ENVIRONMENTAL RISK ASSESSMENT

Eco Skips Transfer Facility, Westfield Hole Farm, Westfield Lane, Westfield, East Sussex, TN35 4SA

Eco Skip Waste & Recycling Ltd

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List of Appendices:

1 Introduction

1.1 Note

1.1.1 Oaktree Environmental Ltd have been instructed by Eco Skip Waste & Recycling Ltd (the Operator) to prepare this Environmental Risk Assessment (ERA) to support an Environmental Permit variation application at Eco Skips Transfer Facility, Westfield Hole Farm, Westfield Lane, Westfield, East Sussex, TN35 4SA.

1.1.2 The existing permit authorises a physical treatment facility (PTF) treating construction and demolition waste to produce soil, soil substitutes and aggregate product. Treatment activities for the PTF include:

a) Screening.
b) Crushing.
c) Blending.

1.1.3 This ERA has been prepared to support an Environmental Permit variation application to vary the permit to operate a household, commercial and industrial (HCI) waste transfer station with treatment. Treatment activities for HCI waste will consist of the following:

a) Sorting (with loading shovel/360^{o} excavator or by hand).
b) Screening (by using appropriate mechanical screening plant and equipment).

1.1.4 This ERA considers the potential and actual risks associated with the proposed changes (listed in point 1.1.3 above). This ERA does not aim to provide detailed Health and Safety risk assessments as required separately through the necessary legislation.

1.1.5 All site staff should be provided with a copy of this ERA and be aware of where it is located on site.

1.1.6 All environmental risks identified in this document should be acted upon accordingly by site management to ensure all environmental risks can be appropriately managed / controlled.

2 Site Location and Receptors

2.1 Site Location

2.1.1 The site is located at Eco Skips Transfer Facility, Westfield Hole Farm, Westfield Lane, Westfield, East Sussex, TN35 4SA, National Grid Reference (NGR) TQ 81013 13846 and is accessed via Westfield Lane.

2.1.2 The site is largely surrounded by woodland areas and open fields. There are a cluster of industrial businesses immediately adjacent to the east of the site including other construction and waste management services.

2.1.3 The closest residential dwelling is approximately 105m west of the site, in terms of larger settlements the village of Westfield is situated approximately 1.25km north of the site.

2.2 Sensitive Receptors

2.2.1 Sensitive receptors within 1km of the site are illustrated on Drawing No. WES/2555/04 Sensitive Receptor Plan, see Appendix II.

2.2.2 Table 2.1 shows the approximate distance and orientation of sensitive receptors from the site.

Table 2.1 Sensitive Receptors

No.	Receptor	Receptor Type	Direction from Site	Approx distance from the site boundary to the receptor boundary (m)
1	Westfield Lane	Infrastructure	West	15
2	H. Ripley & Co Ltd	Industrial waste management services	East	70
3	Ripley Auto Spares	Commercial	Northeast	80
4	Maplehurst Wood	Site of Special Scientific Interest (SSSI)	South	100
5	Residential dwelling	Residential dwelling	West	105
6	Platinum Ground Works	Industrial	East	160
7	Hole Farm	Agricultural	Northeast	180
8	Juniper Country Park Homes	Recreational (holiday park)	Northwest	535
9	Freshfield Farm Shop	Commercial	North	790
10	Helenswood Sports Centre	Recreational	Southwest	850
11	Ark Alexandra Academy	School	Southwest	900
12	Whitegate Care Home	Residential Dwelling	North	945

3 Environmental Risk Assessment Model

3.1 Fundamental Considerations

3.1.1 **Source/Hazard:** A property or situation that in particular circumstances could lead to harm.

3.1.2 **Consequences:** The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.

3.1.3 **Risk:** A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

3.2 Pathway

3.2.1 Important in the assessment of a particular risk(s) and to inform the subsequent management of the risk(s) is the identification of the pathway(s) through which the risk may affect the identified receptor(s). The following are examples of pathways:

- Air (windblown dust etc.).
- Ground (leaching of contaminants into underlying aquifers).
- Water (hydrocarbon run off into surface waters).
- Direct contact / exposure.

