

Vantage Business Park

784-B042236

Environmental Risk Assessment

Environmental Permit Variation Application

Airbag Disposal (UK) Limited

February 2023

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



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1.0 INTRODUCTION

1.1 REPORT CONTEXT

- 1.1.1 This section of the Environmental Permit application corresponds to Section 6 of Part C2 of the Environmental Permit application form, and has been prepared on behalf of the Operator, Airbag Disposal (UK) Limited (ABD), by Tetra Tech.
- 1.1.2 This document relates to ABD's permitted facility located at Unit 9 Vantage Business Park (the site), Sheffield Road, Tinsley, Sheffield, S9 1BG, at approximate Nation Grid Reference (NGR) SK 40228 91537.
- 1.1.3 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.
- 1.1.4 ABD are now seeking to expand their waste operations at the site to allow the 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. 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.
- 1.1.5 Further details regarding the proposed activities are provided in the Best Available Techniques and Operating Techniques (BATOT) document which is provided as Appendix C of the Environmental Permit Application.
- 1.1.6 This Environmental Risk Assessment (ERA) is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the proposed changes at the site. This report will identify any significant risk and demonstrate that the risk of pollution will be acceptable by taking the appropriate measures to manage the risk.

2.0 ENVIRONMENTAL RISK ASSESSMENT

2.1 METHODOLOGY

- 2.1.1 This report has been prepared following the Environment Agency's (EA) Risk Assessment guidance and takes into consideration the potential risks associated with the following risk types:-
- Amenity and Accidents;
 - Surface water discharges;
 - Air;
 - Global Warming potential;
 - Site Waste; and
 - Groundwater
- 2.1.2 There will be no direct emissions to groundwater, surface water or air as a result of this proposal. In addition, the EA's 'Assess the impact of air emissions on global warming' guidance indicates that the global warming impact assessment is only required if the proposal comprises emission points to air. Subsequently, it's considered that no further assessment is required for groundwater, surface water, air and global warming potential.
- 2.1.3 This report addresses the risks associated with site waste and amenity and accidents.
- This risk assessment addresses the above, and is based on the following methodology:-
 - Identification of potential sources of risk;
 - Identification of all potential receptors to risk; and
 - Risk assessment of each risk type.
- 2.1.4 The ERA is a tool used to identify the pollutant linkage i.e. source – pathway – receptor. For most risks, the atmosphere is the main pathway and will always exist. Therefore, the ERA deals primarily with the sources and receptors. The ERA is provided in Appendix A of this document and is summarised below.
- 2.1.5 A 'Nature and Heritage Conservation Screen' (EPR/FB3702UD/V003), was requested from the EA. The screen determines the presence of any site of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal. A copy of the results is in Appendix B of this document.

2.2 SOURCES

- 2.2.1 The potential sources of risks have been considered for each risk type, as provided in Appendix A of this document and summarised below:-

Odour

- Acceptance of odourous waste materials.

Noise and vibration

- Engine noise from vehicles;
- Use of reverse vehicle warnings;
- Loading/unloading of waste

- Mechanical treatment of waste

Fugitive emissions

- Particulate matter i.e., dust;
- Scavenging birds, pests and vermin;
- Mud; and
- Litter.

Accidents

- Fire;
- Leaks and spillages; and
- Unauthorised access.

2.3 PATHWAYS

2.3.1 The pathways have been identified for each risk type as shown in Table 1:

Table 1: Potential Pathways

Risk Type	Pathway
Odour	Atmosphere
Noise and Vibration	Atmosphere
Fugitive Emissions	Atmosphere
Accidents	Atmosphere
	Surface water run-off
	Infiltration
	Percolation

2.4 RECEPTORS

2.4.1 Receptors within 1km of the proposed application boundary, including those identified in the Nature and Heritage Conservation Screen (EPR/FB3702UD/V003), have been listed in Table 2 and are shown on Drawing Number ABD/B0242236/REC/01. The main pathway for the identified sources will be the atmosphere and as such, atmospheric conditions can affect dispersion rates and hence potential risk. As a result, the location of each receptor in relation to the site may influence the potential impact of the risk, as summarised in Table 2.

