

Project No: 312341

Fire Prevention Plan

Prepared for:

Cooks Waste Kare Limited (t/a Sun Skips)

Raeburn Road South
Ipswich
Suffolk
IP3 0ET

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Signed
1.0	Final	September 2024	Graeme Kennett

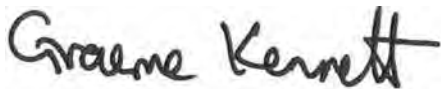


Acknowledgement

This report has been prepared for the sole and exclusive use of Cooks Waste Kare Limited (t/a Sun Skips) in accordance with the scope of work presented in Mabbett & Associates Ltd (Mabbett) Letter Agreement (314107/LA/GK), dated 26 October 2023. This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete or subject to change, Mabbett may wish to revise the report accordingly.

This report has been prepared by the following Mabbett personnel:

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MABBETT & ASSOCIATES LTD



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Environmental Engineer

Executive Summary

Table 1-1: Site details	
Site name	COOKS WASTE KARE RECYCLING SITE
Site address	Raeburn Road South Ipswich Suffolk IP3 0ET
Operator name	Cooks Waste Kare Limited (t/a Sun Skips)
Permit number	EPR/KB3304FX/V002

This FPP will be made available to;

- All staff
- Site visitors
- Contractors working at the site

Table 1-2: Document owner	
Author	Graeme Kennett
Version number	1

Version number	Revision authorised by	Date submitted to Environment Agency	Revision owner
1			
2			
3			
4			
5			

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Section 1.0: Introduction

1.1 Roles and Responsibilities

Cooks Waste Kare Limited (t/a Sun Skips), 'the Operator', has the overall responsibility for ensuring these procedures are adhered to and will ensure that the Site Manager (SM) has access to the resources required for compliance with the Environmental Permit.

The Site Manager is specifically responsible for:

- Ensuring the adequate training of staff and contractors working on site regarding the content of these procedures;
- Ensuring the adequate provision of resources such as personal protective equipment (PPE);
- Ensuring the provision and maintenance of handheld fire extinguishers and other firefighting equipment at the site is adequate.

As with wider Health and Safety issues, overall responsibility for fire safety and prevention lies with the senior management team of the operator.

Responsibility for Fire Prevention Plan (FPP) implementation rests with the Board and is implemented through the control of the Managing Director (MD).

1.2 Purpose

The primary purpose of this FPP is to guide staff and contractors in the prevention of fire. The FPP also confirms the actions to be taken in the event of fire, in order to minimise any impact on the environment and to control the fire where appropriate.

This FPP will be issued to the Fire and Rescue Service (F&RS) and be available at the site in the event of a fire to aid with firefighting.

1.3 Scope

This FPP [SUN_IFPP] is a standalone document that also forms part of the EMS, with the individual fire emergency procedures for the site forming part of the FPP. The FPP has been prepared in accordance with the latest Environment Agency (EA) guidance¹. It relates to the storage of combustible waste, both pre-and post-treatment, at the site. All waste materials stored at the site have been considered in this plan.

The measures prescribed in the EA approved FPP will be regularly reviewed to ensure that operations on site remain compliant. The review will also ensure that the approved document still conforms to the latest

¹ Fire Prevention Plans: Environmental Permits, last updated 11 January 2021, www.gov.uk

version of the guidance. Any changes to operations that will impact upon the FPP must be approved by the Environment Agency prior to implementation.

The FPP does not solely rely on applying water to any burning material but will also use mechanical methods in conjunction with a supply of inert material, where safe to do so, to isolate and smother any 'hotspots'.

Following this FPP will ensure that;

1. The likelihood of a fire starting is minimised.
2. A fire will, along with the implementation of mechanical means, aim to be extinguished within 4 hours.
3. The spread of fire will be minimised by the same mechanical means.
4. The impact of the effects of fire on people, the environment and other businesses are minimised.

The objectives will also be met by ensuring that awareness and training in following, putting in place and using the fire prevention measures, those whose work will also impact on meeting the three objectives will similarly understand that should these measures fail the EA may take enforcement action on the site.

This FPP will be read by;

- All Cooks Waste Kare Limited t/a Sun Skips staff
- Contractors working on – site
- Fire & Rescue personnel will have access to a dedicated copy of this FPP

Section 2.0: Site Information

2.1 Site description

Cooks Waste Kare Limited is located on Raeburn Road South, Ipswich, IP3 0ET (the Site). The facility is a household, commercial and industrial waste transfer station with treatment for non-hazardous waste and the permitted area extends to approximately 0.2ha.

2.2 Site setting

The Site is located in southern Ipswich, approximately 3km south of the city centre and approximately 250m north of the River Orwell. The surrounding land-use includes protected habitat, commercial and industrial uses.

