

# Caulmert Limited

Engineering, Environmental & Planning  
Consultancy Services

## Arpley 2 Waste Transfer Station

FCC Recycling (UK) Limited

## Environmental Permit Variation Application

## Environmental Risk Assessment

**Prepared by:**

**Caulmert Limited**

**Office:** Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

**Tel:** 01773 749132

**Email:** [andystocks@caulmert.com](mailto:andystocks@caulmert.com)

**Web:** [www.caulmert.com](http://www.caulmert.com)

**Document Reference:** 6109-CAU-XX-XX-RP-V-0301.A0.C1

May 24



**APPROVAL RECORD**

**Site:** Arpley 2 Waste Transfer Station

**Client:** FCC Recycling (UK) Limited

**Project Title:** Environmental Permit Variation Application

**Document Title:** Environmental Risk Assessment

**Document Ref:** 6109-CAU-XX-XX-RP-V-0301.A0.C1

**Report Status:** **Final**

**Project Manager:** Andy Stocks

**Caulmert Limited:** Strelley Hall, Main Street, Strelley, Nottingham, NG8 6PE

<b>Author</b>	Samantha Hayden Senior Environmental Consultant	<b>Date</b>	13/02/2024
<b>Reviewer</b>	Andy Stocks Director of Environment	<b>Date</b>	12/04/2024
<b>Approved</b>	Andy Stocks Director of Environment	<b>Date</b>	18/04/2024

Revision Log			
Revision	Description of Change	Approved	Effective Date
C1	Initial Release	AS	01/05/2024

**DISCLAIMER**

This report has been prepared by Caulmert Limited with all reasonable skill, care and diligence in accordance with the instruction of the above named client and within the terms and conditions of the Contract with the Client.

The report is for the sole use of the above named Client and Caulmert Limited shall not be held responsible for any use of the report or its content for any purpose other than that for which it was prepared and provided to the Client.

Caulmert Limited accepts no responsibility of whatever nature to any third parties who may have been made aware of or have acted in the knowledge of the report or its contents.

No part of this document may be copied or reproduced without the prior written approval of Caulmert Limited.

## Environmental Risk Assessment

### TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION .....</b>	<b>1</b>
	1.1 Overview .....	1
	1.2 Site Setting and Location .....	1
	1.3 Existing and Proposed Site Operations .....	2
<b>2.0</b>	<b>SENSITIVE RECEPTORS.....</b>	<b>4</b>
	2.1 Overview .....	4
	2.2 Designated Sites of Ecological Importance & Other Habitats .....	5
	2.3 Summary .....	5
	2.4 Meteorological Setting .....	6
<b>3.0</b>	<b>RISK ASSESSMENTS .....</b>	<b>8</b>
	3.1 Assessments for the Proposed Operations.....	8
	3.2 Risk Assessments - Tables.....	8
<b>4.0</b>	<b>CONCLUSION .....</b>	<b>28</b>
	4.1 Overview .....	28
	4.2 Additional Documents .....	28
<b>5.0</b>	<b>REFERENCES .....</b>	<b>29</b>

### DRAWINGS

**6109-CAU-XX-XX-DR-V-1800** Sensitive Receptors Plan

### TABLES

<b>Table 1:</b>	Summary of Sensitive Receptors within 1km of the Site
<b>Table 2:</b>	Odour Risk assessment
<b>Table 3:</b>	Noise Risk assessment
<b>Table 4:</b>	Fugitive Emissions Risk Assessment
<b>Table 5:</b>	Visible Plumes Risk Assessment
<b>Table 6:</b>	Release of Bioaerosols Risk Assessment
<b>Table 7:</b>	Accidents Risk Assessment

### APPENDICES

**Appendix 1** Environment Agency Habitats Screening Report

## 1.0 INTRODUCTION

### 1.1 Overview

- 1.1.1 Caulmert Limited have been appointed by FCC Recycling (UK) Limited (“the Operator”) to prepare an environmental permit variation application to add a “*Household, commercial and industrial waste transfer station*” activity to the existing permit ref. EPR/JB3633RP for their Arpley 2 Site (‘the Site’) in Huyton, Liverpool. This will involve accepting up to 120,000 tonnes per year of Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up and temporarily storing within bays in the building prior to transferring off-site for further recovery and/or recycling. The Site Operator is a wholly owned subsidiary of FCC Environment (UK) Limited.
- 1.1.2 This report is an Environmental Risk Assessment which forms part of the environmental permit variation application for the Site. This risk assessment considers any potential risks associated with the proposed waste transfer station activities and the proximity of the site to sensitive receptors. It is expected that the risks will be low (with controls in place) with respect to odour, pests, dust, litter, noise, accidents and other fugitive emissions from site operations and all operations will be undertaken within the building.
- 1.1.3 This risk assessment has been compiled in accordance with the current Environment Agency guidance ‘Risk Assessments for your Environmental Permit’ (last updated 21<sup>st</sup> November 2023).

### 1.2 Site Setting and Location

- 1.2.1 The Site is located in an industrial estate off Stretton Way in Huyton, Liverpool, at postcode L36 6JF and is centred on National Grid Reference SJ 45870 90085.
- 1.2.2 The Site is situated 620m north-northwest of Junction 6 of the M62, approximately 2.5km to the southwest of Prescot. The site is in an industrial area, with other industrial units and warehouses surrounding the site to the northwest, west and south. The M57 motorway is 100m to the east of the Site boundary and the Liverpool to Manchester railway is located 690m to the north. The River Mersey is located over 7.2km to the southeast at its closest point and leads to the Mersey Estuary over 15km to the west. The Site location is shown below in Figure 1:



**Figure 1 – Site Location Plan (approx. Permit boundary in green) (map from: Google Earth)**

### 1.3 Existing and Proposed Site Operations

- 1.3.1 The Arpley 2 Site is currently permitted as an installation, specifically a Section 5.4A(1)(b)(ii) activity for the “Recovery of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration”. The facility when operational pre-treats up to 120,000 tonnes per year of waste primarily to produce a Refuse Derived Fuel (RDF) which is baled and stored prior to being sent for incineration. Ferrous metals and other recyclable materials are also recovered as part of the treatment process.
- 1.3.2 This application is to add a “*Household, commercial and industrial waste transfer station*” activity to the existing permit ref. EPR/JB3633RP and retain the existing listed activity. The proposed activity involves accepting up to 120,000 tonnes per year of Mixed Dry Recyclables (MDR) and residual Municipal Solid Waste (MSW) and other wastes from household, commercial and industrial sources for bulking up to 3m high within 4m high concrete bays in the building prior to transferring off-site for further recovery and/or recycling.
- 1.3.3 All unloading, handling, storing and re-loading of wastes into vehicles will be undertaken within the building, which will have roller shutter doors that are kept closed when not in use and impermeable concrete surfacing. There will be no change to the existing permit boundary as part of this permit variation.

