MURFITTS®
INDUSTRIES

Environmental Risk Assessment

wiser
environment

Helping clients prosper through compliance

SITE DETAILS

Murfitts Industries Ltd,

Unit 13 Slyfield Industrial Estate,

Moorfield Road,

Guildford,

GU1 1RU

OPERATOR DETAILS

Murfitts Industries Limited,

Avenue One,

Letchworth Garden City,

SG6 2HU

PERMIT APPLICATION REFERENCE

EPR/WP3522SZA

DOCUMENT REFERENCE

K18.19~09~003

ISSUE DATE

19/05/2025

Wiser Environment Ltd, Suite 11 Manor Mews, Bridge Street, St Ives, PE27 5UW
94 Xuan Thuy, Thao Dien Ward, District 2, Ho Chi Minh City, 713385
+44 1480 462 232 | www.wiserenvironment.co.uk | info@wisergroup.co.uk

DOCUMENT CONTROL

DOCUMENT TITLE:	Environmental Risk Assessment
REFERENCE:	K18.19~09~003
CLIENT:	Murfitts Industries Limited
REPORTED BY:	Wiser Environment Limited
STATUS:	Final
ISSUE:	02
ISSUE DATE:	19/05/2025
AUTHOR:	Wiser Environment Limited
APPROVED BY:	Magda Jackson – Murfitts Industries Ltd

REVISION HISTORY

REFERENCE	DATE	ISSUE:	REVISION SUMMARY
K18.19~09~003	16/08/2024	D1	For client review
K18.19~09~003	16/09/2024	01	Finalised for submission.
K18.19~09~003	19/05/2025	02	Amendments from Duly Making RFI

QUALITY CONTROL

ACTION	DATE	NAME
Prepared	16/08/2024	Elliott Howard
Checked	16/08/2024	Elliott Howard
Approved	16/09/2024	Elliott Howard
Amended	12/05/2025	Laura Robinson
Approved	19/05/2025	Elliott Howard

CONTENTS

TABLES

FIGURES

DRAWINGS

REFERENCE	TITLE	DATE
K18.19~20~001	Permit Boundary Plan	22/12/2023
K18.19~20~002	Sensitive Receptors 1km	22/12/2023
K18.19~20~003	Site Setting Plan (2 km)	16/09/2024
K18.19~20~004	Site Layout Plan	02/09/2024
K18.19~20~005	FRS Access Route Plan	22/12/2023
K18.19~20~006	Drainage Plan	16/09/2024

APPENDICES

REFERENCE	TITLE
Appendix A	ERA Tables
Appendix B	Groundsure Report (GS-RGO-27J-2BH-VGA)
Appendix C	NIA for a proposed Tyre Recycling Plant at Warrington

1. INTRODUCTION

This document is the Environmental Risk Assessment (ERA) that accompanies the application for a variation to the existing Standard Rules Environmental Permit to a Bespoke Environmental Permit at Unit 13 Slyfield Industrial Estate, Moorfield Road, Guildford, GU1 1RU.

The application has been prepared by Wiser Environment Limited on behalf of the applicant Murfitts Industries Limited. The ERA has been produced in line with Environment Agency guidance, 'Risk assessments for your environmental permit'[1].

This ERA identifies potential environmental risks and proposes mitigating measures that can reduce adverse impacts and should be read in conjunction with the other supporting documents included within the application.

1.1. Scope

This risk assessment is based on the source-pathway-receptor approach. All potential sources of pollution associated with waste acceptance, storage and treatment for recovery activities have been assessed against the principal receptor types identified within the site's vicinity.

The requirement for risk management measures is then dependent on a viable pathway being present between the source and the receptor. Where such pathway exists, management measures are required to reduce risk.

1.2. Aims

This assessment aims to consider potential environmental hazards associated with the activity, to identify sensitive receptors which these may impact, and determine the influence management practice has on reducing risk.

[1] Risk assessments for your environmental permit - GOV.UK (www.gov.uk), updated 31 August 2022

2. SITE SETTING

2.1. Location

The proposed site is located in the Slyfield Industrial area (see Figure 1 below) bordered by other established industrial and commercial activities. Jacobs Well is the closest residential area, approximately 240 m NNW although a singular residential property is located approx. 70 m NNW.

