

# Vantage Business Park

784-B042236

## Dust Management Plan

## Environmental Permit Variation Application

**Airbag Disposal UK Ltd**

**May 2023**

**Document prepared on behalf of Tetra Tech Environment Planning Transport Limited.  
Registered in England number: 03050297**



# DOCUMENT CONTROL

<b>Document:</b>	Dust Management Plan
<b>Project:</b>	Vantage Business Park
<b>Client:</b>	Airbag Disposal UK Ltd
<b>Project Number:</b>	784-B042236
<b>File Origin:</b>	\\lds-dc-vm-101\Data\Projects\784-B042236 (Vantage Business Park)\60. Project Output\63. Published\Resubmission for extension\Appendix E - Dust Management Plan\Dust Management Plan.docx

<b>Revision:</b>		<b>Prepared by:</b>	Isabelle Mills
<b>Date:</b>	January 2023	<b>Checked by:</b>	Alice Shaw
<b>Status:</b>	Draft	<b>Approved By:</b>	Andrew Bowker
<b>Description of Revision:</b>			

<b>Revision:</b>		<b>Prepared by:</b>	Gemma Allan
<b>Date:</b>	May 2023	<b>Checked by:</b>	
<b>Status:</b>	Final to EA	<b>Approved By:</b>	Andrew Bowker
<b>Description of Revision:</b>			

<b>Revision:</b>		<b>Prepared by:</b>	
<b>Date:</b>		<b>Checked by:</b>	
<b>Status:</b>		<b>Approved By:</b>	
<b>Description of Revision:</b>			

<b>Revision:</b>		<b>Prepared by:</b>	
<b>Date:</b>		<b>Checked by:</b>	
<b>Status:</b>		<b>Approved By:</b>	
<b>Description of Revision:</b>			

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## 1.0 INTRODUCTION

### 1.1 REPORT CONTEXT

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- 1.1.1 This Dust Management Plan (DMP) has been prepared by Tetra Tech on behalf of Airbag Disposal UK Limited (ABD) to support an Environmental Permit Variation Application for ABD's permitted facility at Unit 9 Vantage Business Park (the site), Sheffield Road, Tinsley, S9 1BG.
- 1.1.2 ABD currently hold a bespoke environmental permit (EPR/FB3702UD) that allows the storage and recovery of waste airbags that have either been received from third parties already deployed or that are deployed on site. The treatment activities regulated in the permit include manual and mechanical sorting and separation of the deployed airbags for recovery.
- 1.1.3 ABD are now seeking to expand their waste operations at the site to allow the acceptance and treatment of hazardous and non-hazardous wastes that are predominantly associated with WEEE and items from the automotive sector. Treatment will comprise variety of methods which include manual and mechanical sorting and separation, shredding granulating and baling. To facilitate this expansion, ABD are also seeking to increase the annual throughput of the site from 5,000 tonnes to 70,000 tonnes per annum.
- 1.1.4 In addition, ABD are seeking to extend the permit boundary to incorporate the adjacent warehouse unit (Unit 10). This unit will be stored for the storage of waste prior to treatment within Unit 9. The proposed permit boundary is shown on Drawing Number ABD/B042236/PER/02.
- 1.1.5 According to the Environment Agency's (EA) 'Control and Monitor Emissions for your Environmental Permit' guidance a DMP must be prepared to support an application that comprises the *"keeping or treatment (or both) of household, commercial or industrial waste in a materials waste transfer station/ material recycling facility"* as well as the *"keeping or treating (or both) scrap metal"*.
- 1.1.6 As such, this DMP has been prepared in accordance with the EA's 'Dust & Emission Management Plan' template (Version 10, October 2018).
- 1.1.7 This DMP is a working document, intended to be used as a reference document for operational staff on a day-to-day basis. ABD will implement the plan to ensure that all reasonable measures are taken to control dust emissions, and in the event that an adverse impact is caused, prompt action will be taken to identify the source and apply corrective measures. It provides a schedule of actions that will be taken to minimise dust impact and details site management procedures for the management and monitoring of dust.

## 2.0 SITE DESCRIPTION

### 2.1 SITE SETTING

- 2.1.1 The site is situated within a wider industrial park, Vantage Business Park, located approximately 6.2km north east of the city centre of Sheffield and 2.5km south west of Rotherham. The site is centred at approximate National Grid Reference (NGR) SK 40228 91537. The site location and environmental permit boundary is shown on Drawing Number ABD/B0242236/PER/02.
- 2.1.2 Access to the site is achieved by an access road located directly off the A6178 to the east of the Blackburn Meadows Way junction. The immediate surrounding of the site comprise industrial units directly east and south. To the west of the site lies Blackburn Meadows Way and to the north is a railway line and the River Don. The nearest residential property is located approximately 155m south of the site on Ferrars Road.
- 2.1.3 According to the DEFRA's 'AQMA Interactive Map', the site is located within the Sheffield Citywide Air Quality Management Area for Nitrogen Dioxide (NO<sub>2</sub>) and Particulate Matter (PM<sub>10</sub>).

