#### FIRE PREVENTION PLAN

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

#### **Eco Skip Waste & Recycling Ltd**

Version:	1.0	Date:	25 July 2024		
Doc. Ref:	WES-2555-B	Author(s):	EG Checked:		СР
Client No:	2555	Job No:	005		



# Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants



Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ

Tel: 01606 558833 | Fax: 01606 861183 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk

REGISTERED IN THE UK | COMPANY NO. 4850754

#### **Document History:**

Version	Issue date	Author	Checked	Description
1.0	25/07/2024	EG	СР	Internal Draft

THIS DOCUMENT IS DUE FOR REVIEW IN <u>JULY 2026</u> OR AS A RESULT OF ANY INCIDENTS WHICH MAY LEAD TO THE REQUIREMENT FOR IMMEDIATE REVIEW, WHICHEVER IS SOONER.

#### **CONTENTS**

DOCU	JMENT HISTORY:	
CONT	ENTS	
LIST C	OF TABLES	IV
LIST C	OF APPENDICES:	\
1	INTRODUCTION	
1.2	Fire Prevention Objectives	
1.3	GENERAL SITE INFORMATION	
1.4	Hours of Operation	
1.5	STAFFING AND MANAGEMENT	
1.6	PLANT AND EQUIPMENT	
1.7	Sensitive Receptors	4
2	MANAGING COMMON CAUSES OF FIRE	7
2.1	Details	
2.2	Fuel & Oil Storage	
2.3	SMOKING POLICY	
2.4	MOBILE PLANT AND EQUIPMENT MAINTENANCE	
2.5 2.6	SITE SECURITY  ELECTRICAL FAULTS OR DAMAGED/EXPOSED ELECTRICAL CABLES	
	WASTE ACCEPTANCE PROCEDURES	
3		
3.1 3.2	Waste Acceptance	
3.3	REJECTED WASTE	
<b>3</b> .3	MANAGING WASTE STORAGE TO PREVENT SELF-COMBUSTION AND THE FIRE SPREADING	
	GENERAL	
4.1 4.2	GENERAL	
4.2	CONVERSION FACTORS	
4.4	STORAGE / MONITORING PROCEDURES (FREE STANDING PILES)	
4.5	STORAGE / MONITORING PROCEDURES (CONTAINERS)	
4.6	STOCK ROTATION AND SEASONAL VARIATIONS	18
4.7	External Heating	18
5	PREVENT FIRE SPREADING	20
5.1	Waste Storage General / Fire Breaks	20
5.2	FIRE WALLS AND BAYS	20
6	SITE INSPECTION PROGRAMME	22
6.1	Daily Checks	22
6.2	Staff Training	22
6.3	TOOLBOX TALKS	23
7	QUARANTINE AREA	24
7.1	QUARANTINE AREA DETAILS	24
8	FIRE DETECTION PROCEDURE	25
8.1	Fire Detection Procedure (manual)	25
8.2	FIRE TRAINING	
8.3	Out of hours fire detection (automated)	26
9	FIRE RESPONSE PROCEDURES	28
9.1	RESPONSE PROCEDURE	
9.2	STAFF/VISITOR RESPONSE PROCEDURE	
9.3	EVACUATION OF STAFF (AND DRILL PROCEDURE)	
9.4	Access for Emergency Services	

9.5	Notifying Receptors	30
10	SUPPRESSING FIRES & FIREFIGHTING TECHNIQUES	31
10.1	GENERAL	31
	SITE-WIDE SUPPRESSION	
10.3	EXTERNAL SUPPRESSION (FRS)	32
10.4	Use of Inert Materials	33
11	MANAGING FIRE WATER	34
11.1		34
11.2	CONTAINMENT OF FIRE WATER	34
11.3		35
	AFTER AN INCIDENT	
12.1	CONTINGENCY PLANNING	
12.2		36
12.3	SITE DECONTAMINATION	37
12.4	Post Fire Site Recovery	38

# **List of Tables**

Table 1.1 - Staffing Levels	3
Table 1.2 - Plant & Equipment	4
Table 1.3 Sensitive Receptors	5
Table 4.1 Combustible Waste Storage Table	15
Table 4.2 Conversion factors	16
Table 4.3 - Waste storage/monitoring table (free standing piles)	17
Table 4.4 - Waste storage/monitoring table (containers)	18
Table 5.1 – Fire wall details and specifications	21
Table 10.1 - Water supply calculations	31
Table 11.1 - Firewater Containment Calculations	

## **List of Appendices:**

#### Appendix I - Drawings

Drawing No. WES/2555/02 – Permit Boundary Plan

Drawing No. WES/2555/03 – Site Layout & Fire Plan

Drawing No. WES/2555/04 – Receptors Plan

#### Appendix II - Record Keeping Forms (operator may use their own forms)

Site Diary/Inspection Form

Preventative Maintenance Checklist

**Training Needs Assessment** 

Site Information & Key Contacts List

## 1 <u>Introduction</u>

- 1.1.1 Oaktree Environmental Ltd have been instructed by Eco Skip Waste & Recycling Ltd (the Operator) to prepare this Fire Prevention Plan (FPP).
- 1.1.2 The FPP assesses the fire risk associated with the storage and treatment of combustible waste at Eco Skips Transfer Facility, Westfield Hole Farm, Westfield Lane, Westfield, East Sussex, TN35 4SA.
- 1.1.3 A copy of this FPP must be kept in the site office at all times and be readily available to all members of staff.
- 1.1.4 The permit boundary is illustrated in green on Drawing No. WES/2555/02 Permit Boundary Plan. All references to 'the site' in this FPP refer to the associated operations, infrastructure, plant, and equipment within this boundary.
- 1.1.5 This FPP is considered a 'live' document which will be reviewed on a biannual basis (once every two years) and or if any of the following occur:
  - a) A fire incident.
  - b) Additional combustible waste types are accepted on to site.
  - c) An increase in the annual throughput of combustible waste accepted.
  - d) An increase in the amount of combustible waste stored.
  - e) The construction of new infrastructure e.g. buildings.
  - f) The installation of new plant / equipment.

#### 1.2 Fire Prevention Objectives

- 1.2.1 This FPP has been prepared in accordance with the Environment Agency guidance on Fire Prevention Plans: Environmental Permits (updated 11<sup>th</sup> January 2021). The FPP guidance requires that the FPP accounts for the fire risk from potentially combustible waste types stored on site.
- 1.2.2 This FPP has been designed to meet the following objectives:

- a) To minimise the likelihood of a fire happening.
- b) To aim for a fire to be extinguished within 4 hours.
- c) To minimise the spread of a fire within the site and to surrounding neighbouring sites; and,
- d) To minimise impact of fire on people, environment, and businesses.
- 1.2.3 All staff working on site must understand the content of this FPP to know what to do:
  - a) To prevent a fire occurring.
  - b) During a fire if one breaks out.

#### 1.3 **General Site Information**

- 1.3.1 The Site is operated as a waste transfer station with treatment, accepting household, commercial and industrial (HCI) waste and a physical treatment facility (PTF) for construction and demolition waste to produce soil, soil substitute and aggregate product.
- 1.3.2 This FPP has been prepared in conjunction with a permit variation application to add HCI waste acceptance and activities. It is considered there is no risk of fire attributed to the PTF activities as wastes accepted in relation to the PTF activities are not combustible. Therefore, this FPP only assesses the risk of fire from the waste codes and activities associated with the HCI transfer station.
- 1.3.3 In addition to this FPP the site is managed and operated in accordance with a fully comprehensive Environmental Management System (EMS).
- 1.3.4 The layout of the site and its infrastructure is shown on Drawing No. WES/2555/03 Site Layout & Fire Plan, see Appendix I.
- 1.3.5 All site staff and contractors must be aware and understand the contents of this FPP and what they must do during a fire. A copy of this FPP will be kept on site at all times and be made available to all members of staff.

- 1.3.6 In the event of a fire, the Fire & Rescue Service (FRS) and Environment Agency (EA) would be able to view this FPP to ensure the actions set out are implemented to meet the objectives shown in section 1.2.2.
- 1.3.7 Contact details for neighbouring business and receptors within the immediate vicinity of the site are kept on site at all times. In the event of a fire these receptors would be contacted to alert them of the fire.

#### **Waste Operations**

- 1.3.8 Household, commercial and industrial (HCI) skip waste is accepted at the site for storage, treatment, and transfer. Waste treatment activities undertaken include:
  - Sorting (with loading shovel/360° excavator or by hand).
  - Screening (by using appropriate mechanical screening plant and equipment).

#### 1.4 Hours of Operation

1.4.1 The site is operated according to the hours specified below:

Monday to Friday 08:00 – 18:00

Saturday 08:00 – 13:00

Sundays & Bank/Public holidays Closed

### 1.5 **Staffing and Management**

1.5.1 The table below detail the minimum staff structure required when the site is open for the reception and processing of waste and, therefore, shows the minimum number of staff available to tackle a fire on site during all operational hours. Site management referenced throughout this application includes the directors, TCM/s, and site managers. Site management will train operational staff in the contents of the FPP to ensure they can be considered suitable to assist in tackling a fire at the site.

