set out operational procedures to control and mitigate dust and particulate emissions from the IBA facility, with the DMP made available to all operational staff working at the IBA facility. Redcar Ltd may choose to subcontract the day-to-day operation of the IBA facility to a contractor but will remain responsible in ensuring compliance with the EP (which will include the DMP and keeping this up to date).

For the purpose of this report, “dust” refers to the course fraction which can deposit and cause annoyance, whereas “particulates” refers to the finer particulates which are suspended in the air and can cause respiratory health impacts. These are generally PM_{10} or smaller.

1.1 Report structure

This report has the following structure broadly in line with the template DMP guidance provided by the EA:

- Details of the site location including site address are presented in section 2.
- Operations to be undertaken at the IBA facility are outlined in section 3.
- Sensitive receptors are identified in section 4.
- Measures for dust and particulate management at the IBA facility are outlined in section 5.
- Proposals for monitoring at the site are described in section 6 and 7.
- Further details on the reporting and complaints procedures to be implemented at the IBA facility are provided in section 8.

2 Site location and description

2.1 The site

REC will be located at the Redcar Bulk Terminal, approximately 4.5 km west of Redcar town centre and 8.5km northeast of Middlesbrough city centre, and under the authority of Redcar and Cleveland Borough Council. The site is not located within an AQMA.

The surrounding area is predominantly industrial – the eastern boundary of the site is formed by coke ovens associated with the former Teesside Steel Works, with a further area of the Steel Works located to the southeast of the site. The north and north-eastern boundaries of the site are formed of a high earth bund, beyond which lies an area of sand dunes associated with the Bran Sands. The western boundary of the site is not enclosed or marked but a further storage area of the Redcar Bulk Terminal and the Tees Estuary lies beyond it.

Access to REC will be via a series of internal access roads which serve the industrial area, with a link to the A1085 which provides a strategic access to Middlesbrough and beyond via the A19.

2.2 Site address

The site address is as follows:

Redcar IBA Facility,

Redcar Energy Centre,

Land at Redcar Bulk Terminal,

Redcar,

TS10 5QW

2.3 Summary of operations

The purpose of the IBA facility is to process IBA (received both directly from the ERF via a conveyor system, and from off-site sources via road) to produce an aggregate material (IBAA) for use in the construction industry. Other aggregate-type materials will be received at the IBA facility for the purposes of blending.

3 Operations at Redcar IBA facility

3.1 Deliveries to Redcar IBA facility

IBA falls from the combustion grate at the ERF, and is quenched using a water bath or similar system. This serves to dampen the IBA to prevent the formation of fugitive dust emissions from subsequent handling and storage and reduces the temperature of the IBA so that it is safe for sampling.

The quenched IBA from the ERF will be transferred, via an enclosed conveyor system, to the bottom ash reception bunker at the IBA facility, which is located within an enclosed building. IBA will also be transferred directly to the IBA facility from off-site sources. This may be via road in enclosed/covered vehicles (expected to be heavy goods vehicles) or imported in enclosed vessels via the Redcar Bulk Terminal. IBA transferred from external sources will be weighed first at the weighbridge, and waste acceptance checks will be undertaken on the paperwork accompanying the delivery. The EWC codes to be accepted by the IBA facility are presented within Table 1:

Table 1: Waste to be processed in the IBA facility

EWC Code	Description of Waste
WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS	
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 0407
01 04 09	waste sand and clays
WASTES FROM THERMAL PROCESSES	
10 01	**wastes from power stations and other combustion plants (except 19)**
10 01 01	bottom ash, slag and boiler dust (excluding boiler dust mentioned in10 01 04)
10 01 03	fly ash from peat and untreated wood
10 01 15	bottom ash, slag and boiler dust from co-incineration other thanthose mentioned in 10 01 14
CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 09	**other construction and demolition wastes**
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

EWC Code	Description of Waste
WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE	
19 01	**wastes from incineration or pyrolysis of waste**
19 01 12	bottom ash and slag other than those mentioned in 19 01 11
19 01 16	boiler dust other than those mentioned in 19 01 15
19 01 19	sands from fluidised beds
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 09	minerals (for example sand, stones)
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 1913 01

3.2 Overview of waste processing, dust and other emission controls

Fugitive emissions of dust have the potential to occur during transport, unloading, loading, processing and storage operations at the IBA facility. A number of control measures will be in place to reduce fugitive emissions of dust from the site – these are set out within sections 3.2.1 and 3.2.2 below.

3.2.1 IBA processing

From the bottom ash reception bunker, the IBA will be transferred via enclosed conveyor to the main enclosed process building, where it will undergo mechanical processing to extract metals, separate out size fractions etc. The processing stages are set out broadly as follows:

1. The IBA will be fed into a hopper to screen oversize material (which is material typically above 40mm diameter). It is expected that larger pieces of material (such as stone and concrete) would undergo crushing at the IBA facility to ensure a more homogeneous product.
2. The screened material will then pass via conveyor belts through the treatment process. An over-band magnet would remove ferrous metals from the IBA, and an eddy current separator would remove non-ferrous metals from the IBA. Ferrous and non-ferrous material would be collected in separate storage bays or containers before transfer off-site for further processing and reuse.
3. The IBA will then undergo separation into different size fractions using a drum screen. A wind sifter may also be used to separate out fine material.
4. Finer particles of ferrous metals would be removed using secondary over-band magnets.
5. Any unburnt material that is identified would be returned to the ERF for re-processing.
6. Blending of the processed IBA material with other aggregate materials may be undertaken to improve the quality of the aggregate product.

Dust suppression measures will be incorporated within the IBA processing buildings. Whilst they are subject to detailed design, an example of a measure to be implemented is the use of overhead dust suppression sprays.

An indicative process flow diagram for the IBA facility is presented within Figure 1.