3.3 Consequences

3.3.1 The following table highlights the consequences of the hazard(s) identified and the abbreviations for each as used in the Risk Assessment Table in Section 3:

Abbreviation	Consequences
A	Minor Injury
B	Major Injury
C	Death
D	Air Pollution
E	Water Pollution
F	Pollution of Land

3.4 Effects of Consequences

3.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

Abbreviation	Consequences	Management Requirements
S	SEVERE	In all cases
Mo	MODERATE	In most cases
Mi	MILD	Occasionally
N	NEGLIGIBLE	No

3.4.2 Note: "Management" is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.

3.5 Risk Estimation and Evaluation (Probability/Frequency of Occurring Hazard)

3.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

Abbreviation	Probability	Evaluation
1	Very likely	Could occur during any working day
2	Likely	Could occur regularly
3	Possible	Event possible
4	Unlikely	Event very unlikely

3.6 Risk Assessment Outcome (Combination of Probability & Consequence)

3.6.1 The following table shows the resultant risk of an identified hazard or potential situation. This uses the hierarchy of both probability and consequence to assess the level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

		Consequence			
		S	**Mo**	**Mi**	**N**
Probability	**1**	High	High	Medium	Low
	2	High	Medium	Low	Negligible
	3	Medium	Low	Negligible	N/A
	4	Low	Negligible	N/A	N/A

3.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. removal of hazard, implementation of major infrastructure/structural design measures to contain the risk/hazard and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks to ensure all site staff and users are made fully aware of the risk/hazard, all potential consequences and necessary management and contingency procedures.

3.6.3 Where the risk assessment outcome is medium, the management of the risk should be tackled by management or delegates. If removal of the hazard is not possible, management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures/procedures.

3.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures/procedures.

3.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

4 Risk Assessment Table

4.1 The following pages contain the site-specific risk assessment for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant, or situation.

4.2 The table also contains references to the appropriate section(s) of the site's EMS for additional management procedures.

4.3 As discussed in Section 3.6 above, all situations which identify a risk from Low – High should be incorporated into the staff/visitor training schedule, where appropriate and acted on as required.