- 1.3.4 Surface water from waste storage areas discharges to a public foul sewer located on the road outside the facility, however the waste storage areas are under cover within the fully enclosed building therefore worked dry and unlikely to generate significant volumes of run-off. Surface water from the northern end of the site discharges to Logwood Mill Brook through a private outfall and the southern end discharges to the same brook via a surface water sewer. Penstock valves will be installed in the drainage systems to sewer and surface water to isolate the site in an emergency such as a spillage, leak or fire.

## 2.0 SENSITIVE RECEPTORS

### 2.1 Overview

- 2.1.1 This report assesses the potential risks to nearby sensitive receptors from the permit variation proposals at Arpley 2 Waste Transfer Station. A sensitive receptor search was conducted of the surrounding area within a 1km radius of the site boundary using Defra's Magic Maps website<sup>1</sup> and the sensitive receptors identified are listed below in Table 1 and also shown on the Sensitive Receptor Plan drawing ref. 6109-CAU-XX-XX-DR-V-1800. The distance to each receptor is measured from the site permit boundary.
- 2.1.2 In addition, as part of the Pre-Application Advice stage, the Environment Agency (EA) conducted a Nature and Heritage Conservation Screening Report, attached as Appendix 1, which identified a fish migratory route in the adjacent Logwood Mill Brook.
- 2.1.3 The closest human receptors to the Site are workers and visitors of the surrounding industrial units located <10m north-northeast (Pine Precision Engineering), 20m east (Knowsley Council Depot and a Cemex Site), 20m south (Knowsley MBC Depot), 25m southwest (Caravan Storage/John Mason International Ltd) and 40m northwest (Veolia Depot). The Site is in an industrial area, with numerous other industrial and commercial units and warehouses to the northwest, west and south. These premises are likely to be less sensitive to noise, vibration, dust and odour emissions due to the nature of the activities carried out on their own sites.
- 2.1.4 The nearest residential receptors to the Site are houses located within the residential area around Logwood Road 395m west-southwest from Site. Numerous other residential areas are located further to the east, north, west and south (see Table 1 below).
- 2.1.5 St. Gabriel's Primary School is located 780m northwest of the Site and Sylvester Primary School is located 980m west. There are no hospitals within 1km of the Site, but there is one medical facility, Tarbock Medical Centre located 980m west of the site.
- 2.1.6 There are no public rights of way (footpaths, bridleways, byways) crossing the site or immediately adjacent to the site. The closest public right of way is located 200m northeast, associated with numerous other interconnecting paths crossing Stadt Moers Park (West View).
- 2.1.1 Below the Site the bedrock is the Pennine Middle Coal Measures, with the bedrock designated as a Secondary A Aquifer.
- 2.1.2 There is a Source Protection Zone (SPZ) III located 365m to the south, 1km to the west and 1.5km to the east of the Site boundary at its closest point, likely associated with the Principal Aquifer to the south. A Zone II SPZ is also located 1.7km to the south and southwest.

---

<sup>1</sup> DEFRA Magic Maps 2022: <https://magic.defra.gov.uk/MagicMap.aspx>

## 2.2 Designated Sites of Ecological Importance & Other Habitats

- 2.2.1 The Environment Agency (EA) Pre-Application Conservation Screen Report (see Appendix 1) identified a fish migratory route adjacent to the Site (<10m to the west) in the Logwood Mill Brook as a European Eel Migratory Route.
- 2.2.2 There is one Ancient and Semi-Natural Woodland within 1km of the Site, The Old Wood (North and South) located 980m and 1km southeast of the Site, bordering the M62 motorway.
- 2.2.3 There are no Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Local Nature Reserves (LNR), National Nature Reserves (NNRs), Ramsar sites or Areas of Outstanding Natural Beauty (AONBs) within 2km of the site.
- 2.2.4 The closest designated habitat to Site is a Local Nature Reserve (LNR) located over 4.2km southwest from the Site, named Childwall Woods & Fields LNR. The next closest designated sites are a SSSI and SPA located over 7km to the south-southeast and southwest of the Site associated with the Mersey Estuary.

## 2.3 Summary

- 2.3.1 The sensitive receptors identified within 1km of the site boundary are presented in Table 1 below:

**Table 1 – Summary of Sensitive Receptors within 1km of the site boundary**

Receptor	Type	Distance/Direction
Secondary A Aquifer in bedrock	Groundwater	Below Site
Pine Precision Engineering	Commercial/Industrial	<10m NNE
Logwood Mill Brook/ European Eel Migratory Route	Surface Water	<10m W
Knowsley Council Depot	Commercial/Industrial	20m E
Knowsley MBC Depot	Commercial/Industrial	20m S
Cemex Site	Commercial/Industrial	20m E
Caravan Storage/John Mason International Ltd.	Commercial/Industrial	25m SW
Veolia Depot	Commercial/Industrial	40m NW
Tarmac Huyton	Commercial/Industrial	70m NE
Commercial Units inc. Dulux Centre	Commercial/Industrial	85m NW
Commercial/Industrial Units along Ellis Ashton Street and Wilson Road	Commercial/Industrial	Between 20m and 545m to SSE Between 85m and 925m to NW
Users of M57 motorway	Public Road	100m E
Huyton HWRC	Commercial/Industrial	130m SSW