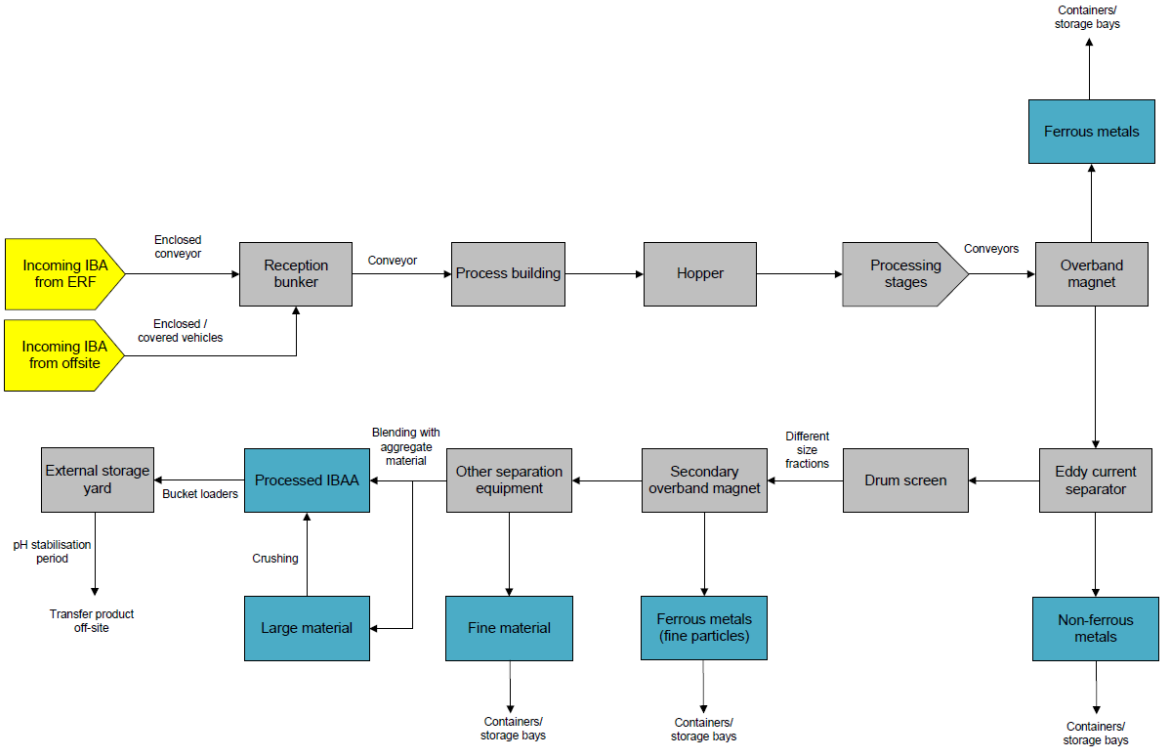

Figure 1: Indicative process flow diagram - IBA facility

The type of equipment and order of processing will be confirmed during the detailed design of the IBA facility.

3.2.2 IBAA storage

The screened material will then be transferred from the process building, by bucket loaders, to the external storage area for maturation (typically 2 – 4 weeks), before transport off-site as secondary aggregate (IBAA). The storage period would allow for pH stabilisation of the IBA via a series of naturally occurring chemical reactions (such as carbonisation and hydration) which will reduce the pH of the IBA and improve the material. Following maturation, the IBA would be transferred off-site in covered vehicles as IBAA for use in the construction industry.

The external storage area would comprise a large concrete storage yard, surrounded by a high concrete wall which would serve as a push wall for the operation of the IBA facility. The concrete hardstanding will be easy to clean thus preventing the accumulation of dust and particulates. A 5m high boundary wall to the IBA area will be installed, to disrupt wind flow across the site and reduce the generation of dust. Additional wind breaks will also be installed within the IBAA storage area to minimise the generation of windborne dusts from IBAA storage. The IBAA stockpiles will be at least 0.5m below the height of the walls. Detailed design will consider whether additional dust suppression measures are required to mitigate the generation of fugitive dusts from the IBAA storage, and could include measures such as a tractor with a water bowser, or ‘dust busters’ located at strategic points around the IBAA storage area.

The expected storage arrangements and capacities for the IBAA storage area are presented within Table 2. The Dust Management Plan will be updated following completion of detailed design to provide more detail on storage locations and quantities within the IBAA storage areas,

Table 2: Indicative storage arrangements - IBA facility

Material	Storage capacity	Storage arrangements
Incoming IBA (from both adjacent ERF and off-site sources)	40,000 tonnes	Reception bunker in enclosed building.
Processed IBAA	20,000 tonnes	External stockpiles in storage yard.
Aggregates for blending	5,000 tonnes	External stockpiles in storage yard.
Extracted metals	1,000 tonnes	Containers in storage yard.

An indicative site layout for the IBA facility is presented within Figure 2. The exact layout will be subject to detailed design and appointment of a technology provider. The Dust Management Plan will be updated following completion of any detailed design, with site layout drawings showing the locations of any generators, combustion equipment, mobile plant and dust suppression equipment. A copy of the wider Installation Boundary drawing for REC is also provided in Appendix A.