Table 2: Location of Sensitive Receptors

ID	Receptor	Direction from Operational Area	Minimum Distance from the Permit Application Boundary (approx. m)
Priority Habitats			
1	Deciduous woodland	N	40

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2	Deciduous Woodland	NE	325
3	Deciduous Woodland	NE	460
4	Deciduous Woodland	NE	730
5	Deciduous Woodland	NE	750
6	Deciduous Woodland	NE	890
7	Deciduous Woodland	NW	215
8	Deciduous Woodland	SW	345
9	Deciduous Woodland	SW	375
10	Deciduous Woodland	N	580
11	Deciduous Woodland	N	645
12	Deciduous Woodland	NW	900
13	Deciduous Woodland	NW	825
14	Deciduous Woodland	SE	735
15	Deciduous Woodland	SE	865
16	Deciduous Woodland	SW	770
Surface Water			
17	The River Don	NW	75
18	Sheffield to Keadby Canal	N	620
19	Chapel Flat Dike	SE	455
Public Highways			
20	A6178	S	140
21	M1	SW	705
22	A631	SW	805
23	A6109	N	750
Residential Properties			
24	Residential properties east of M1 (Tinsley)	S	155
25	Residential properties north of A6109 (Rotherham)	N	675
Industrial and Commercial Premises			
26	Industrial/commercial operations at Vantage Business Park	S, E, W	Adjacent
27	Industrial/commercial operations off Deadman's Hole Lane	E	25
28	Industrial/commercial units at Vantage Park	SW	75
29	Industrial/commercial operations at Templeborough Works	SW	190
30	Industrial/commercial operations at Genesis Business Park	SE	690
31	Brinsworth Strip Mills (Speciality Steel UK Limited)	SE	665
32	MTL Advanced	SE	725
33	Industrial operation off Balk Lane	SE	960

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34	Industrial/commercial operations south of Magna Way	E	405
35	Industrial/commercial operations at Magna 34 Business Park	E	800
36	Industrial/commercial properties at Fusion@Magna Business Centre	E	800
37	Commercial operations at Meadowhall	SW	755
38	Blackburn Meadows Power Station	NW	275
39	Industrial/commercial operations south of Greasbrough Road	SW	595
40	Industrial/commercial operations south of Meadow Bank Road	NE	700
Schools/Hospitals/Shops			
41	Tinsley Meadows Primary Academy	S	520
Recreational Land Uses			
42	Phoenix Golf Club	SE	965
Greenspace/Parks			
43	Play Space	E	600
44	Tinsley Green	S	600
Nature Reserve			
45	Blackburn Meadows Nature Reserve	NE	720
46	Centenary Riverside	NE	1,200
47	Woolley Wood	NW	1,800
Railway Infrastructure			
48	Rotherham Central Rail Line	N	50
49	Meadowhall Rail Line	N	630
Local Wildlife Sites			
50	Bawtry Road Wetlands		
51	Blackburn Brook	NW	1.2
52	Blackburn Meadows	NE	720
53	Centenary Riverside	NE	1,200
54	Grange Park	N	2,000
55	Lower Don Valley: Disused Railway, Meadowhall	N	630
56	Lower Don Valley: Sheffield & Tinsley Canal	N	620
57	River Don (City Centre to Blackburn Meadows)	NW	75
58	Sheffield & South Yorkshire Navigation	NW	75
59	Wincobank Hill	W	2,100
60	Wooley Wood	NW	1,800

Protected Species

61	Brown/Sea Trout	NW	75
62	European Eel Migratory Route	NW	75
63	European Water Vole	All directions	Adjacent

Groundwater Sensitivity

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.