The A320 is approximately 250 m west of the site, whilst the centre of Guildford is 2.6 km south of site.

Figure 1 *Aerial image of the site, showing the permit boundary in green*

2.2. Humans and Property

The nearest residential area (ID1) is approximately 240 m North-North-West of the permit boundary shown on the Site Setting Plan (K18.19~20~003), and K18.19~20~002 Sensitive Receptors 1km. a singular residential property (Watts Cottage) is located approx. 70 m North-North-West.

Residential Area West of Bellfields Green is positioned 360 m South- of the site, extending both sides of the A320.

There are 12 sensitive public use facilities with Jacobs Well Village Hall being the closest at 420 m Nort North-East of the site (ID1).

With regard to commercial sites, there are 19 commercial areas within a 2km radius with the closest being the Slyfield Industrial Estate (ID1) which immediately surrounds the proposed site.

There are 18 recreational areas within the 2km radius, with the closest being White House Lane Public Park & Play Space at 180 m North North-West of the site (ID1).

Twenty agricultural unit receptors have been identified within the 2 km radius, the closest being the area surrounding Watts Cottage adjacent to the North of the proposed permit boundary (ID1).

There are 4 identified critical infrastructure sites within a 2 km radius including Moorfield Road Sewage Works 680 m South South-East of the proposed site.

2.3. Environmentally Sensitive Sites

Environmentally sensitive sites include;

Sites of Special Scientific Interest (SSSI); Special Areas of Conservation (SAC); Special Protection Areas (SPA); RAMSAR sites; National Nature Reserves (NNR); Ancient Woodlands (AW); Local Nature Reserves (LNR): County Wildlife Sites (CWS); World Heritage Sites; Areas of Outstanding Natural Beauty (AONB); and National Parks.

2.3.1. Designated Environmental Receptors

There are, in total, 5 designated sites positioned within 2 km of the proposed site. Two are Local Nature reserves (LNRs), Riverside Park and Dragons Teeth & Woodland Walk. Also within 2 km are Whitmoor Common and Thames Basin Heaths SSSI & SPA.

Table 1 Designated Sites

ID	DESCRIPTION	NEAREST LOCATION FROM SITE (APPROX.)	DIRECTION FROM SITE
1	LNR - Riverside Park	850 m	SE
2	SSSI & SPA - Britten's Pond, Whitmoor Common	910 m	NW
3	SSSI & SPA - Thames Basin Heaths	905 m	WNW
4	SPA, SSSI & LNR - Whitmoor Common	1.3 km	NW
5	LNR - Dragons Teeth & Woodland Walk	1.5 km	SSE

2.3.2. Non-Statutory Designated Receptors

As shown below there are 19 Non-Statutory Designated Receptors, (Site Setting Plan K18.19~20~003; K18.19~20~002 Sensitive Receptors 1km), within a 2 km radius of the proposed site. 19 of which are UK Biodiversity Action Plan (BAP) Sites[2]. There are 6 Ancient Woodlands, and 1 related traditional orchard.

[2] https://hub.jncc.gov.uk/assets/bdd8ad64-c247-4b69-ab33-19c2e0d63736

Table 2 Non-Designated Sites

ID	DESCRIPTION	NEAREST LOCATION FROM SITE APPROX.)	DIRECTION FROM SITE
1	BAP Deciduous Woodland - West of North Moors Allotments	200 m	NE
2	BAP Traditional Orchard - North of Jacobs Well Road	210 m	WNW
3	BAP Deciduous Woodland - East of Woking Road	260 m	E
4	BAP Deciduous Woodland - North of Clay Lane	700 m	NE
5	BAP Deciduous Wooland - Riverside Nature Reserve	816 m	SE
6	BAP Deciduous Woodland - Stringers Common	820 m	WNW
7	BAP Deciduous Woodland - Riverview Business Park	840 m	NE
8	Ancient Woodland - Riverside Nature Reserve	865 m	SE
9	BAP Deciduous Woodland - NE of Burpham Allotments	865 m	ENE
10	BAP Deciduous Woodland - Bishop of Guildford	895 m	NW
11	Ancient Woodland - Blanchards Hill	900 m	NNE
12	BAP Lowland Fens - Britten's Pond	900 m	NW
13	BAP Lowland Fens and Deciduous Woodland - Reverside Nature Reserve	1 km	SSE
14	BAP Deciduous Woodlands and Lowland Fens - Whitmoor Common	1.3 km	WNW
15	BAP Lowland Fens - Woodbridge Hill	1.4 km	SSW
16	Ancient Woodland - Guildford Spectrum	1.4 km	SSE
17	BAP Deciduous Woodland - Sutton park	1.4 km	NNE
18	Traditional Orchard - Sutton Place	1.5 km	NE
19	Ancient Woodland - Sutton Place	1.6 km	ENE