### 2.2 PERMITTED ACTIVITIES

- 2.2.1 ABD currently hold a bespoke environmental permit (EPR/FB3702UD that allows the operation of a non-hazardous physical treatment facility. At present, ABD are permitted to store and treat waste airbags that have either been received from third parties already deployed or that are deployed on site. The treatment activities regulated in the permit include manual and mechanical sorting and separation of the deployed airbags for recovery.
- 2.2.2 According to the Table S1.1 of the Environmental Permit, the current waste activities are undertaken under the following R Codes provided in Annex II to Directive 2008/98/EC of The Council of 19th November 2008 Waste.

**Table 1: Permitted Activities (R Codes)**

R Code	Description
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)

- 2.2.3 ABD are now seeking to expand their waste operations at the site to allow the acceptance and/or treatment of hazardous and non-hazardous wastes that will predominantly comprise of metals, WEEE (including fridges), car exhausts, batteries, plastics, cardboard, and Time Expired Pyrotechnics (TEPs). Treatment will comprise variety of methods which include manual and mechanical sorting, separation shredding, granulating, and baling. Further details regarding the treatment processes are provided in Section 2.5 below.
- 2.2.4 The treatment of non-hazardous waste will be less than 75 tonnes per day and treatment of hazardous waste will be less than 10 tonnes per day. As such, it's considered that the acceptance and treatment of non-hazardous waste will be an extension to the permitting non-hazardous waste physical treatment activity. The acceptance and treatment of non-hazardous waste will comprise a new waste activity that will be incorporated into the environmental permit.
- 2.2.5 The proposed treatment activities will be undertaken as waste operations and will comprise the R and D Codes

provided in Annex II to Directive 2008/98/EC.

**Table 2: R/D Codes for Proposed Waste Treatment Activities**

R/D Code	Description
R3	Recycling/ reclamation of organic substances which are not used as solvents
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)
D15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced)

2.2.6 In addition to the above, ABD propose to store 100 tonnes of hazardous waste at the site at any one time. As such, in accordance with Schedule 1 of the Environmental Permitting Regulations, it's considered that the storage of non-hazardous waste will comprise a waste operation and the storage of hazardous waste will fall under the following Schedule 1 activity: -

- Section 5.6 Part A(1)(a) – Temporary storage of hazardous waste pending any of the activities listed in Section 5.1, 5.2 and 5.3.

## 2.3 THE PROPOSED WASTE ACTIVITIES WILL BE UNDERTAKEN WITHIN THE CONFINES WASTE TYPES

2.3.1 Details of the proposed waste types are provided as Appendix A.

## 2.4 WASTE QUANTITIES

2.4.1 The site is currently permitted to accept 5,000 tonnes of waste per year however, ABD are seeking to increase the annual throughput to 70,000 tonnes.

## 2.5 PROCESS DESCRIPTION

2.5.1 The activities that will be undertaken at the site are described below and have been split into distinct activities.

### WEEE – Treatment Procedure

2.5.2 All items of WEEE will be processed immediately upon receipt. Prior to mechanical treatment, items of WEEE will be manually dismantled to remove the substances, mixtures and components as specified in Annex VII of the WEEE Directive (2012/19/EU) Such items will be stored and bulked on site prior to transfer to an appropriate permitted facility.

2.5.3 Following manual dismantling, items of WEEE will be loaded into a hopper which conveys into the granulator and shredding machinery. The resultant material will then pass through an overband magnet and eddy current separator to allow segregation of components (i.e. plastics and metals) which are subsequently stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.

### Fridges – Treatment Procedure

- 2.5.4 The treatment of fridges will be undertaken in two steps: Step 1 is the manual dismantling of the items and Step 2 is the shredding of the fridge carcass (i.e. the fridge with the various components removed). Steps 1 and 2 are described below.
- 2.5.5 Step 1 of the fridge treatment process comprises the manual dismantling of appliances including removal of the components, fluids and gases as appropriate.
- 2.5.6 The Step 1 process is undertaken as follows:-
- Oil and refrigerant gas are removed from the compressor via vacuum;
  - Gas is stored into a gas tight pressure vessel which are subsequently stored in a designated area prior to transfer off site to an appropriate permitted facility;
  - Compressor oil is heated to remove dissolved refrigerant gas. Any gas that's recovered from the oil will be stored in gas tight pressure vessels (as mentioned above);
  - The residual oil will be stored within an appropriate bunded storage tank; and,
  - Once all gas and fluids have been removed from the compressor, the compressor will be removed manually. Compressors will be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.
- 2.5.7 Step 2 of the fridge treatment process comprises the shredding of the fridge carcass within a self-contained environment that benefits from an automated control system. The resultant material will then pass through an overband magnet and eddy current separator to allow segregation of components (i.e. plastics and metals) which are subsequently stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.
- 2.5.8 Lightly shredded foam will be extracted by suction force and dispatched into an appropriate container which is stored in a designated area prior to transfer off site to an appropriate permitted facility.

#### **Car Exhausts – Treatment Procedure**

- 2.5.9 Treatment of car exhausts will comprise a de-canning facility for removing the scrap ferrous cans from the catalyst material as a preparatory step prior to transfer off site to a suitable permitted facility.
- 2.5.10 In some of the catalytic converters there is a support mat made from refractory ceramic fibre (RCF). This matting is used to protect the honeycomb centre and also as insulation to maintain the high temperatures needed for the reactions to take place within the catalyst. RCF has properties similar to asbestos as is classed as hazardous waste. In most cases it is not possible to determine if a catalytic converter has RCF matting before it is de-canned.
- 2.5.11 The canned material is sorted during the de-canning process to separate the incoming material into the two different types of catalytic converters (hazardous RCF containing type and the non-RCF containing). The metallic converters are prepared on site before being placed in appropriate containers for recycling off-site.
- 2.5.12 Any dust that's generated from this process will be collected by a Local Exhaust Ventilation (LEV) system that's installed within the building. Dust that's collected from the LEV system will be abated using single stage HEPA bag filters, with the outlets discharged within the building. There is no external point source emission to air from the LEV system.