Receptor	Type	Distance/Direction
Industrial Units on Fallows Way/Windy Arbor area	Commercial/Industrial	Between 170m and 500m to E
Stadt Moers Country Park and associated public footpaths/rights of way	Recreational	200m NE, 210m N
Tushingam's Lake	Surface Water	230m NE
SPZ Zone III	Groundwater	365m S
Residential area around Logwood Rd	Residential	395m WSW
Residential area off Hale View Rd	Residential	435m NW
Residential area around Bridgewater Way	Residential	450m SW
Residential area off Cronton Rd and Bishop Drive	Residential	505m E
Playing Fields	Recreational	580m NW, 585m W, 830m NW, 860m E
Residential area off Juniper Avenue	Residential	625m SE
Residential area south of Cronton Rd	Residential	675m SW
Liverpool to Manchester railway	Commercial/Industrial	690m N
Residential area off Wood Lane	Residential	695m NNW
Users of M62 Inc. 6 and Coppice Lane Services (inc. hotels, food outlets etc.)	Public Road	705m SSE
St. Gabriel's Primary School	Residential	780m NW
St. Nicholas Church	Recreational	805m NE
Residential area off Pottery Lane	Residential	885m NE
Allotments	Recreational	900m NE, 920m N
St. John's Millenium Green	Residential	950m W
Sylvester Primary School	Residential	980m W
Tarbock Medical Centre	Residential	980m W
The Old Wood North and South	Ancient Woodland	980m and 1km SE

## 2.4 Meteorological Setting

2.4.1 Fugitive emissions of dust, litter, odour and noise from the site are likely to be affected by local weather conditions, in particular by wind direction. Wind statistics observed from Widnes weather station, the closest weather station actively recording wind statistics, are considered to be representative of the typical conditions at the site (Figure 2 below). Widnes weather station is located over 7km to the southeast of the site.

A review of the data recorded daily between February 2012 and January 2024 on the Windfinder.com<sup>2</sup> website indicates that the most dominant wind direction is from the east-

<sup>2</sup> <https://www.windfinder.com/windstatistics/widnes>

southeast to the west-northwest, but with variations throughout the year. With reference to Table 1 above, predominant annual wind conditions are likely to blow towards the industrial/commercial units to the west-northwest along Ellis Ashton Street and Wilson Road but could also blow towards the residential area to the west.

**Monthly wind direction and strength distribution**



**Figure 2 – Widnes wind statistics – average wind direction & strength 2012-2024**

## 3.0 RISK ASSESSMENTS

### 3.1 Assessments for the Proposed Operations

- 3.1.1 Risk assessment tables have been completed for odour, noise and vibration, fugitive emissions (dust, litter, mud and debris, pests and surface water run-off), visible plumes and accidents, in line with the GOV.UK guidance 'Risk assessments for your environmental permit' (last updated 21<sup>st</sup> November 2023).
- 3.1.2 The activities will be undertaken with environmental protection as a priority, in accordance with Best Available Techniques and utilising Appropriate Measures, ensuring that effective control measures are in place to prevent harm to human health and the local environment. A dedicated building will house the activities, ensuring effective minimisation of potential emissions of odour, dust, litter and noise and to minimise surface water run-off. The Site will be installed with impermeable concrete surfacing to contain any run-off and to reduce mud and debris generation.
- 3.1.3 Waste will be dealt with on a first in first out basis and will be turned round quickly to minimise the risks of odour, potential for self-combustion and vermin. The site will be kept tidy and will be inspected on a daily basis to make sure that no fugitive emissions or risks to the environment or human health are detected. Any significant emissions of dust, odour, litter, noise or other emissions will be investigated immediately and remedied as per the site's procedures.
- 3.1.4 Staff will be trained to understand the potential environmental risks associated with the site and their role in managing those risks. An induction will also be provided for contractors and visitors so that they are aware of any environmental requirements during the course of their work or visit on-site.

### 3.2 Risk Assessments - Tables

- 3.2.1 Possible hazards as a result of the proposed operations at the site that require risk assessment comprise:
- Sources of Odour (Table 2);
  - Sources of Noise and Vibration (Table 3);
  - Fugitive Emissions (dust, litter, mud and debris, pests, surface water run-off) (Table 4);
  - Visible Plumes (smoke or visible plumes) (Table 5);
  - Release of Bioaerosols (Table 6); and,
  - Accidents (leaks and spillages, fire etc.) (Table 7).
- 3.2.2 The hazards identified above have the potential to escape beyond the site boundary and cause an amenity nuisance to sensitive receptors or harm the environment and human health. For each possible hazard, an assessment of the risk that it poses to potential sensitive receptors has been carried out, taking into account the control measures that will be in place.

- 3.2.3 The following Tables 2 to 6 give further detail on each hazard source, pathway and sensitive receptor, the risk management measures to be implemented, probability of exposure, consequences of exposure and an overall risk rating from Low (little or no risk) to High (significant risk) once all risk management measures have been taken into account.

**Table 2 – 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
<p>Odour from non-hazardous household, commercial and industrial wastes:</p> <ul style="list-style-type: none"> <li>• delivery</li> <li>• reception</li> <li>• unloading</li> <li>• handling</li> <li>• storing</li> <li>• re-loading and transfer off-site</li> </ul>	<p>Workers and patrons of nearby commercial/industrial premises – closest &lt;10m NNE, 20m E &amp; S, 25m SW and 40m NW.</p> <p>Users of public and domestic roads and footpaths nearby.</p> <p>Human receptors in residential areas relocated 395m WSW, 435m NW, 450m SW and 505m E.</p>	Through air.	<ul style="list-style-type: none"> <li>• Waste delivered to site in covered delivery vehicles. All waste will be inspected upon delivery to ensure the waste conforms to the permit and the waste transfer notes, with any non-conforming waste, including malodorous wastes being removed from site. The storage of any non-conforming material will be kept in a quarantine area separate from the reception area if required. If it cannot be stored safely without causing odour outside of the site, it will be removed from site as soon as practicable.</li> <li>• Waste unloaded, handled, stored and re-loaded onto vehicles within building, with roller shutter doors kept closed when not in use, other than to allow access/egress of vehicles.</li> <li>• Storage bays within building, sheltering stored wastes from rain and wind, keeping waste dry and less likely for any organic matter to biodegrade and cause odour.</li> </ul>	<p><b>Unlikely –</b> Activities undertaken within building with doors closed when not in use.</p> <p>Odour plumes are transient in nature and unlikely to travel great distances and will dissipate with wind movement.</p> <p>Nearest receptors (industrial/commercial premises), particularly downwind are not particularly sensitive to odours.</p>	May cause amenity nuisance to workers of nearby commercial/industrial premises, road/footpath users and nearby residential receptors.	<b>Low – if control measures are implemented</b>

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
			<ul style="list-style-type: none"> <li>Waste sorted and transferred on a first-in, first-out basis, minimising waste storage times and likelihood of generating odour.</li> <li>All wastes will have a short residence time on site (typically less than 7 days) and daily site inspections will check all wastes and operations for odour emissions.</li> <li>General good housekeeping, such as sweeping of surfaces and machinery being cleared regularly to prevent the build-up of waste residues.</li> <li>An 'Odour Management Plan (OMP) Addendum' to the existing OMP has been produced in support of this permit application which details control measures and procedures for dealing with odour emissions and complaints should they arise as a result of the proposed activities. See document ref. 6109-CAU-XX-XX-RP-V-0303.</li> </ul>	<p>Site has been operational before under existing permitted activity for RDF production and shredding/baling of municipal wastes (same waste types as that proposed for waste transfer and bulking) within the building, with very limited odour complaints</p> <p>The proposed bulking and storage of wastes as part of this permit variation will disturb wastes much less than the previous shredding activity, therefore the potential for</p>		

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
				odours to be generated is much less.		