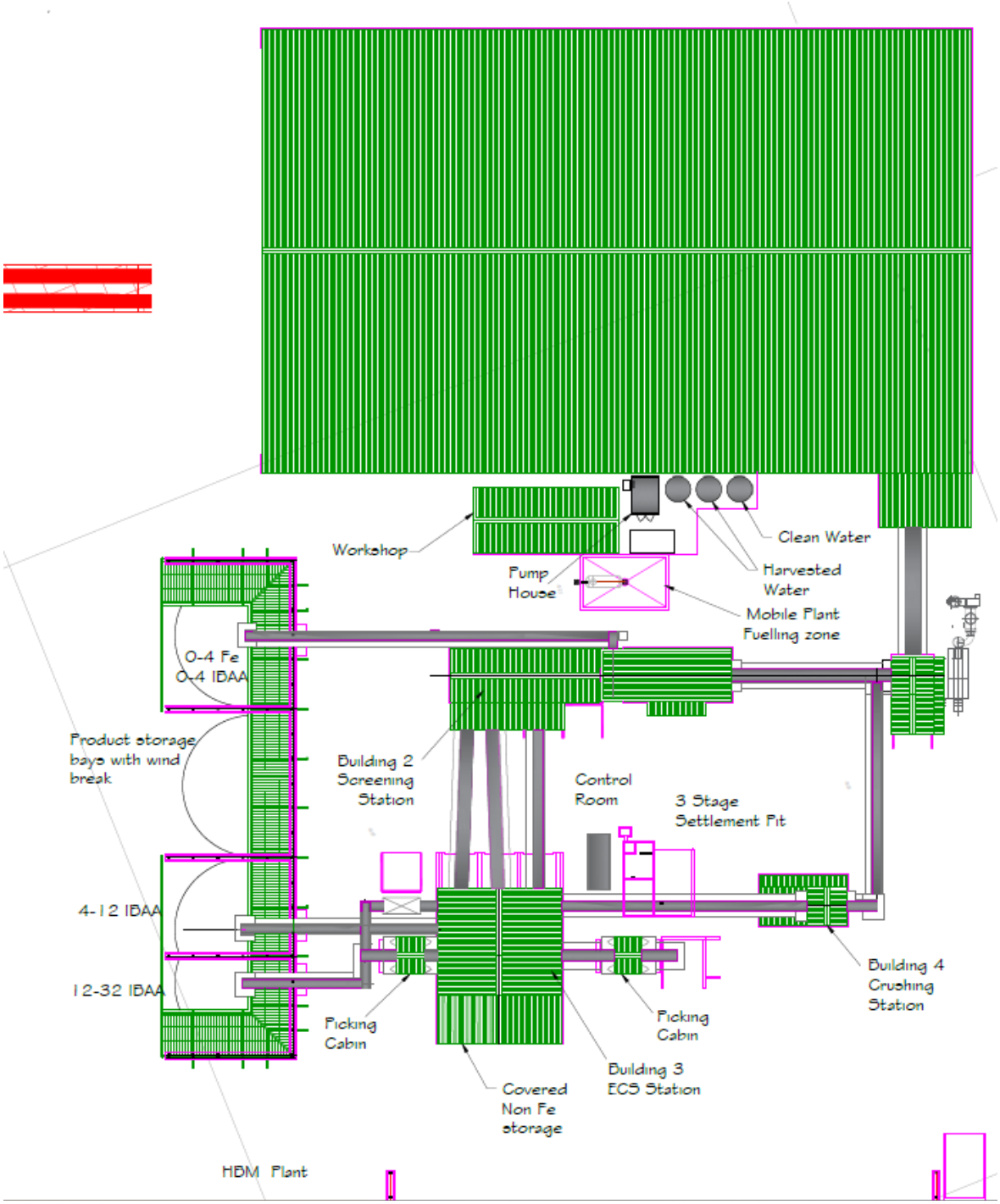

Figure 2: Indicative layout of IBA facility

3.3 Mobile plant and equipment

Operators of mobile plant and vehicles at the site will be provided with suitable training (as documented in the site management systems) for the equipment they are operating and will ensure that vehicle engines are switched off when stationary for long periods of time – i.e., there will be

no idling vehicles. All mobile plant and equipment will comply with the relevant standards[1]. Where practicable, diesel or petrol-powered generators will be avoided, with mains electricity or battery powered equipment preferred. Cutting, grinding or sawing equipment will only be used when fitted with, or in conjunction with, suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. Regular preventative maintenance of mobile plant will be undertaken in accordance with the manufacturer's recommendations. The speed of vehicles on-site will also be limited to minimise the generation of fugitive dust emissions.

Mobile plant and equipment will be regularly inspected to ensure that any leaks, trailing or tracking of residues from vehicles are quickly identified and suitably addressed. During prolonged periods of dry weather, the site roads will be damped down / washed if the potential for fugitive dust impacts resulting from traffic movements are identified by the sites operational staff.

Following completion of detailed design, a register of mobile plant and equipment used at the IBA Facility will be incorporated into the Dust Management Plan, including details of emissions ratings/emissions controls (which are particularly relevant for mobile plant with internal combustion engines). When selecting mobile plant and equipment to be used at the site, consideration will be given to environmental impacts (such as selection of plant to the lowest emissions standards, use of low-sulphur fuel oil, etc).

[1] Prior to 1st September 2020, NRMM of net power between 37kW and 560kW used on the site were required to meet Stage IIIA of EU Directive 97/68/EC and its subsequent amendments. Thereafter, NRMM will be required to meet Stage IIIB of the Directive – this will apply to the Redcar IBA facility.

4 Sensitive receptors

The following section details the local sensitive receptors which are considered to be sensitive to potential dust and particulate emissions from the IBA facility.

A human sensitive receptor is any location where a person may experience the annoyance effects of airborne dust or dust soiling or may be exposed to PM_{10} over a period of time relevant to the air quality objectives. Sensitive human receptors can include:

- Residential dwellings;
- Schools;
- Hospitals;
- Care homes;
- Childcare facilities;
- Hotels;
- Gardens (where relevant public exposure is likely i.e. excluding extremities of gardens or front gardens);
- Sensitive commercial premises including; vehicle showrooms, food manufactures; and electronics manufactures; and

In addition to the above, amenity impacts of dust and other emissions must be considered. These impacts could arise on neighbouring 'clean' industry and manufacturing processes, such as paint shops, offices, food manufacturing and food outlets, agricultural land, areas of car parking, etc. Cumulative impacts should also be considered in relation to neighbouring generators, busy roads, power stations, etc. Furthermore, environmental or ecological receptors sensitive to dust and particulates must be considered – such as environmental habitats sites or protected species sites.

According to the EA's DMP template and guidance, receptors up to 1km from the facility should be included, as these are considered to be the most likely to be impacted by dust and other emissions (such as those resulting from generators, mobile plant and road vehicles) from the site. However, for the Redcar IBA facility, there are few receptors within 1km of the site boundary, due to the location of the site. Therefore, a number of additional receptors up to around 3km from the site have been reviewed. A sensitive receptor plan is presented within Appendix A shows the sensitive receptors within proximity of the IBA facility. The sensitive receptors are also tabulated in Table 3. The sensitive receptors have been chosen as the closest dust and other emissions sensitive properties to the site boundary. As can be seen from Table 3, the closest sensitive receptor is an ecological receptor located adjacent to the site (the Teesmouth and Cleveland Coast habitats site).

Taking into consideration the proposed route used by delivery vehicles, the receptors near the A1085 (such as R5, R6, R11) are considered to be sensitive receptors in the context of dust from vehicle movements. The A1085 is considered to present a source of dust and/or other emissions which may contribute to cumulative impacts, and as such has been included within Table 4.

Table 3: Distances to Selected, Representative Sensitive Locations

ID	Boundary	Name	Approximate distance to site boundary (km)	Comments
R1	South	Tesco DC	1.8	Distribution centre/ warehouse. Industrial receptor, low sensitivity. Impacts not

ID	Boundary	Name	Approximate distance to site boundary (km)	Comments
				expected to be significant as receptor >1km away.
R2	Southwest	Intertek	2.2	Chemical plant. Industrial receptor, low sensitivity. Impacts not expected to be significant as receptor >1km away.
R3	West	Hartlepool Power Station	3.0	Nuclear power station. Industrial receptor, low sensitivity. Impacts not expected to be significant as receptor >1km away.
R4	Northwest	Frutarom UK	2.7	Chemical manufacturer. Industrial receptor, low sensitivity. Potential for amenity impacts (on food manufacturing process). Impacts not expected to be significant as receptor >1km away.
R5	Southeast	Birkbrow Motors	2.8	Car dealership. Commercial receptor, medium sensitivity. Potential for amenity impacts (aesthetic impacts on cars stored externally). Impacts from IBA facility not expected to be significant as receptor >1km away. However, potential for dust impacts from delivery vehicles due to proximity to A1085.
R6	Southeast	Broadway West	3.0	Residential receptor. High sensitivity. Impacts from IBA facility not expected to be significant as receptor >1km away. However, potential for dust impacts from delivery vehicles due to proximity to A1085.
R7	East	York Road	3.2	Residential receptor. High sensitivity. Impacts not expected to be significant as receptor >1km away.
R8	Southeast	Northumbrian Water	1.8	Water treatment plant. Industrial receptor, low sensitivity. Impacts not expected to be significant as receptor >1km away.
R9	West	Redcar Bulk Terminal	1.0	Shipping terminal. Industrial receptor, low sensitivity. Impacts not expected to be significant as receptor 1km away.
R10	North	Paddy's Hole	1.3	Boat storage facility. Commercial receptor, medium sensitivity. Potential for amenity impacts (aesthetic impacts on boats stored externally). Impacts not expected to be significant as receptor >1km away.