2.5 RISK ASSESSMENT

2.5.1 The ERA (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on the receptors. This is achieved by fulfilling the following objectives:-

- Identify the location and nature of each hazard; Identify the specific receptors potentially at risk and assess the sensitivity of each receptor;
- Provide a qualitative assessment of the risk posed to each sensitive receptor;
- Identify management and monitoring techniques; and
- Provide recommendations for more detailed assessments where necessary.

2.6 SUMMARY OF ERA

2.6.1 The ERA (Appendix A) indicates that the proposed changes at the site will have no significant impacts in terms of odour, noise and vibration, and fugitive emissions, and the likelihood of accidents is minimal.

3.0 SITE WASTE ASSESSMENT

3.1 METHODOLOGY

- 3.1.1 The recommended approach for a site waste assessment is detailed in the Environment Agency’s ‘Select a Waste Recovery or Disposal Method for your Environmental Permit’ guidance.
- 3.1.2 The following table identifies and describes the waste streams that arise at the site as a result of the proposal and the disposal/recovery option chosen. There is no existing data relating to the quantities of each waste stream produced as this depends on the quantities of different waste types received at the site.

Table 3: Waste Recovery and Disposal Methods

Description of Waste Stream	Nature of Waste	Disposal or Recovery Option	Impact Score
Plastics (Non-Hazardous/Non-POPs)	Other non-hazardous (2)	Transferred off site for recycling (3)	6
Plastics (Hazardous and POPs waste)	Hazardous Waste (10)	Transferred off site to be destroyed by incineration (10)	100
Ferrous metal	Other non-hazardous (2)	Transferred off site for recycling (3)	6
Non-ferrous metal	Other non-hazardous (2)	Transferred off site for recycling (3)	6
Shredder residue	Other non-hazardous (2)	Transferred off site for disposal (30)	60
Drained compressors	Hazardous Waste (10)	Transferred off site for recycling (3)	30
Recovered waste oil	Hazardous Waste (10)	Transferred off site for recovery (3)	30
Recovered refrigerant gas	Hazardous Waste (10)	Transferred off site for destruction by incineration (10)	100
Shredded foam	Hazardous Waste (10)	Transferred off site for destruction by incineration (10)	100
Recovered contents from fire extinguishers	Hazardous Waste (10)	Transferred off site for physio-chemical treatment (12)	120

- 3.1.3 The proposed disposal/recovery methods for the waste streams produced by the proposed waste treatment activities represents the lowest impact scores that may be achieved based on the nature of the waste stream. As such, it is considered that the risk of the proposed disposal/recovery methods are low and that there is little potential to further minimise the impact of this waste stream. Consideration will be given to seeking alternative treatment and disposal routes in the future where new technologies are brought online.

DRAWINGS

ABD/B042236/REC/01 – Receptor Plan

APPENDIX A - ENVIRONMENTAL RISK ASSESSMENT

Table A1: Odour Risk Assessment

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Odour from acceptance, storage and treatment of putrescible waste	<p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p>	Atmosphere	<p>As part of the proposal, ABD do not intend to accept or process any waste streams that are putrescible in nature. As such, the risk of odour is not expected to increase as a result of this variation.</p> <p>Nevertheless, the following measures will be implemented at the site to minimise the risk of odour.</p> <p>There will be strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the Best Available Techniques and Operating Techniques (BATOT) Document (Appendix C of the Environmental Permit Application).</p> <p>All waste will be stored and processed within the confines of a building. 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. This will minimise the risk of odour to impact sensitive receptors beyond the site boundary.</p>	Low – the proposed waste types are not putrescible in nature and management procedures should prevent emissions of odours	Medium/Low - Odour annoyance	Low – the proposed waste types are not putrescible in nature and management procedures employed reduce the likelihood of impact

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			All site operatives will be vigilant with regard to identifying non-compliant wastes and any non-conformances or odour issues will be reported to the Site Manager.			
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Table A2: Noise and Vibration Risk Assessment