#### Table 1.1 - Staffing Levels

Position	Employees	Responsibilities
Site Manager	1	Overseeing and co-ordinating all activities which take place at the site.
Technically Competent Manager	1	Ensuring compliance with the permit.
Administrative Staff	2	Office/administrative duties
Site operatives	4	Waste handling/processing, reception, and plant operation

#### 1.6 Plant and Equipment

1.6.1 The table below details the plant / equipment on site. Only trained operators will be permitted to drive / operate the plant / equipment listed below.

Table 1.2 - Plant & Equipment

Item	Number	Function
360° excavator / crane grab	2	Loading/unloading/movement/sorting
Loading shovels	2	Loading/unloading/movement/sorting
Crusher	1	Crushing of inert material
Screener	1	Screening / separation of soils, soil substitutes and stones
360° excavator / crane grab	2	Loading/unloading/movement/sorting

#### 1.7 **Sensitive Receptors**

- 1.7.1 It is considered that fire presents three main hazards to nearby sensitive receptors:
  - a) Heat from the fire itself.
  - b) Air pollution (predominantly from smoke emissions).
  - c) Pollution to groundwater / surface water features.
- 1.7.2 Heat energy from a fire will reach sensitive receptors via direct fire spreading or by the deposit of burning embers. Heat energy is largely dependent upon the location and intensity of the fire.
- 1.7.3 Smoke produced from fires can contain harmful gases that are produced from the combustion process. The distance smoke will travel is dependent on wind speed at the time of the fire, however it is considered unlikely that smoke from the burning waste stored on site will significantly affect sensitive receptors outside of a 1km radius.

- 1.7.4 Significant amounts of water and / or other chemicals may be used when controlling a fire. Firewater produced from tackling a fire has the potential to contain contaminants from the chemicals used, burned materials and other pollutants present on the site. The release of firewater from the site because of a fire has the potential to cause pollution to groundwater / nearby surface water features.
- 1.7.5 Sensitive receptors within 1km of the site are listed in Table 1.3. Sensitive receptors are also illustrated on Drawing No. WES/2555/04 Receptor Plan, see Appendix I.
- 1.7.6 The primary sensitive receptor for any fire event would be the site itself and any site users.

**Table 1.3 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

- 1.7.7 There are none of the following protected areas within 1km of the site:
  - a) Special Areas of Conservation (SAC)
  - b) Ramsar sites

- c) Local Nature Reserves
- 1.7.8 The site is not located within a source protection zone or a groundwater protection zone.

# 2 Managing Common Causes of Fire

# 2.1 **Details**

2.1.1 The following table outlines common causes of fire and outlines specific examples of these sources, the associated risks, and any mitigation measures necessary to manage them:

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation		
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	Medium	<ul> <li>Vehicle checks on arrival to the site.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Staff training / toolbox talks.</li> </ul>			
Plant or equipment	Spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	Medium	<ul> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Any hazardous liquid / fuel / oil is stored in a bunded container.</li> <li>Checks of site surfacing and spill kits.</li> <li>Staff training / toolbox talks.</li> <li>Checks will be completed at the end of each working day for dust/fluff that may have settled on plant / equipment.</li> </ul>	Negligible		
Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	Medium	<ul> <li>Fixed wiring testing is carried out 5 years and portable appliances are PAT tested 12 months in accordance with Legislation.</li> <li>Daily checks for dust and fluff on wiring / electrical appliances.</li> </ul>	Low		
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	Low	No smoking or e-cigarettes allowed on site.	Negligible		
Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	Low	<ul> <li>Fire extinguishers are fitted on all plant.</li> <li>Staff training / toolbox talks.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> </ul>	Low		
Hot works	e.g. welding, soldering, cutting, etc. which involve the use of high temperature equipment which may be a source of both primary and residual heat to stored wastes	Medium	No hot works take place at the site.	Low		
Industrial heating	Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion	Low	There are no industrial heaters on site.	Low		
Hot exhausts	Potential source of both primary and residual heat to stored wastes.	High	<ul> <li>Fire extinguishers are fitted on all plant.</li> <li>Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Out-of-hours storage of plant &amp; equipment away from combustible or flammable wastes.</li> <li>Minimum daily checks for dust and fluff on plant/equipment before and after use of equipment.</li> </ul>	Low		

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
Build-up of loose combustible waste, dust, and fluff	Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts	High	<ul> <li>Fire extinguishers are fitted on all plant.</li> <li>Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Minimum daily checks for dust and fluff on plant/equipment before and after use of equipment at the start/end of each working day.</li> </ul>	Low
Hot loads	Imported wastes which may contain materials which are above ambient temperature	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> <li>No designated storage area for containers as they will move to areas on site depending on operations.</li> </ul>	Low
Overhead power lines	Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects	Low	There are no overhead power lines which traverse the site.	Negligible
Ignition sources	Activities or appliances which use a source of both primary and residual heat to treat waste or manufacturer material or plant/equipment	Medium	<ul> <li>No hot works take place.</li> <li>There are no space heaters, furnaces, incinerators, and sources of ignition will be kept 6 metres away from combustible and flammable waste.</li> </ul>	Low
Batteries within waste deposits	Ignition of stored wastes via batteries within imported wastes	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures including wastes received into satellite sites.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load containing batteries.</li> </ul>	Medium
Other combustible non-waste materials on or near the site not mentioned above i.e. gas cylinders / LPG tanks	Any combustible non-waste materials on or near the site may ignite in the event of a fire and worsen the effects	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
Reaction between wastes	Combustible waste piles may ignite in the event of a fire and worsen the effects if wastes react	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
Leaks and spillages of oils and fuels	Fuels and combustible liquids leaking or trailing from site vehicles and ELVs can combust or cause accidents leading to combustion	High	<ul> <li>Spill kits available throughout the site.</li> <li>Suitable sealed drainage system.</li> <li>No ELVs accepted into the site.</li> <li>Minimum daily checks for spillages around the site.</li> <li>Staff training / toolbox talks.</li> </ul>	Low
"Tramp" metal	Metal could be hot from mechanical processing and interact with lighter waste causing a fire	High	The site does not accept or treat any waste which would give rise to tramp metal. All scrap metal on site arises from the hand sorting of mixed skips or accepted in pre-sorted loads.	Low

#### 2.2 Fuel & Oil Storage

2.2.1 No fuel or oil are stored on the site.

### 2.3 **Smoking Policy**

2.3.1 Smoking is prohibited on the site. Any persons wanting to smoke will have to do so 6m from the permit boundary.

#### 2.4 Mobile Plant and Equipment Maintenance

- 2.4.1 Plant and equipment will be maintained and serviced in line with manufacturers recommendations. All plant and equipment will be subject to preventative maintenance checks by site operatives to ensure safe operation and prevent situations which may give rise to faults or malfunction, see Appendix II Preventative Maintenance Checklist.
- 2.4.2 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:
  - a) Machinery is mechanically sound for use and no presence of black fumes or trailing liquids visible prior to use or following shutoff of plant/equipment.
  - b) Mobile plant is stored in the out-of-hours plant storage area as shown on Drawing No WES/2555/03 following cessation of activities and external separation distances of 6m are observed between plant and any combustible or flammable material.
  - c) Plant which is not in use for any extended period is stored at least 6 metres from combustible waste.
  - d) All plant and equipment vehicles are fitted with fire extinguishers in the cab. Rubber strips are not considered appropriate as they are usually removed via uneven and bumpy ground.
  - e) Dust from processing/treatment operations on site can settle throughout the working day but the operator has a continuous training regime to prevent this happening. The plant will be cleaned at least once every 12 hours.

#### 2.5 **Site Security**

- 2.5.1 Site security is important to reduce the likelihood of unauthorised access to the site. The only ingress / egress to the site is situated along the northern boundary.
- 2.5.2 The perimeter of the site is largely surrounded by a combination of dense trees and hedging and security fencing to protect from unauthorised access. The western boundary of the site is secured with 2m high woven fencing and the north, east and southern boundaries are secured with 2.4m high palisade fencing. The entrance to the site is secured with palisade fencing and lockable gates. Whenever the site is unmanned gates will be locked and secured to prevent unauthorised access.
- 2.5.3 The site has 24-hour CCTV which is remotely accessible and benefits from an intruder alarm system; all senior staff members at the site have access to the CCTV via mobile phone which will alert them of any movements at the site. Camera locations are shown on Drawing No. WES/2555/03 Site Layout and Fire Plan. All cameras are pan, tilt and zoom with 50m distance coverage meaning all areas of the site are monitored during and out-of-hours.
- 2.5.4 The site security measures will be inspected on a weekly basis and any defects which impair the effectiveness of the security will be repaired within 24 hours. If this is not possible, temporary measures will be put in place to ensure no unauthorised access to the site can be gained until the proper repairs can be carried out as soon as practicably possible.
- 2.5.5 If unauthorised access becomes apparent as a problem the security measures at the site will be reviewed and improvements implemented.