ID	Boundary	Name	Approximate distance to site boundary (km)	Comments
R11	Southeast	Broadway East	3.4	Residential receptor. High sensitivity. Impacts from IBA facility not expected to be significant as receptor >1km away. However, potential for dust impacts from delivery vehicles due to proximity to A1085.
R12	East	Tod Point Road	2.3	Residential receptor. High sensitivity. Impacts not expected to be significant as receptor >1km away.
E1	All (but primarily to the north)	Teesmouth and Cleveland Coast (Ramsar/SPA /SSSI)	0.1	Ecological receptor. Designated for bird breeding, invertebrates, and saltmarsh / sand dunes habitats. Dust unlikely to affect fauna – more likely to affect flora. Potential for impacts as receptor is <1km away. Receptor also lies in prevailing wind direction which could increase impacts.
E2	West Northwest	Teesmouth (NNR)	1.7	Ecological receptor. Wetland nature reserve with diverse habitats and birdwatching opportunities. Dunes, grazing marsh, bird breeding and invertebrates. Dust unlikely to affect fauna – more likely to affect flora. Impacts not expected to be significant as receptor >1km away.

Table 4: Other sources of dust and/or other emissions

Company	Address	Type of Business	Approximate distance from site boundary (km)
-	A1085	Major trunk road	2.5

4.1 Meteorological Conditions

As shown in Figure 3, the prevailing wind direction for the site is from the southwest, with an average wind speed between 4.5 – 5 m/s. Therefore, receptors to the northeast of the site (such as the Teesmouth and Cleveland Coast habitats site) are most likely to be affected by dust and particulate emissions. The wind rose has been obtained from Teesside International Airport (previously named Durham Tees Valley Airport), which is located approximately 22 km to the southwest of the site. The topography at the airport is relatively flat, which is similar to the site where the IBA facility will be located. Therefore, this data is considered to be representative of the conditions at the site where the IBA facility will be located.

Rainfall is a natural dust suppressant. Meteorological data from Teesside International Airport (previously named Durham Tees Valley Airport) has been analysed to determine the number of

'wet' days in a year. For the purposes of analysing the data, it has been assumed that a 'wet' day is one where there has been >1mm of rainfall.

As can be seen from Table 5, there are an average of 109 'wet' days out of 365 days in the year. This indicates that there will be an average of 256 days in a year in which supplemental dust control measures may need to be applied in the absence of sufficient rainfall to control fugitive dust emissions. The site management will be responsible for monitoring weather forecasts to determine if long dry spells are forecast – this will enable the proactive application of dust control measures (for example, damping down of site roads).

Table 5: Rainfall data from Teesside International Airport

Year	Total rainfall (mm) over the year	Days with >1mm rainfall
2018	505	91
2019	685	118
2020	716	119
Average over 3 years	**635**	**109**

Note: At the time of writing, rainfall data was not available in the meteorological dataset obtained for the year 2021.

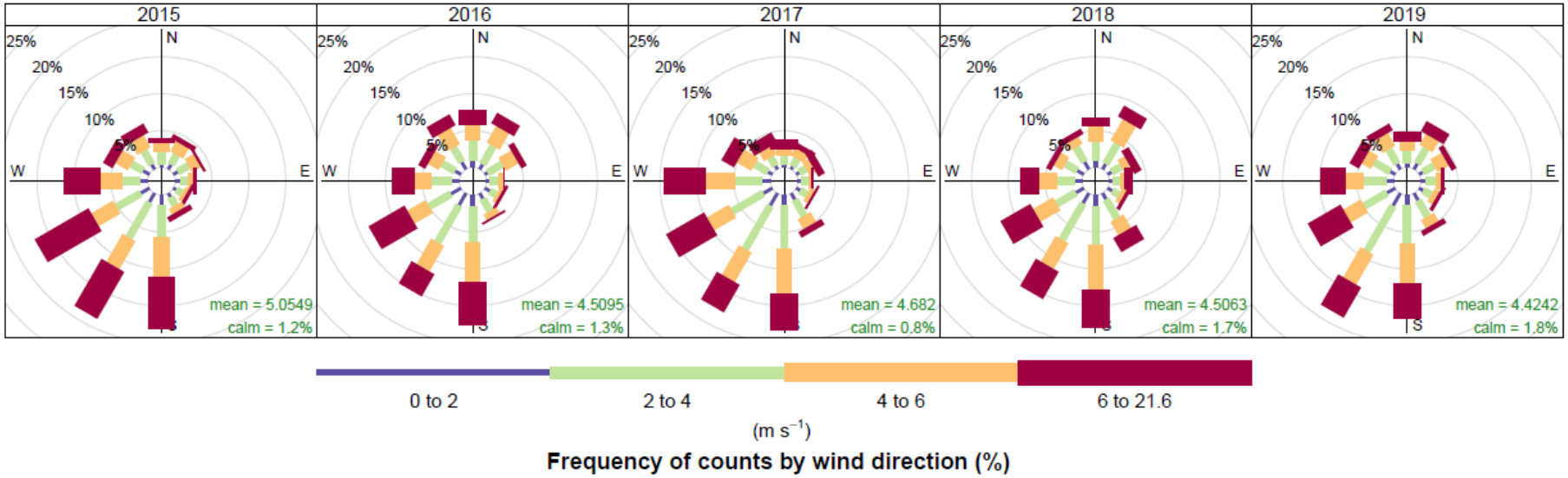

Figure 3: Wind roses from Teesside International Airport

5 Dust and particulate (PM_{10}) management

5.1 Responsibility for implementation of this plan

This DMP will be a working document. Initially, it is intended to demonstrate that the control of dust and particulate emissions has been and will be considered as part of the design of the IBA facility. This DMP will be refined once a technology provider for the IBA facility has been confirmed.

Redcar Ltd will have responsibility for the implementation, reviewing and updating of the DMP. Redcar Ltd may choose to subcontract the day-to-day operation of the IBA facility to a contractor but will remain responsible for the DMP and keeping this up to date. It is expected that reviews will be undertaken on an annual basis, and whenever new equipment or mitigation measures are implemented at the site.

Redcar Ltd aims to ensure that any persons performing tasks for it, or on its behalf, which have the potential to cause significant environmental impact, are competent on the basis of appropriate education and training or experience. Key management roles to be allocated at the IBA facility include the 'General' Manager, Shift Manager/Supervisor, and Environmental Manager (with exact roles and job titles to be confirmed following detailed design). Management will be responsible for ensuring that all employees are fully trained on dust and particulate control, with all employees at the IBA facility responsible for following procedures.

Systems to assess competence and provide training for relevant staff will be provided. Skills, competencies and training requirements for staff (such as understanding and implementation of the DMP) will be documented and recorded as part of the internal management systems at the site. The EMS will contain an archiving procedure to ensure all training (including refresher training) is recorded and all associated records are retained.