**Table 3 – Noise & 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
Noise from: <ul style="list-style-type: none"> <li>• delivery vehicles</li> <li>• plant and machinery on site (e.g. loading shovel)</li> <li>• handling waste and undertaking site maintenance operations.</li> </ul>	Workers and patrons of nearby commercial/industrial premises – closest <10m NNE, 20m E & S, 25m SW and 40m NW.  Users of public and domestic roads and footpaths nearby.  Human receptors in residential areas located 395m WSW, 435m NW, 450m SW and 505m E.  Wildlife in nearby habitats (closest woodland and scrub in Stadt Moers)	Through air.	<ul style="list-style-type: none"> <li>• General handling and movement of waste to be within building on site, which will attenuate any noises associated with the activities to nearby receptors.</li> <li>• It is unlikely that vehicle movements associated with the waste transfer activity will add significant additional noise to the background noise already experienced in the industrial area.</li> <li>• Waste loads will only be unloaded within the building in a designated area and drop heights will be kept to a minimum.</li> <li>• Site vehicles and plant will be regularly serviced and maintained to ensure worn parts do not create unnecessary noise emissions.</li> <li>• Site speed limits will be in place to reduce noise caused by vehicle movement around the facility.</li> <li>• When not in use, all plant will be switched off to minimise noise emissions.</li> </ul>	<b>Very unlikely</b> – vehicle and plant movements associated with the waste transfer station unlikely to contribute noise levels greater than levels already experienced within the surrounding industrial area.  No history of noise complaints from previous shredding and RDF production activities in the building.	Noise may cause an amenity nuisance to people nearby or passing the site on roads and footpaths.	<b>Low – if control measures are implemented</b>



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
	Country Park 200m NE, 210m N)		<ul style="list-style-type: none"> <li>Noise levels will be monitored by staff and any noise complaints received taken into consideration when reviewing levels.</li> <li>Reversing alarms on mobile plant will be fitted with white noise alarms where possible.</li> <li>Waste deliveries, collections and bulking/storing operations will be undertaken within normal operational hours. No activities will be undertaken during unsociable hours.</li> </ul>			
No sources of vibration identified.	Local human population and users of roads. Local wildlife.	Through the ground.	N/A	<b>Very unlikely.</b>	Nuisance to people and disturbance to wildlife.	<b>Very low.</b>

**Table 4 – 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	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
<b>To Air</b>						
Dust from non-hazardous household, commercial and industrial wastes: <ul style="list-style-type: none"> <li>• delivery</li> <li>• reception</li> <li>• unloading</li> <li>• handling</li> <li>• storing</li> <li>• re-loading and transfer off-site</li> </ul>	Workers and patrons of nearby commercial/industrial premises – closest <10m NNE, 20m E & S, 25m SW and 40m NW.  Users of public and domestic roads and footpaths nearby.  Human receptors in residential areas located 395m WSW, 435m NW, 450m SW and 505m E.  Wildlife in nearby habitats (closest woodland and scrub	Through air.	<ul style="list-style-type: none"> <li>• Waste to be delivered to site in covered vehicles.</li> <li>• Wastes that consist solely of dusts will be excluded from the site as per the permit.</li> <li>• Stockpiles of sorted recyclables and non-recyclables, waste wood and glass will be unlikely to produce dust.</li> <li>• All wastes to be unloaded, handled and stored within the building.</li> <li>• Drop heights of waste materials to be minimised, reducing the potential for dust plumes in the air.</li> <li>• Roller shutter doors of building to be kept closed except when opened for access/egress of vehicles.</li> <li>• No wastes stored outside so no risk of wind blow action across stockpiles.</li> <li>• Wastes to be bulked and stored 3m high within 4m high concrete bays inside building.</li> <li>• Wastes for collection and transfer off-site will be loaded into collection vehicles within building.</li> <li>• Good housekeeping will be maintained with regular sweeping and clearing of wastes.</li> </ul>	<b>Unlikely –</b> wastes to be accepted at the site not inherently dusty.  Wastes to be unloaded, handled and stored within enclosed building.  No history of dust complaints from previous shredding/baling and RDF	Amenity nuisance of dust particles on cars and buildings nearby.  Smothering of local plants and flora from dust.	<b>Low – if control measures are implemented.</b>

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
	<p>in Stadt Moers Country Park 200m NE, 210m N).</p> <p>Smothering of flora and fauna and entering surface water.</p>		<ul style="list-style-type: none"> <li>• Daily site inspections will include for dust monitoring. Visual dust monitoring will be undertaken by site personnel throughout the course of the working day to ensure no visible dust emissions with appropriate mitigation measures undertaken should visible dust be observed (review of operations, dampening down, road sweeper etc).</li> <li>• Staff will be trained in dust monitoring and mitigation measures and report any dust emissions with the potential to leave the site boundary to site management immediately.</li> <li>• Dust suppression measures include dampening down site surfaces and stockpiles and if required, dampening down potentially dusty loads that enter the site.</li> <li>• If dust emissions detected beyond the site boundary or a dust complaint is received in relation to site operational activities, the incident must be reported immediately to the site manager and actions taken, including additional control measures such as dampening down offending waste load.</li> </ul>	production activities in the building.		