## 2.6 <u>Electrical Faults or Damaged/Exposed Electrical Cables</u>

- 2.6.1 All fixed wiring electrical cabling on site will be inspected daily by staff and serviced in accordance with Legislation by fully qualified and certified electrical contractors to undertake both Planned Preventative Maintenance and Reactive Maintenance (under contract) of the following:
  - a) Fire detection & alarm system;

- b) Emergency lighting;
- c) Machinery checks / services (as per manufacturers' instructions).
- 2.6.2 In terms of portable appliance testing (PAT), this will be serviced annually by qualified and certified electrical contractors.
- 2.6.3 Weekly inspections of cabling, etc. will be undertaken and the Inspection Form can be used as a reference. Any potential ignition sources from suspected electrical faults will be isolated and the appointed electrical contractors will be contacted immediately to rectify the situation. Where possible, staff will immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.
- 2.6.4 All electrical points will be turned off at least 10 minutes before the site closes (other than those used for CCTV) to ensure the risk of short circuiting is minimised.

# **3** Waste Acceptance Procedures

#### 3.1 Waste Acceptance

- 3.1.1 Strict waste acceptance procedures are implemented at the site as shown below.
- 3.1.2 The following details will be recorded for every load accepted at the site:
  - a) Vehicle Registration and drivers name and signature.
  - b) Waste haulier name and valid waste carriers' registration number.
  - c) Name address (of source site) and signature of transferor.
  - d) Name, address (of destination site) and signature of the person receiving the waste (transferee).
  - e) Permit number or exemption reference of person receiving the waste (if applicable).
  - f) Description of waste including waste type, waste source, waste containment and waste quantity.
  - g) List of Waste (LoW) code.
  - h) SIC code of the waste holder.
  - i) Date and time of waste transfer and waste transfer note number.
  - j) Confirmation that the waste hierarchy has been considered.
- 3.1.3 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted. If the non-conforming waste is discovered following deposit, the waste will be loaded back onto the vehicle and removed off site or quarantined immediately. Where the waste cannot be identified, the EA will be contacted to agree a procedure to remove the waste from site.

#### 3.2 **Combustible Waste Reception**

- 3.2.1 The main combustible waste types tipped at the site are shown below:
  - EWC code 17 02 01/20 01 38 Wood (AREA 2)
  - EWC code 17 02 03 / 20 01 39 Plastic (AREA 3)
  - EWC code 20 03 01 Lights container mixture of card, plastic, wood etc.. (AREA 5)
  - EWC code 17 08 02 Plasterboard (AREA 4B)
- 3.2.2 All wastes, unless source segregated into the above waste streams waste will be tipped in the mixed waste reception and sorting area, where the contents will be inspected, hand sorted and taken to the relevant storage areas shown on Drawing No. WES/2555/03 Site Layout & Fire Plan.
- 3.2.3 Any waste brought into the site already separated will be stored in the relevant storage bays /skips located at the site as shown on Drawing No. WES/2555/03 Site Layout & Fire Plan.

#### 3.3 **Rejected Waste**

3.3.1 Any waste which is rejected will be stored in a quarantine skip for a maximum of five working days prior to removal from the site. The location of this skip may vary but will be somewhere within the quarantine area, 6m from combustible or flammable material.

# 4 Managing Waste Storage to Prevent Self-Combustion and the Fire Spreading

#### 4.1 **General**

- 4.1.1 All waste stored on site will comply with Section 9.1 of the EA's FPP guidance, reference should be made to Drawing No. WES/2555/03 Site Layout & Fire Plan for details of waste stored and storage location on site.
- 4.1.2 The operator will minimise pile sizes and store combustible waste materials in their largest form where possible.

#### 4.2 **Waste Storage Table**

- 4.2.1 Table 4.1 outlines details of the waste quantity, location, and duration of waste stored on site.
- 4.2.2 The storage table has been based on the maximum volumes of waste the site could store at any one time.

**Table 4.1 Combustible Waste Storage Table** 

Waste Stora	Waste Storage Area Details											
Plan Ref	Description	Storage type	Containment	Height / width of firewall (m)	Max Width (m)	Max Length (m)	Height (m)	Max area (m2)	Conversion factor used	Volume (m3)	Tonnage (approx.)	Proposed storage duration
AREA 1	Scrap metal bay	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	8.2	4.4	2	36.08	0.75	54	27	<1 week
AREA 2	Wood bay (>150mm)	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	8.2	4.4	2	36.08	0.75	54	27	<2 weeks
AREA 3	Mixed plastic (>150mm)	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	8.2	4.4	2	36.08	0.75	54	27	<2 weeks
AREA 4A	Mixed waste (residual) bay & POPs	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	8.2	4.4	2	36.08	0.75	54	18	<48 hours
AREA 4B	Plasterboard skip	Free-standing / unprocessed	40-cubic yard container	N/A	6.1	2.44	2.62	14.884	0.5	19	10	<1 week (or sooner if skip full)
AREA 5	Lights container - mixture of card, plastic, wood etc (<150mm)	Free-standing / unprocessed	40-cubic yard container	N/A	6.1	2.44	2.62	14.884	0.5	19	6	<1 week (or sooner if skip full)
AREA 6	Tyre bay	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	3.6	3.6	2	12.96	0.75	19	10	<1 week
AREA 7	Green waste	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	3.6	3.6	2	12.96	0.75	19	10	<1 week
AREA 8	Hardcore/rubble for crushing	Free-standing	N/A	N/A	N/A	N/A	5	350	0.5	875	1050	<12 weeks
AREA 9	Road planings	Free-standing / unprocessed	Concrete interlocking block firewall	3.0 / 0.6	9	5.4	2	48.6	0.75	73	87	<12 weeks
AREA 10	Screened soils	Free-standing	N/A	N/A	N/A	N/A	5	150	0.333	250	300	<12 weeks
AREA 11	Inert fines (<75mm)	Free-standing / screened	N/A	N/A	N/A	N/A	5	150	0.333	250	300	<12 weeks
AREA 12	Topsoil	Free-standing / screened	N/A	N/A	N/A	N/A	5	175	0.333	291	350	<12 weeks

#### 4.3 **Conversion Factors**

4.3.1 Conversion factors for waste piles are worked out using the following methods set out in Table 4.2 below.

#### **Table 4.2 Conversion factors**

#### **Conversion Factors**

Conversion factors for waste piles are worked out using the following methods set out by the Environment Agency

The maximum length, width of a pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor

Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/ bale stacks

Conversion of 0.75 for waste stored within a bay comprising volume of rectangle + pyramid

Conversion of 0.3333 for waste stored in a free-standing stockpile

All containers can be moved and are accessible from one side so a fire can extinguished

#### 4.4 Storage / Monitoring Procedures (free standing piles)

- 4.4.1 Table 4.3 below details storage and monitoring procedures for all **combustible wastes** which are stored at the site in freestanding piles. **AREAS 8 12** have not been included as they are not combustible.
- 4.4.2 The waste reception area has also not been considered, as this is the tipping and sorting area, waste will only be stored here whilst undergoing sorting and separation and will be cleared by the end of each working day. Tipping areas will remain clear out-of-hours, therefore it is considered unnecessary to provide specific storage information for this area.

Table 4.3 - Waste storage/monitoring table (free standing piles)