5.2 Sources and control of fugitive dust and other emissions

In summary, the following activities have been identified as potential sources of dust and particulate emissions during the operation of the IBA facility:

- Road vehicles importing pre-processed IBA to the IBA facility and road vehicles exporting IBAA product from the IBA facility.
  - Such as mud on wheels, tracking of dust on to or off the site, debris falling off insufficiently covered HGVs.
- Transfer of IBA from the ERF to the bottom ash reception bunker.
  - IBA dropping from conveyor into the bunker could result in the generation of dust.
- Transfer of IBA from the bottom ash reception bunker to the process building.
  - IBA loading and unloading from the conveyor could result in the generation of dust.
- Processing of IBA (including crushing, size separation, etc).
  - Dust and particulates have the potential to arise from the operation of trommels and size screeners, crushers, ash dropping from conveyors etc.
- Transfer of IBA from the process building to the external storage areas.
  - IBA will be moved from the process building to external storage areas using bucket loaders.
- Storage of IBA within the external storage areas.
  - Potential for wind whipping of IBA stored in bays.
- Loading of IBAA onto vehicles for transfer off-site.

  - Using mobile plant such as bucket loaders.
- Emissions of combustion products from the operation of mobile plant (such as bucket loaders).
  - This may include particulates from exhausts.
- Maintenance and cleaning operations.
  - Washdown and sweeping activities.
- General movement of vehicles around the site.
  - Potential for particulates from exhausts, and also vehicles and plant moving around the site 'kicking up' dust.

There is no guidance available for the assessment of dust emissions from operational sites which are not mineral workings. Therefore, for each of these sources, a breakdown of the source-pathway-receptor model is presented within Table 6, with the final column in the table setting out details of where relationship can be interrupted. Table 7 provides a more detailed description and consideration of the mitigation/control measures that will be in place at the site to prevent, reduce and/or mitigate against dust and particulate emissions. Should control measures fail and pose a significant risk of dust and particulate emissions, operations at the site will be ceased and the EA will be informed. These tables will be reviewed by management as part of periodic reviews of the DMP. This will ensure that sources, pathways and receptors of dust and particulate emissions are regularly examined, to ensure that there are no 'gaps' in abating the sources of dust and particulate emissions at the site, and as part of Redcar Ltd's aim for continual improvement of management systems.

5.3 Permit requirements

The IBA facility requires an EP to operate. It is assumed that the EP will include conditions regarding the emissions of substances not controlled by emission limits. The standard EP condition with regard to emissions of substances not controlled by emission limits will state:

> *"Emissions of substances not controlled by emissions limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions."*

"*Pollution*", other than in relation to a water discharge activity or groundwater activity, is defined in the Environmental Permitting Regulations as:

> "*Any emission as a result of human activity which may-*
>
> 7. *Be harmful to human health or the quality of the environment;*
> 8. *Cause offence to a human sense;*
> 9. *Result in damage to material or property; or*
> 10. *Impair or interfere with the amenities or other legitimate uses of the environment.*"

Therefore, the EP will control emissions from all activities on-site. The measures should not only prevent harm to human health but also damage to property which includes dust nuisance. As such, to comply with the requirements of the EP, there will be a number of dust and particulate emissions control measures in place at the site, including both physical measures and management techniques. These are detailed further in Table 7.

Table 6: Source-Pathway-Receptor routes

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Mud/dust tracking from vehicles/mobile plant.	Falling/dropping from vehicles when they leave site/as wheels dry out.	Receptors near the A1085 road (such as R5, R6, R11).	Visual soiling, also consequent resuspension as airborne particulates.	Remove mud and dust before vehicles leave site, e.g. using a wheel wash facility. Operation of road sweepers. Good housekeeping and regular washdown. Damping down of roads in dry periods.
Debris/dust falling from vehicles/mobile plant.	Atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling, also consequent resuspension as airborne particulates.	Ensure HGVs are sufficiently covered before leaving site (e.g. visual checks).
'Kicking up' of dust from movement of vehicles/mobile plant.	Atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling and airborne particulates.	Good housekeeping and regular washdown. Damping down of roads in dry periods.
Transfer of IBA using conveyors (e.g. ERF to reception bunker, or reception bunker to process building).	Escape from buildings and subsequent atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling and airborne particulates.	Keep conveyors enclosed, ensure integrity of conveyors.
IBA dropping from heights (e.g. conveyor into reception bunker, conveyors in process building).	Escape from buildings and subsequent atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling and airborne particulates.	Minimise source strength by means of low drop heights, Maintain IBA wet from quenching.
Processing of IBA (crushing, size separation).	Escape from buildings and subsequent atmospheric dispersion.	All receptors (human and ecological).	Visual soiling and airborne particulates.	Maximise containment, open doors only for entry of vehicles. Direct doors away

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
		Receptors closest to the site (E1) most likely to be affected.		from most sensitive receptors. Minimise source strength by misting/water/barrier techniques on certain processing equipment. Good housekeeping and regular washdown.
Tipping and sorting of IBA in the open (e.g. transfer of IBA from process building to external storage areas, loading of IBA from external storage areas into vehicles for transfer off-site).	Atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling and airborne particulates.	Minimise manual handling where possible, limit drop heights, maintain IBA wet from quenching, good housekeeping and regular washdowns.
Storage of IBA in the open.	Atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Visual soiling and airborne particulates.	Profiling and shielding of piles from wind whipping (e.g. using walls/shields), maintain IBA wet from quenching, positioning sources away from receptors.
Vehicle/mobile plant exhaust emissions.	Atmospheric dispersion.	All receptors (human and ecological). Receptors closest to the site (E1) most likely to be affected.	Airborne particulates.	Regulatory controls and best-practice measures to minimise source strength (e.g. compliance with relevant emissions standards.
Maintenance and cleaning operations (washdown, sweeping).	Atmospheric dispersion, dispersion via washdown water.	All receptors (human and ecological).	Visual soiling, airborne particulates, pollutants in water.	Training in using road sweepers, damping down of roads in periods of dry weather, containment of

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
		Receptors closest to the site (E1) most likely to be affected.		process waters resulting from washdown.

