ENVIRONMENTAL RISK ASSESSMENT

The Recycling Centre, Abbotsfield Road, St Helens, Merseyside, WA9 4HU

St Helens Waste Recycling Ltd

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1 Introduction

1.1 Note

1.1.1 Oaktree Environmental Ltd have been instructed by St Helens Waste Recycling Ltd (the Operator) to prepare this Environmental Risk Assessment (ERA) to support an Environmental Permit (EP) variation application at The Recycling Centre, Abbotsfield Road, St Helens, Merseyside, WA9 4HU.

1.1.2 The Environmental Permit (EP) Ref. is EPR/ DB3637WG (EP) and the site previously operated under a SR2008No3 EP which was issued on 18/11/2011 but following the withdrawal of this EP on 18/12/2024, the current EP is a SR2022No4 EP - non-hazardous waste recycling with asbestos, hazardous batteries, cable and WEEE storage which in summary authorises the transfer, storage and treatment household, commercial & industrial (HCI) waste.

1.1.3 The operator is seeking to vary the current SRP to a BP following withdrawal of the EP on 18/12/2024.

i) The SR2022No4 has a number of operating techniques which the operator can no longer comply with which include the following:
ii) The operator cannot fully enclose the current waste transfer building which is open fronted
iii) The site cannot store and handle all waste listed in Table 2.3a of the SR2022No4 inside an enclosed building
iv) The site stores containers of waste externally, these cannot be continually be covered or stored inside an enclosed building
v) The site does not wish to accept any hazardous waste into the facility and the operator only has a non-hazardous technical competence
vi) The site does not require a throughput of <75,000 tonnes per annum (tpa) and it is proposed to reduce this to <25,000 tpa

1.1.4 It is proposed the following activities will be undertaken on site for the HCI operations:

a) Sorting (by hand or machinery i.e. loading shovels or excavators).
b) Storage (prior to removal).

1.1.5 The site will not mechanically treat any waste on site.

1.1.6 All wastes with the exception of non-hazardous inert material will be stored and treated on an impermeable surface with sealed drainage. Wastes will be stored in accordance with the locations and quantities illustrated on Drawing No. ABB/1855/03.

1.1.7 It is important to note that there have been no complaints or issues relating to noise, dust or odour from the site since operations began, nor have there been any pollution incidents.

1.1.8 This ERA considers the potential and actual risks associated with the proposed changes (listed in point 1.1.6 above). This ERA does not aim to provide detailed Health and Safety risk assessments as required separately through the necessary legislation.

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

1.1.10 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 The Recycling Centre, Abbotsfield Road, St Helens, Merseyside, WA9 4HU, National Grid Reference (NGR) SJ 53456 92534 and is accessed via Abbotsfield Road, which lies to the south west of the site via a concrete access track which links to the rear of Silverdale House

2.1.2 Within the immediate vicinity of the site are a handful of other commercial / industrial premises, a few residential properties and some areas of agricultural / open fields.

2.1.3 A full list of sensitive receptors within 1km of the site can be found in Table 2.1 overleaf. Some receptors included in this list may not be sensitive to all potential emissions / hazardous from the site i.e. surface water is not considered sensitive to odour. When considering each hazard in the risk assessment table specific receptors that have the potential to be affected by the specific hazard being considered have been outlined in the associated row.

2.2 Sensitive Receptors

2.2.1 Sensitive receptors within 1km of the site are illustrated on Drawing No. ABB/1855/04 Receptor Plan, see Appendix II.

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

Table 2.1 - Sensitive Receptors

Receptor	Direction from Site	Approx distance from the site boundary to the receptor boundary (m)
Commercial / Industrial		
Properties on Abbotsfield Road	North-west, west, south-west,	0 - 500
Properties on Brindley Road	North-west, west, south-west,	0 - 340
Properties on Normans Road	North-east	600 - 860
Properties on Station Road	North	620 - 740
Residential (nearest by direction only)		
Houses on B5204 (Reginald Road)	North-west	335
Houses on Wheatsheaf Avenue, Applecorn Close and Riddle Way	West	355
Houses on Frenchfields Crescent	South	850
House off Gorsley Lane	South-east	825
Care homes / hospitals		
Whitefield Lodge Supported Living	South-west	900
Rutland House Veterinary Hospital	North-west	330
Schools		
Isabella Primary School	West	520
St Anne's Catholic Primary School	North-west	600
Willow Tree Primary School	South-west	850
Watercourses		
Unknown watercourse	North-east	10
Unknown watercourse	South	150
Sutton Mill Dam	West	800
Sutton Mill Brook (Main River)	West	600
Infrastructure (major roads and transport links)		
St Helens Junction Train Station & Railway Line	North	660
Sensitive, Protected & Ecological Sites (Nearest by Direction Only)		
Local Wildlife Site	South	100
Protected Species (coded)	South-east	25
Deciduous Woodland	West	440
Deciduous Woodland	South-east	800

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 negligible, 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 appendices contain the site-specific risk assessments for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant, or situation. There are two separate tables outlining the risks to general receptors and a separate table comprising the main risks to the Code 2 species located adjacent to the site.