Storage Ref.	Storage/monitoring procedures to reduce the risk of fire
AREA 1 SCRAP METAL	<ul> <li>This storage area comprises an interlocking block concrete storage bay for storage of scrap metal which comes to the site source segregated or has been segregated from the waste reception area.</li> <li>Waste will be stored with a 1m freeboard. The bay is open at the front meaning access is available at all times in the event of a fire.</li> <li>Stock rotation – waste will be stored for a maximum of 1 week.</li> <li>As only sorted waste by type is stored in this bay, the waste is unlikely to contain any material which is likely to cause combustion.</li> </ul>
AREA 2 WOOD	<ul> <li>This storage area comprises an interlocking concrete storage bay for storage of handpicked wood from the tipping area.</li> <li>Waste will be stored with a 1m freeboard.</li> <li>The waste pile is monitored throughout the day by site operatives who will be trained in recognition of fire i.e. early signs of smoke.</li> <li>The site has access to mains water and hose points which can be utilised to dampen down stockpiles throughout operational hours which will prevent the waste from heating during periods of warmer weather.</li> <li>Stock rotation – waste will be stored for a maximum of 2 weeks.</li> </ul>
AREA 3 MIXED PLASTIC	<ul> <li>This storage area comprises an interlocking concrete storage bay for storage of handpicked wood from the tipping area.</li> <li>Waste will be stored with a 1m freeboard.</li> <li>The waste pile is monitored throughout the day by site operatives who will be trained in recognition of fire i.e. early signs of smoke.</li> <li>The site has access to mains water and hose points which can be utilised to dampen down stockpiles throughout operational hours which will prevent the waste from heating during periods of warmer weather.</li> <li>Stock rotation – waste will be stored for a maximum of 2 weeks.</li> </ul>
AREA 4A  MXED WASTE  RESIDUAL BAY & POPS	<ul> <li>This storage area comprises an interlocking concrete storage bay for storage of handpicked wood from the tipping area.</li> <li>Waste will be stored with a 1m freeboard.</li> <li>Stock rotation – waste will be stored for a maximum of 48 hours.</li> <li>Bays will be fully cleared every 12 weeks and deep cleaned to prevent any build-up of material.</li> </ul>
AREA 6 TYRE BAY	<ul> <li>This storage area comprises an interlocking concrete storage bay for storage of handpicked wood from the tipping area.</li> <li>Waste will be stored with a 1m freeboard.</li> <li>Stock rotation – waste will be stored for a maximum of 1 week.</li> <li>The waste pile is monitored throughout the day by site operatives who will be trained in recognition of fire i.e. early signs of smoke.</li> <li>The site has access to mains water and hose points which can be utilised to dampen down stockpiles throughout operational hours which will prevent the waste from heating during periods of warmer weather.</li> </ul>
AREA 7 GREEN WASTE	<ul> <li>This storage area comprises an interlocking concrete storage bay for storage of handpicked wood from the tipping area.</li> <li>Waste will be stored with a 1m freeboard.</li> <li>The waste pile is monitored throughout the day by site operatives who will be trained in recognition of fire i.e. early signs of smoke.</li> <li>The site has access to mains water and hose points which can be utilised to dampen down stockpiles throughout operational hours which will prevent the waste from heating during periods of warmer weather.</li> <li>Stock rotation – waste will be stored for a maximum of 1 week.</li> </ul>

#### 4.5 **Storage / Monitoring Procedures (containers)**

4.5.1 Table 4.4 below details the waste types which are stored in skips/containers at the site.

Table 4.4 - Waste storage/monitoring table (containers)

Storage Ref.	Storage/monitoring procedures to reduce the risk of fire
AREA 4B PLASTERBOARD	<ul> <li>Plasterboard should arrive on site segregated to mixed HCI waste.</li> <li>No treatment of plasterboard will be undertaken on site.</li> <li>Plasterboard will not be stored in this for longer than 1 week.</li> <li>Containers are visually monitored throughout the day by site operatives.</li> <li>Plasterboard will be stored in its largest form as no mechanical treatment has taken place causing a significant rise in temperature.</li> <li>The site will have access to mains water and hose points which can be utilised to dampen down the waste throughout operational hours which will prevent the waste from heating during periods of warm weather.</li> <li>Containers are accessible from at least one side.</li> </ul>
AREA 5  LIGHTS CONTAINER –  MIXTURE OF CARD,  PLASTIC, WOOD ETC	<ul> <li>This container is placed under the three-way screen used to separate waste. Any light waste such as card, plastic, wood etc will be captured in the skip and sorted by hand into the appropriate storage bays.</li> <li>Waste will be stored for a maximum of 1 week in the container.</li> <li>Containers are open top so provide access from at least one side in the event of a fire.</li> </ul>

#### 4.6 Stock Rotation and Seasonal Variations

4.6.1 In the event of destination site closures or seasonal demands for wastes leading to a longer storage duration, the operator can divert incoming waste and send stored waste to an alternative site.

## 4.7 **External Heating**

- 4.7.1 To reduce the risk of self-combustion from external heating, the site will deploy the following measures:
  - In the event of a drought period i.e. three hot days where weather conditions would exceed 25°C / 75°F, which the operator would know in advance via the Met Office, the monitoring frequency of these piles will be increased to at least three times every 12 hours per day and the piles would undergo additional dousing using the mobile bowser, hoses or dust cannon.

- The stored wastes are not near vegetated or grassed areas and no hot workings take place on site.
- The piles can be easily supressed using a mobile water cannon or hoses in the event of early fire detection i.e. smoke, steam, flames.
- Normally the waste stored at the site is turned around in 5 14 days (with the exception of wastes associated with the PTF) as absolute worst-case scenario. Due to this, no additional monitoring i.e. temperature checks, thermal probes are considered necessary. The site would only look to deploy the use of thermal imaging cameras / probing would be in extenuating circumstances i.e. closure of destination sites, transport failures, staff illness where the waste could be stored excessively i.e. up to 12 weeks. This would occur only on very rare occasions and the EA would be contacted in this scenario.

# **5** Prevent Fire Spreading

#### 5.1 Waste Storage General / Fire Breaks

- 5.1.1 Combustible waste will be stored as per Drawing No. WES/2555/03 and within the limit of EA's FPP guidance. All stockpiles of stored wastes are detailed in the Storage Area Details table on Drawing No. WES/2555/03 and in Table 4.1 of this document, in respect of their description, maximum length and width, area, volume and storage duration.
- 5.1.2 The operator will store waste materials in their largest form and minimise pile sizes wherever possible.
- 5.1.3 The aim of the site is to process the incoming material and arrange for its export off site as soon as practicably possible following sorting to minimise over-stocking which in-turn minimises the risk of overheating and spontaneous combustion.
- 5.1.4 The site will operate in accordance with a 'first in, first out' principle.
- 5.1.5 **Storage on flat ground**: Site surfaces where wastes are stored are flat and, therefore, reduce the risk of falling materials which would accelerate the spread of fire.

#### 5.2 **Fire Walls and Bays**

- 5.2.1 The concrete firewalls used to separate combustible waste on site are constructed to the BS8110 Pt2 'Structural use of concrete Part 2 Code of practice for special circumstances' and BSEN1992-1-2 'Design of concrete structures. General rules. Structural fire design'. In accordance with BSEN1992, the fire resistance of concrete structures over 100mm will have a fire resistance of 1200°C for 4 hours. This means the fire walls:
  - Reduce the need for 6m separation distances between different waste piles; and
  - Reduce the need to provide a 6m separation from the waste and permit or site boundary.
- 5.2.2 The table overleaf details the type of wall and demonstrates their properties to:

- a) resist fire (both radiative heat and flaming); and,
- b) have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.

Table 5.1 - Fire wall details and specifications

Firewall type	Width	Site location / use	Specification
Concrete block wall	0.6m	Bays for waste storage	Class A under EN 13501-1:2007+1:20009: Fire classification of construction products and building elements. Classification using test data from reaction to fire tests: concrete structures over 100mm will have a fire resistance of 1200°C for 4 hours.

- 5.2.3 The above walls are checked throughout the day by staff via daily inspections if any gaps or damage to the walls are present which could compromise their integrity will be repaired and sealed as soon as practically possible.
- 5.2.4 All waste stored against fire walls will have a suitable freeboard of at least 1m but it is not possible to scientifically calculate the flame height as each waste pile is different and could contain a number of different sizes/grades of waste leading to a lesser or greater flame height.

# **Site Inspection Programme**

#### 6.1 **Daily Checks**

- 6.1.1 Site management are responsible for staff and contractors carrying out fire watches including daily site walks for checking drainage systems, security measures, out-of-hours plant (hot exhausts) and waste storage areas. Site management can reference the fire checklist shown in Appendix II but may use internal check sheets.
- 6.1.2 Weekly inspections of firefighting equipment take places to ensure they are fit for purpose and there are sufficient quantities available.
- 6.1.3 The fire watches/site inspections will take place regularly throughout the day when plant is idle but recorded at least once at the end of the working day before the site closes to ensure the risk of a potential fire has been reduced.
- 6.1.4 Carrying out the above checks daily will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively in accordance with the storage limitations provided in the table on Drawing No. WES/2555/03.

## 6.2 **Staff Training**

- 6.2.1 Operational staff will be subject to site inductions which includes basic fire emergency procedures provided by site management or the Technically Competent Manager. If necessary, a third-party fire consultant will be contacted to carry out additional training.
- 6.2.2 A full test (drill) of the procedures in this document will be carried out every 12 months to test that the plan works. The first test will take place within one month of the agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the EMS. The fire checklist may also be used during the drill.

#### 6.3 **Toolbox Talks**

6.3.1 All operational and out-of-hours staff including the out-of-hours security guard will receive fire awareness training / toolbox talks by trained site management to detect early signs of fire and to minimise the chance of a fire breaking out, which will also include the procedures shown in this FPP.