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Vehicle movements on site and haul road (including reverse vehicle warnings)	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2.	Atmosphere.	<p>Vehicle movements will only be undertaken during the existing operating hours (08:00 – 16:30 Monday to Thursday and 08:00 - 16:00 on Fridays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site.</p> <p>The site is situated within a wider business park where speed limits are restricted.</p> <p>An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use.</p> <p>All vehicles will utilise low level reversing signals where possible.</p> <p>All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer’s requirements to minimise the risk of mechanical failure which could result in increased noise emissions.</p> <p>All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and</p>	Low - Intermittent during operating hours.	Medium/Low - Intermittent noise and vibration disturbance.	Low – The management procedures employed reduced the likelihood of impact.

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			how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.			
Noise and vibration from loading and unloading of waste	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2.	Atmosphere.	<p>All noise generating activities will only be undertaken during the existing operating hours (08:00 – 16:30 Monday to Thursday and 08:00 - 16:00 on Fridays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site.</p> <p>The loading/unloading of wastes will be undertaken in a controlled manner to keep noise/vibration to a minimum. For example, drop heights will be minimised as much as practicable.</p> <p>All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.</p>	Low - Intermittent during operating hours.	Medium/Low - Intermittent noise and vibration disturbance.	Low – The management procedures employed reduced the likelihood of impact.

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<p>Noise from waste treatment activities</p>	<p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p>	<p>Atmosphere</p>	<p>All waste treatment activities will be undertaken within the confines of a building. 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. As such, any noise arising from the waste operation will be effectively attenuated by the walls and roof of the building.</p> <p>All noise generating activities will only be undertaken during the existing operating hours (08:00 – 16:30 Monday to Thursday and 08:00 - 16:00 on Fridays), with the exception of emergency repairs. There are no proposed changes to the operational hours of the site.</p> <p>The use of modern plant and equipment shall be practiced and will be maintained in accordance with the manufacturer’s requirements. This will minimise the risk of mechanical failure which could result in increased noise emissions.</p> <p>All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NIA and NMP are provided as Appendix G of the Environmental Permit Application.</p>	<p>Low - Intermittent during operating hours.</p>	<p>Medium/Low - Intermittent noise and vibration disturbance.</p>	<p>Low – The management procedures employed reduced the likelihood of impact.</p>
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Table A3: Fugitive Emissions Risk Assessment

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Hazard	Receptor	Pathway	Hazard
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?
To Air						
Dust emissions from vehicle movements	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2.	Atmosphere	Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. The site is situated within a wider business park where speed limits are restricted. An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use This will minimise the risk of dust that's typically associated with idling. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.	Low – the management actions should prevent emissions of dust	Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	Low – The management procedures employed reduced the likelihood of impact.
Dust emissions from loading/unloading of waste	Domestic dwellings	Atmosphere	The loading/unloading of wastes would be undertaken in a controlled manner to keep dust emissions to a minimum.	Low – the management actions	Low – human health	Low – The management

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	<p>listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p> <p>Designated ecological habitats, priority habitats and protected species listed in Table 2.</p>		<p>The loading/unloading of wastes will predominantly be undertaken within the confines of a building. The 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. This will minimise the risk of dust to impact receptors beyond the site boundary</p> <p>The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the manager.</p> <p>Drop heights will be minimised as much as practicable to reduce the generation of dust whilst the waste is being handled.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p>	should prevent emissions of dust	risk in immediate vicinity, nuisance risk to nearby vehicles and property.	procedures employed reduced the likelihood of impact.
Dust emissions from storage of waste	<p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p> <p>Designated ecological habitats,</p>	Atmosphere	<p>All waste be stored within the confines of a building. The 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. This will minimise the risk of dust to impact receptors beyond the site boundary.</p> <p>The building benefits from a LEV system to facilitate the collection of dust that may be generated from site operations.</p> <p>The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p>	Low – the management actions should prevent emissions of dust	Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	Low – The management procedures employed reduced the likelihood of impact.