4.2 The tables also contain 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 Subject to Mitigation	Remedial Action/ Recommendations/ Comments
Dust / particulates	Release of dust via waste delivery vehicles deposit and collection of wastes with the potential to emit dust during dry and windy weather conditions. Storage of waste with the potential to emit dust (**AREAS 3 & 6**). Dust / debris on site surfaces. Periods of dry/warm weather or conditions where winds reach 4+ on the Beaufort Wind Scale Particulate emissions from the exhaust of vehicles / plant /generators and other non-road going machinery on site		Local human population, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	Harm to human health – respiratory irritation and illness A, B, D, E	Mo	3	Low	The operator is already permitted to accept and store waste with the potential to emit dust. The site has been operated in accordance with the current permit for over 15 years, in this time there have been no complaints of dust received from operations; therefore, it is considered the dust suppression currently implemented has been considered effective. There are no proposed changes to the types of waste accepted or the operational activities undertaken on site, it is not considered there is any additional increased risk of dust at the site. The site is also reducing the amount of waste which can be accepted into the facility. The Operator will continue to implement the following to minimise the risk of dust from site operations: • With the exception of AREAS 3 & 6 all other waste with the potential to emit dust is stored within the waste transfer building. • 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. • Drop heights will be minimized as far as reasonably practicable. • Hoses, mains water and a bowser will be utilised to dampen stockpiles (AREAS 3 & 6) and site surfaces. • Externally stockpiles of inert material (oversize concrete, hardcore, stone and soils) 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 extend beyond the permit boundary. • A 5mph speed limit is enforced on site to prevent the resuspension of mud from the site surface and vehicle movements. • Hoses can be utilised to wash the wheels of vehicles leaving the site to remove any mud, dust or debris and minimise the risk of mud on surrounding roads.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
								• In the event of mud being tracked off site and onto the main roads it will be treated as an emergency and cleaned by site operatives using manual techniques or if required the operator will organise for a road sweeper to be deployed. • 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 when operations with the highest dust potential are being undertaken. Results of monitoring will be recorded in the site diary/record forms.
Odour	Biodegradable waste stored on site e.g. green waste. Cracks in impermeable concrete pad leading to trapped waste. Dry and hot weather conditions exceeding three days. Prevailing wind towards residential receptor locations transporting odour. Staff negligence leading to odour releases from unauthorised waste. Improper storage of plasterboard leading to the production of hydrogen sulphide.	Air transport then inhalation	Local human population, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	A, D	Mi to Mo	3	Low	The site has been operated in accordance with the current SR2008 No.3 (now SR2022No4) for over 15 years, in this time there have been no complaints of odour received from operations; therefore, it is considered the odour mitigation currently implemented has been considered effective. Due to the above it is not considered there is any additional increased risk of odour at the site. The Operator will continue implement the following to minimise the risk of odour from the site: • Strict waste acceptance procedures are implemented to ensure that no malodorous waste is accepted. • Any wastes discovered to be malodorous following acceptance / deposit into the waste reception area will be quarantined and removed from site as soon as practicable. • All waste with the potential to be malodorous, i.e. plasterboard and mixed HCI waste are stored / deposited in the waste transfer building. Storing these wastes within the confines of the waste transfer building eliminates the potential for the waste to come into contact with rainwater which in the cases of green waste and plasterboard would exacerbate the production of odour. • In terms of green waste accept, this will comprise plant tissue waste and trees, branches from gardens so unlikely to cause odour generation when being stored. The site is not accepting material which will be composted.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
								• Green waste accepted will not contain grass cuttings (which are considered to harbour the greatest potential for odour due to their susceptibility to aerobic compositing and decomposition if wet). • Putrescible waste that has the potential to be odorous will be stored on site for a maximum of five days, waste is typically removed from site within two days however, five days is provided to allow for contingency (delays in vehicles, plant and equipment breakdowns etc.). If any waste stored on site begins to give rise to odour that can be detected off site will be removed as soon as possible. • No food waste is routinely accepted at the site, which is considered to be a particularly malodorous waste type. Any food waste discovered in mixed loads will be quarantined and removed from the site. • Good housekeeping measures are actively maintained on site to reduce the risk of odour. • Site operatives will be sufficiently trained and undergo continuous training on identifying odorous wastes or non-conforming wastes that could give rise to odour. • All waste storage and treatment areas on site comprise of an impermeable pad. 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 developing odour. • Waste storage areas / bays will undergo a deep clean every 12 weeks to remove any residual waste (all areas will not undergo cleaning at the same time). • 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. • The nearest residential receptors are situated approximately 335m from the site boundary with other odour generating premises between.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	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, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	A to C E & F	Mi to Mo	3	Low	The greatest risk of litter escaping the permit boundary would be light waste during windy conditions. Light waste stored externally will be either in secure containers or internally within the confines of waste transfer building. The Operator implements the following to minimise the risk of litter escaping the permit boundary: • Waste with the highest potential to become windblown is light material such as plastic, paper and cardboard. These wastes are either stored in the waste transfer building or in secure containers externally. Waste stored in containers will not be overfilled beyond the height of the container's side to ensure no waste spills over the edge or is easily windblown. • Due to mixed waste tipping and storage being undertaken within a building it is not considered the site would be required to reduce operations in windy conditions. However, in extremely windy conditions 7+ on the Beaufort scale, the site manager may make the decision to operate to a lesser degree or cease operations temporarily giving due regard to the potential effects of windblown litter. External skips storing separated / processed waste may have lids or covers placed over the top to prevent waste being blown out. • Site inspections including litter checks will take place on a regular basis to identify and remove any litter from the site boundary. • Waste stored externally can be reduced in height i.e. from 3m to 2m. • Stockpiles of potentially friable waste i.e. concrete, hardcore and stone are dampened down to prevent material becoming dry and being blown off site. • Good housekeeping measures are actively maintained on site to reduce the risk of litter. • Vehicles leaving the site will be sheeted and if required will undergo wheel washing (using mains water and a hose) to prevent mud being tracked onto the local highway. In the event of mud being tracked off site and onto the main roads it will be treated as an emergency and cleaned by site operatives using manual techniques or if required the operator will organise for a road sweeper to be deployed.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
Noise/ vibration	Plant and machinery breakdowns or malfunctions. Tipping / loading of waste. Operating mechanical treatment plants in external areas of the site i.e. baler	Noise through the air or vibration through the ground	Local human population, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	A, D	Mo	3	Low	The site has previously screened and shredded material and there have been no notable complaints relating to noise received from operations undertaken at the site. The permit variation seeks to remove mechanical treatment and reduce the annual throughput from 75,000 tonnes per annum to <25,000 tonnes per annum. Therefore, it is considered operations proposed will have a lesser noise impact than the current permitted activities authorized. On this basis, it is considered a noise impact assessment (NIA) and noise and vibration management is not required. The site will adhere to the following measures to reduce the risk of any noise pollution: • A 5mph speed limit is enforced on site. • All plant and equipment will be maintained in accordance with the manufacturers' recommendations to keep plant and equipment functioning correctly and minimise noise generation. • 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.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
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 periods of time.	Water, direct contact with waste	Local human population, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	A to C	Mi to Mo	4	Negligible	The operator implements the following: • Strict waste acceptance procedures are implemented to ensure no food waste or waste 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 bins and removed from site as within 48 hours (if odorous or has potential to attract pests) • Mixed waste is initially deposited in the waste transfer building for sorting and separation, the waste being stored and processed within a building will reduce the likelihood of vermin entering and accessing the waste. • The short storage times of waste (maximum 5 working days) means waste does not have the opportunity to significantly develop odour which would attract vermin. • 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	Air transport of smoke	Receptors affected by a fire will depend on factors such as how much smoke is produced and the climatic conditions including the direction of wind on the day of the fire. However, it is considered the most likely receptors affected by a fire on site would be local human population, including adjacent commercial / industrial units, other	A to F	Mi to S	3	Medium	The operator will continue to implement the following: • Strict waste acceptance procedures are implemented to reduce the likelihood of non-conforming waste being accepted. • Combustible waste will be stored in accordance with the requirements of the Environment Agencies Fire Prevention Plan guidance. Storage times and quantities are significantly less than those in the guidance. • Plant and equipment are maintained in accordance with manufacturer recommendations. • A no smoking policy is implemented on site, those who wish to smoke will need to do so in the designated smoking hut on site which is located 6m from all combustible waste stored on site.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
	Buildup of loose combustible waste, dust and fluff Hot loads Leaks and spillages of oil and fuel		neighboring businesses, and residential dwellings as shown in Table 2.1					• 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, hoses, water storage containers and fire extinguishers. • Site security measures to reduce the risk of arson include lockable gates that remain locked outside of operational hours. • CCTV cameras cover all combustible waste storage and processing areas on site (including within the waste transfer building and external yard). • The requirements of a Fire Prevention Plan (FPP) are implemented on site. • Inspections are undertaken of waste storage areas to ensure that 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, see document ref. ABB/1855-B_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	Direct contact	Visitors to the site and workers employed by the operator. Pedestrians	A to F	Mi to S	4	Low	There are no proposed changes to the throughput of waste and therefore it is not anticipated there will be an increase in vehicles delivering waste to the site. The operator will continue to implement the following: • Ensure all free-standing waste storage areas are in the correct locations and access areas are kept clear as shown on Drawing No. ABB/1855/03 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.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
	collapse of stored materials / falling materials and reducing accessibility around 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. • Appropriate PPE is provided to all site operatives.
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 courses and features shown in Table 2.1.	E, F	Mi to S	3	Low	All wastes which could have the potential to cause leachate are stored on an impermeable surface with sealed drainage. Waste stored in containers will be sealed, containers will not be overfilled so waste spills over the edges having the potential for leachate to be produced and discharged off site to surface water or sewer. Therefore, the production and discharge of leachate from the northern area of the site is considered low risk. Other mitigation measures to prevent leachate off site are outlined below: • Fuel and liquid storage on site are stored with a bund capable of containing 110% of the volume stored in the tank. Containment requirements will be in accordance with CIRIA C736 'Containment systems for the prevention of pollution' in the event of a spillage this will be dealt with in accordance with the spillage procedure in the Environmental Management System, see document ref. ABB/1855-A_EMS. • Refueling of vehicles or plant takes place in the dedicated refueling area in the western area of the site which is fully sealed in the event of a spill. • All waste stored externally non-hazardous or inert material that presents a very low risk of contamination. • Mixed HCI waste is stored within the waste transfer building on an impermeable concrete pad with sealed drainage. • 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.