#### **Metal Recycling – Treatment Procedure**

- 2.5.13 Metals treated on site will predominantly derive from the automotive sector or other waste streams that will be processed on site such as WEEE.

- 2.5.14 The metals will be stored in a designated area (as shown on Drawing Number ABD/B0242236/PER/02) prior to processing. Depending on the nature of the waste material, items may be subject to manual sorting and segregation to remove any components that are not suitable for mechanical treatment. Items will then be loaded into a hopper which conveys into a shredder. The metal will then be shredded to achieve the desired grades and then will be segregated via an overband magnet and eddy current separator. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.

#### **Non-Hazardous Waste – Treatment Procedure**

- 2.5.15 In addition to metals, ABD propose to accept plastics and cardboard for treatment however, it's envisaged that plastics and cardboard may derive from other wastes that will be processed in the site.
- 2.5.16 Treatment of plastics will be similar to metals whereby items will be subject to manual sorting and segregation prior to processing via shredding. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.
- 2.5.17 The treatment of cardboard will solely comprise of baling. Cardboard will primarily comprise of packaging waste that's used to contain some waste materials that are delivered to the site. Upon arrival, waste will be removed from the cardboard packaging and then the cardboard will be processed immediately by a baler. The baled cardboard will then be stored on site in a designated area until enough material has been bulked-up to be transported off site for either recycling or disposal.

#### **TEPs – Treatment Procedure**

- 2.5.18 This activity will comprise the acceptance and/or treatment of specific TEPs which comprise of life jackets, railing fog detonators and fire extinguishers.
- 2.5.19 For life jackets that don't contain inflators, two cuts will be made on either side of the jacket. The jacket will then be placed into the shredder as most of the material consists of polyvinyl chloride and polyethylene.
- 2.5.20 Life Jackets with inflators have to be treated initially as they contain CO<sub>2</sub> cylinders. To be recycled, the cylinder must be empty. A used cylinder has an identifiable puncture hole which must be punctured by the waste holder prior to disposal however, site operatives will complete a visual inspection of all life jackets to ensure that the cylinder has been punctured and will puncture the cylinder if necessary. The life jacket and punctured cylinder will then be loaded into the shredder and pass through an overband magnet and eddy current separator to allow segregation of components. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.
- 2.5.21 The treatment of fire extinguishers will be limited to the discharge of the contents of the extinguisher and dismantling by removal of valves and other parts of the cylinder. Once the contents have been discharged, the metal cylinder will be loaded into the shredder and pass through an overband magnet and eddy current separator to allow segregation of components. The resultant material will then be stored and bulked in designated containers prior to transfer off site to a suitable permitted facility for further recovery and/or disposal.
- 2.5.22 Railing fog detonators will be subject to destruction via a decommissioning chamber that's currently used on site for the treatment of waste airbags.

#### **Batteries – Storage and Sorting**

- 2.5.23 Waste batteries will derive from End-of-Life Vehicles (ELV) which are subsequently imported on to the site or from items of WEEE that's processed at the site. All waste batteries will be stored within in appropriate leak-



proof and UN approved boxes and will be categorised and separated by type, class, or group. Waste batteries will be bulked on site prior to transfer off site to specialist recyclers.

2.5.24 In accordance with the EA's appropriate measures guidance, all lithium-ion batteries from electric vehicles will be stored separately from other types of batteries.

## 2.6 WASTE STORAGE

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2.6.1 All waste that's accepted at the site will be stored within the confines of a building which benefits from an impermeable concrete surface. In addition, all waste will be stored in appropriate containers which will comprise of skips, open top Intermediate bulk containers (IBC), stillages and UN approved 4H2 containers.

2.6.2 The maximum storage capacity for the site is 150 tonnes and will comprise 50 tonnes of non-hazardous waste and 100 tonnes of hazardous waste.

## 2.7 OPERATING HOURS

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2.7.1 The operating hours for the site will be limited to the following hours, set out below:

- Monday to Thursday: 08:00 to 16:30
- Friday: 08:00 to 16:00

2.7.2 There would be no work on Saturdays, Sundays Bank and National Holidays.

## 2.8 PLANT AND EQUIPMENT

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2.8.1 The following equipment will be used on site: -

- Shredder;
- Granulator;
- Overhead Magnet;
- Eddy Current Separator;
- Decanter; and
- Forklift Truck.

2.8.2 As a function of the Environmental Management System, the performance of all plant and equipment will be reviewed in comparison to other models that may be available on the market. If there happens to be other models available that perform more efficiently than the site's existing plant and is financially feasible, ABD may decide to change their existing plant and equipment. As part of the process, ABD will ensure that all non-road going mobile plant have a minimum Stage IV emission rating and road going vehicles will have a minimum emission rating of Euro VI. As such, the brand, make, model and specification of the mobile plant and equipment that will be used on site is expected to vary throughout the operational life of the facility.