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
			<ul style="list-style-type: none"> <li>A Dust &amp; Emissions Management Plan (DMP) has been included in this permit application as document ref. 6109-CAU-XX-XX-RP-V-0304, detailing further control measures, complaints procedure and action plan in case of dust emissions at the site.</li> </ul>			
<b>To Water</b>						
Contaminated run-off into surface water or groundwater.	Groundwater in Secondary A Aquifer (bedrock) below site. Adjacent Logwood Mill Brook – a designated protected migratory route for the European Eel.	Surface run-off/overland flow and infiltration down into ground.	<ul style="list-style-type: none"> <li>The site benefits from a perimeter kerbing for the building, with existing site drainage able to be isolated by closing the penstock stop valves, if necessary, in the event of a fire or accidental spillage (leaks &amp; spills are covered in Table 7).</li> <li>Site surfacing will be impermeable concrete with existing surface water drainage system, fitted with penstock stop valves. Drains will be inspected and maintained to ensure they do not become damaged, blocked or leak into surrounding environment.</li> <li>The concrete surfacing will be subject to routine inspection and maintenance to ensure integrity is maintained and any damage repaired quickly.</li> <li>Run-off from waste storage and handling area within building discharges via existing site</li> </ul>	<b>Unlikely</b> - given that storage areas are sheltered from rainfall by building and are bunded with impermeable concrete surfacing and regularly maintained and inspected.	Detriment to the quality of surface water could affect fish and other wildlife within the watercourse.  May adversely affect groundwater quality.	<b>Low – if control measures are implemented.</b>

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
			drainage system into public foul sewer, however the waste storage areas are under cover within the fully enclosed building therefore worked dry. <ul style="list-style-type: none"> <li>• Clean, uncontaminated surface water run-off discharges via existing site drainage system into Logwood Mill Brook adjacent to site.</li> <li>• The building will protect the waste storage and handling area from rainfall, reducing potential run-off from the waste areas.</li> </ul>			
<b>Pests</b>						
Rodents and other pests such as flies and birds and associated diseases.	Workers and patrons of nearby commercial/industrial premises – closest <10m NNE, 20m E & S, 25m SW and 40m NW.  Users of public and domestic roads and footpaths nearby.  Human receptors in residential areas	Over ground, via the air or via watercourses.	<ul style="list-style-type: none"> <li>• Daily site inspections will monitor for the presence of rats and mice and other vermin or pests such as flies or birds on-site.</li> <li>• Wastes delivered to site with visible signs of rodents and other pest infestations (e.g. flies) will be rejected from site at the weighbridge.</li> <li>• If during storage, any wastes are found to contain a rodent infestation, it will be segregated immediately, and a pest control contractor will be appointed.</li> <li>• In general, good housekeeping with regular sweeping and clearing of waste areas and storage bays is encouraged to prevent build up.</li> </ul>	<b>Unlikely</b> – strict waste acceptance procedures will prevent infested wastes being accepted. Daily site inspections will check for any potential	General nuisance and health risk from rats being vectors for human pathogens (e.g., Weil’s disease).	<b>Low – if control measures are implemented.</b>

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
	located 395m WSW, 435m NW, 450m SW and 505m E.		Vermin traps to be used around site if necessary. <ul style="list-style-type: none"> <li>• Quick turnaround of waste (typically less than 7 days) in the transfer station work area to ensure that wastes are not stored in one place for long periods of time. First in-first out principle applied to reduce stagnation of wastes.</li> </ul>	infestations of pests.		
<b>Mud/Litter</b>						
Mud & debris tracked by delivery and collection vehicles.	Users of public roads around site.	Mud and debris being dragged onto public highway.	<ul style="list-style-type: none"> <li>• Site to be covered with concrete hardstanding so unlikely to generate mud and debris from vehicles movements.</li> <li>• Waste types unlikely to be a source of mud or debris (dry recyclables and municipal wastes).</li> <li>• Good housekeeping will be maintained, with site surfaces inspected and cleaned regularly to ensure no mud or debris is tracked out of the site.</li> </ul>	<b>Unlikely</b>	Potential skid risk to drivers on public roads and general amenity nuisance.	<b>Low – if control measures are implemented.</b>
Litter.	Workers and patrons of nearby commercial/industrial premises – closest <10m NNE, 20m	By wind and over land.	<ul style="list-style-type: none"> <li>• Waste unloading, handling and storing will be undertaken within the building, with doors closed (except when vehicles entering or leaving).</li> <li>• Stored wastes 3m high within 4m high bays within building, sheltered from wind to prevent</li> </ul>	<b>Unlikely</b>	Amenity nuisance/untidy local area.	<b>Low – if control measures are implemented.</b>

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
	<p>E &amp; S, 25m SW and 40m NW.</p> <p>Users of public and domestic roads and footpaths nearby.</p> <p>Human receptors in residential areas located 395m WSW, 435m NW, 450m SW and 505m E.</p>		<p>any windblow across stockpiles that could entrain litter.</p> <ul style="list-style-type: none"> <li>• Waste delivery vehicles will arrive and leave site covered.</li> <li>• Good housekeeping will ensure an accumulation of debris or litter does not occur.</li> <li>• As part of daily site inspections, litter will be checked for and any shown to escape the site boundary will be reported and litter picking undertaken.</li> </ul>			

**Table 5 – Visible Plumes 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
Potential visible plumes.	Nearby receptors.	Air.	N/A – no visible plumes will be generated by the proposed operations.	N/A	N/A	N/A



**Table 6 – Release of Bioaerosols 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
Release of Bio-aerosols from wastes.	<p>Workers and patrons of nearby commercial/industrial premises – closest &lt;10m NNE, 20m E &amp; S, 25m SW and 40m NW.</p> <p>Users of public and domestic roads and footpaths nearby.</p> <p>Human receptors in residential areas located 395m WSW, 435m NW, 450m SW and 505m E.</p>	Via air.	<p>Bioaerosols have the potential to be present in municipal wastes such as those contaminated with food or green waste. However, no treatment activities proposed (such as shredding or other agitation) and therefore bioaerosols not likely to be released from wastes by the site activities (no significant agitation of wastes).</p> <p>Waste will be relatively fresh which will limit generation of bioaerosols in the waste and first-in first-out principal applied to wastes to prevent stagnation and maintain a quick turnaround.</p> <p>Additional control measures as for dust including drop heights minimised, all waste stored and unloaded in building, doors to be kept closed when not in use and good general housekeeping on-site.</p>	<p><b>Unlikely</b> – wastes of low bioaerosol potential and no processing of wastes on site.</p> <p>Wastes to be unloaded, handled and stored carefully within enclosed building.</p>	Health risk to humans near to site from bioaerosols.	<b>Low – if control measures are implemented.</b>