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
								• 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 a quarantine skip/area. • The FPP has a dedicated section on firewater containment measures.
Hydrocarbons including release of gases/fumes/ vapors/ volatiles	Spills from fuel tanks Drips when refueling During delivery Leakage from stored drums Fixed and mobile plant malfunction Mixing 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 adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	A, B, D, E, F	Mi to S	3	Low	• There are no proposed changes to waste types accepted at the site which would increase the risk of hydrocarbons. • Spill kits will be available to ensure that any fuel spillages from plant 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. • Fuel is stored with double bunded containment. The integrity of fuel storage tank is checked monthly to minimise the risk of leaks. • Very little potential for hydrocarbons to be released from site given the waste types accepted. • No gas is stored on site.
Flooding	Heavy rainfall	Floodwaters	Local human population, including adjacent commercial / industrial units, other neighboring businesses, residential dwellings and surface water features (See Table 2.1).	Waste being washed off site contaminating buildings, gardens, habitats including watercourses.	Mi to Mo	2	Low	The site is located in flood zone 1 meaning there is less than 0.1% chance of flooding from rivers or the sea. • It is considered that the waste being stored externally including processed / recycled wastes present a low risk of contamination in secure containers and inert material in the unlikely event of a flood inert material is unlikely to cause contamination and all other waste is in secure containers and would not enter the flood waters.