2.8.3 Only personnel who are trained and licensed to operate equipment and carry out maintenance will do so.

2.8.4 All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements. This will ensure that the integrity and operational efficiency of all plant and equipment is maintained and therefore minimise the risk of mechanical failure which may result in increased dust emissions. This particular programme forms part of the site's Environmental Management System.

- 2.8.5 In addition, all plant and equipment will be visually inspected on a daily basis by the Site Manager (or a nominated deputy) prior to use. The purpose of this inspection is to identify any signs of defects that may affect the integrity and operational efficiency of the plant.
- 2.8.6 In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.

## 2.9 DUST SENSITIVE RECEPTORS

- 2.9.1 Receptors within 1km of the site have been listed in Table 3 and are shown on Drawing Number ABD/B0242236/REC/02.

**Table 3: Location of potential receptors within 1km of the Site**

ID	Receptor	Direction from Operational Area	Minimum Distance from the Permit Application Boundary (approx. m)
<b>Priority Habitats</b>			
1	Deciduous woodland	N	40
2	Deciduous Woodland	NE	350
3	Deciduous Woodland	NE	790
4	Deciduous Woodland	NE	725
5	Deciduous Woodland	NE	735
6	Deciduous Woodland	NE	885
7	Deciduous Woodland	NE	960
8	Deciduous Woodland	N	525
9	Deciduous Woodland	SW	300
10	Deciduous Woodland	NW	845
11	Deciduous Woodland	NW	630
12	Deciduous Woodland	NW	980
13	Deciduous Woodland	SW	825
14	Deciduous Woodland	SW	890
15	Deciduous Woodland	SE	755
16	Deciduous Woodland	SE	920
<b>Surface Water</b>			
17	The River Don	NW	75
18	Sheffield to Keadby Canal	N	570
19	Chapel Flat Dike	SE	450
<b>Public Highways</b>			
20	A6178	S	125
21	M1	SW	665
22	A631	SW	670
23	A6109	N	745

<b>Residential Properties</b>			
24	Residential properties east of M1 (Tinsley)	S	155
25	Residential properties north of A6109 (Rotherham)	N	745
<b>Industrial and Commercial Premises</b>			
26	Industrial/commercial operations at Vantage Business Park	S, E, W	Adjacent
27	Industrial/commercial operations off Deadman's Hole Lane	E	10
28	Industrial/commercial units at Vantage Park	SW	75
29	Industrial/commercial operations at Templeborough Works	SW	165
30	Industrial/commercial operations at Genesis Business Park	SE	645
31	Brinsworth Strip Mills (Speciality Steel UK Limited)	SE	610
32	MTL Advanced	SE	720
33	Industrial operation off Balk Lane	SE	950
34	Industrial/commercial operations south of Magna Way	E	375
35	Industrial/commercial operations at Magna 34 Business Park	E	780
36	Industrial/commercial properties at Fusion@Magna Business Centre	E	760
37	Commercial operations at Meadowhall	SW	755
38	Blackburn Meadows Power Station	NW	275
39	Industrial/commercial operations south of Greasbro Road	SW	595
40	Industrial/commercial operations south of Meadow Bank Road	NE	700
<b>Schools/Hospitals/Shops</b>			
41	Tinsley Meadows Primary Academy	S	520
<b>Recreational Land Uses</b>			
42	Phoenix Golf Club	SE	940
<b>Greenspace/Parks</b>			
43	Play Space	E	600
44	Tinsley Green	S	580
<b>Nature Reserve</b>			
45	Blackburn Meadows Nature Reserve	NE	710
<b>Railway Infrastructure</b>			
46	Rotherham Central Rail Line	N	15
47	Meadowhall Rail Line	N	590
<b>Local Wildlife Sites</b>			

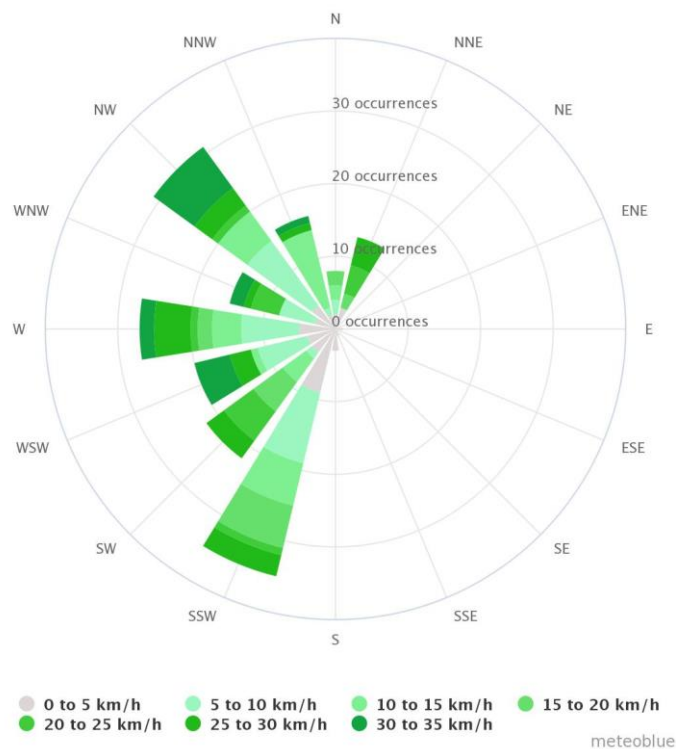
48	Blackburn Meadows	NE	700
49	Lower Don Valley: Disused Railway, Meadowhall	S	630
50	Lower Don Valley: Sheffield & Tinsley Canal	SW	995
51	River Don (City Centre to Blackburn Meadows)	NW	75
<b>Protected Species</b>			
52	Brown/Sea Trout	NW	75
53	European Eel Migratory Route	NW	75
54	European Water Vole	All directions	Adjacent
<b>Groundwater Sensitivity</b>			