2.3.3. Ecology

Site staff are aware of a potential presence if a European Protected Species (EPS), located in proximity to the site (Protected Species Code 2).

Source-pathway receptors have been identified in Appendix A offering risk management methods for potential direct and indirect risks to EPS including, noise, water pollution and litter.

2.4. Geology

2.4.1. Artificial Ground and Made Ground

The site is located in an area designated as Artificial and Made ground (Landscaped Ground (undivided). The site was formerly allotment gardens until c.1970 where warehousing was erected adjacent to the site and similar industrial buildings built in the immediate surrounding area.

2.4.2. Superficial and Drift Geology

Underlying the impermeable site surface are superficial geological deposits known as ‘drift’, these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

The superficial geological deposits below site consist of Kempton Park Gravel member.

2.4.3. Bedrock and Solid Geology

Bedrock geology is the main mass of rocks underlying the Superficial deposits, forming the Earth and is present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water. There is evidence of London Clay being the predominant bedrock formation underlying site and was formed in the Palaeogene period.

2.5. Hydrogeology

The Superficial aquifer is the status of groundwater held within superficial geology. There are records of a Secondary A Aquifer on site (which are permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. Formerly classified as minor aquifers).

The Bedrock aquifer is the status of groundwater held within bedrock geology. There is a Principal aquifer below site which are described as geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers.

2.6. Hydrology

Table 3 Surface Water Features

DESCRIPTION	NEAREST LOCATION FROM SITE (APPROX.)	DIRECTION FROM SITE
Jacobs Well Playpark	200 m	NNW
White House Lane Pond	255 m	NW
Bellfields Green Lake	645 m	SW
River Wey	745 m	ENE
Pond north of Clay Lane	830 m	NNE
Britten's Pond	930 m	WNW
Riverside Nature Reserve Lake	970 m	SE

2.7. Flood Risk

2.7.1. Risk of Flooding from Rivers and Sea

The UK Government Flood Risk Check states that there is a Very Low Risk of flooding from Rivers and Sea on site[3].

2.7.2. Surface Water Flooding

The UK Government Flood Risk Check states that there is a Very Low Risk of surface water flooding at the site[2]. As identified within Appendix A, the highest risk on site is identified as 1 in 250 year between 0.1 m and 0.3 m.

[3] Check the long term flood risk for an area in England - GOV.UK (www.gov.uk)

2.7.3. Groundwater Flooding

The UK Government website to check flood risk states that flooding from groundwater is unlikely in this area[2]. The Environmental Report (Appendix A) identifies the highest risk as moderate.

2.8. Air Quality

The proposed site is not situated within an Air Quality Management Area[4].

2.9. Nature of Risk Assessment

This document provides a broad and general assessment of the risk factors considered to be of significance for the site, and an evaluation of the impact from the principal risk factors to receptors within the site vicinity.

[4] https://uk-air.defra.gov.uk/aqma/maps/

3. METHODOLOGY

3.1. Hazard Identification

A hazard is something with potential to cause harm to something else. Table ERA1 below identifies the principal hazard types which may be associated with the proposed activity; and indicates where hazards are identified and determined to be of significant potential risk to determine further assessment. Potential hazards from this activity are as follows:

ERA1 Identified Hazard Types

PRINCIPAL HAZARD TYPE	SUB-HAZARD TYPE	POTENTIAL SOURCE	RISK	REQUIRES FURTHER ASSESSMENT
Odour	N/A	• Waste Delivery • Storage • Treatment Process • Material Dispatch	• Some non-conforming waste could be delivered	✓ ERA 8
Point Source Emissions to Air	None	• None	• None	No
Fugitive Emissions to Air	Dust and Particulate Matter	• Waste Delivery • Treatment Process • Material Dispatch	• Deposit of EoL tyres on site • Baling of EoL tyres • Loading of baled EoL tyres for onward processing.	✓ ERA 8
	Litter and Debris	• Waste Delivery • Treatment Process • Material Dispatch	• Loss of material during unloading, treatment, and dispatch of waste	✓ ERA 9
Fugitive Emissions – Pests	Pests, vermin, scavengers	• Storage	• Some non-conforming waste could be delivered	✓ ERA 10
Fugitive Emissions – Mud and Debris	Mud & debris	• Waste Delivery • Treatment Process • Material Dispatch	• Some non-conforming waste could be delivered • Mud tracked into/out of site by vehicles	✓ ERA 11
Fugitive Emissions – to Water	Contaminated runoff	• Run off from stored waste pre-treatment • Run off from stored waste post treatment • Surface water run off • Fire waters	• Waste will be stored within an area with an impermeable site surface. • Waste post treatment stored on an impermeable site surface. • All hazardous liquids will be stored in appropriate containers with secondary containment. • Localised secondary containment will be provided for potential fire water in the event of a fire.	✓ ERA 12

PRINCIPAL HAZARD TYPE	SUB-HAZARD TYPE	POTENTIAL SOURCE	RISK	REQUIRES FURTHER ASSESSMENT
			• Waste processing occurs externally.	
Accidents	Transferring substances	• Waste delivery • Treatment process	• Loss of waste from vehicle • Spillages from process equipment	✓ ERA 13
	Plant or equipment failure	• Waste delivery • Failure of tanks	• Spillages from vehicles bringing waste to site • Leakages from waste duel/oil tanks	
	Flooding	• Flood risk from rivers or the sea • Surface water flooding	• Very Low risk • Very Low risk	
	Vandalism	• Unauthorised access	• Damage to critical elements of process or storage containment or vehicles.	
	Fire	• Stored waste • Mobile plant/process equipment	• Uncontrolled emissions or smoke and fire water	
Noise and Vibration	Transferring substance	• Mobile plant / process equipment	• Uncontrolled emissions of noise to surrounding commercial and residential receptors	✓ ERA 14
Climate Change	Extreme maximum & minimum temperature Extreme rainfall Drier summers River flow Sea level rise	• Stored Waste • Mobile plant / process equipment • Flood risk from rivers or the sea • Surface water flooding	• Uncontrolled emissions or smoke and fire water • Potential for increased waste reactions or fires involving heat sensitive or combustible waste. • Increased dust emissions from processing areas, stockpiled material and site roads. Reduced availability of water for dust suppression. • Long periods of hot and dry weather leads to drought significant impact on water supplies.	✓ ERA 15

3.3. Receptors

A receptor is the object (e.g., person, organism, resource, or property) impacted by a hazard. For example, odour may cause offence to a human (the receptor). When identifying receptors which may be at risk from the site, the following have been considered:

- Ancient woods
- Locations used to grow food or to farm animals or fish
- Drain and sewer systems
- Factories and other businesses
- Fields and allotments used to grow food
- Footpaths
- Roads and railways
- Groundwater beneath the site
- Homes, or groups of homes
- Playing fields and playgrounds
- Private drinking water supplies
- Regionally important geological sites
- Schools, hospitals, and other public buildings
- Water
- Conservation and habitats protected areas and areas of scientific interest

Sensitive receptors are shown on the Site Setting Plan (K18.19~20~003) and K18.19~20~002 Sensitive Receptors 1km. The IDs in ERA2 correspond to identified receptors within 1 km of site. Appendicised is a full list of identified ID points (Appendix D, Sensitive Receptors Table).