Appendix II

Assessment of Risk to Habitats (Code 2 Species)

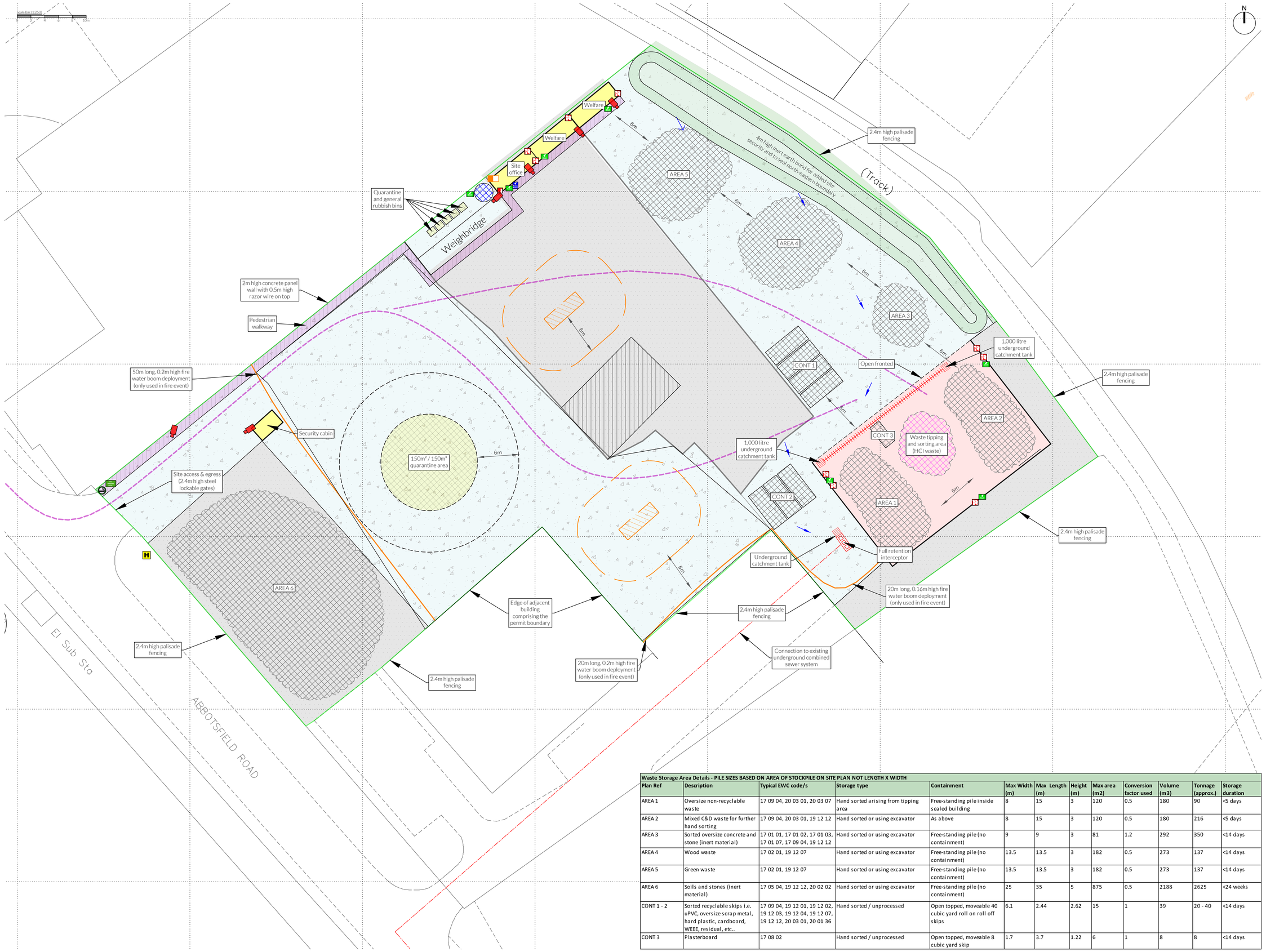
Receptor	Source(s)	Pathway	Consequences	Effect	Probability	Assessment Outcome Subject to Mitigation	Remedial Action/ Recommendations/ Comments
Protected sites - Code 2 Species	Leachate arising from contaminated surface water Damaged to the impermeable surface storing wastes which have the potential to cause leachate. Staff negligence for not carrying out suitable site inspections. Staff negligence including lack of training to site staff in accordance with the EMS Poor housekeeping leading to escape of waste from the site boundary or acceptance of non-conforming waste Litter arising from the unsuitable storage and containment of light waste Smoke and fumes arising from a fire on site	Ground Air transport of smoke Water, direct contact with waste Noise through the air or vibration through the ground	E, F	Mi to S	3	Low	All wastes which could have the potential to cause leachate are stored on an impermeable surface with sealed drainage. No water leaves the site other than via the existing drainage system which comprises a sealed system as shown on Drawing No. ABB/1855/03. The operator will also carry out daily inspections to the surrounding watercourse to ensure it is free from contamination. It must be noted the site has been operational for 15 years and there have never been any recorded pollution incidents which have affected this watercourse where the Code 2 Species could be present. Waste stored in containers will be sealed, containers will not be overfilled so waste spills over the edges having the potential for leachate to be produced and discharged off site to surface water or sewer. Therefore, the production and discharge of leachate from the northern area of the site is considered low risk. All waste stored externally on non-impermeable surfaces comprise non-hazardous inert material that presents a very low risk of contamination. The waste stored in this area will have also passed site inspections before it can be transferred to this area of the site. The tipping and sorting of waste will take place inside a building. Although the building is open fronted, there is a sealed drain to the front of the building to prevent egress of potentially contaminated water arising from skips. The site also has a continuous water supply to keep loads damp in dry, hot, windy weather conditions. The integrity of the impermeable surface and sealed drainage system is checked by site operatives as part of the inspection checklists to ensure it is in good condition and potentially contaminated water is not escaping the sealed drainage system. The capacity of the interceptor will be checked weekly or daily in heavy rainfall events and emptied when capacity reaches 80%. 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 a quarantine skip/area and stored inside the waste transfer building. All new and existing site staff are subject to a specific training regime based on their responsibilities at the site to ensure all operations are carried out without harm to the environment or amenity of the surrounding area. An employee training record as part of the EMS will provide a comprehensive checklist for the training needs of all new site staff and also serves as a training review for existing site staff which will be carried out annually or a period set at the operator's preference. All staff will be subject to training involving:

	Smoke and exhaust fumes from damaged plant and equipment Excessive noise from plant malfunctions, idling or staff negligence Extreme weather events i.e. droughts, excessive rainfall or high winds increasing the risk of pollution off site						- Site rules and infrastructure training - Emergency procedures training - Fire safety / firefighting training - Recognition of waste types training - Storage areas / limits training - Vehicle / plant preventative maintenance training - Duty of care training - Plant operation training - Permit / Management System training - Training for contractors Tool box will take place at least every 6 months or sooner in the event of site infrastructure changes, a pollution incident or variations to the permit. This reduces the potential of any staff negligence or poor housekeeping arising on site. The site will operate in accordance with an approved FPP which minimises the risk of a fire occurring at the site. The FPP has a dedicated section on firewater containment measures. In the event of fire, there is a quarantine area situated on an impermeable surface with sealed drainage to prevent runoff of potentially contaminated fire water, Light waste stored externally will be either in secure containers or internally within the confines of waste transfer building. The Operator implements the following to minimise the risk of litter escaping the permit boundary: • Waste with the highest potential to become windblown is light material such as plastic, paper and cardboard. These wastes are either stored in the waste transfer building or in secure containers externally. Waste stored in containers will not be overfilled beyond the height of the container's side to ensure no waste spills over the edge or is easily windblown. In extremely windy conditions 7+ on the Beaufort scale, any light waste stored in containers externally will be moved inside the waste transfer building if covered with a tarpaulin sheet prior to the weather warning. The skip will remain covered other than when being loaded with waste material. Staff would only load this container when weather conditions improve. • Due to mixed waste tipping and storage being undertaken within a building it is not considered the site would be required to reduce operations in windy conditions. However, in extremely windy conditions 7+ on the Beaufort scale, the site manager may make the decision to operate to a lesser degree or cease operations temporarily giving due regard to the potential effects of windblown litter. External skips storing separated / processed waste may have lids or covers placed over the top to prevent waste being blown out. The waste transfer building will also be subject to daily inspections to ensure there are no gaps and it is fully sealed other than the open-fronted sections. It must be noted the open-fronted faces northwest which is in the opposite direction of the species and habitats. Any damages to the building will be repaired as soon as practicable with 5 days being the maximum time.

							The Operator will continue to implement the following to minimise the risk of dust from site operations: • With the exception of AREAS 3 & 6 all other waste with the potential to emit dust is stored within the waste transfer building. • 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. • Drop heights will be minimized as far as reasonably practicable. • Hoses, mains water and a bowser will be utilised to dampen stockpiles (AREAS 3 & 6) and site surfaces. • Externally stockpiles of inert material (oversize concrete, hardcore, stone and soils) 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 extend beyond the permit boundary.

Appendix III

Drawings



Waste Storage Area Details - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH

Plan Ref	Description	Typical EWC code/s	Storage type	Containment	Max Width (m)	Max Length (m)	Height (m)	Max area (m2)	Conversion factor used	Volume (m3)	Tonnage (approx.)	Storage duration
AREA 1	Oversize non-recyclable waste	17 09 04, 20 03 01, 20 03 07	Hand sorted arising from tipping area	Free-standing pile inside sealed building	8	15	3	120	0.5	180	90	<5 days
AREA 2	Mixed C&D waste for further hand sorting	17 09 04, 20 03 01, 19 12 12	Hand sorted or using excavator	As above	8	15	3	120	0.5	180	216	<5 days
AREA 3	Sorted oversize concrete and stone (inert material)	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 09 04, 19 12 12	Hand sorted or using excavator	Free-standing pile (no containment)	9	9	3	81	1.2	292	350	<14 days
AREA 4	Wood waste	17 02 01, 19 12 07	Hand sorted or using excavator	Free-standing pile (no containment)	13.5	13.5	3	182	0.5	273	137	<14 days
AREA 5	Green waste	17 02 01, 19 12 07	Hand sorted or using excavator	Free-standing pile (no containment)	13.5	13.5	3	182	0.5	273	137	<14 days
AREA 6	Soils and stones (inert material)	17 05 04, 19 12 12, 20 02 02	Hand sorted or using excavator	Free-standing pile (no containment)	25	35	5	875	0.5	2188	2625	<24 weeks
CONT 1 - 2	Sorted recyclable skips i.e. uPVC, oversize scrap metal, hard plastic, cardboard, WEEE, residual, etc..	17 09 04, 19 12 01, 19 12 02, 19 12 03, 19 12 04, 19 12 07, 19 12 12, 20 03 01, 20 01 36	Hand sorted / unprocessed	Open topped, moveable 40 cubic yard roll on roll off skips	6.1	2.44	2.62	15	1	39	20 - 40	<14 days
CONT 3	Plasterboard	17 08 02	Hand sorted / unprocessed	Open topped, moveable 8 cubic yard skip	1.7	3.7	1.22	6	1	8	8	<14 days

NOTES

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	24.06.25	CP	Initial drawing
A	10.12.25	CP	Corrected typo (AREA 6)

Key:

- Permit boundary
- Waste storage areas
- Temporary waste storage / sorting areas
- Non-waste fuel, fluids storage
- Non-waste storage areas
- Out-of-hours mobile plant storage
- Waste transfer / recycling building (impermeable concrete floor)
- Impermeable surface with sealed drainage
- Other buildings (offices, etc.)
- Stone surface / free draining
- Quarantine area
- 0.2m high concrete kerb to seal impermeable surface
- Mains water point
- Spill kit
- Fire fighting equipment (extinguishers, etc.)
- Access routes for emergency services
- Surface water fall direction
- Surface water drainage
- Slot/channel drain
- Fire assembly point
- CCTV cameras (indicative)
- Designated smoking area
- Firewater boom deployment area
- Firewater containment equipment i.e. booms
- Fire hydrant
- Hose reels

TITLE: SITE LAYOUT & FIRE PLAN

CLIENT: St Helens Waste Recycling Ltd

PROJECT/SITE: The Recycling Centre, Abbotsfield Road, St Helens WA9 4HU

SCALE @ A1:	CLIENT NO:	JOB NO:
1:250	1855	004
DRAWING NO:	REV:	STATUS:
ABB-1855-03	A	Issued
DATE:	DRAWN:	CHECKED:
10.12.25	CP	--

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KEY:

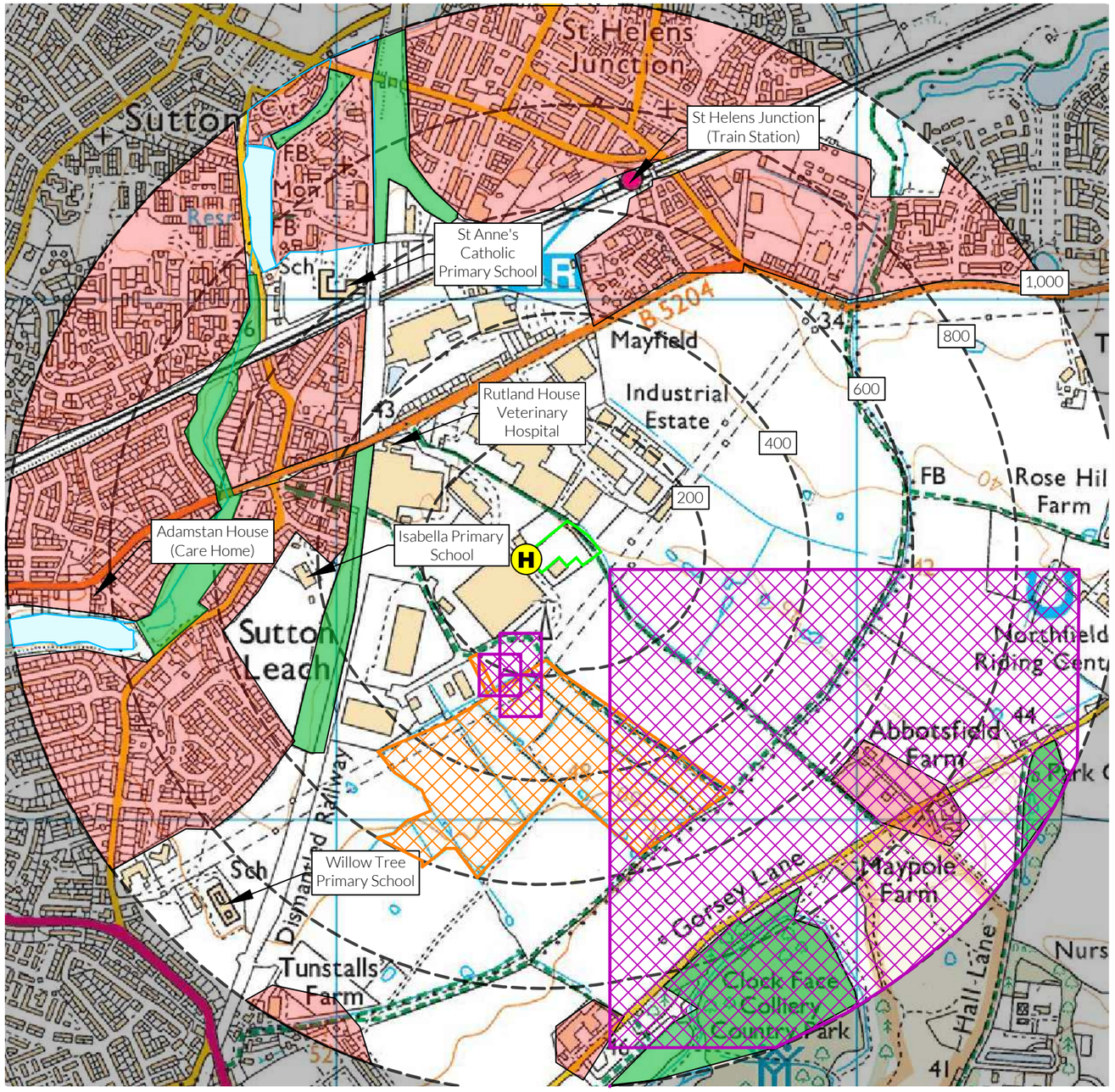
- Permit boundary
- Surface water body (river / stream / pond / pool / lake)
- Areas with mix of residential, retail and commercial properties
- Residential blocks
- Class A roads
- Class B roads
- Class C roads
- Nearest fire hydrant
- Railway line
- Woodland areas