According to the Multi-Agency Geographic Information for the Countryside’s (MAGIC) website, the site is not situated within a Groundwater Source Protection Zone. In terms of aquifers, the MAGIC website indicates that the site underlies a Secondary A aquifer.

## 2.10 WIND

- 2.10.1 The prevailing wind direction will determine which receptors will be affected and at what frequency.
- 2.10.2 Meteorological data has been used from Tinsley from [www.meteoblue.com](http://www.meteoblue.com) which is considered to be representative of conditions within the vicinity of the application site. According to the wind rose data for the area, the prevailing winds in the local area is from the south, south west (SSW) as shown in Figure 1 below.

**Figure 1: Prevailing Wind Direction for Tinsley**



- 2.10.3 As such, areas at most risk from dust emissions, should it occur, are therefore located northeast of the site.
- 2.10.4 As noted in Table 3, there are surface water features and railway lines within 1km of the site. According to the EA's 'Dust & Emission Management Plan' template, surface water and groundwater are not identified as receptors that are susceptible to the adverse effects of exposure to high levels of dust and particulates. As such, these receptors are not considered further in this DMP.

## 2.11 LOCAL CONTRIBUTORS TO DUST

- 2.11.1 According to the EA's public register, there are a few waste facilities within 1km of the site that may be considered as local contributors to dust emissions. Details of these facilities are summarised in the table below.

**Table 4: Local Contributors of Dust within 1km of the Site**

Name of Site	Name of Operator	Site Address	Site Type	Direction and distance from the site
Sheffield Road	Waste Recycling And Destruction Limited	Sheffield Road, Templeborough, Rotherham, South Yorkshire, S60 1BY	A11 – Household, commercial and industrial waste transfer station	550m northeast
Blackburn Meadows Waste Treatment Facility	FCC Recycling (UK) Limited	Alsing Road, Tinsley, Sheffield, S9 1HL	A13 – Household Waste Amenity Site	665m northwest
T D E Enterprises Limited	T D E Enterprises Limited	Meadowbank Road, Rotherham, South Yorkshire, S61 2NF	SR2008 No12 - Non Hazardous Household Waste Amenity Site	800m north
Templeborough Works	ELG Metals UK Limited	Sheffield Road, Tinsley, South Yorkshire, S9 1RT	Waste Installations - Treatment of non-hazardous waste involving shredding of metal waste including WEEE and ELVs and their components	360m east
Holmes Farm Landfill	Yorkshire Water Services Limited	Blackburn Meadows WWTW, Alsing Road, Tinsley, Sheffield, S9 1HL	Waste Installations – Non-Hazardous Landfill	250m northeast
Blackburn Meadows	FCC Recycling (UK) Limited	Alsing Road, Tinsley, Sheffield, S9 1HL	Waste Installations – Physical Treatment Facility	600m northwest

## 3.0 DUST AND PARTICULATE MANAGEMENT

### 3.1 RESPONSIBILITY FOR THE IMPLEMENTATION OF THE DMP

- 3.1.1 The implementation and dissemination of this DMP will be the responsibility of the Site Manager, supported by other staff. The Site Manager can delegate certain tasks as required, although ultimate responsibility will remain with them.
- 3.1.2 A nominated deputy will be appointed for all times when the Site Manager is not on site. In such circumstances, it will be the nominated deputy's responsibility to ensure that the requirements of the DMP are adhered to.
- 3.1.3 All site staff will receive instructions on how the plan is to be implemented during toolbox talks on site.
- 3.1.4 This document forms part of the site's Environmental Management System (EMS) and will be reviewed on an annual basis to ensure that it is fit for purpose and meets the requirements of current guidance.

### 3.2 SOURCES AND CONTROL OF DUST

- 3.2.1 The key aspects of the process which may lead to dust emissions are identified in Table 5 below and the control measures that will be used are detailed in Table 6.

**Table 5: Source-Pathway-Receptor Routes from Waste Activities at the Site**

Source	Pathway	Receptor	Type of impact
Mud	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Public highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Debris	Falling off waste delivery vehicles	Public Highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Tipping, storage and treatment of waste inside building	Escape from buildings and subsequent atmospheric dispersion	Occupiers of domestic dwellings listed in Table 3.  Workforce in commercial and industrial properties listed in Table 3.  Amenities listed in Table 3.  Priority habitats listed in Table 3.	Visual soiling and airborne particulates.
Vehicle exhaust emissions	Atmospheric dispersion	Occupiers of domestic dwellings listed in Table 3.	Visual soiling and airborne particulates  Airborne particulates