The Site is located in Flood Zone 1, where the probability of fluvial flooding is 0.1% in any year and is considered to be at a very low risk of flooding from seas and rivers and from surface water. The site is not located within a groundwater Source Protection Zone (SPZ).

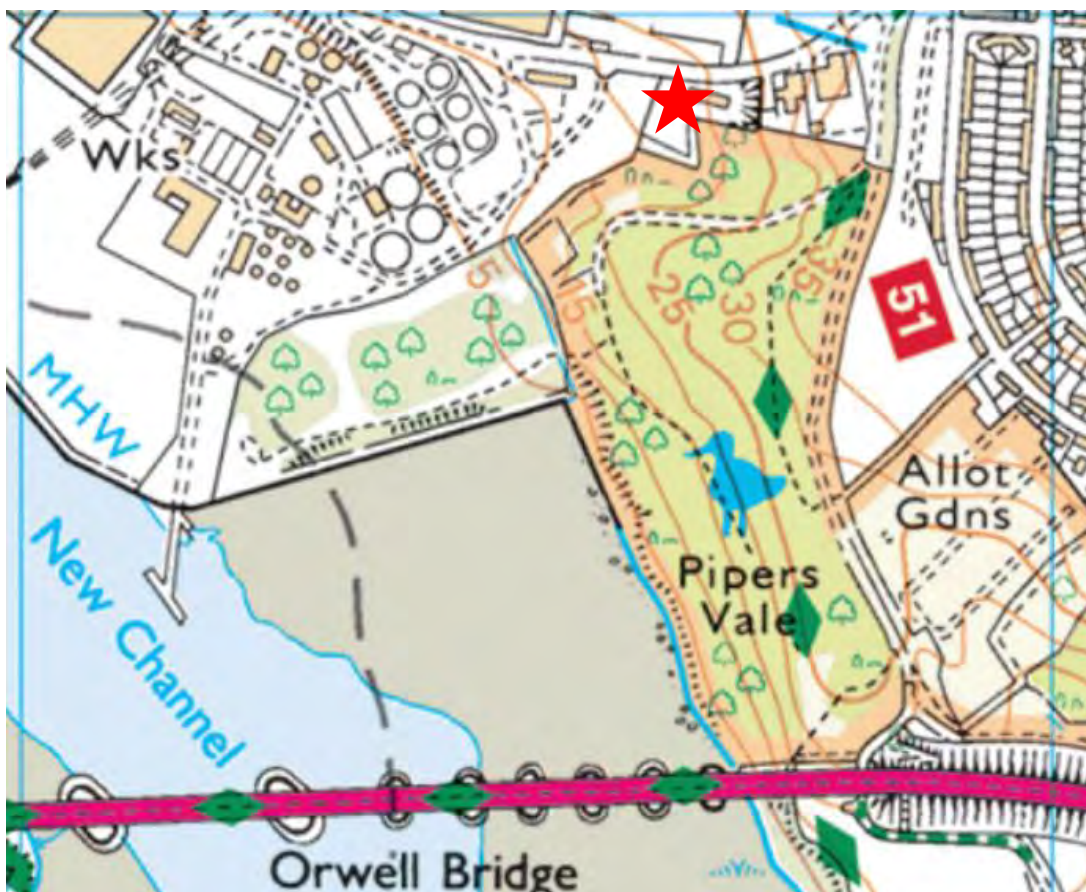


Figure 2-1 Site location

2.2.1 Process overview

Cooks Waste Kare Limited accept mixed household, commercial and industrial waste for transfer and treatment. The following treatment activities are carried out on the Site:

- Hand sorting / hand picking.

- Sorting using telehandlers / grabbers.
- Screening.

The following combustible waste types are stored on Site:

- Incoming mixed waste.
- Plastics.
- Fines.
- Wood / green waste.
- Paper / card.
- Metal.
- Waste electrical and electronic equipment (WEEE) including fridges / freezers.
- Mixed residual waste.

The following non-combustible waste types are stored on site:

- Construction / demolition waste.
- Plasterboard.
- Soil.

2.3 Hazards

It is considered that a fire will present three main hazards to nearby sensitive receptors: heat from the fire itself, air pollution (predominantly from smoke emissions) and pollution to groundwater / surface water features.

Heat energy from a fire may reach sensitive receptors via direct fire spreading or by the deposit of burning embers. Heat energy will be largely dependent upon the location and intensity of the fire, however it is unlikely to spread more than 150m due to the lack of feedstock available in the vicinity of the site. It is considered that burning embers are likely to extinguish when travelling over distances that exceed 150m. Smoke produced from fires can contain harmful gases that are produced from the combustion process. The distance smoke will travel will be dependent upon the wind speed at the time of the fire, however it is considered unlikely that smoke will significantly affect sensitive receptors outside of a 1km radius.