**Table 7 – Accidents 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
Leak or spillage from containers or vessels or mobile plant containing liquid hazardous substances	Groundwater in Secondary A Aquifer (bedrock) below site.  Adjacent Logwood Mill Brook – a designated protected migratory route for the European Eel.	Overland surface water run-off, across ground, infiltration into ground.	<ul style="list-style-type: none"> <li>Any accidental spillages or leaks of potentially hazardous substances such as fuels or oils from mobile plant on site will be contained by the impermeable concrete surfacing and bunding of the storage and handling areas. The concrete base will be subject to routine inspection and maintenance to ensure integrity is maintained.</li> <li>All plant and machinery will be regularly maintained to ensure leaks and spills minimised.</li> <li>Any refuelling or maintenance of plant or machinery will be undertaken by suitably trained staff/contractors in a designated area on the impermeable surfacing with spill kits nearby.</li> <li>Spills or leaks will be reported and cleaned up immediately.</li> <li>Emergency spillage pads, booms and granules will be available at strategic locations around site, particularly near to areas where a spillage or leak could occur.</li> </ul>	<p><b>Unlikely</b> – small leaks or spillages should they occur will be cleaned up immediately.</p> <p>Large (catastrophic) spillages very unlikely to occur – no large tanks of hazardous substances to be stored on site.</p>	Detriment to the quality of surface water and groundwater with severity dependant on size of the spill.	<b>Low – if control measures are implemented</b>

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
			<ul style="list-style-type: none"> <li>The spillage action plan will be implemented (included within the FCC’s IMS procedures for the site) with training of all relevant staff on implementing the plan and in the use of spill pads and booms, and appropriate PPE required for spillages of hazardous substances will be available.</li> <li>The manager also responsible for review of what caused the incident and whether changes in procedures are needed as a result.</li> </ul>			
Flooding	<p>Groundwater in Secondary A Aquifer (bedrock) below site.</p> <p>Adjacent Logwood Mill Brook – a designated protected migratory route for the European Eel.</p>	Overland surface water run-off, across ground, infiltration of contaminated flood water into ground.	<ul style="list-style-type: none"> <li>The site is within a Flood Zone 1, meaning very low probability of flooding by rivers or the sea – however it is adjacent to the Logwood Mill Brook which has a Flood Zone 3 designation along its banks, meaning a high probability of flooding.</li> <li>The building covers the waste storage and handling areas to prevent excessive rainwater collecting on the site surface.</li> <li>Surface water from waste storage areas discharges to a public foul sewer located on the road outside the facility.</li> <li>Surface water from the northern end of the site discharges to Logwood Mill Brook</li> </ul>	<b>Unlikely</b>	Detriment to the quality of surface water and groundwater.	<b>Low – if control measures are implemented</b>

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
			through a private outfall and the southern end discharges to the same brook via a surface water sewer. <ul style="list-style-type: none"> <li>• Surface water drains are regularly inspected and cleaned to prevent blockages.</li> </ul>			
Fire and subsequent firewater.	Workers and patrons of nearby commercial/industrial premises – closest <10m NNE, 20m E & S, 25m SW and 40m NW.  Users of public and domestic roads and footpaths nearby.  Human receptors in residential areas located 395m WSW, 435m NW, 450m SW and 505m E.	Air transport of smoke and vapours.  Firewater run-off over land and via existing drainage system.	<ul style="list-style-type: none"> <li>• A Fire Prevention Plan (FPP) has been produced as part of this permit variation and is included as document ref. 6109-CAU-XX-XX-RP-V-0302.</li> <li>• Fires could occur as a result of arson, self-combustion or from sources of ignition.</li> <li>• Concrete bay walls and flooring is fire resistant to prevent fires from spreading within the building.</li> <li>• Combustible wastes (e.g. dry recyclables, waste packaging, cardboard etc.) will be stored no more than 3m high within 4m high concrete bays, with 1m freeboard.</li> <li>• Emergency procedures, which form part of the site’s Management System, will be followed in the event of a fire.</li> <li>• Site is installed with automatic cannon fire suppression system, targeting waste bays on fire immediately and minimising firewater generated.</li> </ul>	<b>Unlikely</b> – immediate fire suppression provided by automatic detection system with water cannons and alarm.  Fire-resistant concrete surfacing and bay walls within the building will minimise the size of a fire to likely be small and containable.  A 1m freeboard above stockpiles in	Respiratory irritation to humans from smoke.  Smoke impact on local environment and atmosphere.  Local nuisance from smoke and risk of fire spreading to other areas or properties.	<b>Low - if control measures are implemented.</b>

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
	<p>Groundwater in Secondary A Aquifer (bedrock) below site.</p> <p>Adjacent Logwood Mill Brook – a designated protected migratory route for the European Eel.</p>		<p><u>Action Plan</u></p> <ul style="list-style-type: none"> <li>• Automatic fire suppression system with cannons will target materials on fire quickly and automatically trigger the site fire alarm and alert site staff to a fire out of hours. Immediate access to water from on-site water tank.</li> <li>• If on site, staff/contractors and visitors will be alert to a fire by using fire alarm, and the call of “FIRE FIRE FIRE!” and activate site water cannons if not already activated. Call 999 for fire and rescue service.</li> <li>• All site staff trained in emergency drill procedures and dealing with a fire safely.</li> <li>• Trained site staff and/or emergency fire crews will use water to extinguish any fires on-site and the resulting firewater has the potential to be contaminated and will be contained and disposed of appropriately. Measures to contain firewater similar to handling of spillages as outlined above. Firewater will be contained, collected, and removed from site in a controlled manner and not be</li> </ul>	<p>bays in building will prevent fire spreading/jumping between waste piles quickly, allowing the cannon suppression systems to be more effective.</p>	<p>Pollution of land or water by firewater.</p>	

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
			allowed to run-off into nearby watercourses or land. <ul style="list-style-type: none"> <li>• Penstock valves within site drainage system will be closed immediately by trained site staff upon a fire being detected and prior to dousing with water, if possible.</li> <li>• Daily site inspections of internal and external storage areas to identify any signs of smoking or smouldering within wastes or other areas of the site.</li> <li>• Site security with fencing, lockable gates and CCTV will prevent and alert site management of fires caused by arson or vandalism.</li> <li>• Further control measures are detailed in the site’s Fire Prevention Plan.</li> </ul>			