Table 7: Measures that will be used on site to control dust/particulates (PM10) and other emissions

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Preventative measures			
Enclosure within a building	This will create a solid barrier between the source of dust/particulates and receptors. This is considered to be the most effective method of control (i.e. control at source).	Will be implemented for process building and waste reception building. Entrances and exits will be well managed. Will not be implemented for external storage of IBA, as this would affect the weathering process (which typically takes place during stockpiling of IBA in open air conditions).	N/A – this is a continuous measure.
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. As can be seen from Figure 2, the external storage bays will be located to the south of the IBA facility. The nearest sensitive receptor (ecological receptor E1) is located predominantly to the north of the site. Therefore, the external storage area is located at the furthest point from the nearest sensitive receptor, with the main storage building in-between also providing some level of shielding.	N/A – this is a continuous measure.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Implementing a speed limit for vehicles at the site, a 'no idling' policy, and minimisation of vehicle movements at the site.	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	This will be implemented at the site as part of good practice. The speed limits will be clearly established and signposted around the site. The no idling policy will be clearly identified in the site management system. The site layout (including internal roads) will be designed to minimise unnecessary vehicle movements.	N/A – this is a continuous measure.
Minimising drop heights	Minimising the height at which ash is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds.	This will be implemented at the site as part of good practice. For example, at the exit of conveyors (both those linking to the reception bunker and those within the process building), from process equipment, and from loading shovels.	N/A – this is a continuous measure.
Use of enclosed conveyors	This prevents the escape of dust and litter during the transport of waste to the site and within the site.	The conveyor transporting ash from the ERF to the reception bunker will be fully enclosed, and so will the conveyor transferring ash from the reception bunker to the processing building.	N/A – this is a continuous measure.
Good housekeeping	A consistent, regular housekeeping regime supported by management will ensure the site is regularly checked and issues remedied to prevent and remove dust and particulate build up.	It can be confirmed that good housekeeping will be employed at the site, with a regime set out within the documented management systems. Regular washdown of process and storage areas will be undertaken, along with visual inspections by staff.	Housekeeping will be undertaken in accordance with a documented regime, with additional washdown undertaken following any visual inspections which have identified a build up of dust/litter.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Sheeting/covering of vehicles	This prevents the escape of debris, dust and particulates from vehicles as they travel to/from the site.	This will be a requirement for vehicles entering/exiting the site and will be clearly identified in the site management systems. Visual inspections of vehicles before they leave the site will ensure that sheeting is sufficiently fitted, reducing the potential for fugitive emissions during travel.	This will be a continuous requirement for vehicles entering/exiting the site. This may not apply to vehicles moving around the site (e.g. if IBA needs to be loaded onto a vehicle from two separate stockpiles).
Hosing of vehicles on exit, or installed wheel wash	This can remove some of the dust/dirt/particulates from the lower parts of vehicles.	It is expected that a pressure washer or similar will be installed at the site, or alternatively a wheel wash, although this is subject to the detailed design of the facility and appointment of a contractor. Site roads will also be damped down during extended periods of dry weather.	If implemented, it is expected that this will be used on all heavy vehicles exiting the site.
Ceasing operation during high winds	The mobilisation of dust and particulates is likely to be greater during periods of strong winds. Therefore, ceasing operations at these times may reduce peak pollution events.	It is anticipated that during periods of exceptionally high winds (such as storms), some operations at the site will be ceased (e.g. the external movement and loading of ash). The site general manager will be responsible for making this decision and will monitor weather conditions at the site.	Implemented during periods of exceptionally high winds (such as storms).
Surfacing the site with easy-to-clean, impermeable concrete surfaces	This should reduce the amount of dust and particulate material generated at ground level by vehicles and site	It can be confirmed that the site will be surfaced in impermeable concrete hardstanding. Maintenance and	N/A – this is a continuous measure.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
	activities and ensure washdown and housekeeping activities are effective.	cleaning procedures / regimes will be defined in the site management systems.	
Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is stored and handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	Maximum heights for stockpiles will be clearly established and not exceeded. Walls/shields around stockpiles will reduce the potential for wind-whipping and atmospheric dispersion. IBA will require storage for extended periods to allow weathering and stabilisation to take place – therefore, the storage volumes are limited by this (i.e. difficult to reduce quantity stored).	N/A – this is a continuous measure.
Installation of walls surrounding the site	Walls can disrupt wind flow across the site and reduce the generation of dust.	The external storage area would comprise a large concrete storage yard, surrounded by a high concrete wall (5m) which would serve as a push wall for the operation of the IBA facility. IBA will be stored at least 0.5m below the top of wall heights. Site walls/barriers/fencing will be kept clean using wet methods.	N/A – this is a continuous measure.
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 IBA facility, with additional mitigation such as dust suppression sprays installed on processing equipment where technically/economically feasible.	High integrity equipment will be selected by the technology provider when undertaking the detailed design of the IBA facility. Should it be identified during the lifetime of the IBA facility that

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
		Regulatory controls and best-practice measures will be implemented for vehicles/mobile plant to confirm they comply with relevant emissions standards.	equipment is no longer 'fit-for-purpose' or is otherwise resulting in significant fugitive emissions, it will be repaired or replaced as appropriate.
Prohibit burning of waste materials on site	Prohibiting the combustion of waste materials at the site to avoid combustion products such as particulates.	The burning of waste materials will be prohibited at the site – this will be clearly stated in the documented management systems at the site.	N/A – this is a continuous measure.
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 in a log book, 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.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
Minimising the amount of movement of ash once outside	Minimising the amount of ash movement can reduce the quantities of dust and particulates generated at the site.	Handling during the external storage of processed IBA will be minimised where possible, and disturbance to stockpiles will also be minimised.	N/A – this is a continuous measure.
Regular preventative maintenance	Regular preventative maintenance can help to maintain the integrity of plant and equipment, and as such reduce the generation of dust and particulates.	Regular preventative maintenance will be undertaken for all plant and equipment (including conveyors, processing equipment, mobile plant).	Preventative maintenance will be undertaken on a periodic basis in accordance with documented procedures.
Remedial measures			
On-site sweeping	Effective in managing larger debris e.g. on roads, but may re-suspend smaller particles (however this can be mitigated against using spray bars/filters etc on the sweepers).	Roadsweepers will be employed at the site to remove large debris and dust from roads. There will be training procedures to ensure that staff are	The sweepers will be implemented when it has been identified (from visual inspections) that there is a build up of dust/debris/litter.

Abatement Measure	Description / Effect	Overall consideration and implementation	Trigger for implementation
		sufficiently trained to operate this equipment.	
Water suppression	Damping down of site areas (using hoses) can reduce dust and particulate re-suspension and may assist in the cleaning of the site.	During periods of dry weather, site roads will be damped down to reduce the potential for fugitive dust emissions. Triggers will be installed on all hoses to reduce overall water consumption. It should be noted that the ash will be maintained wet during storage, from initial quenching.	Implemented during extended periods of dry weather.
Spill kits/cleaning equipment	The provision of easily accessible spill kits and cleaning equipment can ensure that spills are readily mitigated, hence reducing the quantity of time available for dust/particulates to be further dispersed off-site.	Equipment will be readily available on site to clean any spillages (including wet cleaning methods) as soon as reasonably practicable after the event. The EMS will include procedures to follow in the event of a significant spillage.	Spill kits/cleaning equipment will be available at the site at all times. The equipment will be used in the event of a spill.

5.4 Other considerations

5.4.1 Water use

Redcar Ltd will ensure an adequate water supply is provided at the site for effective dust/particulate matter mitigation, with recycled water used where possible. It can be confirmed that process drainage from the IBA facility will be contained and re-used within the process (such as for washdown activities etc).