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 as a result of a fire has the potential to cause pollution to groundwater / nearby surface water features.

2.4 Receptors

Sensitive receptors in close vicinity to the site are identified on the Sensitive Receptors Plan. A radius of 150m and 1km from the Site are included on the Sensitive Receptor Plan.

Table 2-1 shows the approximate distance and orientation (from the site) of nearby sensitive receptors located within a 1km radius of the Site.

Table 2-1: Sensitive receptors

Ref	Receptor	Description	Direction from site	Distance from boundary (m)
1	Pipers Vale (LNR)	Protected Habitat- Deciduous Woodland	Southeast	0
2	Raeburn Road South	Nearest public highway	North	30
3	Indipave	Industry	Northeast	60
4	Greenshoots Print	Business	Northeast	70
5	BBS Stone/ Granite Concepts	Industry	North	75
6	D&M Forwarding & Warehousing	Industry	Northwest	130
7	Anglian Water WWTW	Sewage treatment plant and composting facility	West	150
8	The Five Castles Press Ltd	Industry	Northeast	150
9	Morland Road Allotments	Recreational	East	200
10	East Coast Driver Training	Industry	North	220
11	Gainsborough Town	Area of residential dwellings and associated infrastructure	Southeast	220
12	Sandyhill Lane	Road	North	225
13	Orwell Country Park	Recreational	Southeast	250
14	Gainsborough Town	Area of residential dwellings and associated infrastructure	Northwest	250
15	Orwell Estuary Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar	Protected habitat	Southwest	270
16	Piper's Vale Primary Academy	School	Northeast	280
17	Newmarket Plant Hire Ltd	Industry	Northwest	320
18	Hamiltons Driver Training	Business	Northwest	400
19	Deciduous woodland	Protected habitat	Northwest	430
20	Landseer Road	Road	North	480
21	Cliff Quay Substation	Industry	Northwest	505
22	ISG offices	Business	Northwest	560
23	Morland Church of England Primary school	School	Southeast	560
24	Landseer Park- Wildflower Meadow	Protected Habitat	North / Northeast	585
25	A14	Road	South	595
26	Bauder Flat Roofs	Business	Northeast	640
27	Tarmac Ipswich Asphalt Plant	Industry	East	650
28	ABP Sentinel Terminal	Industry	Southwest	735
29	Ipswich BMX Club	Recreational	North	740

Ref	Receptor	Description	Direction from site	Distance from boundary (m)
30	Gainsborough Community Library	Recreational	Northeast	770
31	BMC Cakery	Business	Northeast	770
32	Deciduous woodland	Protected Habitat	Southeast	800
33	Southern Cement	Industry	West	820
34	Deciduous Woodland	Protected Habitat	Northwest	870

Section 3.0: Site Operations

Cooks Waste Kare Ltd operate a household, commercial and industrial waste transfer station accepting non-hazardous waste at Raeburn Road South, Ipswich, Suffolk, IP3 0ET.

3.1 Site operational hours

7:30-17:00 Monday to Friday and
7:30-12:00 Saturday.

3.2 Waste acceptance

Following a customer enquiry, pre-acceptance information about the waste is requested from the waste producer. Such information will include what sort of waste will be placed into the skip. This information is recorded, and the information reviewed to assess if the waste is acceptable at the site.

Review of the pre-acceptance information will determine the need for additional testing or controls on the incoming waste. It allows the Operator to apply controls to the incoming waste if considered necessary. Waste pre-acceptance checks identify if the material requires any special carriage instructions, is suitable to be accepted at the site and if the site has the storage capacity to accept the waste.

If incoming loads contain potentially odorous wastes, the waste producers will be advised that the site will not accept excessively odorous wastes or wastes with odour which would cause pollution. If such wastes arrive at the site, they will be rejected.

All vehicles delivering waste are sheeted or enclosed.

All waste deliveries will be accompanied by a Waste Transfer Note (WTN) which is obtained from the load driver. The WTN will provide information on the driver, waste haulier name, permit number, description of waste etc. Loads not accompanied by a WTN or that do not match the description on the WTN will be rejected.

A record will be kept of all vehicles delivering waste to and removing waste from the site, along with the type, quantity and source of waste delivered. WTN's will be appropriately stored for a minimum of two years.

Waste acceptance procedures ensure that only those waste codes detailed in the Permit will be accepted, separated, treated, and stored on site. The site will not accept loads which are malodorous or likely to produce odours, however, it may be that loads of mixed waste with minor quantities of waste with an odour will be accepted. The process for dealing with these odorous wastes is to sort them and remove from site promptly i.e. within 24 hours. When removing significantly odorous materials from site, the offending waste will be covered e.g., thin layer of soil or other suitable barrier to limit offence during transit.