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	priority habitats and protected species listed in Table 2.					
Dust emissions from the mechanical treatment of waste	<p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p> <p>Designated ecological habitats, priority habitats and protected species listed in Table 2.</p>	Atmosphere	<p>All waste treatment activities will be undertaken within the confines of a building. The 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. This will minimise the risk of dust to impact receptors beyond the site boundary.</p> <p>The site will comprise the operation of a shredder which will be enclosed to minimise the release of dust emissions as a result of the treatment process.</p> <p>The building benefits from a LEV system to facilitate the collection of dust that may be generated from site operations.</p> <p>The use of modern plant and regular maintenance shall be practiced minimising the risk of mechanical failure which may result in increased dust emissions. All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements.</p> <p>All plant and equipment will be inspected on a daily basis (prior to use) by the Site Manager. The purpose of this inspection is to identify any signs of defects that may affect the integrity or operational efficiency of the plant/equipment. If any defects are identified, the defective plant/equipment will not be used until the necessary remedial works have been undertaken.</p> <p>The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.</p>	Low – the management actions should prevent emissions of dust	Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	Low – The management procedures employed reduced the likelihood of impact.

			Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.			
To Water						
Contaminated rainwater from contact with putrescible wastes Run off of contaminants from wastes or non-wastes (e.g. oil, fuel)	Groundwater Surface water features listed in Table 2..	Direct surface water run-off from site. Infiltration. Percolation.	All waste activities will be undertaken within the confines of a building and therefore will minimise contact with rainwater. With the exception of cardboard, all waste streams will be stored within appropriate sealed containers which will contain any contaminated run off that may be generated. In addition, the building benefits from an impermeable concrete surface to prevent the transmission of potentially contaminated liquids into groundwater beneath the site. All areas of the impermeable concrete surface, covered buildings, roofed areas and containers will be visually inspected on a daily basis to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.	Low – The engineered systems and infrastructure are designed to prevent any discharge of contaminated rainwater run off	Medium – contamination of local water bodies and/or groundwater	Low - due to the design of the site
Pests/Scavenging birds						
Scavenging birds or animals attracted to site and carrying waste off site.	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2.	Air – dropped by birds. Terrestrial – removed from site by vermin.	As part of the proposal, ABD do not intend to accept or process any waste streams that are putrescible in nature and therefore will not attract pests, vermin and/or scavenging birds. As such, the risk of pests from the waste treatment activity is expected to be low. Nevertheless, the following measures will be implemented at the site to minimise the risk of odour. Strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the BATOT Document (Appendix C of the Environmental Permit Application).	Low – The management actions should reduce the risk	Medium - Nuisance, property damage and risk of vermin spread infections.	Low – the management procedures in place reduce likelihood of impact.

	Designated ecological habitats, priority habitats and protected species listed in Table 2.		All waste will be stored and processed within the confines of a building. The 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. This will minimise the risk of dust to impact receptors beyond the site boundary.			
Litter/Debris						
Litter/debris and mud on public highway	Domestic dwellings listed in Table 2. Commercial and industrial users listed in Table 2. Schools and amenities listed in Table 2. Designated ecological habitats, priority habitats and protected species listed in Table 2. Highways listed in Table 2.	Litter – atmosphere and terrestrial (likely to be in accordance with prevailing wind direction) Mud – terrestrial	All waste accepted at the site will be stored within the confines of a building. 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. This will minimise the risk of wind-blown litter. The site is situated within a wider business park and benefits from a concrete surface. As such, the risk of mud is considered to be low. Vehicles will be sheeted/netted, if necessary, when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways. The site will employ good housekeeping criteria. Any litter that’s noticed on site will be removed as soon as is practicable and a check will be undertaken at both the start of the workday and the end of the workday to ensure that there is no litter.	Low – the management actions should prevent materials being tracked/dropped onto local highways	Medium - Nuisance and potential health and safety hazard caused by waste on the highway.	Low – The management procedures in place minimise the likelihood of impact.