During detailed design of the drainage systems, an assessment will be made of water supply and drainage capacity at the IBA facility. A worst-case scenario will be assumed when calculating the required water supply for the IBA facility (such as assuming dry and windy conditions for an entire operational day). Consideration will also be given to climate change, to ensure that dust management can be maintained even in the event of a drought.

5.4.2 Contingency measures

In the event that dust suppression systems are not functioning properly, mobile bowsers may be brought to site for the purposes of dust suppression.

Should the conveying system which transfers IBA from the ERF fail or otherwise require maintenance, IBA will be transferred from the ERF to the IBA facility by covered vehicles.

5.5 Enclosure of waste processing and storage areas

It can be confirmed that storage of IBA within the bottom ash reception bunker and IBA processing, will be undertaken within enclosed buildings. This will reduce the potential for fugitive emissions of dust and particulates offsite. It is understood that this is in accordance with the requirements of the Waste Treatment Industries BREF, which requires that activities which have the potential to give rise to fugitive emissions are undertaken in enclosed buildings.

The only external storage of ash will be for processed IBAA. Therefore, enclosure will not be implemented for the storage of IBAA, as this would affect the maturation process which requires open air conditions.

Taking the above into consideration, the arrangements for the storage and processing of IBA at the site are considered to represent Best Available Techniques.

6 Monitoring

As explained within section 7, due to the low background concentrations of particulates, additional emissions monitoring equipment is not proposed at the IBA facility. Furthermore, the site is not located within an AQMA, and there is only 1 sensitive receptor <1km of the site – the Teesmouth and Cleveland Coast habitats site which is located approximately 100m to the north of the site (refer to section 4 for further details).

There are a number of alternative monitoring methods which will be implemented to demonstrate compliance with the Environmental Permit conditions. These include the following:

- Documented management systems for the IBA facility;
- Visual dust monitoring;
- IBA monitoring;
- Weather monitoring;
- QA/QC and record keeping; and
- Reporting of data.

6.1 ISO accredited EMS

An EMS will be in operation which will include a range of monitoring and recording procedures. This DMP will form part of the EMS and will be reviewed and updated accordingly during the course of the project. The EMS will include procedures for managing external complaints. Further detail on the complaints procedures proposed at the IBA facility are presented within section 8.

6.2 Visual dust monitoring

An EMS will be in operation which will include a range of monitoring and recording procedures. This Dust and Particulate Emissions Management Plan will form part of the EMS and will be reviewed and updated accordingly during the course of the project.

The site manager will undertake visual inspections of the site on a daily basis, to monitor compliance with air quality and dust control procedures. This will include, but not be limited to, the road network on-site and the off-site roads in the vicinity of the site. The procedure will be detailed in the EMS. The site manager will then ensure road sweepers are operated if required. Details of the visual inspections and periods when the road sweepers have been used will be recorded and made available to the EA if requested.

The frequency of visual inspections would be increased when activities with a high potential to produce dust and emissions are being carried out, and during prolonged dry or windy weather conditions. Any exceptional incidents that cause dust and air quality pollutant emissions (such as spillages) would be recorded in a logbook, alongside any remedial actions. Remedial actions may include road sweepers being operated if required.

Procedures for visual dust monitoring will be set out within the site management systems and will include setting out locations around the perimeter of the site from which routine monitoring will be undertaken. This may include carrying out regular dust soiling checks of buildings within 100m of the site boundary and implementing cleaning if necessary.

Should the results of visual monitoring identify dust as continuing to escape the site, activities will be stopped until the cause can be identified and rectified. Data sets and previous records of inspections would be reviewed to try and determine when/why higher levels occur (such as

operation of certain equipment), with the aim of improving dust management measures at the site to prevent re-occurrence of higher levels.

Additional monitoring (such as using sticky discs) may be implemented to confirm the presence of fugitive dust, following any serious complaints or following identification of fugitive dust emissions from visual monitoring.

6.3 IBA monitoring

It is expected that samples of IBA will be taken to confirm burnout criteria in accordance with the requirements of the Industrial Emissions Directive (IED) and to measure for a number of key parameters such as metals content. The samples may also be analysed for moisture content – the full suite of parameters will be confirmed following the detailed design of the IBA facility.

6.4 Weather monitoring

As described within section 4.1, the site management will be responsible for monitoring weather forecasts to determine if long dry or windy spells are forecast – this will enable the proactive application of dust control measures (for example, damping down of site roads). In the case of extreme weather conditions, or following a serious complaint, activities at the IBA facility may be temporarily put on hold.

6.5 QA/QC and record keeping

As detailed within section 6.2, records of monitoring would be kept in a logbook in accordance with quality assurance (QA) and quality control (QC) procedures to be documented in the site EMS. Monitoring records would be regularly reviewed with the aim of improving dust management measures at the site and reducing the frequency of periods of high dust levels.

6.6 Reporting of data

Reporting of data to the EA will be undertaken as required in accordance with the conditions of the EP for the site. Any complaints received will be reported to the EA in accordance with the reporting and complaints procedure that will be developed for the site – refer to section 8 for further details.

7 Existing monitoring data

In order to assist local authorities with their responsibilities under Local Air Quality Management, Defra provides modelled background concentrations of pollutants throughout the UK on a 1 km by 1 km grid. This model is based on known pollution sources and background measurements and is used by local authorities in lieu of suitable monitoring data. A summary of the available mapped background data for particulates is presented in Table 8. The mapped background concentrations are well below the relevant AQALs.

Table 8: Mapped background data

Pollutant	Annual Mean AQAL (µg/m³)	Concentration (µg/m³)		Dataset
		At the site	Max within 5 km of the site	
Particulate matter (PM_{10})	40	10.15	14.19	DEFRA 2018 Dataset
Particulate matter ($PM_{2.5}$)	20	6.87	8.82	DEFRA 2018 Dataset

Source: © Crown 2021 copyright Defra via uk-air.defra.gov.uk, licenced under the Open Government Licence (OGL).

In addition to national modelling, local and national background monitoring data has been reviewed. The UK Automatic Urban and Rural Network (AURN) is a country-wide network of air quality monitoring stations operated on behalf of Defra. The closest site is the Middlesbrough urban industrial site, located approximately 8.4 km to the west. Due to the distance from the site, concentrations at this site have not been considered.

In addition to the national AURN, local authorities undertake monitoring of a range of pollutants as part of the LAQM review process. Local monitoring is undertaken by Redcar Borough Council. The neighbouring local authorities do not operate any monitoring locations within 5 km of the Facility.

Data from the most recent Annual Status Report (ASR) published by Redcar Borough Council in 2021 shows that no roadside monitoring has been undertaken within 2 km of the Facility. There are three background (suburban) type monitoring locations within 5 km of the Facility, one of which is the Redcar Dormanstown automatic monitoring site. Background monitoring concentrations for particulates from this monitoring location are presented within Table 9 below. As shown, no exceedance of any AQAL has been measured.