SEE TABLES OVERLEAF

Appendix I

RISK ASSESSMENT TABLES

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Dust / particulates	Release of dust via one of the following channels: • Waste delivery vehicles depositing and collecting potentially dusty waste during dry and windy weather conditions • Storage of potentially dusty/waste material externally • Crushing of inert wastes • Dust / debris on site surfaces • Loading of waste into treatment plant • Processing of waste as part of mechanical recycling facility comprising screeners, crusher etc.. • Wastes dropping from conveyors into stockpiles • Prolonged periods of dry/warm weather or conditions where winds reach 4+ on the	Air	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Maplehurst Wood (Site of Special Scientific Interest) • Westfield Lane residential dwellings.	Harm to human health – respiratory irritation and illness A, B, D, E	Mo	3	Low	The Operator is already permitted to undertake treatment including crushing and screening of construction and demolition waste to produce soil, soil substitutes and aggregate product. There have been no complaints of dust from these operations, therefore, the dust suppression currently implemented has been considered effective. The increased throughput increases the potential risk of dust emissions; however, the Operator will continue to implement the following to minimise the risk: Potentially dusty waste that has been stockpiled will be dampened regularly in dry and windy conditions. This reduces the amount of dust which could be suspended and therefore the amount of dust that has the potential to reach nearby receptors. Hoses and mobile water bowsers will be utilised to dampen stockpiles and the site surface. Strict waste acceptance procedures are implemented to ensure that loads comprising mainly dust, powders or loose fibres are not accepted on site. All vehicles delivering and exporting waste will be sheeted. Vehicles will be visually inspected before arrival and exit to check that loads are safe and that no mud is carried onto the access road that could spill off site from the wheels or bodies of skip lorries. There is access to a wheel washing / vehicle wash down facility on site. Vehicle wheels will be washed down prior to exiting the site to wash off any mud, dust or debris and minimise the risk of mud on the surrounding roads. Drop heights will be minimized as far as reasonably practicable. A mobile dust cannon will be situated adjacent to the crushing and screening operations for construction and demolition waste. The dust cannon disperses water over a 30m radius and can be moved around the site for dust suppression as required. Site operatives will continuously monitor dust emissions whilst the site is in operation and will report back to the site manager for advice if required. The site manager will make a formal visual inspection of dust emissions at least twice per day. Results of monitoring will be recorded in the site diary/record forms.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
	Beaufort Wind Scale • Particulate emissions from the exhaust of vehicles / plant /generators and other non-road going machinery on site							The requirements of a Dust Management Plan (DMP) are implemented on site. The DMP outlines all mitigation measures to be implemented on site and what to do in the event of dust protruding the permit boundary.
Odour	Biodegradable waste stored on site. Cracks in concrete pad leading to trapped waste. Dry and hot weather conditions exceeding three days. Prevailing wind towards residential receptor locations. Staff negligence leading to odour releases from unauthorised waste.	Air transport then inhalation	Local human population, including industrial units, neighboring businesses, and residential dwellings, specifically: • Site workers and visitors • Westfield Lane residential dwellings. • H. Ripley & Co Ltd • Ripley Auto Spares	A, D	Mi to Mo	3	Low	Strict waste acceptance procedures are implemented to ensure that no malodorous waste is accepted. Any wastes discovered to be malodorous following acceptance will be quarantined and removed from site as soon as practicable. Putrescible waste that has the potential to be odorous will be stored on site for less than one week. Any stored waste giving rise to odour will be removed from the site as soon as practicable. Site operatives will be sufficiently trained and undergo continuous training on identifying odorous wastes or non-conforming wastes that could give rise to odour. Good housekeeping measures are actively maintained on site to reduce the risk of odour. The condition of the impermeable pad will be checked on a weekly basis to ensure there are no cracks that could lead to trapped waste. The requirements of an odour management plan (OMP) are implanted on site. The OMP outlines all mitigation measures to be implemented on site and what to do in the event of odour detection outside the permit boundary.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments
Waste, litter and mud on local roads	Litter escaping the site boundary (windblown). Vehicles delivering / removing waste including unsheeted / poorly sheeted skips. Poor or faulty storage containment. Poor housekeeping. Staff negligence leading to litter escaping off site	Vehicles entering and leaving the site. Air transport (windblown)	Local human population and neighboring businesses within close vicinity of the site, including: • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Westfield Lane residential dwellings.	A to C E & F	Mi to Mo	3	Low	The greatest risk of litter would be during windy conditions. The site will be operated to a lesser degree during these conditions giving due regard to the potential effects of windblown litter. Site inspections including litter checks will take place on a regular basis to identify and remove any litter from the site. Waste is stored in skips or bays to contain waste and minimise the risk of wind whipping. Waste is tipped into a free-standing stockpile upon acceptance at the site for manual sorting prior to screening and hand picking. Waste is stored in the reception area for 1-2 hours; all waste reception areas are cleared by the end of the working day. Waste stored in bays is stored with a freeboard of 1m to prevent waste escaping the bay or becoming wind whipped. Good housekeeping measures are actively maintained on site to reduce the risk of litter. Vehicles leaving the site will be sheeted and undergo wheel washing to prevent mud being tracked onto the local highway. If mud is tracked onto the local highways the Operator will organise for a road sweeper to be deployed.