As a waste transfer station processing household waste, the site operates on a quick turnaround. Waste deliveries and export occur continuously throughout the day. Vehicles entering the site will be inspected prior to unloading to ensure that no malodorous waste is accepted. All HGV's must be sheeted.

- Vehicles carrying skips will be sheeted.
- Vehicles carrying waste with open tops will be sheeted.
- Vehicles carrying waste may also be enclosed which will contain any potential odour from the waste.

Where there is the potential for contravening waste to be contained within incoming loads. Any contravening waste that is putrescible/malodorous will be quarantined and rejected from the site in accordance with EMS procedures.

Waste inputs/outputs will be recorded to ensure that should the site be forecast to reach storage capacity; no further loads will be accepted until there is sufficient capacity available.

3.3 Waste storage

All general waste received on Site is deposited, sorted and stored within the waste treatment building.

Waste is sorted into various storage bays/ containers for storage.

Sorted waste is stored for a maximum of 1 month, however, typically, turnaround time is 1 week. Maximum and typical storage times for waste on site is summarised below.

Table 3-1: Combustible waste typical and maximum storage times

Waste description	Typical storage times	Maximum storage time
Sorted/treated wastes	1 week	1 month

3.3.1 Storage capacity

Incoming waste is accompanied by Waste Transfer Notes which allow the volumes of incoming waste to be tracked. Outgoing waste is weighed and recorded.

The Site is relatively small in area which allows the Site Manager (SM) to visually assess remaining capacity in each storage bay and area. Waste can be readily removed from site within 1 working day. As storage areas approach capacity, arrangements are made to empty the area to make way for incoming material. This process is tracked via Inspection Checklists in the EMS.

3.4 Waste activities

Incoming mixed waste will undergo treatment to separate into its individual parts. Treatment can be either hand sorting or mechanical sorting by grab or screen.

Section 4.0: Management of Potential Causes of Fire

It is important to identify potential causes of fire on the site to minimise and reduce the likelihood of fires, thus addressing Objective 1 of the FPP Guidance; “minimise the likelihood of a fire occurring”. Potential causes of fire, taken from the FPP Guidance, are listed in Table 4-1 below and a comment of how it applies to this Site in the comment column.

Table 4-1: Potential causes of fire

Potential causes of fire	Applicable to the site?	Comments
Arson/vandalism	Yes	There is a low risk of unauthorised access on to the Site. The Site perimeter is fenced and has a gated entrance. There is CCTV in operation 24/7.
Malfunctioning / breakdown of mobile plant, equipment or vehicles.	Yes	There is a risk of equipment and vehicles on the site malfunctioning and/or breaking down.
Electrical faults (including damaged / exposed cables).	Yes	Mains electricity is installed on site. The weighbridge, site offices and floodlighting are powered by electricity.
Discarded smoking materials	Yes	There is a risk of discarded smoking materials presenting a source of ignition.
Hot works undertaken for maintenance	Yes	Hot works are carried out as part of the maintenance regime for the processing plant and these are considered as a source of ignition.
Industrial heaters, furnaces, incinerators or any other naked flames.	No	No industrial heaters, furnaces, incinerators or any other naked flames will be present on the Site.
Hot exhausts on mobile plant, equipment or vehicles.	Yes	There is a risk of exhausts of machinery, equipment and vehicles remaining ‘hot’ after use.
Batteries in End-of-Life Vehicles.	No	End-of-Life Vehicles are not imported onto the site.
Fuel and waste oil stored on the Site.	Yes	Fuel and gas are stored on the Site. There is a risk that fuel or gas could present a fire risk or source of ignition.
Leaks and spills from site vehicles.	Yes	Vehicles will be used on the Site to import/export waste loads. There is a risk of one of these vehicles leaking fuel or oil.
Leaks and spills from End-of-Life Vehicles.	No	End-of-Life Vehicles are not imported onto the site.
Build-up of loose combustible waste, dust and fluff.	Yes	There is a risk of loose combustible waste, dust and fluff building up within storage areas of combustible waste.
Reactions between wastes.	No	There are no waste types accepted on to the site that, when mixed, would create a reaction e.g. an explosion. Waste Acceptance Procedures within the EMS will ensure that only

Potential causes of fire	Applicable to the site?	Comments
		permitted waste types are accepted on to the site. Waste Acceptance Procedures include: ▪ The List of Waste codes from the Environmental Permit. ▪ Instructions to visually check loads upon reception, acceptance and unloading.
Deposited hot loads.	Yes	There is a risk of a 'hot load' entering the Site.
Self-heating resulting in self-combustion.	Yes	There is a risk of self-heating within piles of combustible waste stored on the Site and leading to self-combustion.
Operations carried out by neighbouring businesses.	Yes	The Site is located within an area used for industrial uses and therefore has neighbouring businesses, including a sewage treatment works and warehousing facilities.