## 4.0 CONCLUSION

### 4.1 Overview

- 4.1.1 The risk assessments above enable identification of appropriate mitigation measures to control the amenity and accident risks from the proposed activities. All identified risk mitigation measures will be incorporated within the management system for the site.
- 4.1.2 This Environmental Risk Assessment (ERA) indicates that provided the identified risk mitigation measures, which are identified in the tables above, are implemented, the risk of nuisance or pollution from odour, noise and vibration, fugitive emissions including dust, litter, mud and debris, contaminated surface run-off, pests, or accidents such as spills, leaks and fire, is low.
- 4.1.3 Overall, the proposed activity applied for at the Arpley 2 Site will produce very little emissions likely to affect nearby sensitive receptors and the surrounding environment.
- 4.1.4 The Site has been operational before under the existing permitted activity for RDF production (shredding and baling) of municipal wastes within the building, with existing control measures adequately controlling odour. The proposed bulking and storage of wastes as part of this permit variation will disturb wastes much less than the previous shredding activity, therefore the potential for odours, and other emissions such as noise, dust, and litter to be generated will be much less.

### 4.2 Additional Documents

- 4.2.1 The following site-specific documents include control measures and action plans for fire, odour and dust:
- Fire Prevention Plan ref. 6109-CAU-XX-XX-RP-V-0302;
  - Odour Management Plan Addendum ref. 6109-CAU-XX-XX-RP-V-0303; and,
  - Dust & Emissions Management Plan ref. 6109-CAU-XX-XX-RP-V-0304.

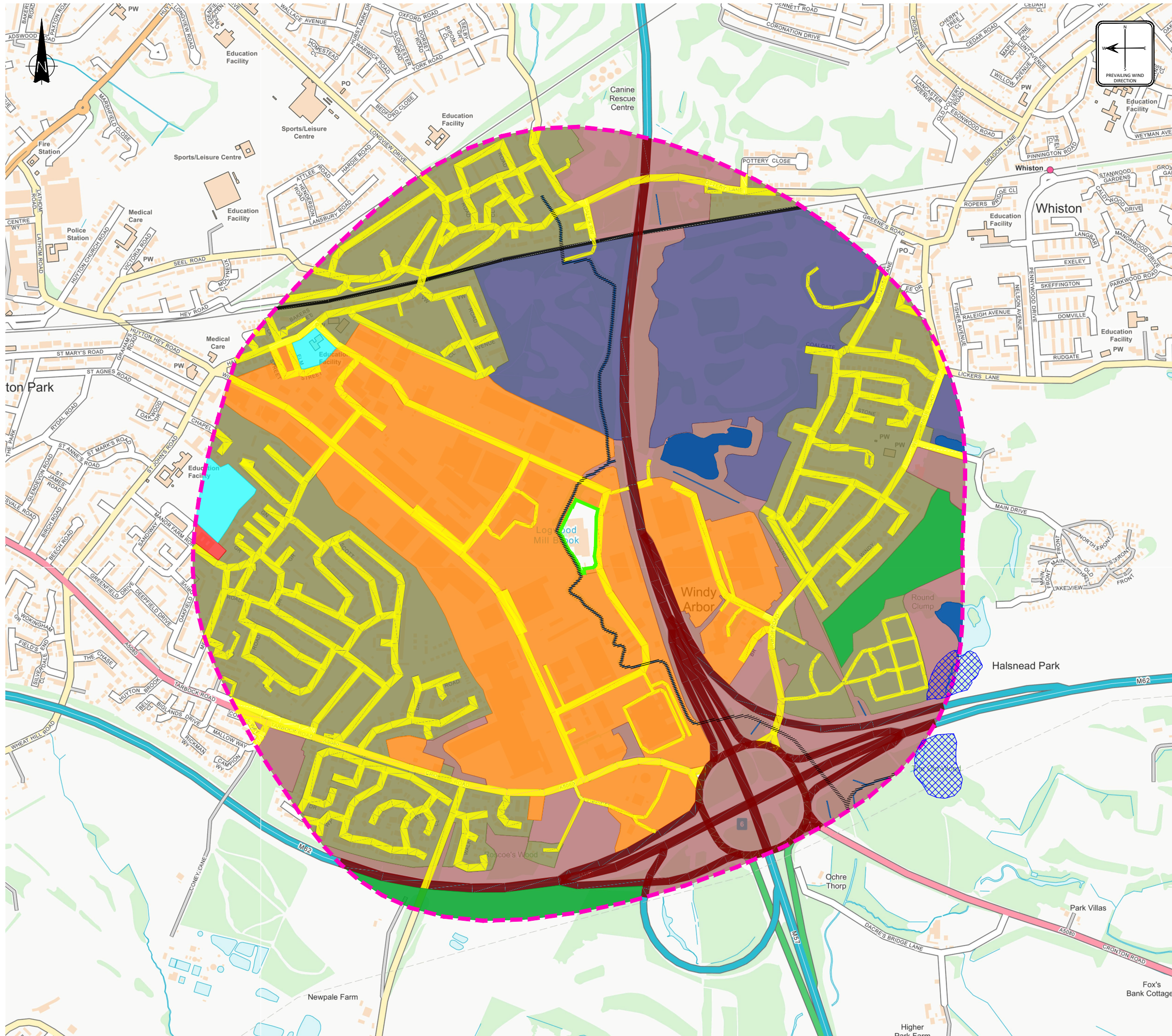
## 5.0 REFERENCES

- 1) Environment Agency guidance 'Risk Assessments for your environmental permit' (last updated 21<sup>st</sup> November 2023), found at: <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>.