Noise/ vibration	Plant and machinery breakdowns or malfunctions Tipping / loading of waste Operating mechanical treatment plants in external areas of the site i.e. crusher	Noise through the air or vibration through the ground	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Maplehurst Wood (Site of Special Scientific Interest) • Westfield Lane residential dwellings	A, D	Mo	3	Low	A 5mph speed limit is enforced on site. All plant and equipment will be maintained in accordance with the manufacturers' recommendations to minimise noise generation. Plant and equipment will only be operated when necessary. Mechanical plant will not be typically operated for more than 3-hours per day. Pre-use checks are undertaken prior to using plant or equipment. Defects are reported and actions taken to rectify the problem. Engines will be switched off when not in use. No plant, equipment or vehicles will be left idling. Drop heights of materials will be reduced as far as practicable. Waste treatment operations with the highest potential to produce noise i.e., crushing will take place within the containment of a 5m high noise attenuation bund. A Noise Impact Assessment has been completed to consider the risk of noise from the proposed operations. The requirements of a Noise Management Plan are implemented on site. Noise levels will be measures on a monthly basis using a class 2 sound level meter to ensure noise levels are not exceeding those outlined in the Noise Management Plan. Further noise mitigation and control measures are outlined in the Noise Management Plan. The screener will be fitted with a J45 screener with a polyurethane sieve plate. These plates should reduce the overall noise emissions by 5 dBA. Rubber isolators will also be installed to further reduce noise by 1 dBA.

Vermin causing leptospirosis and other respiratory diseases	Poor housekeeping Staff negligence leading to acceptance of unauthorised waste giving rise to pests Storing waste for excessive time periods	Water, direct contact with waste	Local human population and neighboring businesses within close vicinity of the site, including: • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Westfield Lane residential dwellings	A to C	Mi to Mo	4	Negligible	Strict waste acceptance procedures are implemented to ensure no food wastes or wastes that could attract vermin are accepted. Mixed municipal waste (EWC code 20 03 01) can be accepted at the site. Once a load has been tipped, if any waste that could give rise to pests such as food waste is detected it will be segregated in the quarantine area and removed from site as soon as practicable. Good housekeeping measures are actively maintained to reduce the potential of attracting pests. Housekeeping inspections take place daily at the end of each working day to collect any waste produced by on-site operatives. An appropriate pest controller will be called in the event of pests being present at the site or complaints received relating to pests.
Fire/ smoke / particulates	Plant failure Combustible waste types Arson and or vandalism Staff negligence Discarded smoking materials Hot exhausts Industrial heating Build up of loose combustible waste, dust and fluff Hot loads Leaks and spillages of oil and fuel	Air transport of smoke	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Maplehurst Wood (Site of Special Scientific Interest) • Westfield Lane residential dwellings	A to F	Mi to S	3	Medium	The proposed waste types to be accepted at the site contain combustible waste, increasing the potential for a fire. Combustible waste will be stored in accordance with the Environment Agencies Fire Prevention Plan guidance. Storage times and quantities will be significantly less than those in the guidance. Strict waste acceptance procedures are implemented to reduce the likelihood of non-conforming wastes being accepted. Plant and equipment are maintained in accordance with manufacturer recommendations. No oil or fuel is stored on site A no smoking policy is implemented on site, those who wish to smoke will need to do so 6m outside the permit boundary. Checks will be performed at the end of each working day to ensure there is no buildup of dust or fluff on plants and equipment to minimise the risk of fire caused by dust settling on hot exhausts and engine parts. All staff are fully trained in recognition of early fire signs and trained to prevent negligence. Fire-fighting equipment on site includes mains water and fire extinguishers. Site security measures including lockable gates that are locked outside of operational hours are implemented to prevent unauthorised access.