4.1 Site security

Site security is important to reduce the likelihood of unauthorised access on to the site. The entrance to the yard has a lockable gate and is secured outside of operational hours and fencing surrounds the Site perimeter. Floodlighting covers the entrance of the Site to deter potential intruders. There is limited access to the Site from the east, south and west due to the presence of woodland along the Site boundary.

The Site is manned during operational hours and has CCTV in operation. The Site Manager can view this CCTV system at any time via devices e.g. phone, tablet, computer.

4.2 Plant, equipment and vehicles

Mobile plant / equipment that is not being used is parked at least 6 m away from combustible waste types and combustible materials. All mobile plant is fitted with fire extinguishers to aid in active firefighting. The function of fire extinguishers is checked on an annual basis, using Inspection Checklists in the EMS.

Plant and equipment have the potential to malfunction / breakdown which may cause a fire, which in turn could spread to combustible waste stored on the Site. Plant and equipment are maintained in line with manufacturers recommendations to reduce the risk of breakdown / malfunction. Plant and equipment are checked daily, using Inspection Checklists (EMS). Any faults are noted on the Inspection Checklists (EMS) and rectified as soon as possible.

4.2.1 Dust or particulate matter

Dust, loose fibres settling on hot exhausts / engines can cause fires. Therefore, an inspection is carried out at the end of the day to ensure all mobile plant / vehicles are cool and to remove any dust build-ups. This inspection will ensure that mobile plant is monitored for 15 minutes after shutting down to ensure it has cooled. Mobile plant is stored outside when not in use / at the end of the day, to aid in the dissipation of any heat.

4.2.2 Fuel leaks/spills

There is a risk of fuel leaking from / spilling during refuelling of vehicles and mobile plant on the site. Spill kits are available on the Site and will be made available during refuelling. Fines / soils are stored on the site which can be used as a 'spill kit' in the event of a large spill. The condition / integrity of the fuel tank will be checked monthly using Inspection Checklists in the EMS.

There is a potential for vehicles entering the site to leak fuels and oils. Vehicles entering the Site will be owned by the Operator or their customers. Vehicles owned by the Operator will be maintained in line with manufacturers recommendations to reduce the risk of breakdown / malfunction, which will include any corrosion, cracks, or leaks in any fuel/oil tanks. Spills kits will be used in the event of a spill or leak from the Operator's vehicles and any other vehicles on the Site.

Incoming loads containing material that is on fire have the potential to spread fire to other waste types stored on the site. In extreme circumstances 'loads of burning waste' may result in the carrying vehicle catching fire. Loads that contain burning waste are immediately directed to the Fire Quarantine Area shown on the Layout Plan.

The storage of flammable liquids is considered as an ignition source. Fuel is considered as a potential source of ignition. There is a risk of fuel leaking / spilling during refuelling of vehicles / mobile plant on the Site. Spill kits are available on the site and will be made available during refuelling. The condition / integrity of the fuel tank will be checked using Inspection Checklists in the EMS.

4.3 Ignition Sources

A no-smoking-policy applies across the Site, apart from in a designated area away from all potentially combustible materials and is strictly enforced.

Hot works are carried out on the picking line and screening plant when required as part of the maintenance regime for the Site. A fire watch is carried out by visual inspection for an appropriate period of time after completion of any hot works.

No other naked flames, including incinerators, industrial heaters, space heaters, furnaces, are permitted on the site.

4.4 Oil and fuel storage

Oil and fuel storage at the site will comply with the Oil Storage Regulations for Businesses (last updated 2 May 2023). Fuel is stored in bunded tanks in accordance with the Oil Storage Regulations.

Oils are stored in a container on drip containment or within bunds in accordance with the Oil Storage Regulations. The site will maintain sufficient spill kit equipment to clear up any spillages should they occur.

Standard operational procedures apply to prevent any spilled liquids being tracked across the Site. The above prescriptions will minimise the risk of fire from these elements.

All ignition sources present on the site will be kept at least 6m away from combustible waste types.

4.5 Electricity

Electricity is used on the site to power some of the operations, including the weighbridge and Site office.

Damaged or exposed electrical cables and fittings have the potential to give off excess heat / create sparks. Power sockets can be overloaded which may result in the overheating of these sockets and wires. All electrics, including wiring and equipment, on the site are certified by a qualified electrician on an annual basis. A record of this certification is recorded using the Inspection Checklists in the EMS. Associated records will be kept.

Inspections of electrics, including wiring and equipment, are carried out by site staff monthly to ensure that cables are in a good condition and sockets are not overloaded. Inspections are recorded using the Inspection Checklists form in the EMS.

4.6 Build-up of loose combustible waste

Combustible residues collecting around waste storage areas can present a fire risk. Separated waste types associated with the screening operations will be stored within bays / skips. There are larger bays located to the west and north of the screening plant.