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	Railway lines listed in Table 2					
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Table A4: Accident and Incident Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Leaks/spillages from items of plant or waste	Groundwater. Surface water features listed in Table 2.	Surface run-off. Infiltration. Percolation	<p>The operator will undertake regular maintenance of plant equipment in accordance with manufacturer’s guidance. This will minimise the risk of mechanical failure which may result in leaks.</p> <p>The use of modern plant and equipment shall be practiced and will be maintained in accordance with the manufacturer’s requirements. This will minimise the risk of mechanical failure which could result in leaks and spillages.</p> <p>Site operations will be undertaken within the confines of a building which benefits from an impermeable concrete surface to prevent the transmission of potentially contaminated liquids into groundwater beneath the site.</p> <p>All areas of the impermeable concrete surface, covered buildings, roofed areas and containers will be visually inspected at least weekly to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.</p> <p>In addition, all plant and equipment will be subject to daily pre-use inspection checks. The purpose of this inspection is to</p>	Low – the Management actions should prevent accidents and the engineered systems and infrastructure are designed to prevent any discharge of contaminated water run off	Medium - Pollution of local water courses, groundwater and aquifers	Low - The management procedures in place should prevent this occurring

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			<p>identify any signs of defects that may affect the integrity and operational efficiency of the plant.</p> <p>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.</p>			
Vandalism / theft – damage to waste containment	<p>Groundwater. Surface water features listed in Table 2.</p> <p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p> <p>Designated ecological habitats and priority habitats listed in Table 2.</p>	Unauthorised entry to the site.	<p>Although the proposal is to expand the site’s waste operations, there are no proposed changes to the site boundary and therefore the risk of unauthorised access is not expected to increase.</p> <p>Nevertheless, the following measures are currently in place at the site and will continue to be implemented to minimise the risk of unauthorised access.</p> <p>All waste accepted at the site will be stored within the confines of a building. 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 site is situated within a business park which is secured by fencing and a lockable gate which is kept closed and locked outside hours of operation to prevent unauthorised access to the site .</p> <p>The site will comprise a CCTV system which will be monitored by on site staff during working hours and the contractors outside working hours. Contractors will have details of the emergency contacts from ABD to ensure that any incidents are dealt with a timely manner.</p> <p>There will be procedures in place which will require all visitors to the site to sign in on arrival and sign out on departure.</p> <p>With the exception of cardboard, all waste streams will be stored within appropriate sealed containers which will contain any contaminated run off that may be generated. In addition, the building benefits from an impermeable concrete surface to</p>	Low – the management actions should prevent unauthorised access and the engineered systems and infrastructure are designed to prevent any discharge of harmful liquids	Medium - Pollution of local water courses, groundwater and aquifers	Low - The management procedures in place should prevent this occurring

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			prevent the transmission of potentially contaminated liquids into groundwater beneath the site.			
Arson/fire from self-combustion of waste (for waste treatment facility)	<p>Groundwater.</p> <p>Surface water features listed in Table 2.</p> <p>Domestic dwellings listed in Table 2.</p> <p>Commercial and industrial users listed in Table 2.</p> <p>Schools and amenities listed in Table 2.</p> <p>Designated ecological habitats and priority habitats listed in Table 2.</p>	<p>Infiltration.</p> <p>Contaminated rainwater runoff.</p>	<p>The proposal comprises an extension to the site's waste activities which includes the acceptance of additional waste codes such that are combustible in nature. As such, the risk of fire from this particular activity will be minimised and managed in accordance with the Fire Prevention Plan Appendix F of the Environmental Permit Application).</p>	<p>Low – the management actions should prevent fire</p>	<p>Medium- possible respiratory irritation from smoke inhalation Nuisance from smoke and emissions of particulates</p>	<p>Low – due to Management system in place</p>

APPENDIX B - NATURE AND HERITAGE CONSERVATION SCREEN (EPR/FB3702UD/V003)