								The requirements of a Fire Prevention Plan (FPP) are implemented on site. Inspections are undertaken of waste storage areas to ensure combustible waste is not stored more than the time periods stated in the FPP. Further mitigation measures and responses implemented in the event of a fire are listed in the FPP.
Vehicle collision/ accidents including impacts and injury	Poor visibility Spillages of oils/fluids causing vehicles to skid. Lack of PPE worn by staff. Staff negligence i.e. mobile plant operators. Excessive waste storage causing collapse of stored materials / falling materials and reducing accessibility around the site.	Direct contact	Site personnel / visitors Vehicle users Pedestrians	A to F	Mi to S	3	Low	Ensure all free-standing waste storage areas are in the correct locations and access areas are kept clear as shown on Drawing No. WES/2555/03 Site Layout & Fire Plan. An accident logbook is kept in the site office so all new and existing staff members can review previous accidents. Appropriate signage throughout the site. All staff have radios and use horns / alarms on equipment to alert them of their presence. The operator has trained staff who control vehicle movements throughout the site. Vehicle movements on site are restricted to 5mph.
Leachate	Poor housekeeping Staff negligence leading to acceptance of unauthorised waste giving rise to leachate Overflowing waste storage skips Water through ground from mobile dust suppression and rainwater	Ground	Surface water features and areas of sensitive ground, specifically: • Maplehurst Wood (Site of Special Scientific Interest)	E, F	Mi to S	3	Low	HCI waste is stored on an impermeable concrete pad with sealed drainage. Water from the concrete pad drains to an above ground water storage tank that is tinkered away to a suitably licensed facility. The integrity of the impermeable pad is checked by site operatives as part of the inspection checklists to ensure it is in good condition. Any defects or faults are reported to the site manager. Actions to repair any faults are recorded and undertaken as soon as practicable to prevent further risk. Any wastes which are liable to give rise to contamination will be removed from site or placed into the quarantine skip/area. The FPP has a dedicated section on firewater containment measures. The site is situated on areas of high and unproductive groundwater vulnerability. The area of high groundwater vulnerability is largely

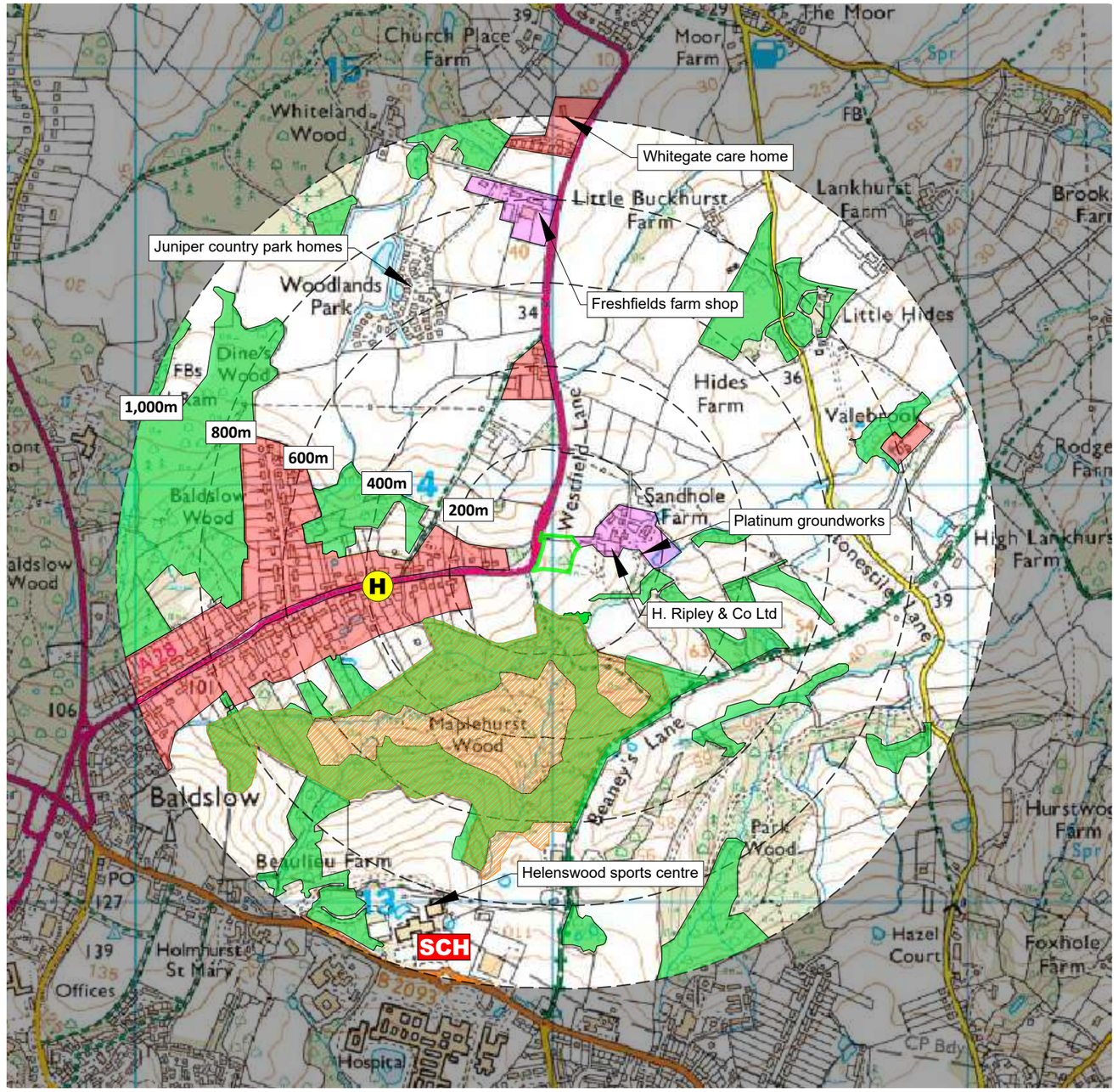
								where the impermeable pad will be situated on site, and it is considered surface water that has been in contact with waste will not penetrate the ground.
Hydrocarbons including release of gases/fumes/ vapours/ volatiles	Spills from fuel tanks Drips when refueling During delivery Leakage from stored drums Fixed and mobile plant malfunction Mixing of waste/ chemicals Spillage of chemicals Overturned vehicle plant/plant failure Reaction between stored wastes	Ground - direct contact, ingestion Inhalation (of volatiles)	Local human population, including industrial units, neighboring businesses, and residential dwellings and surface water features, specifically: • Site workers and visitors • Westfield Lane • H. Ripley & Co Ltd • Ripley Auto Spares • Maplehurst Wood (Site of Special Scientific Interest) • Westfield Lane residential dwellings	A, B, D, E, F	Mi to S	3	Low	No fuel will be stored at the site. Where plant is operated, spill kits will be available to ensure that any fuel spillages are cleared. All site surfaces will be inspected daily for the presence of spillage when the site is in operation. Debris will be swept as required and placed in a skip for further processing on site and sent to a suitably permitted site. Impermeable pad with sealed drainage system will reduce the impacts of any spills. Very little potential for hydrocarbons to be released from site given the waste types accepted and stored i.e. no ELVs. No gas is stored on site.