## DRAWINGS

6109-CAU-XX-XX-DR-V-1800 Sensitive Receptors Plan



**LEGEND**

- PERMIT BOUNDARY
- 100m OFFSET
- SURFACE WATER
- WOODLAND / SCRUBLAND
- RECREATIONAL
- EDUCATIONAL FACILITY
- COMMERCIAL / INDUSTRIAL
- RESIDENTIAL
- MEDICAL FACILITY
- AGRICULTURAL
- MAJOR ROAD
- MINOR ROAD
- RAIL
- EUROPEAN EEL MIGRATORY ROUTE
- ANCIENT WOODLAND

P02	WIND ROSE ADDED	EJD	SH	SH	16.04.24
P01	ISSUED FOR INFORMATION	EJD	SH	SH	21.02.24
REV	MODIFICATIONS	BY	RE	AP	DATE
PURPOSE OF ISSUE					STATUS
<b>FOR INFORMATION</b>					<b>S2</b>

CLIENT:

PROJECT:

**ARPLEY 2 TRANSFER STATION**

TITLE:

**SENSITIVE RECEPTOR PLAN**

DESIGNED BY	DRAWN BY	REVIEWED BY	AUTHORISED BY
EJD	EJD	SH	SH
DATE	SCALE @ A3	JOB REF:	REVISION
20.02.2024	1:10000	6109	P02

DRAWING NUMBER

**6109-CAU-XX-XX-DR-V-1800**

Registered Office: Intec, Parc Menai, Bangor, Gwynedd, LL57 4FG Company Registered No: 06716319

© COPYRIGHT CAULMERT LIMITED - NOT TO BE COPIED OR REPRODUCED IN ANY WAY OR FORM WITHOUT PRIOR WRITTEN CONSENT FROM CAULMERT LIMITED

## APPENDIX 1

### Environment Agency Habitats Screening Report

# Nature and Heritage Conservation

Screening Report: Bespoke Waste

Reference	EPR/JB3633RP/P001
NGR	SJ 45872 90066
Buffer (m)	30
Date report produced	24/01/2024
Number of maps enclosed	1

## This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on [Magic map](#). Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. [Help videos](#) are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

### Protected Species within screening distance

European Eel Migratory Route

### Screening Further Information distance (m)

up to 500m

[Natural England](#)  
[Appropriate Local Record Centre \(LRC\)](#)  
[National Biological Network \(NBN\)](#)  
Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

Where protected species are present, a licence may be required from [Natural England](#) to handle the species or undertake the proposed works.

**The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.**

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

**Please note** we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

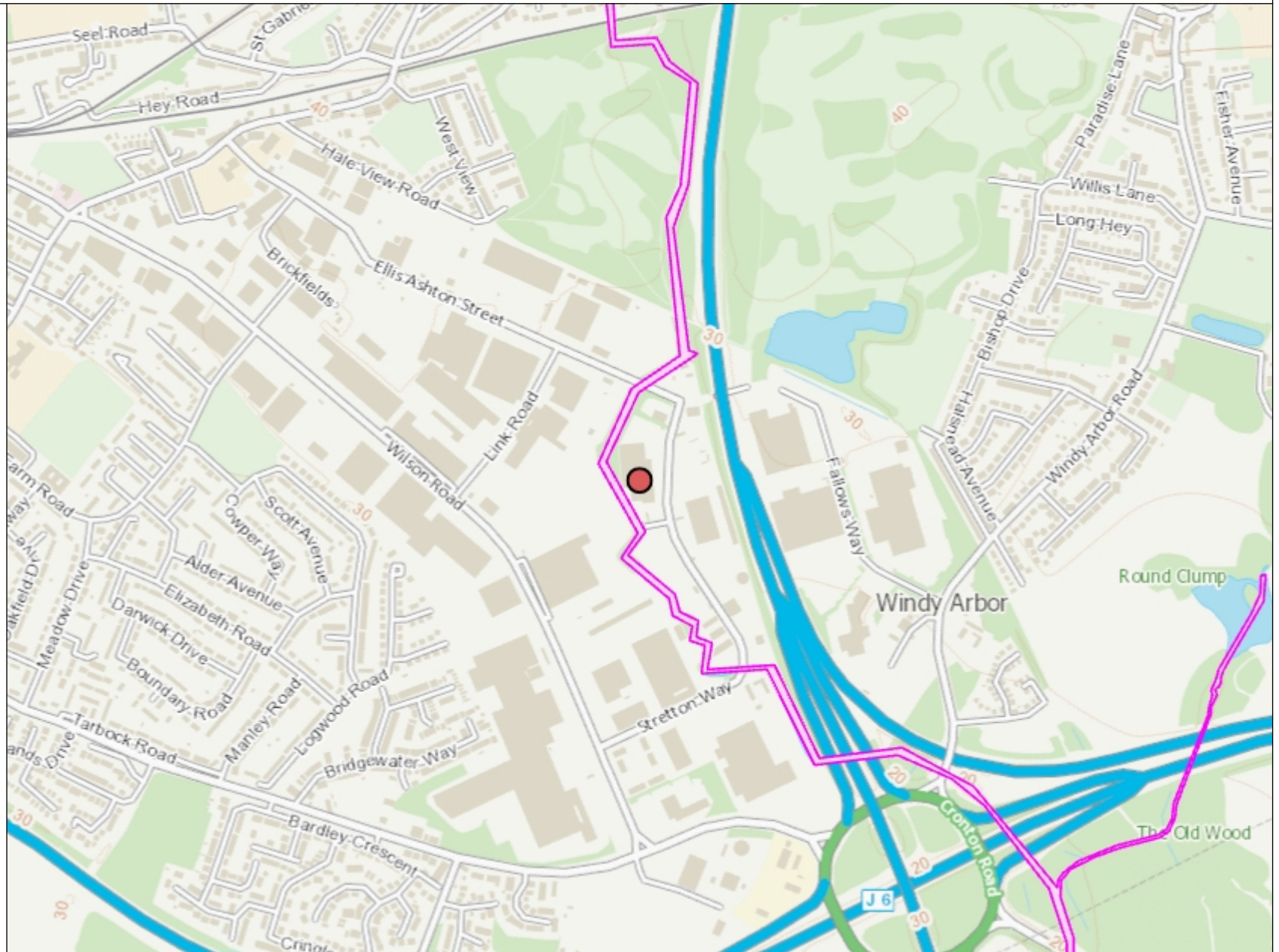
The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information

# Protected Species

## Legend

Protected species screened for Env Permits - complete set

-  Protected species, non fish
-  Protected fish
-  Protected fish migratory route
-  Fish migratory routes screened for Environmental Permits



1: 10,000



[WWW.CAULMERT.COM](http://WWW.CAULMERT.COM)



Registered Office: InTec, Parc Menai, Bangor, Gwynedd, LL57 4FG

**Tel:** 01248 672666

**Email:** [contact@caulmert.com](mailto:contact@caulmert.com)

**Web:** [www.caulmert.com](http://www.caulmert.com)