ERA2 Receptors (up to 2 km)

Identified on Site Setting Plan (K18.19~20~003) and Sensitive Receptors (K18.19~20~002)

RECEPTOR TYPE	ID	DESCRIPTION	DISTANCE	DIRECTION
HUMANS AND PROPERTY	-	Site Workers	On site	-
	-	Site Visitors	On site	-
		INHABITANTS OF RESIDENTIAL PROPERTIES		
	1	Watts Cottage, Jacobs Well Rd	70 m	NNW
	2	Jacobs Well Residential Area	240 m	NNW
	3	Queen Anne Farm	240 m	NNE
	4	Residential Area surrounding Whitemore Road, West of A320	255 m	S
	5	Residential Area West of Bellfields Green	360 m	SSW
	6	Residential Area East of Jacobs Well Road	505 m	NNE
	7	Gunners Farm	565 m	WNW
	8	Bellfields Residential Area, West of Bellfields Green	610 m	WSW
	9	Burpham Court Farm	750 m	NE
	10	Bishop of Guildford	765 m	NW
	11	Blanchards House (and neighbouring properties)	840 m	NNE
	12	Bellfields Residential Area North of The Good Shepherd Trust	1 km	SW
	13	Bellfields Residential Area East of Stoke New Cemetery	1 km	NNE
	14	Stroughton Residential Area	1 km	W
	15	Residential Area NE of Burpham Foundation Primary School	1.1 km	ENE
	16	Weycliffe Cottage and Neighbouring Residencies	1.1 km	WNW
	17	Abbotswood and Burpham Residential Area	1.2 km	ESE
	18	Sutton Grange Residential Area	1.3 km	N
	19	Sutton Place – Surrey	1.4 km	NNE
	20	St Edward the Confessor Church House	1.4 km	NNE
	21	North Burpham Residential Area	1.4 km	ENE
	22	Woodbridge Hill – Residential Area	1.5 km	SW
	23	Residential Area North of Whitmoor Wood	1.7 km	N
	24	Chestnut Cottage	1.7 km	NNE
	25	The Hatchingtan Travellers Site	1.7 km	NW
	26	Residential Area Surrounding Josephs Road	1.7 km	SSW
	27	Raynham Close Residential Area	1.8 km	E
	28	Guilden Village Stoke Park – Student Halls	1.8 km	SSE

RECEPTOR TYPE	ID	DESCRIPTION	DISTANCE	DIRECTION
	29	Pitch Place Residential Area	1.8 km	W
	30	Brook Pond Cottage	1.8 km	WNW
		SENSITIVE PUBLIC USE		
	1	Jacobs Well Village Hall	420 m	NNE
	2	Weyfield Primary School	790 m	S
	3	Bellfields Education Facilities	995 m	SW
	4	Stoke New Cemetery	1.2 km	SW
	5	Northmead Junior School	1.2 km	SW
	6	Burpham Lane Church and Primary School	1.2 km	E
	7	Surrey Health Promotion Resource Centre	1.3 km	SSW
	8	Bowers Lock – Historical Landmark	1.3 km	NE
	9	St Edward the Confessor, Church	1.4 km	NNE
	10	Stoughton Infant and Nursery School	1.5 km	WSW
	11	George Abbot School	1.7 km	ESE
	12	St John's Stoke Church & Guildford College	1.7 km	SSW
		COMMERCIAL USE		
	1	Slyfield Industrial Estate	0 m	SE
	2	Anchor-Chasefield Close and neighbouring commercial sites	575 m	NE
	3	Stringers Farm	595 m	WNW
	4	Tranquillo Therapy	635 m	WSW
	5	Hurst Farm	720 m	N
	6	Stringers Barn	815 m	NW
	7	Riverview Business Park	880 m	NE
	8	Unidentified Commercial Area West of Woking Road	975 m	NNW
	9	Guildford Borough Council Depot	1 km	SSE
	10	Blanchards Hill Farm Stud	1.2 km	NNE
	11	Sainsbury's – Jacob's Well	1.5 km	E
	12	Whitmoor Farm Self Catering Accommodation	1.5 km	N
	13	Post Office and surrounding Commercial Buildings	1.7 m	ESE
	14	Stoke Park Commercial Sites	1.7 km	ESE
	15	Staleigh Manor	1.9 km	N
	16	Commercial Area East of River Wey	1.9 km	SW
	17	Guildford Chiropractic Centre	1.9 km	SE
	18	Yeomans Honda Guildford	1.9 km	W
	19	The Sidings Commercial Site	1.9 km	NW
		RECREATIONAL AREAS		