The storage time of combustible waste on the Site is minimised. Stockpiles and skips will be inspected on a weekly basis to identify when all combustible waste in a storage area has been removed. Once empty, the storage area will be cleaned to remove any residual waste / dust / fluff. A storage area will be cleared if the area has not been cleared within the maximum storage duration. The clearing and cleaning down of bays will be recorded. These checks will be recorded using a Stock Rotation Form.

A weekly, recorded, review of the Stock Rotation Forms will be carried out to ensure compliance with maximum storage duration times for the waste.

4.7 Self-heating resulting in self-combustion

The risk of self-heating occurring within waste piles is influenced by the following:

- Waste type.
- Particle size.
- Storage time.
- Volume of stockpile.
- Ambient temperature / external conditions (including heat produced from waste operations).

Self-heating is a potential cause of fire, as it may lead to self-combustion, but can be managed in a number of ways. The FPP Guidance states the following:

For all waste:

- Management of storage duration times for combustible waste.
- Good stock rotation to ensure quick-turnaround of materials i.e. First-in, First-out principle. Complete turnaround of waste and use of the first-in, first-out principle will ensure that waste is not stored on site for periods longer than the maximum storage duration.
- Minimising stockpile dimensions, including height.
- Minimising stockpile volumes.
- Managing any seasonal variations in waste types.
- For waste stored on site for longer than 3 months:
 - o Temperature monitoring and implementing actions to be taken should trigger temperatures be reached.
 - o Routine turning of piles to ensure waste remains cool and localised heating is dissipated.

The waste stored on Site is considered to have a low potential risk for self-combustion due to the following:

- The site is small in size, therefore, the amount of waste that can be stored at any one time is limited. The maximum pile size of combustible waste on site is the mixed waste pile at **75.6 m³**. The FPP guidance maximum pile size for this waste type is 750m³.
- Stockpile volumes of waste stored on the site are significantly less than the maximum stockpile sizes referenced in the FPP Guidance.
- The maximum storage duration for combustible waste (except for aluminium and electrical cable) stored on the site is one month in accordance with the FPP Guidance.
- The site operates a first-in, first-out policy for waste. Incoming waste will be screened, and separated waste will be stored according to their type. Waste for removal from site will be removed in its entirety, when possible, to ensure full stock rotation.
- Waste is stored outside. During the night (non-operational hours), temperatures outside will be low compared to in the day and there will be increased airflow to the waste.
- Where waste is not stored within a bay or container, the minimum separation distance for combustible waste stockpiles will be 6 m.
- Waste may still show signs of being on fire in the morning, in which case the Operator would be able to extinguish or use inert materials to put out immediately.
- Therefore, due to this combined low risk (self-heating, self-combustion, absence of ignition sources, small storage volumes to sustain a fire), it is considered that a manual system in the form of a procedure will be proportionate to the nature and scale of the waste management activities on the site.

Plant will shut down 1-hour before site closure to allow sufficient time for cooling. An inspection is carried out at the end of the day to ensure all mobile plant / vehicles are cool and to remove any dust build-ups. This inspection will ensure that mobile plant is monitored for 15 minutes after shutting down to ensure it has cooled.

A fire watch will be completed during operational hours and prior to site closure to ensure there are no signs of self-heating.

A CCTV system is installed at the Site, which can be viewed outside of operational hours by site management. The CCTV cameras are primarily for security of the site; however, they can be used for fire detection during non-operational hours.

4.8 Reactions between waste types

Any potentially reactive waste types identified within a load will be separated and stored appropriately, using a quarantine area if necessary. The location of the quarantine area can be seen on the Layout Plan. Such wastes will be identified on arrival on Site during the visual inspection which is part of the waste acceptance procedure.

4.9 Neighbouring Businesses

A number of industrial land uses are located in the vicinity of the Site. The closest business is Indipave Depot which is located just north of the site on the other side of Raeburn Road South. Indipave Depot is located approximately 60 m from the permitted area containing combustible waste. Raeburn Road South is located in between the permitted area and Indipave Depot.

D&M Forwarding & Warehousing Limited are located approximately 130 m west of the site. This site comprises of a large building and transport yard. An area of grassland, Raeburn Road South and Indipave Depot are located between the permitted area and D&M Forwarding & Warehousing Limited. Any combustible materials stored on the D&M Forwarding & Warehousing Limited site are likely to be stored inside the building.

There is a sewage treatment works which is located approximately 150 m west of the site. Raeburn Road South, Indipave Depot and D&M Forwarding & Warehousing Limited are located between the permitted area and the sewage treatment works.

It is considered unlikely that a fire involving the combustible waste stored on the site would reach these neighbouring businesses due to the lack of combustible / flammable materials in the vicinity of the Site. A fire would therefore have little fuel/feedstock to spread to neighbouring businesses.