# 7 **Quarantine Area**

#### 7.1 Quarantine Area Details

- 7.1.1 The largest pile on site comprises one of the storage bays in **AREAS 1-4**, which if full would equate to a volume of 54m<sup>3</sup> of waste material meaning the quarantine area on site would need to hold 27m<sup>3</sup> of waste material.
- 7.1.2 The quarantine area on site measures 40m² and as there are 6m separation distances to the north, south, east and west, storing the waste at 4m high, which is considered suitable, equates to a volume of 30m³ based on l x w x h x 0.333 which means the quarantine area is >50% of the largest stockpile on site.
- 7.1.3 It is proposed that any fire on site is likely to be fought in situ and as there is access to all piles stored at the site, the quarantine area would likely be used to store waste materials at risk of catching fire to reduce the fire spreading. The site would only store smouldering waste in the quarantine area once the fire has been extinguished, it is expected at this time, the waste previously moved into the pile would be placed into the existing stockpiles.
- 7.1.4 The quarantine area is located on an impermeable surface with sealed drainage and will be marked on the ground and checked daily to ensure it is visible.

# **8** Fire Detection Procedure

#### 8.1 Fire Detection Procedure (manual)

- 8.1.1 If a fire is detected or suspected by a member of staff during operational hours, the relevant person will conduct the following procedure report to site management:
  - a) Raise the fire alarm (if not already done by another staff member) or sound fire alarms/communicate via radio or ring out-of-hours key holders. **Timescale for this will be upon detection i.e. seconds.**
  - b) Assess the intensity and scale of the fire and make a judgment as to whether the fire can be managed without the requirement for assistance from the emergency services i.e. using the hose or fire extinguishers. This process should take less than 60 seconds. If fire requires further assistance, a call will be logged to the FRS then the procedures in 8.1 followed.
  - c) Initiate evacuation of staff and visitors on site to the meeting point and instruct delegated person(s) to conduct a roll-call to ensure all site users are accounted for.
     Timescale variable depending on staff on site estimated within 5 minutes.
  - d) If viable and safe, instruct necessary site staff to commence extinguishment. **Timescale** variable depending on size of fire, suppression can be within minutes if safe to do so.

## 8.2 **Fire Training**

8.2.1 All operational staff working on site will have received fire awareness training 6 monthly and on their staff induction to detect early signs of fire and to minimise the chance of a fire breaking out in order to meet the three objectives.

#### 8.3 Out of hours fire detection (automated)

8.3.1 During operational hours, the TCM/site manager will undergo regular inspections of all areas storing combustible, the checks will take place three times minimum, at the start, middle and end of the day. The TCM/site manager will have also carried out the necessary training to site operatives working around combustible waste so they will be continually monitoring these piles for any potential fire occurrences i.e. smoke, flames, sparks.

#### **OUT-OF-HOURS**

- 8.3.2 The site benefits from having intruder alert CCTV cameras which provide full coverage to areas storing combustible waste and other areas of the site. The locations of the cameras are indicatively shown on Drawing No. WES/2555/03.
- 8.3.3 The alarm system on the CCTV cameras will detect the following when the site is closed:
  - a) Any sudden movement i.e. a piece of waste falling, animals,
  - b) Intruders or trespassers
  - c) Signs of smoke traversing the beams
- 8.3.4 The CCTV system is not monitored by a third-party monitoring company but links directly to senior employees' mobile devices so in the event of one the above scenarios, the CCTV will trigger the above employees' devices who can instantly review site footage to see if there is a false alarm, an intrusion or a fire incident and contact the emergency services if required. In addition to contacting the emergency services, the three out of hours senior staff comprising site managers and TCM will be trained in the following fire suppression methods to ensure reduce the impact of a fire (f safe to do so):
  - a) Mobile plant
  - Site drainage and surface water protection measures
  - c) Firefighting equipment

- 8.3.5 The CCTV is monitored hourly by staff using their mobile devices up once the site closes from 17:00 23:00 Monday-Friday, 14:00 23:00 Saturday and 07:00 23:00 Sunday. The only times when the site is monitored would be when evening/night time periods when management are sleeping but the CCTV will pick up the occurrences shown in 8.3.3, log a call to the mobile devices and site management can then review the footage.
- 8.3.6 The CCTV system has been installed by a suitably qualified electrical company who PAT test all electrics in line with legislation requirements.
- 8.3.7 In the event the out-of-hours contacts are unavailable due to sickness or holiday, an alternative member of staff who lives within 5-10 minutes if the site (suitably trained) will be provided with a phone contactable by the monitoring company and directors who will stand in temporarily to ensure out-of-hours procedures are sufficient.
- 8.3.8 It is also considered the FRS would be available within 10 minutes to assist the out-of-hours contact in supressing and controlling the fire.

# **9** Fire Response Procedures

#### 9.1 **Response Procedure**

- 9.1.1 Further to the above measures, the following procedure would apply if a large fire is detected:
  - a) Call the Fire Response Service (FRS) immediately using 999.
  - b) Call the EA's Emergency Contact Number.
  - c) Prior to the FRS arriving, inform all neighbouring premises likely to be affected.
  - d) If not previously informed, senior management of the company will be informed at this point of the details, nature and extent of the fire and whether assistance from staff from other depots is required.
  - e) Ensure access routes are clear.
  - f) If safe to do so, the TCM or a senior member of staff will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
  - g) Ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive.
  - h) Ensure relevant site staff are standing by in a safe location to deploy surface water protection equipment under the direction of the FRS when they arrive.
  - i) The site manager / TCM will identify themselves to the fire service as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information that will assist them in dealing with a fire more effectively.
  - j) Implement pollution control measures only when safe to do so.
- 9.1.2 In the event of the site manager or TCM being absent from the site, the operator will ensure a suitable person is employed and familiar with the site.

#### 9.2 **Staff/Visitor Response Procedure**

- 9.2.1 The following quick actions will be undertaken by site operatives where a fire is detected or suspected on site:
  - a) Don't panic
  - b) Inform the site manager or technically competent manager immediately
  - c) Raise the alarm (if not done so already)
  - d) Do not try to tackle the fire yourself unless you are trained in doing so and you are sure of the nature of the fire
  - e) Leave the site using the nearest exit as quickly and as orderly as possible
  - f) Assemble at the specified fire assembly point
  - g) The site manager or delegated operative will be in charge of calling the emergency services on "999" and ensuring that all persons who were working in the building / site office are assembled safely
  - h) Do not return to the site until you have been given the 'all clear' by the emergency services and/or site management / responsible person.

#### 9.3 Evacuation of Staff (and Drill Procedure)

- 9.3.1 An evacuation plan has been formulated for the site and all operational staff will be made aware of the actions through site inductions, refresher training, toolbox talks etc.). The fast and effective evacuation of staff to the fire assembly point will increase safety on site and limit the impact of a fire on any persons on site.
- 9.3.2 Fire drills will take place every 6 months and 1 month after the approval of the FPP to ensure evacuation times are acceptable and that site staff remain informed of evacuation procedures.
- 9.3.3 The drill will be a simulation of an emergency with the location of a mock fire notified to staff in order to test the response speed in deploying pollution control equipment i.e. including drain mats/plugs and ensure all firefighting equipment is sound. The fire check

form may also be completed and a detailed report of the outcome of the exercise will be prepared to assist with staff training.

#### 9.4 **Access for Emergency Services**

- 9.4.1 The nearest fire station is situated approximately 3.7 miles away on the Ridge (B2093) and the response time is estimated at less than 10 minutes in the event of an incident.
- 9.4.2 The site has direct access from the surrounding road network and the width of the surrounding roads and the gateway provide sufficient access onto the site for the FRS.
- 9.4.3 Access routes for emergency services around the site for firefighting are clearly shown on Drawing No. WES/2555/03.

#### 9.5 **Notifying Receptors**

- 9.5.1 The contact numbers of key sensitive receptors identified within 1km of the site who could be directly affected in the event of a fire along with the Receptor Plan will be stored within the site office.
- 9.5.2 As it isn't feasible for a contact number to be provided for every individual residential receptor and individual business within 1km. The most immediate receptors will be contacted (receptors adjacent to the site) by the operator.
- 9.5.3 Once Emergency Services arrive on site i.e. FRS, Police, the lead authority (usually the Police) will co-ordinate a systematic approach to ensure all the relevant sensitive receptors within 1km are notified. This will involve via telephone calls, personal visits (knocking on doors). In addition to this, the Emergency Services would also publicise the fire on their Social Media outlets and contact local news websites, radios who can also provide updates on the incident.
- 9.5.4 The police with the assistance of ECSS and any other attending authority will ensure all relevant properties are informed of the fire event and given clear instructions of the actions they need to take.

## **Suppressing Fires & Firefighting Techniques**

#### 10.1 **General**

- 10.1.1 Section 16 of the EA's FPP requires the site should have enough water available for firefighting to take place and to manage a worst-case scenario. A worst-case scenario would be the largest waste pile catching fire.
- As detailed in section 7.1.1, the largest combustible waste pile on-site would-be one of the bays in **AREA 1-4** with an individual bay having a volume of 54m<sup>3</sup> if full. This would require 64,832 (65m<sup>3</sup>) of water to extinguish the fire within 4 hours which equates to 360 litres per minute.