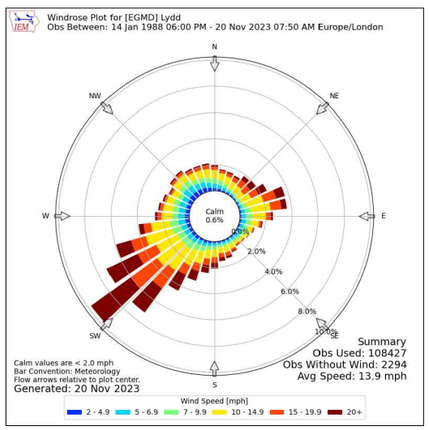
Appendix II

Drawings

KEY:

- Permit boundary
- Surface water body (river / stream / pond / pool / lake)
- Workplaces (includes agriculture industry, commerce and retail)
- Areas with mix of residential, retail and commercial properties
- Residential blocks
- Class A, B, C roads
- Nearest fire hydrant
- Railway line
- School
- Woodland areas
- Protected sites (Sites of special scientific interest)
- Priority habitat inventory (deciduous woodland)





Compass Wind Rose for (EGMD) Lydd Period 1988-2023
- source: Iowa State University

Scale Bar (1:12,500)

0 km 500 m 1 km

NOTES

1. Boundaries are shown indicatively.
2. Wind rose data shows the prevailing wind direction to be Southerly.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	28.11.23	JH	Initial drawing

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
RECEPTOR PLAN

CLIENT
Eco Skip Waste & Recycling Ltd

PROJECT/SITE
Westfield Lane, Westfield TN35 4SA

SCALE @ A3	CLIENT NO	JOB NO
1:12,500	2555	005

DRAWING NUMBER	REV	STATUS
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