The risk of fire spreading is mitigated by the storage facilities used by Cooks Waste Kare Limited. The screening operations are carried out within an open fronted structure, as such there is a metal wall along the southern boundary. Waste associated with the screening operations is stored within bays or skips. Waste stored within bays can easily be removed in the event of a fire. Skips will be easily removed by mobile plant on the site.

Section 5.0: Managing Fire Risks from the Storage of Waste

5.1 Storage duration

Restricting the maximum storage duration of combustible waste will reduce the risk of self-heating within waste piles. The maximum storage duration for combustible waste stored on Site is one month in accordance with the FPP Guidance.

Good stock rotation ensures effective management of the time that waste is stored on site. Waste storage areas will be inspected daily. Storage areas will be cleared if they have not been cleared within the maximum storage duration. Daily inspections and weekly reviews of storage areas will be recorded using Stock Rotation Forms.

5.2 Stock rotation policy

Good stock rotation ensures effective management of the time that waste is stored on Site. The Site operates a First-in, First-out policy for waste. Incoming waste will be screened, and separated waste will be stored according to their type. Waste from a storage area that is being sent off the site will be removed in its entirety, when possible, to ensure full stock rotation.

Cleared storage areas, containing no combustible waste, will be cleaned to remove any residual loose combustible waste, dust or fluff. The clearing and cleaning down of storage areas is recorded on the Stock Rotation Forms. Storage areas are shown on the Layout Plan (see Appendix 1).

5.3 Pile dimensions, volumes and separation distances

The recommendations within the FPP Guidance in relation to stockpile sizes are proposed to be met on this site. Stockpile volumes of waste stored are less than the recommendations included within the FPP Guidance.

Storage areas are shown on the Layout Plan. Table 5-1 below summarises combustible waste storage area sizes and maximum individual pile sizes, the volume for each waste type and the maximum storage times.

A maximum pile height of 4m for combustible waste will be enforced in accordance with the FPP Guidance. The maximum pile height in bays / contained stockpiles is 2.1 m.

The minimum separation distance for combustible waste stockpiles stored, where waste is not stored within a bay or container is 6m.

Table 5-1: Combustible waste storage area details

Storage bay contents	Facility	Size (LWH)	Volume	FPP guidance max volume	Max storage time
Green Waste	Bay within treatment building	6m x 6m x 2.1m	75 m ³	750m ³	1 month
Wood	Bay within treatment building	6m x 6m x 2.1m	75 m ³	750m ³	1 month
Cardboard	Bay within treatment building	6m x 6m x 2.1m	75 m ³	750m ³	1 month
General waste	Bay within treatment building	6m x 6m x 2.1m	75 m ³	750m ³	1 month
Plasterboard	Bay within treatment building	6m x 6m x 2.1m	75 m ³	n/a	2 weeks
Metal	Skip within treatment building	3.6m x 1.8m x 1.2m	7.8	750m ³	1 month
WEEE (if accepted)	Skip within treatment building	3.6m x 1.8m x 1.2m	7.8	450m ³	1 month
Quarantine area	Pile within treatment building	3m x 3m x 4m	36 m ³	50% of largest pile	36hrs

5.4 Particle size

Combustible wastes will be stored in their largest form prior to removal from Site.

It is in the best interest of the Operator to remove treated waste (typically with a smaller particle size) as soon as possible to make space for incoming waste. Ensuring that processed waste, with a smaller particle size, is removed as soon as possible will ensure that waste on the Site will be stored in its largest form.

5.5 Storage bays, skips and containers

Waste may be stored in stockpiles, storage bays or skips/containers, see Site Layout Plan. Combustible waste on Site will be stored in concrete bays/skip /storage container within the dedicated building.

The waste storage bays used on Site provide a barrier, allowing better control of stockpile sizes and waste mixing. All storage bays on the Site are constructed from industry standard concrete or steel panels which provides a thermal barrier - confirmed to have a fire resistance period of at least 120 minutes.

An appropriate 'freeboard' space of at least 1m will be maintained within the storage bays to prevent fire spreading over the walls. The height of the walls is 4m, therefore the maximum height of waste in bays / contained stockpiles is 3m.

All combustible waste storage areas are accessible by mobile plant and firefighting equipment to allow for a fire to be put out. The integrity of firewater containment infrastructure retaining water is checked as part of the inspection checklists (EMS).

Where appropriate, mobile plant will be used to remove burned waste from the vicinity of the fire, to minimise the likelihood of a fire spreading as burned waste may reignite. Burned waste will be transported to the Fire Quarantine Area.

5.6 Risk to surface and groundwater

Combustible waste is stored and sorted within a secure building, on impermeable surfacing. Firewater from such waste, in the event of a fire, will be contained within the building.