Table 10.1 - Water supply calculations

Maximum pile volume in m <sup>3</sup>	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on/off site in litres
54	54 x 6.67 = 360.18	360.18 x 180	64,832.4 (65m³)

#### 10.2 <u>Site-wide Suppression</u>

- 10.2.1 It is not proposed to install an automated fire suppression systems at the at the site as it is considered that the following alternative measures ensure that the objectives set out in Section 1.1 are met:
  - a) During operational hours there will always be a trained employee on site carrying out continuous inspections on the waste storage areas for the presence of fire.
  - b) The above inspections consist of visual monitoring of all combustible waste piles every three hours during the day. All visual inspections/watches will be recorded on the site inspection forms shown in Appendix II (or similar document).
  - c) The site has access to a number of on-site suppression measures which can be deployed in the event of a fire as an immediate response following the alarm being raised and the mobilisation of appointed fire contact(s) (if safe to do so). These are described further in the section below.

- d) Hose reels strategically placed providing full coverage to all internal areas storing combustible and flammable materials.
- e) A mixture of a 120 water, foam, powder and CO2 fire extinguishers located in close proximity to waste piles.
- f) There is a water cannon available for dust suppression, although these items of plant are not specifically aimed at fire suppression, it is mobile piece of equipment dispersing water within a 30m radius meaning it can be moved and targeted in a specific location.
- g) The water cannon is fed by mains water and always refilled after use to be readily available for fire-fighting or suppression.
- h) In addition to the above, there are large quantities of non-combustible inert soil / hardcore material and also sand which could be using to smother a fire using the site's excavator within 5/10 minutes of a fire breaking out at the site.

#### 10.3 External suppression (FRS)

- 10.3.1 In consultation with the FRS, the nearest hydrant is situated 300m west of the site access.

  The FRS have confirmed the hydrant would be suitable for firefighting.
- 10.3.2 The FRS confirmed the fire hydrant conforms to British Standard 750 and are regularly serviced and maintained by the FRS. The location of the hydrant is shown on Drawing No. WES/2555/03.
- 10.3.3 The FRS were unable to provide a flow rate for the hydrant off-site therefore the following guidance extracted from The Local Government Association (LGA) / Water UK National Guidance Document details the following flow rates which should be considered for this site:

In order that an adequate supply of water is available for use by the Fire and Rescue Authority in case of fire it is recommended that the water supply infrastructure to any industrial estate is as follows with the mains network on site being normally at least 150 mm nominal diameter

• Up to one hectare 20 litres per second.

- One to two hectares 35 litres per second.
- Two to three hectares 50 litres per second.
- Over three hectares 75 litres per second.
- 10.3.4 As the site is considered to be in an industrial location with surrounding industry measuring over three hectares, the nearest hydrants have nominal mains >150mm, the flow of water from the hydrants should be at least 75 litres per second, 4,500 per minute which is excess of the required 360 litres per minute shown in Section 10.1. This means there is a suitable off site water supply to extinguish a fire on site within 3 hours.

#### 10.4 **Use of inert materials**

- 10.4.1 As an absolute worst-case scenario if water cannot be supplied to the site, the operator has access to large numbers of mobile plant and inert material which could be scooped onto piles in assuming the FRS and EA authorise at the time.
- 10.4.2 If this method of suppression is used, the material would be sampled and disposed of a suitably permitted site for recovery.

## 11 Managing Fire Water

#### 11.1 **Drainage**

All free-standing combustible waste is stored on an impermeable concrete surface with sealed drainage system as shown on Drawing No. WES/2555/03 comprising the following:

- a) Surface water arising from the sealed impermeable pad drains into a 10,000 litre above ground sealed tank.
- b) Other areas comprising hardstanding will naturally soakaway, evaporate or be captured within a 2,500-litre silt tank that will separate any silt / debris from the water.

#### 11.2 Containment of Fire Water

- 11.2.1 The impermeable pad is surrounded by a 0.1m high kerb and bays along the northern section of the pad. These measures fully seal the impermeable pad which would prevent any water from escaping. Fire water on the impermeable pad would drain into the 10,000 litre above ground sealed storage tank for containment. Once the tank reached full capacity the remaining firewater would remain contained on the impermeable pad.
- 11.2.2 In the event of a fire in AREAS 6 & 7, the waste would be moved to the quarantine area (if safe to do so) and would be extinguished on the impermeable pad to allow for fire water containment within the impermeable pads sealed drainage system and avoid fire water contamination on hardstanding.

11.2.3 As detailed in Section 10.1.2, the largest pile would require containment for 64,832 litres (65m3) of water in accordance with the FPP guidance. The table overleaf details the containment available on site.

**Table 11.1 - Firewater Containment Calculations** 

Area	Volume of Water (m³)	Approx. Containment Area (m²) – lower yard	Containment Required	Total Containment On Site
Concrete pad of waste area	65	725	65/ 725 = 0.08	0.1m high kerbing + 10,00 litre sealed storage tank

11.2.4 Therefore, in accordance with Table 11.1 there will be a surplus of 0.02 containment available on the impermeable pad.

#### 11.3 Removal of Fire Water

11.3.1 Upon successfully extinguishing a fire all standing fire water would be pumped using a hiredin vacuum tanker and deposited to a suitably permitted site for treatment.

## 12 After an Incident

#### 12.1 **Contingency Planning**

- 12.1.1 In the event of a fire the site will cease accepting waste. All customers who wish to deliver wastes during a fire will be notified by site admin staff and any who arrive without prior notification will be turned away. If urgent, deliveries will be directed to an alternative waste facility in the borough; details of which can be found on the EA's public register.
- 12.1.2 No waste will be accepted on site until the post-fire site recovery procedures outlined in the section below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

#### 12.2 **General Recovery Procedure**

- 12.2.1 When the fire has been successfully dealt with the following actions will take place:
  - a) The fire will be reported to the EA on the same working day and will be confirmed in writing by email or letter within 24 hours (unless in extenuating circumstances), including all steps taken by site staff, management and/or emergency services to deal with the fire.
  - b) Removal of burnt material using appropriate and lawful disposal.
  - c) Investigation into the cause of the fire, to ensure it does not reoccur.
  - d) A review of the FPP and EMS, associated amendments will be implemented.
  - e) Review of any additional training requirements for site personnel as a result of the incident.
  - f) All fire extinguishers used to tackle the fire will be serviced and replaced after use.
- 12.2.2 In addition to the abovementioned procedures, the sections below outline specific procedures following a fire.

#### 12.3 Site decontamination

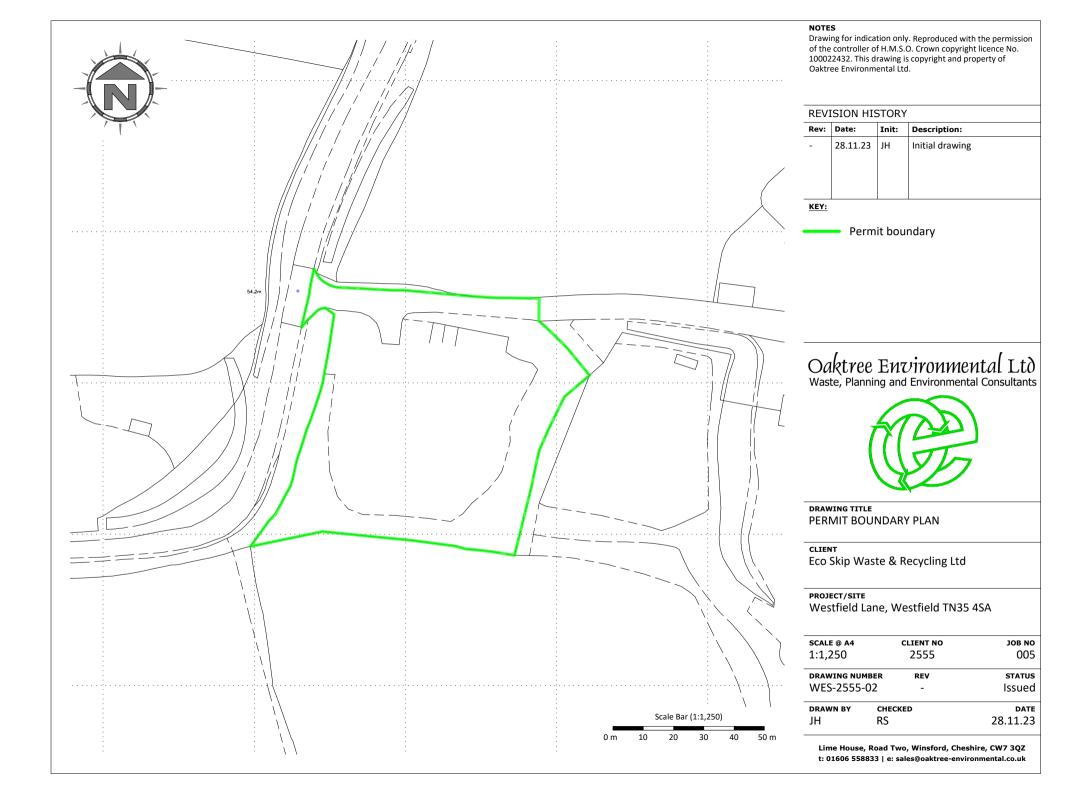
- 12.3.1 Surface water on site will be cleared using the following method:
  - a) Using a bowser, all standing fire water should be sucked up and taken off site or stored in a tank/bowser prior to removal off site.
  - b) Using all available resources, manually clean out surface water gullies removing the debris to the pile of fire damaged waste for removal to landfill or permitted site.
  - c) Using a road sweeper, sweep the yard (damp as required using the bowser) until all ash and clinker has been removed.
  - d) All debris has now been isolated and all contaminated water holding areas have been cleaned and emptied.
  - e) Wash the yard down in entirety using clean water or allow a reasonably heavy rain shower to wash the yard down.
  - f) It is at this stage that site management should decide whether it is appropriate to remove the surface water protection measures or repeat areas of the clean-up.
- 12.3.2 If the clean-up operation has been deemed complete, the surface water protection measures can now be removed. This will be achieved using the following methods:
  - a) Remove any temporary containment mats
  - b) Fully empty the catchment pits of any potential burnt material
  - c) Surface water discharge from the site is now possible the next time it rains to discharge sewer. Ensure that surface water checks are made during the next rainfall event to validate that clean-up has been undertaken satisfactorily. Record all findings and actions in the site diary.
  - d) Account for all consumables that have been used in the fire and re-order / replace immediately.
  - e) Restack, and re-locate all items used for the surface water protection during the fire to their storage locations ready for future deployment.
  - f) Check monthly that items are still present and correct and still serviceable for use in an emergency.