Table 9: Local authority monitoring data

Ref	Approx distance from the site (km)	Annual Mean Concentration (µg/m³)					
		2018 Mapped Bg	2016	2017	2018	2019	2020
Background monitoring – PM_{10}							
RD(1)	3.6	11.4	12.7	12.0	12.0	14.0	13.0
Background monitoring – $PM_{2.5}$							
RD(1)	3.6	7.4	8.9	8.4	8.4	9.8	9.1
Note: *(1) RD = Redcar Dormanstown, an automatic monitoring site.*							

Source: RCBC 2021 Air Quality Annual Status Report

As the baseline monitoring has indicated that particulate concentrations are well below the objective, no further monitoring of particulates resulting from the operation of the IBA facility is proposed.

8 Reporting and complaints response

The measures outlined in this DMP are aimed at preventing dust and particulate emissions occurring to the extent where complaints may be made regarding dust and/or particulates by nearby sensitive receptors. Nevertheless, Redcar Ltd considers that having an established complaints procedure is an essential part of implementing a successful DMP.

As such, the EMS will include procedures for managing external complaints. This will include for complaints in relation to dust and particulate emissions from the site. The procedures will include those for the recording of the initial complaint, the approach to investigation, and proposed response time. This will align with the requirements of the EP. It is expected that management at the IBA facility will handle any complaints that are received. Management will be responsible for logging any complaints received in the site's incident reporting system, with the EA informed as soon as possible following receipt of a complaint. They will also be responsible in submitting a short report to the EA detailing the complaint and whether any remedial actions have been implemented.

Public comments, complaints and concerns could be received by email, telephone or letter, either directly to the site or via the relevant authorities (such as the Local Planning Authority or the EA). Redcar Ltd will aim to respond to complaints within 2 working days of receipt, with a maximum time of 7 days implemented to respond to a complaint.

8.1 Engagement with the community

Recdar Ltd is committed to maintaining a comprehensive communications programme to ensure that local stakeholders are kept informed on the development of the Facility. A communications plan will be developed and implemented as part of the facilities EMS. This will provide details on how Redcar Ltd will interact with external stakeholders.

A board displaying the relevant contact information will also be displayed at the gatehouse. This will include for an emergency 24-hour contact number so that complaints/enquiries etc can be registered at all times.

8.2 Dust complaint investigation

The following actions will be undertaken upon receipt of an external dust complaint concerning the IBA facility:

- Any complaints received will be logged in the site's incident reporting system, with the EA informed as soon as possible following receipt of a complaint.
- The site management will be provided with details of the complaint as soon as possible, including the location, nature, time and date of the complaint.
- Should a complaint be received, a visual inspection will be conducted as soon as is practicable by a suitably trained member of staff in the area of which the complaint is regarding, to assess the presence and intensity of dust. Where possible, the likely cause of the dust will be identified and recorded.
- For all complaints, reference will be made to the site activities at the time of the complaint, and further onsite investigations will be conducted to determine whether any abnormal operations were/are occurring. Key potential causes of abnormal dust emissions will be investigated. These may include, but not be limited to, the following:
  - Is IBA arriving / leaving the site in appropriately covered vehicles?
  - Are there any unusual weather conditions (such as strong winds and very dry conditions)?

  - Are operations (waste processing and movement within the site) in 'normal operation'? Or is any equipment/mobile plant identified to be faulty or otherwise not working properly?
  - Are there any unusual activities taking place off-site?
- If the investigations identify that the source of dust is an off-site source, feedback will be given to the complainant, and a complaint logged with the off-site source of the dust emissions.
- Once any on-site cause of the dust complaint has been established, appropriate actions will be immediately implemented, and a strategy devised to prevent reoccurrence.
- Feedback will be given to all complainants on the findings of any investigations if they are known, and a summary will be provided of any remedial measures taken to rectify dust problems and ensure that the problem has been suitably resolved. The complainant will be asked if the perceived problem is still occurring to measure any improvement achieved.
- Redcar Ltd will submit a short factual report to the EA detailing:
  - the complaint(s) received;
  - the investigations conducted;
  - the findings of those investigations;
  - whether the complaint was substantiated;
  - any remedial measures implemented; and
  - any ongoing improvement actions to be implemented.
- Records of all complaints, subsequent investigations, and remedial actions will be retained on site for a minimum of five years. The site management will ensure that records are readily retrievable and maintained as fit for retention. As applicable, records will be stored in accordance with data protection legislation.

8.3 Action plans

In the event that a dust complaint is proven to be justified and attributable to operations undertaken at the IBA facility, or a 'non-conformance' otherwise occurs, a defined action plan will be implemented. The following potential dust 'non-conformances' have been identified:

- abnormal dust and particulate emissions occur;
- significant dust and/or particulate emissions occur/are detected onsite, that are believed to pose a risk of offsite impacts; and/or
- significant dust and/or postulates are detected off-site during visual inspections, that are attributable to operations at the IBA facility.

In the event that any of the above occurs, the following actions will be taken:

- If not previously undertaken, a walk-around / visual inspection of the entire site and a review of the activities undertaken at the IBA facility will be conducted in order to identify the likely cause(s) of the dust/particulate emissions.
- Upon identification of the likely source(s), appropriate corrective and preventative measures will be identified and implemented, depending on the outcome of the investigations. The measures will consider, but not be limited to the following:
  a. Suspension of receipt of IBA in the relevant waste storage/processing areas and the closure of all doors to process buildings.
  b. Ceasing of IBA processing operations, including movement of IBA in external areas.
  c. Implementation of additional dust suppression measures (such as bringing a water bowser to the site).

Details of any 'non-conformances' including the nature of the incident, results of investigations, action taken and any required amendments to the DMP will be made available to the EA on request.

It is expected that management at the IBA facility will handle any complaints that are received. Management will be responsible for logging any complaints received in the site's incident reporting system, with the EA informed as soon as possible following receipt of a complaint. They will also be responsible in submitting a short report to the EA detailing the complaint and whether any remedial actions have been implemented.

9 Summary

This DMP has been prepared to set out operational procedures to control and mitigate dust and particulate emissions from the IBA facility. It will be refined and updated following detailed design of the IBA facility, and at regular intervals (expected to be annually) as part of periodic reviews of the documented management systems at the site. Reviews will serve to confirm the identification of any new sensitive receptors, sources of dust, monitoring equipment or changes to relevant procedures (such as complaints handling and reporting).

With the implementation of the control measures that have been identified, there is considered to be a low risk of residual dust and particulate impacts resulting from the operation of the IBA facility.

Appendices

A Plans and drawings

B Dust and odour complaint form

Dust and/or odour complaint form	
Customer details	
Customer Name -	
Address – Postcode –	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	
Investigation details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	
Review and improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust and/or odour management plan need to be updated -	
Date that the dust and/or odour management plan was updated -	
Closure	

Dust and/or odour complaint form	
Site manager review date	
Site manager signature to confirm no further action required	

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