Priority Habitats

- Deciduous woodland

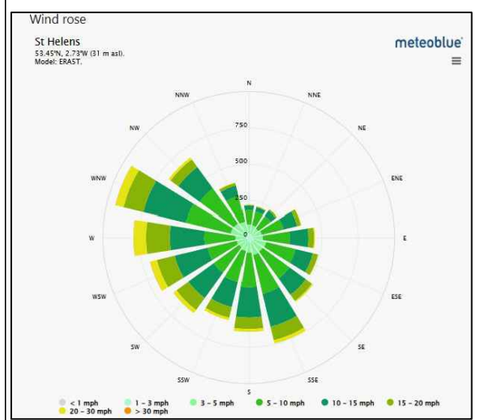
Protected Species

- Local Wildlife Site
- Protected Species (Coded)



Scale Bar (1:10,000)

0 100 200 300 400 500m



Compass Wind Rose for St Helens - *source: Meteoblue*

NOTES

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

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	25.06.25	CP	Initial drawing

TITLE:
RECEPTOR PLAN

CLIENT:
St Helens Waste Recycling Ltd

PROJECT/SITE:
The Recycling Centre, Abbotsfield Road, St Helens WA9 4HU

SCALE @ A3:	CLIENT NO:	JOB NO:
1:10,000	1855	004

DRAWING NO:	REV:	STATUS:
ABB-1855-04	-	Issued

DATE:	DRAWN:	CHECKED:
25.06.25	CP	--

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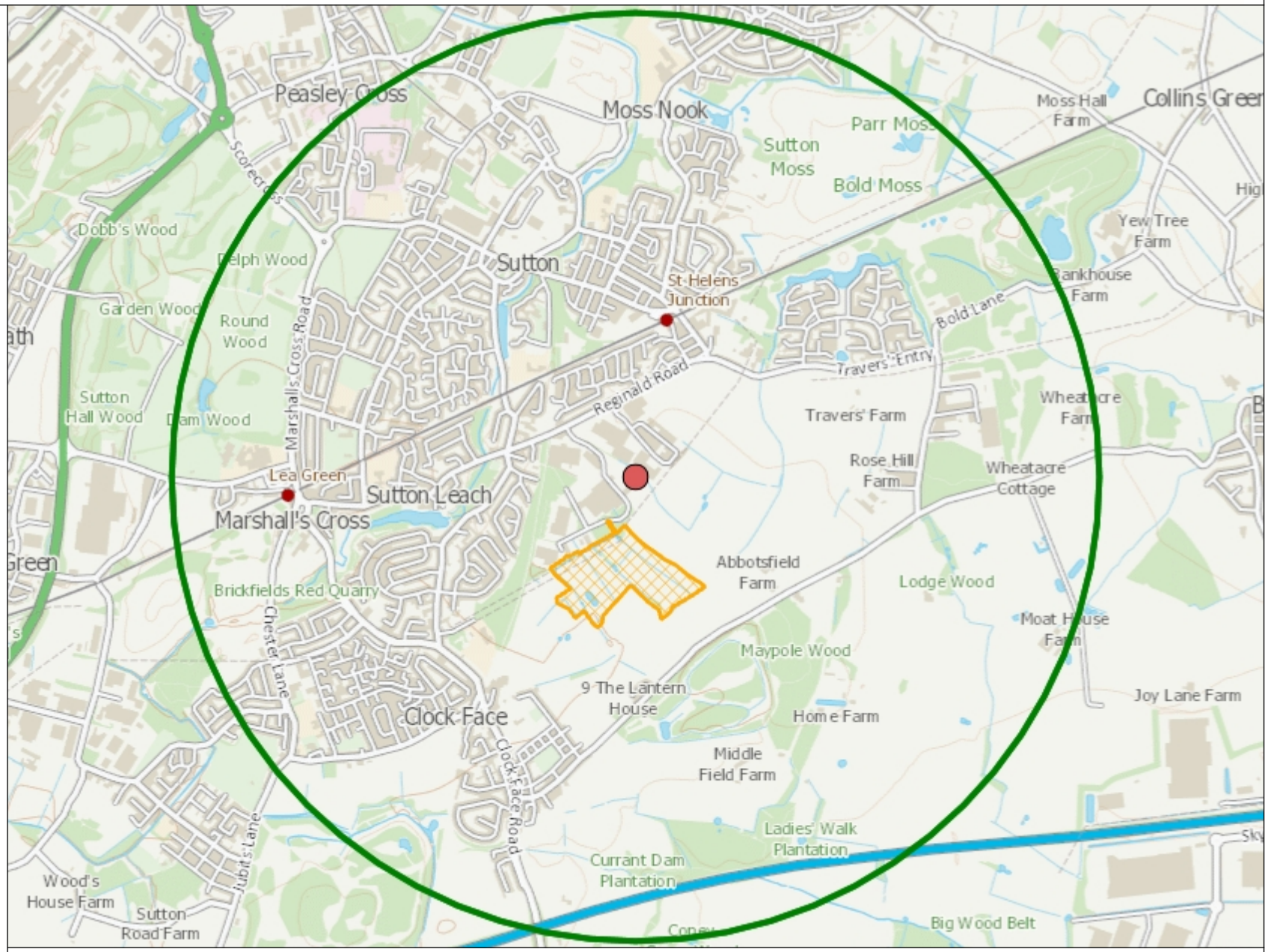
Local Wildlife Sites