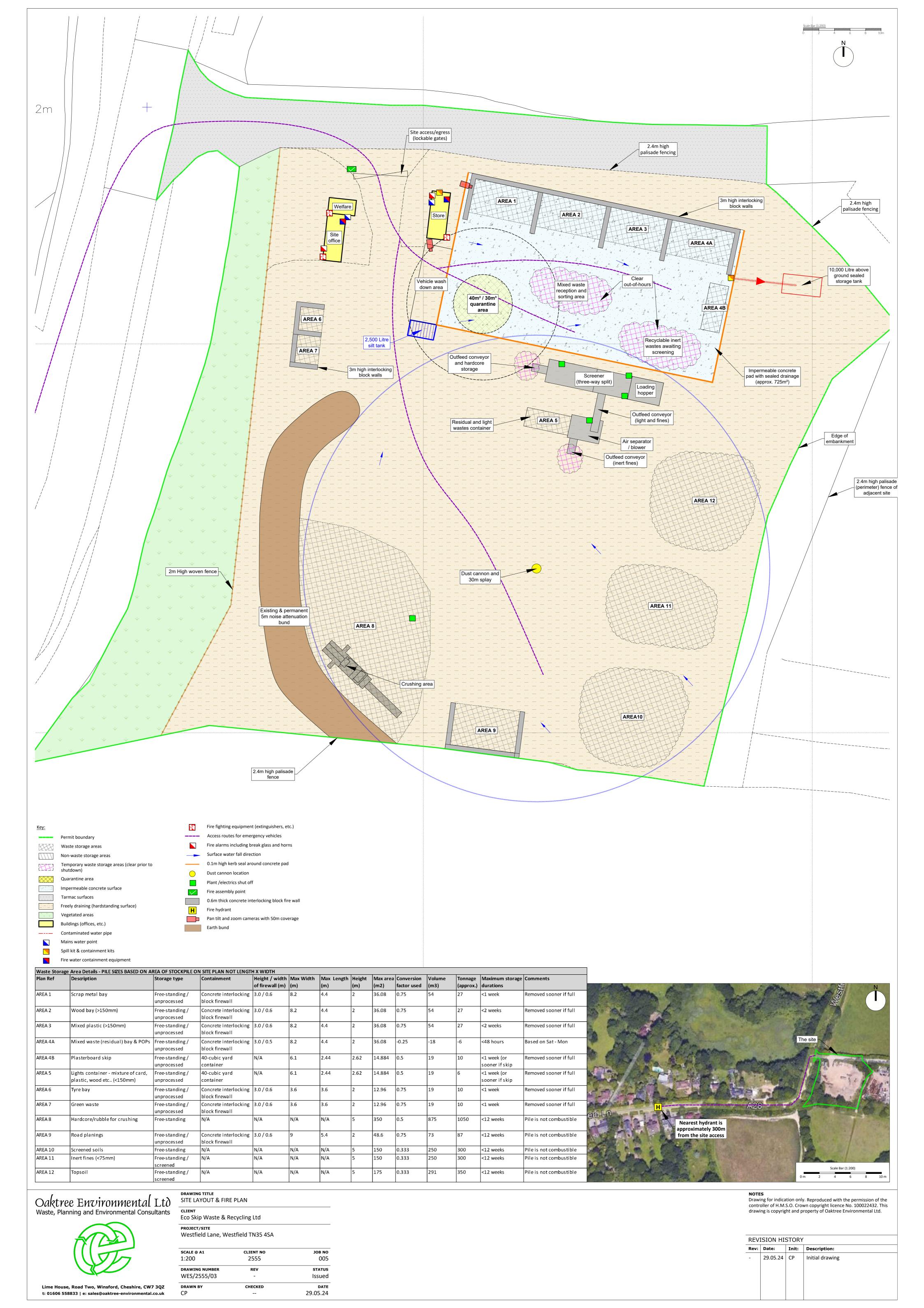
- 12.3.3 The operator will liaise with the EA throughout the event ensuring they are satisfied with the clean-up programme and notify the operator when the site can begin accepting waste again onto site.
- 12.3.4 Due to the nature of the site's customers, there are no regular waste contracts which need to be dealt with if the site is closed for a period of time due to any incidents.

#### 12.4 **Post Fire Site Recovery**

- 12.4.1 If a recovery procedure is required, the operator would instigate the following;
  - a) Remove damaged material to a permitted facility that is able to deal with it legally.
  - b) Ask engineers to carry out repairs on any plant, vehicles and/or infrastructure.
  - c) Assist the FRS with the fire investigation and where necessary engage the advice from a professional fire consultant.
  - d) Review the FPP and EMS procedures and improve upon areas which were deficient.
  - e) Review training requirements for staff.
  - f) Assess whether further preventative measure could be implemented.
  - g) Ensure all fire equipment, where used, is replenished.
  - h) Remove fire water to a permitted facility for disposal.