Non road going machinery exhaust emissions	Atmospheric dispersion	<p>Workforce in commercial and industrial properties listed in Table 3.</p> <p>Amenities listed in Table 3.</p> <p>Priority habitats listed in Table 3.</p>	Airborne particulates
			Airborne particulates

**Table 6: Measures to Control Dust/Particulates from Permitted Waste Activities**

Abatement Measure	Description / Effect	Trigger for implementation
<b>Preventative Measures</b>		
Enclosure within a building	Wastes accepted for the site will be stored within warehouse units (Units 9 and 10) and processing will only take place within Unit 9. Both units benefit from roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. In addition, pedestrian doors.	All preventative measures will be implemented during the operating hours detailed in Section 2.8.
Local Exhaust Ventilation (LEV)	The building benefits from a LEV system to facilitate the collection of dust that may be generated from site operations.	
Enclosure of waste treatment processes	<p>Wastes accepted for the facility will be processed within the confines of a building (Unit 9). This building benefits from roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. In addition, pedestrian doors are also closed when not in direct use.</p> <p>The shredder, granulator and decommissioning chamber will be enclosed which will minimise the release of dust emissions during the treatment process.</p>	
Site speed limit	The site is situated within a business park where speed limits are restricted. This will prevent the suspension and entrainment of dust. Clear signage is established on the site to reinforce the speed limit.	
No-idling policy	A 'No-idling policy' is in place at the site which requires all vehicles and plant to be switched off when not in use.	

Minimising drop heights for waste	Drop heights will be minimised as much as practicable to reduce the generation of dust whilst waste is being deposited.
Site surfacing	The site's surface comprises impermeable concrete surface. The site surfacing will be visually inspected on a weekly basis to ensure that all areas provide a smooth-running surface. In the event that any damage is identified on the site's surfacing, necessary remedial work will be undertaken as soon as possible. If possible, the area may also be closed off until the necessary remedial works have been undertaken.
Sheeting of vehicles	Wastes being delivered to the site will be covered or sheeted to prevent dust emissions whilst the waste is in transit.
Maintenance of Plant and Equipment	<p>All plant and equipment will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased dust emissions.</p> <p>In addition, all plant and equipment will be subject to visual checks on a daily basis prior to use to ensure that the equipment functions correctly. In the event that any damage is identified on any plant or equipment that may affect its performance, necessary remedial work will be completed as soon as practicable. If necessary, defective plant or equipment may be isolated/closed off for use until the necessary remedial works have been undertaken. With regards to cleaning equipment (i.e. road sweeper), arrangements will be made to employ alternative equipment.</p>
Good housekeeping	The site will be subject to visual inspections on a daily basis to ensure that there is not a build-up of particulates on surfaces and equipment. In addition, site staff will remain vigilant during operational hours for any visible dust on surfaces and equipment. Any abnormal build-up of dust noticeable on surfaces and equipment will be removed as soon as is practicable.

### 3.3 ENCLOSURE OF WASTE PROCESSING & STORAGE AREAS

- 3.3.1 According to the EA's 'Dust & Emission Management Plan' template, the EA will consider the enclosure of activities inside a building to be Best Available Techniques (BAT) especially if you are located inside an AQMA or a London Borough.
- 3.3.2 As noted in Section 2.1, the site is situated within an AQMA however, all waste activities will be undertaken within the confines of a building. As such, it's considered that the site is considered to be compliant with BAT.

### 3.4 VISUAL DUST MONITORING



- 3.4.1 Given that all waste activities will predominantly take place inside a building, visual dust monitoring will be undertaken at the main entrance of the building to determine if dust is escaping the building.
- 3.4.2 Monitoring will also comprise daily observations on the meteorological conditions (particularly the wind speed and direction) at the site. This information will be used by the Site Manager (or a nominated deputy) to determine the risk of dust emissions which is typically elevated during periods of dry weather or high winds. For the purposes of this DMP high winds have been defined Number 7 on the Beaufort scale where wind speeds range from 28-33 knots. The Beaufort Scale defines land conditions in high winds as “*whole trees in motion; inconvenience felt when walking against the wind*”.
- 3.4.3 Daily monitoring will be undertaken by a member of site personnel who is trained in this procedure.
- 3.4.4 The results of the visual assessment and comments on the meteorological conditions will be recorded in the Daily Dust Conditions Log (Appendix B) and will be reviewed by the Site Manager (or a nominated deputy). ABD will maintain a record of the Daily Dust Conditions Log and will be referred to in the event of a complaint (as detailed in Table 8).
- 3.4.5 Monitoring will be undertaken during the operating hours detailed in Section 2.8. ABD do not propose to make any arrangements to monitor dust outside operating hours as it’s considered that the risk of dust will be low during this period.
- 3.4.6 In the event that visible dust or high winds are identified through daily monitoring, the following actions will be undertaken.

**Table 7: Action Plan for Visible Dust or High Wind Speeds**

	<b>Action</b>	<b>Person responsible for ensuring action is carried out</b>	<b>Timescale for action completion</b>
1	<p>The Site Manager (or a nominated deputy) will be notified and will make the appropriate managerial staff and site operatives aware.</p> <p>In the event that visible dust is identified from daily monitoring, the Site Manager (or a nominated deputy) will review site operations to establish if the site can be identified as the source of the dust.</p> <p>In the event that high wind speeds are observed, the Site Manager (or a nominated deputy) will proceed to implement remedial action(s) that are detailed in Step 2.</p>	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.
2	<p>If the visible dust can be directly related to the site or high wind speeds are observed, remedial action will be undertaken and may include the following depending on the source: -</p> <ul style="list-style-type: none"> <li>• Reduce/limit waste deliveries to and from the site; and,</li> <li>• Reduce/limit waste treatment activities that present a high risk to dust emissions (e.g. shredding and granulator).</li> </ul>	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.