Environment Agency

Legend

Local Wildlife Sites



1: 25,000

0 625

Metres

N W E S

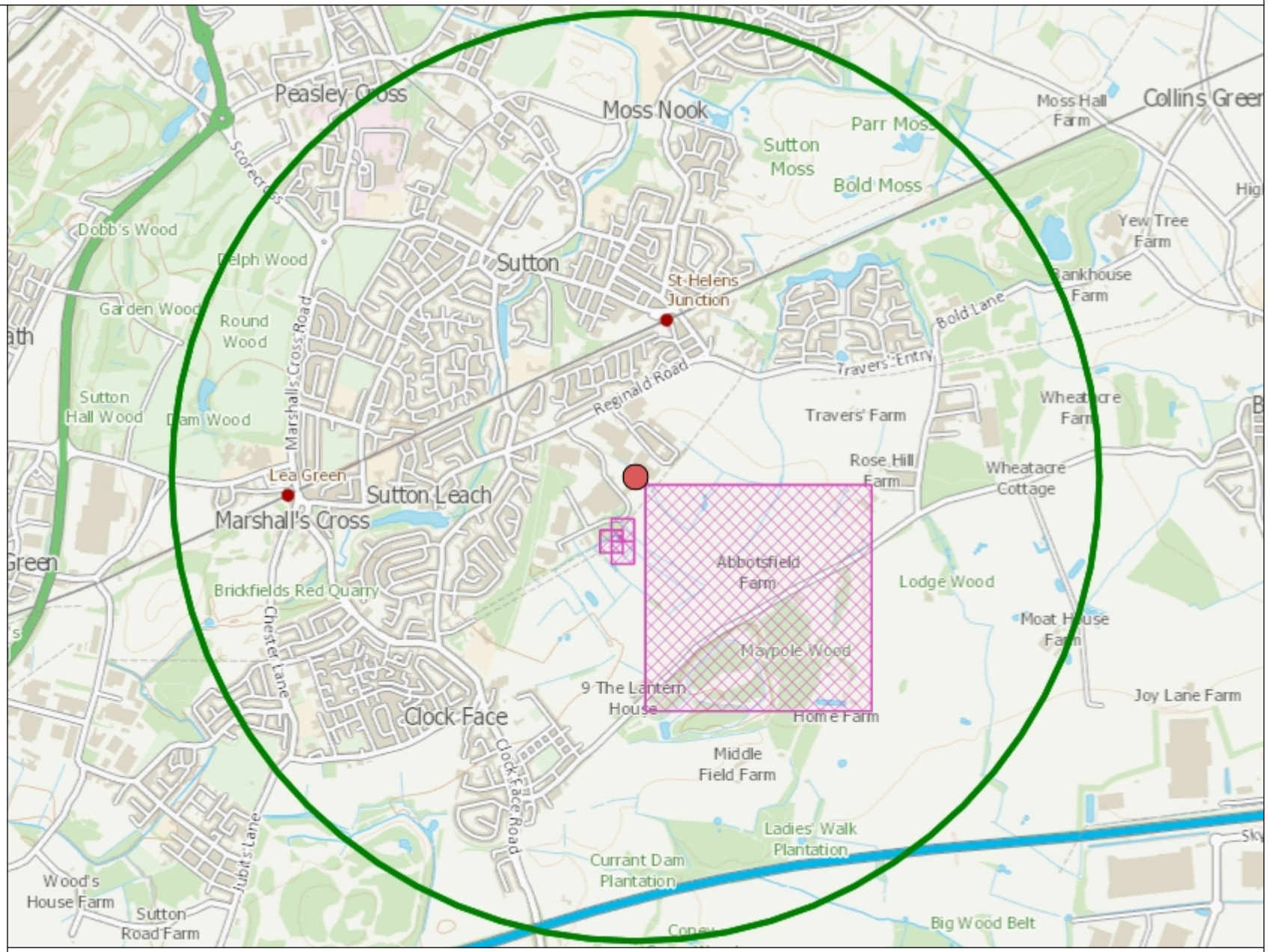
Protected Species

Environment Agency

Legend

Protected species screened for Env Permits - complete set

- Protected species, non fish
- Protected fish
- Protected fish migratory route
- Coded



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Metres

N W E S