# Appendix I 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

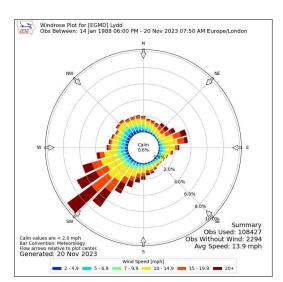
Nearest fire hydrant

HIIIIIII Railway line

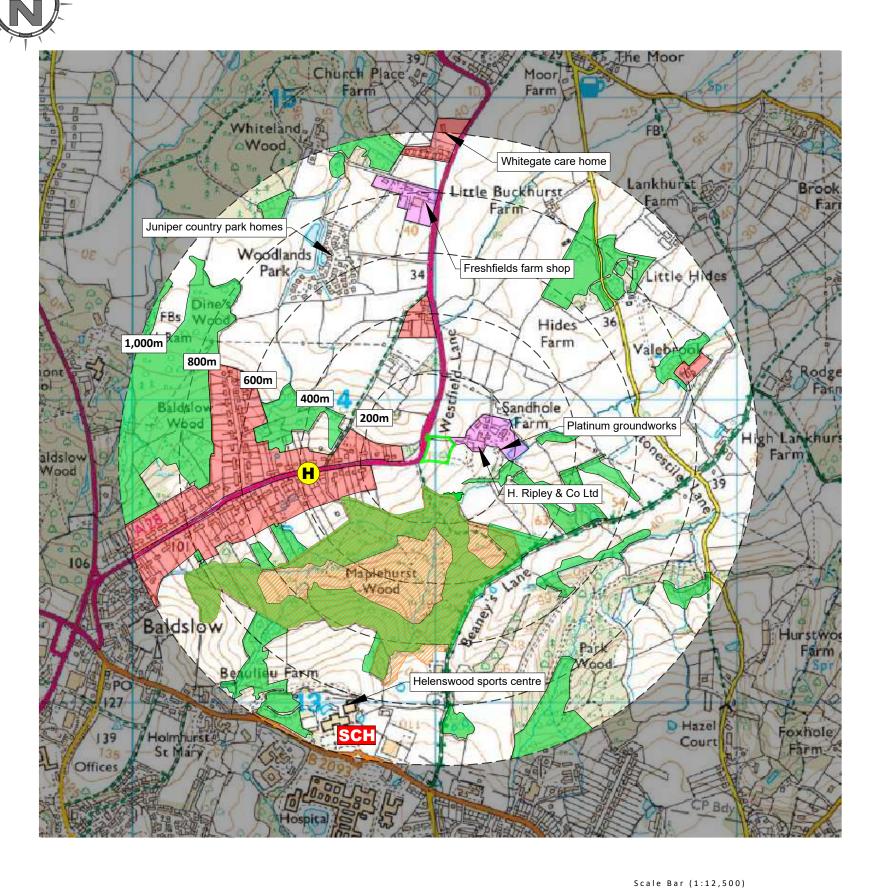
SCH School

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



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

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

#### REVISION HISTORY

NOTES

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

## Oaktree Environmental Ltd Waste, Planning and Environmental Consultants



DRAWING TITLE
RECEPTOR PLAN

LIENT

Eco Skip Waste & Recycling Ltd

PROJECT/SITE

Westfield Lane, Westfield TN35 4SA

SCALE @ A3	CLIENT NO	JOB NO
1:12,500	2555	005
DRAWING NUM	IBER REV	STATUS
WES-2555-0	04 -	Issued
DRAWN BY	CHECKED	DATE
JH	RS	28.11.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ t: 01606 558833 | e: sales@oaktree-environmental.co.uk

0 km 500 m 1 km

# Appendix II Record Keeping Forms

ECO SKIP WASTE & RECYCLING LTD DAILY INSPECTION CHECKLIST							
DATE							
ITEM FOR VISUAL INSPECTION	TIME OF INSPECTION (START)	CHECKED Y/N	REMEDIAL ACTION REQUIRED				
↓	TIME OF INSPECTION (FINISH)						
EMERGENCY ACCESS (I	FREE FROM BLOCKAGES)						
COMBUSTIBLE WASTE POTENTIAL IGNITION S	STORAGE (AWAY FROM OURCES)						
INSPECT FOR SIGNS OF	ND OF THE WORKING DAY TO SELF-HEATING, SMOKE OR FIRE SON PLANT ARE COOL ETC						
DUST/FLUFF AROUND	UNIT CHECK						
LITTER (I.E. LOOSE CON	MBUSTIBLE WASTE MATERIALS)						
PLANT/EQUIPMENT M	AINTENANCE CHECKS						
FIRE QUARANTINE ARE	EA IS CLEAR OF WASTE						
OTHER (SEE NOTES	BELOW)	•					
INSPECTION CARRIED (	OUT BY						
NOTES/ACTION (C	ONTINUE ON A SEPARATE SE	HEET IF NECESS	SARY):				
CHECKED BY		SIGNATURI	E				
POSITION		DATE					
Sheet		of					

ECO SKIP WASTE & RECYCLING LTD WEEKLY INSPECTION CHECKLIST						
WEEK COMMENCIN	G					
ITEM FOR VISUAL	TIME OF INSPECTION (START)	CHECKED	REMEDIAL ACTION REQUIRED			
INSPECTION	TIME OF INSPECTION (FINISH)	Y/N				
AROUND SITE PERIM	V SYSTEM IS WORKING, FENCING METER IS IN GOOD CONDITION, TRANCE IS WORKING)					
	REA (NOT EXCEEDING THE DED IN THE FIRE PREVENTION					
	T (CHECK FOR UPCOMING WEEK ASTE OPERATIONS ARE LIKELY TO					
The state of the s	IPMENT AND SPILL KITS E.G. FIRE E IN PLACE AND FULLY STOCKED					
INTEGRITY OF BAY \	WALLS (NO CRACKS ETC)					
INTEGRITY OF IMPE	RMEABLE PAD (NO CRACKS ETC)					
	ING AROUND IMPERMEABLE EE FROM CRACKS ETC)					
OTHER (SEE NOTES	BELOW)					
INSPECTION CARRIE	D OUT BY					
NOTES/ACTION (CO	NTINUE ON A SEPARATE SHEET IF NE	CESSARY):				
CHECKED BY		SIGNATURE				
POSITION	•	DATE				
SHEET		OF				

## **ECO SKIP WASTE & RECYCLING LTD MONTHLY INSPECTION CHECKLIST WEEK COMMENCING ITEM FOR VISUAL** TIME OF INSPECTION (START) **CHECKED** REMEDIAL ACTION REQUIRED INSPECTION Y/N TIME OF INSPECTION (FINISH) HOSES AVAILABLE ON SITE AND FREE FROM HOLES (IN **GOOD WORKING CONDIITON)** INTEGRITY OF WATER TANKS (FREE FROM CRACKS / **IMPERFECTIONS AND SECURE) ELECTRICALS (WIRES SHOULD NOT BE FRAYED / DAMAGED AND SOCKETS NOT OVERLOADED)** OTHER (SEE NOTES BELOW) **INSPECTION CARRIED OUT BY** NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY): **CHECKED BY SIGNATURE POSITION** DATE **SHEET** OF

# ECO SKIP WASTE & RECYCLING LTD PREVENTATIVE MAINTENANCE CHECKLIST

CHECKED BY	POSITION
DATE	DATE OF LAST CHECKLIST

EQUIPMENT ITEM			
OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)			
IF NO, DATE OF LAST CHECK			
IF YES, DATE OF NEXT CHECK			
IS ITEM IN CORRECT WORKING ORDER			
LEAKAGES OF OIL/DIESEL ON MOBILE PLANT / VEHICLES			
IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)			
WERE REPAIRS DETAILED ON THE LAST CHECKLIST			
IF YES, HAVE THEY BEEN CARRIED OUT			
ADDITIONAL REPAIRS OR ACTIONS REQUIRED			

# ECO SKIP WASTE & RECYCLING LTD EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

EMPLOYEE NAME					DATE COMPLETED					
POSITION					REVIEW DUE					
TRAINER					ОИТСОМЕ	PASSE	D			
POSITION						FURTH	HER TRA	AINING REQUIRE	)	
CARRIED OUT /SIGN OFF >	Y/N	SIGNED BY EMPLOYEE	SIGNED BY TRAINER			Υ,	/N	SIGNED BY EMPLOYEE	SIGNED	
ENVIRONMENTAL PERMIT				FIRE	PREVENTION PLAN					
MANAGEMENT SYSTEM				FIRE	SAFETY					
SITE RULES				EME	RGENCY PROCEDURE	s				
RECORD KEEPING / TRANSFER NOTES				STO	RAGE /PILE SIZE LIMIT	гѕ				
RECOGNITION OF WASTE TYPES				STOI	RAGE DURATION					
SECURITY				FIRE DETECTION						
VEHICLE CHECKS				FIRE	ALARMS					
PLANT OPERATION				FIRE	FIGHTING EQUIPMEN	NT				
PLANT CHECKS					WATER CONTAINME SURES	NT				
AMENITY - LITTER, ODOUR, PESTS etc.				SPIL	L CLEARANCE					
NOTES AND ACTIONS	:									

#### **SITE INFORMATION & KEY CONTACTS LIST**

Site Address:	Eco Skips Transfer Facility, Westfield Hole Farm, Westfield Lane, Westfield, East Sussex, TN35 4SA						
Site Operator:	Eco Skip Waste & Recycling Ltd	National Grid Ref:	TQ 81013 13846				

CONTACT	DESCRIPTION	OFFICE HOURS	OUT OF HOURS
Luke Timothy Field	Director	07592 156874	07592 156874
Conquest Hospital The Ridge, Hastings, Saint	Local NHS Hospital (Main)	0300 131 4500	999
Leonards-on-sea, TN37 7RD	Accident & Emergency (A&E)	112	999
High Glades Medical Centre 9 Upper Church Road, Hastings, Saint Leonards-on-sea, TN37 7AT	Local Doctor Surgery (GP)	01424 754678	999 or 112
Hastings Police Station Bohemia Road, Hastings, TN34	Local Police Non- Emergency	01273 475432	999
1JJ	Police Emergency	999	999
The Ridge Community Fire Station 50, The Ridge, Hastings, TN34 2AA	Fire and Rescue Service (in Emergency Dial 999)	0303 999 1000	999
Environment Agency Coast Road, Pevensey Bay, Pevensey, BN24 6ND	Environmental Regulator	0370 850 6506	0370 850 6506
Hastings Borough Council Muriel Matters House, Breeds Place, Hastings, TN34 3UY	Local Planning Authority - First Response Team (Emergency)	01424 451111	999
Southern Water Western Road, Hastings, Saint Leonards, Saint Leonards-on-sea TN37 6DG	Local Water Supplier / Sewerage Provider	0333 000 0365	0333 000 0365
Oaktree Environmental Ltd Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ	Specialist Advisor (Waste and Planning Issues)	01606 558833	999 / 0800 80 7060