RECEPTOR TYPE	ID	DESCRIPTION	DISTANCE	DIRECTION
	1	White House Lane Public Park & Play Space	180 m	NNW
	2	Stringers Common	325 m	WNW
	3	Bellfields Green	430 m	WSW
	4	Sutton Green	695 m	NNE
	5	Hazel Avenue Playground	735 m	WSW
	6	The Guildford Ski Slope	1 km	SW
	7	Queen Elizabeth Park and surrounding Recreational Centres	1.3 km	WSW
	8	Sutherland Memorial Park and neighbouring Recreational Centres	1.4 km	E
	9	Suton Park and Pavilion	1.4 km	NE
	10	Guildford Spectrum	1.4 km	SSE
	11	Stoke Park and surrounding Recreational Centres	1.8 km	SSE
	12	Guildford Spectrum Leisure Complex	1.8 km	SE
	13	Guildford Model Engineering Society	1.9 km	SE
	14	Worplesdon Target Rifle Range	1.9 km	WNW
	15	Stoke Recreation Ground	1.9 km	SSW
	16	Woodbridge Meadows	1.9 km	NNE
	17	Chitty's Common	1.9 km	W
	18	Stroughton Recreation Ground	1.9 km	SW
		CRITICAL INFRASTRUCTURE		
	1	Moorfield Road Sewage Works	680 m	SSE
	2	Guildford Fire Station	1.7 km	SSW
	3	SPTC (BRUH) Police Surrey	1.8 km	ESE
	4	South East Coast/Guildford Ambulance Station	1.9 km	SE
		ROADS AND RAILWAYS		
	-	Moorfield Road	150 m	SSW
	-	Jacobs Well Road	170 m	NW
	-	A320 - Woking Road	250 m	W
	-	Clay Lane	570 m	NNE
		PUBLIC RIGHTS OF WAY		
	-	Riverside Nature Reserve - Jacobs Well Playpark	185 m	E
	-	North Moor Allotments Footpath	290 m	NNE
	-	Stringers Farm Footpath	310 m	W
	-	Slyfield Industrial Estate to Jacobs Well Village Hall	350 m	ENE
	-	Clay Lane - Byway	570 m	NNE
	-	Old Farm Road to Woking Road Depot	595 m	SSW

RECEPTOR TYPE	ID	DESCRIPTION	DISTANCE	DIRECTION
	-	Stringers Common to Salt Box Road	650 m	WNW
	-	Yew Tree Drive Footpath	950 m	WSW
WATER		**SURFACE WATER**		
	-	Jacobs Well Playpark	200 m	NNW
	-	White House Lane Pond	255 m	NW
	-	Bellfields Green Lake	645 m	SW
	-	River Wey	745 m	ENE
	-	Pond located North of Clay Lane	830 m	NNE
	-	Britten's Pond	930 m	WNW
	-	Riverside Nature Reserve Lake	970 m	SE
		GROUNDWATER		
	-	Superficial Aquifer - Secondary A	On site	-
	-	Bedrock Aquifer - Principal Aquifer	On site	-
ENVIRONM-ENTALLY SENSITIVE SITES		**DESIGNATED SITES**		
	1	LNR - Riverside Park	850 m	SE
	2	SSSI & SPA - Britten's Pond, Whitmoor Common	910 m	NW
	3	SSSI & SPA - Britten's Pond	905 m	WNW
	4	SPA, SSSI & LNR - Whitmoor Common	1.3 km	NW
	5	LNR - Dragons Teeth & Woodland Walk	1.5 km	SSE
		NON-STATUTORY DESIGNATED SITES		
	1	BAP Deciduous Woodland - West of North Moors Allotments	200 m	NE
	2	BAP Traditional Orchard - North of Jacobs Well Road	210 m	WNW
	3	BAP Deciduous Woodland - East of Woking Road	260 m	E
	4	BAP Deciduous Woodland - North of Clay Lane	700 m	NE
	5	BAP Deciduous Wooland - Riverside Nature Reserve	816 m	SE
	6	BAP Deciduous Woodland - Stringers Common	820 m	WNW
	7	BAP Deciduous Woodland - Riverview Business Park	840 m	NE
	8	Ancient Woodland - Riverside Nature Reserve	865 m	SE
	9	BAP Deciduous Woodland - NE of Burpham Allotments	865 m	ENE
	10	BAP Deciduous Woodland - Bishop of Guildford	895 m	NW
	11	Ancient Woodland - Blanchards Hill	900 m	NNE
	12	BAP Lowland Fens - Britten's Pond	900 m	NW