Vantage Business Park  
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3	A follow up visual assessment will be undertaken off site on the local road network for any visible dust.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
4	If visible dust is not identified, the Site Manager (or a nominated deputy) will ensure that any action taken, and the effectiveness of that action is documented and a record will be maintained.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
5	In the event that visible dust is identified following the implementation of remedial action(s), operations on site will cease and the EA will be informed.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).

## **4.0 REPORTING AND COMPLAINTS PROCEDURE**

### **4.1 PURPOSE OF COMPLAINTS PROCEDURE**

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- 4.1.1 A DMP should show how the operator will respond to complaints. Any complaints should be investigated promptly, and appropriate remedial action should be taken. The complainant and anyone else likely to be affected should be informed of any action taken in response to the complaint.
- 4.1.2 A procedure has been developed (see Table 8 below) to ensure that complaints will be handled by ABD appropriately and consistently and to reassure the EA and the public that any of their concerns will be acknowledged and acted upon where appropriate. The procedure will be reviewed on an annual basis or in the event of any significant dust issues.

### **4.2 COMPLAINTS REPORTING ROUTE**

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- 4.2.1 In order to ensure that members of the public are easily able to report any complaints relating to dust emissions from the site, there will be a display board at the site entrance which details the site name, the permit number, the EA's contact details and ABD's contact details. By providing contact details for the EA as well as the operator, this ensures that the member of public can report their complaint and be confident that it will be received by the appropriate party even if they feel uncomfortable discussing directly with the operator.

### **4.3 COMPLAINTS RECORDS**

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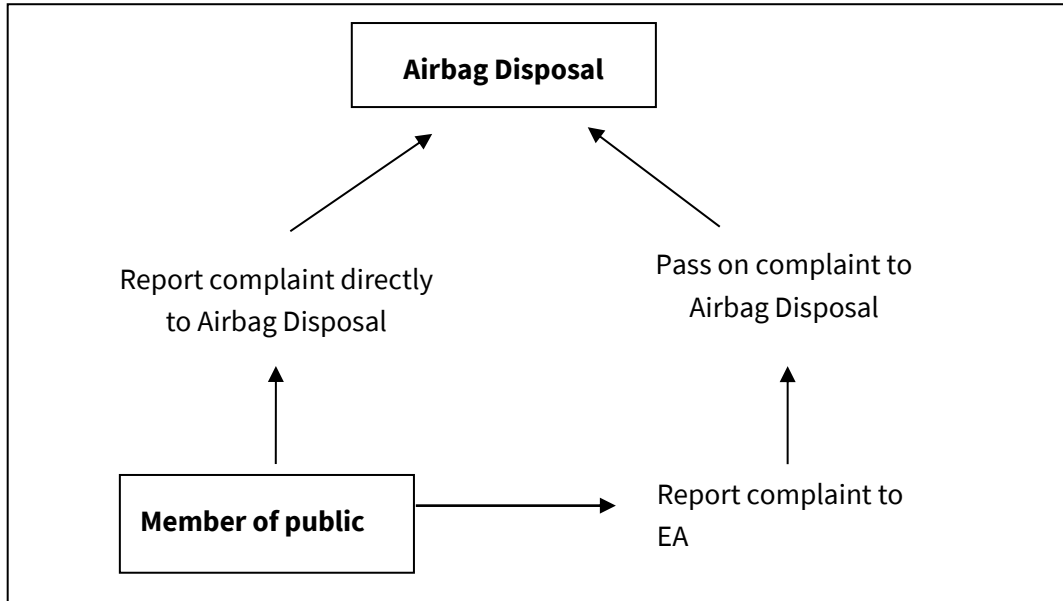
- 4.3.1 Auditable records will be kept of any complaints made and the investigations undertaken. This will provide an ongoing record of the causes incidents which will enable ABD' to identify any patterns which would prompt a review in dust management procedures and control measures.

### **4.4 COMMUNITY ENGAGEMENT**

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- 4.4.1 ABD will be undertaking regular community liaison group meetings with any interested local parties and any issues with dust can be raised at that time.

**Figure 2: Reporting Route**



**Table 8: Complaints Procedure**

Action		Person responsible for ensuring action is carried out	Timescale for Action Completion
1.	<p>The Site Manager (or a nominated deputy) will be notified of the complaint and will make the appropriate managerial staff and site operatives aware of the complaint.</p> <p>The EA will also be notified of the complaint. The complaint shall be formally recorded using the Complaint Report sheet (Appendix C).</p>	Site Manager or appropriately trained operator	Within two working days of receipt of the complaint.
2.	<p>The complaint will be investigated by:-</p> <ul style="list-style-type: none"> <li>a) Checking the monitoring records to see whether the complaint corresponds to the monitoring records.</li> <li>b) Checking the Site Diary and waste acceptance records to see if any particularly dusty waste was accepted.</li> <li>c) Checking the Site Diary to see whether the complaint corresponds to any operational issues at the site.</li> </ul> <p>If the cause of the complaint is established, it will be recorded within the Complaint Record Sheet (Appendix C). If no particular cause is identifiable, then this will also be recorded.</p>	Site Manager or appropriately trained operator	Within one working day of receipt of the complaint.
3.	<p>If more than one complaint is received about a particular incident, and the cause has not been established, ABD would engage with the complainant(s) and agree corrective action(s) to be undertaken and timescales to implement.</p>	Site Manager or appropriately trained operator	Within one working day of receipt of the complaints.