RECEPTOR TYPE	ID	DESCRIPTION	DISTANCE	DIRECTION
	13	BAP Lowland Fens and Deciduous Woodland - Reverside Nature Reserve	1 km	SSE
	14	BAP Deciduous Woodlands and Lowland Fens - Whitmoor Common	1.3 km	WNW
	15	BAP Lowland Fens - Woodbridge Hill	1.4 km	SSW
	16	Ancient Woodland - Guildford Spectrum	1.4 km	SSE
	17	BAP Deciduous Woodland - Sutton park	1.4 km	NNE
	18	Traditional Orchard - Sutton Place	1.5 km	NE
	19	Ancient Woodland - Sutton Place	1.6 km	ENE
HERITAGE SITES	LISTED BUILDINGS, PARKS & SCHEDULED MONUMNETS			
	1	1 Listed Building - Grade II	135 m	NNW
	2	1 Listed Building - Grade II	340 m	NNW
	3	1 Listed Building - Grade II	615 m	WSW
	4	1 Listed Building - Grade II	760 m	NE
	5	4 Listed Buildings - Grade II	870 m	NW
	6	4 Listed Buildings - Grade II	1.4 km	ESE
	7	12 Listed Buildings - Grade II	1.5 km	NNE
	8	3 Liste Buildings - Grade I & II	1.6 km	NE
	9	2 Listed Buildings - Grade II	1.7 km	SW
	10	7 Listed Buildings - Grades II & II*	1.8 km	S
	11	4 Listed Buildings - Grade II	1.8 km	SE
	12	1 Listed Building - Grade II	1.9 km	W

3.4. Prevailing Wind Direction

The closest observing station where weather data is available is Heathrow Airport, approximately 25 km NNE of Guildford[5]. The prevailing wind direction is from the WSW, carrying any wind-blown emissions ENE. This is shown in Figure 1 below.

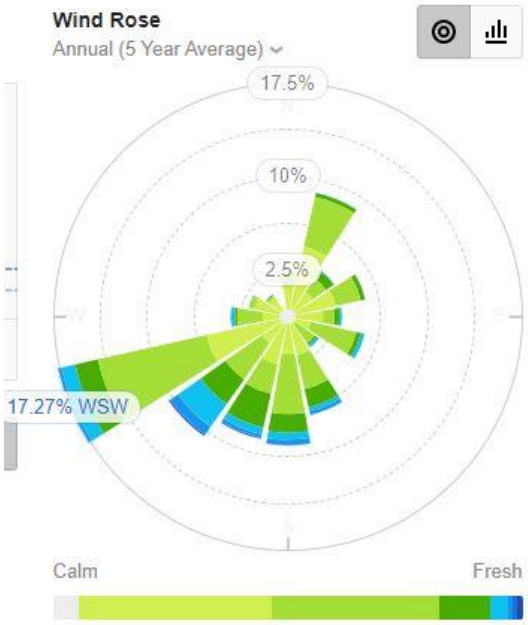

Figure 1: Heathrow Airport Windrose, annual five-year average (willyweather.co.uk)

3.5. Pathways

The pathway is the means by which the hazard reaches the receptor and forms the link between the two. For example, a dust hazard may reach a receptor by travelling through air, with the air therefore being the pathway.

The source-pathway-receptor link must be present for there to be a risk. Management measures applied at the site act to minimise the overall risk by impeding or removing the pathway.

5 https://weatherspark.com/y/147787/Average-Weather-at-Liverpool-Airport-United-Kingdom-Year-Round#Sections-Sources

ERA3 Pathways

RECEPTOR	HAZARD	PATHWAY
Humans and Property	Odour	Transmitted through the air
	Dust and Particulate Matter	Transmitted through the air
	Noise	Transmitted through the air
	Birds, Vermin & Insects	Physical travel
	Fire	Physical contact and spread
Groundwater	Contaminated runoff	Infiltration through the ground
Surface Water	Contaminated runoff	Direct discharge from site
Environmentally Sensitive Sites	Dust and Particulate Matter	Transmitted through the air
	Noise	Transmitted through the air
	Fire	Physical contact and spread
Atmosphere	Dust and Particulate Matter	Transmitted through the air

3.6. Risk

Assessment of risk is based on the probability of receptor exposure to the identified hazards and the consequences of such exposure. The initial assessment of risk is made assuming no risk management practices are applied.

A matrix is used to determine overall risk and uses the following definitions:

ERA4 Probability of Exposure

PROBABILITY OF EXPOSURE
HIGH – *exposure is probable:* direct exposure likely with no / few barriers between hazard, source and receptor.
MEDIUM – *exposure is fairly probable*: feasible exposure possible, barriers to exposure less controllable.
LOW – *exposure is unlikely*: several barriers exist between hazards source and receptors to mitigate against exposure.
VERY LOW – *exposure is very unlikely*; effective, multiple barriers in place to mitigate against exposure.

ERA5 Consequences of Exposure

CONSEQUENCES OF EXPOSURE
HIGH – *the consequences are severe:* sufficient evidence that short or long term exposure may result in serious damage.
MEDIUM – *consequences are significant;* sufficient evidence that exposure to hazard may result in damage that is not severe in nature and reversible once exposure ceases (e.g. irritant).
LOW – *consequences are minor;* damage not apparent though reversible adverse changes may occur.
VERY LOW – *consequences are negligible;* no evidence of adverse changes following exposure.

Comparison between probability and consequence provides the overall risk which is reached as follows:

ERA6 Assessing Overall Risk

		CONSEQUENCES			
		Very Low	**Low**	**Medium**	**High**
LIKELIHOOD	**High**	Low	Medium	High	High
	Medium	Low	Medium	Medium	High
	Low	Low	Low	Medium	Medium
	Very Low	Very Low	Low	Low	Low

3.7. Risk Management

Risk management practices for the key hazards identified above are summarised in Section 4 of this ERA. The information presented below is supported by various documents, such as the BS4142 Noise Impact Assessment carried out by Spectrum Acoustic Consultants (Appendix C), and this is clearly indicated within each table presented.

In addition, risk management measures have been developed with reference to relevant guidance documents, the following being of particular note:

- Environmental Management – Guidance: Risk assessment for your environmental permit[6]

[6] Risk assessments for your environmental permit - GOV.UK (www.gov.uk), Updated 31 August 2022

- Guidance: Noise and vibration management: environmental permits[7]
- Guidance: Control and monitor emissions for your environmental permit[8]
- Sector Guidance Note S5.06: Recovery and disposal of hazardous and non-hazardous waste.[9]

This risk assessment details the key management measures for identified risks.

3.8. Residual Risk

The application of management practice results in a residual risk which is detailed in Section 4 of this document.

[7] Noise and vibration management: environmental permits - GOV.UK (www.gov.uk), Updated 31 January 2022
[8] Control and monitor emissions for your environmental permit - GOV.UK (www.gov.uk), Updated 24 November 2022
[9] Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste - GOV.UK (www.gov.uk), Updated 10 October 2018

4. RISK ASSESSMENT

The key hazards identified for the activity have been subject to a risk assessment against management practice. Each hazard is assessed in a separate table (Appendix A). The information presented is, as appropriate, supported by other documents and these are referenced.

Many of the hazards identified in the tables located in Appendix A relate to 'Environmental Risk Points (ERP)' identified throughout the processes:

ERA7 Environmental Risk Points (ERP)

REFERENCE	PROCESS
ERP1	Material receipt
ERP2	Material storage pending treatment
ERP3	Production processes
ERP4	Material dispatch

5. APPENDICES

This page is intentionally left blank

Appendix A

Environmental Risk Assessment Tables

(19/05/2025)

Appendix B

Groundsure Report (GS-RGO-27J-2BH-VGA)

(22/09/2023)

Appendix C

Noise Impact Assessment (CJA4804/23273)

(10/07/2023)

wiser
environment

Helping clients prosper through compliance

Suite 11 Manor Mews, Bridge Street, St Ives, PE27 5UW
01480 462 232 | www.wiserenvironment.co.uk | info@wisergroup.co.uk