4.	The Site Manager will instigate any necessary reviews of procedures and will implement corrective action(s) that were agreed with the complainant(s).	Site Manager or appropriately trained operator	Works would commence within seven working days of agreeing corrective action. Completion will depend on timescales agreed with the complainant.
5.	Following the corrective action(s) have been implemented, the complainant and the Environment Agency will be informed.	Site Manager or appropriately trained operator	Within one working day of corrective action(s) being implemented.
6.	A follow up audit on the corrective actions implemented shall be undertaken to ensure the complaint is not made again in the future and that the preventive procedure is effective.	Site Manager or appropriately trained operator	Within two weeks of corrective action(s) being implemented.
7.	<p>Once the follow up audit has been completed, the Site Manager will ensure that the complaint and any action taken, and the effectiveness of that action are recorded in the Environmental Management System.</p> <p>This record shall also note any amendments to procedures, both environmental and health &amp; safety, which may be required following the investigation. The record shall be kept in the site office at all times or if it is an electronic record it will be accessible from the site.</p>	Site Manager or appropriately trained operator	Within two weeks of receipt of corrective action(s) being implemented.

## DRAWINGS

ABD/B0242236/PER/02 – Environmental Permit Boundary

ABD/B0242236/REC/02 – Receptor Plan

ABD/B0242236/PER/02 - Site Layout Plan

## APPENDIX A – PROPOSED WASTE TYPES

Waste Code	Description
<b>02</b>	<b>WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING</b>
<b>02 01</b>	<b>Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing</b>
02 01 04	Waste plastics (except packaging)
<b>07</b>	<b>WASTES FROM ORGANIC CHEMICAL PROCESSES</b>
<b>07 02</b>	<b>Wastes from the MFSU of plastics, synthetic rubber and man-made fibres</b>
07 02 13	Waste plastic
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>Wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 05	Plastics shavings and turnings
<b>15</b>	<b>WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>Packaging (including separately collected municipal packaging waste)</b>
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 6 06 and 16 08)</b>
16 01 10	Explosive components (for example air bags)
16 01 17	Ferrous metal
16 01 18	Non-ferrous metal
16 01 19	Plastic
16 01 21*	Hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14
16 01 22	Components not otherwise specified
<b>16 02</b>	<b>Wastes from electrical and electronic equipment</b>
16 02 14	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13
16 02 15*	Hazardous components removed from discarded equipment
16 02 16	Components removed from discarded equipment other than those mentioned in 16 02 15
<b>16 04</b>	<b>Waste explosives</b>
16 04 02	Fireworks wastes
<b>16 05</b>	<b>Gases in pressure containers and discarded chemicals</b>
16 05 04*	Gases in pressure containers (including halons) containing hazardous substances
<b>16 06</b>	<b>Batteries and accumulators</b>
16 06 01*	Lead batteries
16 06 02	Ni-Cd batteries
16 06 03	Mercury-containing batteries
16 06 04	Alkaline batteries (except 16 06 03)



16 06 05	Other batteries and accumulators
<b>17</b>	<b>CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)</b>
<b>17 02</b>	<b>Wood, glass and plastic</b>
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substances
<b>17 04</b>	<b>Metals (including their alloys)</b>
17 04 05	Iron and steel
17 04 07	Mixed metals
<b>17 05</b>	<b>Soil (including excavated soil from contaminated sites), stones and dredging spoil</b>
17 05 08	Track ballast other than those mentioned in 17 05 07
<b>19</b>	<b>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</b>
<b>19 12</b>	<b>Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>
19 12 01	Paper and cardboard
19 12 04	Plastic and rubber
<b>20</b>	<b>MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>Separately collected fractions (except 15 01)</b>
20 01 33	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components
20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35
20 01 39	Plastics
20 01 40	Metals
<b>20 03</b>	<b>Other municipal wastes</b>
20 03 01	Mixed municipal waste
20 03 07	Bulky waste

## APPENDIX B - DAILY CONDITIONS LOG

# Daily Conditions Log

Date	
Name	
Monitoring Location(s)	
Observations	
Actions	
Signature	

## APPENDIX C – COMPLAINTS FORM

## Daily Conditions Log

Dust complaint report form	Date:	Ref. No.
Name and address of complainant		
Tel no. of complainant		
Time and date of complaint		
Date, time and duration of offending dust		
Weather conditions (e.g., dry, rain, fog, snow)		
Wind strength and direction (e.g. light, steady, strong, gusting)		
Complainant's description of dust		
Has complainant any other comments about the offending dust?		
Any other previous known complaints relating to installation (all aspects, not just dust)		
Any other relevant information		
Potential dust sources that could give rise to the complaint		
Operating conditions at the time offending dust occurred		
Action taken:		
Final outcome:		
Form completed by	Signed	