The Site's drainage system consists of gullies and an interceptor. Surface run-off is channelled to the interceptor to prevent potentially contaminated surface water reaching land, groundwater and / or surface water courses. The interceptor discharges into foul sewer under a trade effluent discharge consent.

In the event of a fire and the need for water as a suppression measure, a firewater boom will be deployed along the waste storage building entrance. Firewater will collect within the building before being removed by a licensed contractor to a suitably licensed facility.

5.7 Seasonal variations

Imported waste is mixed household, commercial, industrial, construction and demolition waste. There may be seasonal variations regarding the amount of waste imported on to the Site. The export of waste will be increased during these variations to ensure that maximum storage durations of waste are not exceeded.

5.8 Managing temperatures within waste piles

Combustible waste stored on Site will be stored for a maximum of one month.

In the event of prolonged hot weather, combustible waste should be stored out of direct sunlight and under a canopy. If this is not possible, combustible waste piles may be turned daily to ensure any localised warming within the waste is dissipated quickly. All combustible waste will be stored under cover within the treatment building.

Waste storage times for combustible wastes are minimised to reduce the likelihood of heat building up within a waste pile to a point to where self-combustion could occur.

5.9 Lithium-ion batteries

Lithium-ion batteries have the potential to explode when damaged, punctured or overheated and are a significant potential ignition source for fires on waste sites.

Site operatives are vigilant of items that may contain Lithium-ion batteries when sorting incoming waste, any discovered will be separated and stored separately to other combustible waste types. Lithium-ion batteries will be stored in a battery storage box within the waste treatment building.

5.10 Persistent Organic Pollutants

Some waste types stored on the Site i.e. uPVC windows contain persistent organic pollutants (POPs). uPVC windows are stored separately to other wastes stored on the Site. In the event of a fire, the fire service will be informed that there are wastes containing POPs on the site and will be notified where these are stored.

Section 6.0: Detecting a Fire

The risk from localised ignition (hotspots) due to contamination is generally less likely in processed material. This is because contaminants are removed before the processed wood is put into stockpiles for short-term storage awaiting despatch from Site. However, there remains a risk that a hotspot could develop.

To detect hotspots within stockpiles of potentially combustible material, the operator will, using a temperature probe and a hand-held thermal imaging camera with a trigger temperature of 50°C, monitor any remaining stockpiles at the end of each working shift.

Should temperatures be discovered that exceed 50°C, the stockpile would be cautiously dismantled and carefully removed, to ensure sufficient oxygen is not introduced to increase the risk of combustion, to the quarantine area to allow cooling to take place.

Due to the low levels of material kept on site for short periods of time, along with robust pre-acceptance measures, reduces the risk of a hotspot becoming established.

There is specific evidence as to the combustion temperature of the material, and a temperature of 50°C will be the point at which action is taken. The temperature will be monitored by using a temperature probe, like those used for the monitoring of compost piles.

As the material is sufficiently loose and friable so that penetration of the material by the temperature probe in the stockpile will be easy to accomplish. An image is shown below as an example of the equipment available supplied by Freeland Scientific Ltd.

Figure 6-1: Thermal probe (Freeland Scientific)



Detection is via 2 x IR2 infrared flame detectors linked to an alarm panel in the weighbridge office with out of hours mobile phone alerting in addition to sounder/beacons in the tipping hall and weighbridge office. The system is configured to alarm and then begin extinguishing the fire. This auto system is intended to minimise the spread and intensity of a fire until the fire brigade arrive.

6.1 Auto-suppression

The system is configured in a combination of 'double-knock' arrangements;

1. Flame detector activates alarm only.
2. If the second detector sees flame then the suppression system is activated automatically.
3. Auto dialler contacts the designated numbers.
4. Water is supplied to nozzles via an electric fire pump.

A tee is installed into the pipework at ground level between the pump and suppression system to allow a pressure fed supply to fire service appliances as required. This facility allows water to be delivered to the affected bay without requiring entry into the building.

Nozzles are positioned over the bays, each nozzle delivering 117 litres/min.

All on call staff live within 1 mile of the Site and upon receiving notification that stockpile temperatures are increasing are able to attend the Site within 30 minutes.

Management resides within 20 miles of the Site and can attend Site within an hour.

6.1.1 Certification for the systems

The temperature probe and a hand-held thermal imaging camera are regularly checked for correct operation.

Pump and control systems are supplied to BS9251:2021 which is the British Standard for Fire Sprinkler Systems in the UK.

Fire Panel is supplied and installed to BS5839 fire detection and fire alarm systems for residential and commercial buildings.

6.2 Detecting of a fire outside of operational hours

Cooks Waste Kare Limited implement the following measures to minimise the likelihood of a fire occurring during non-operational hours:

- Fire watch twice daily including at the end of the working day to inspect for signs of self-heating, smoke and fire, and ensure exhausts are cool etc.
- Dampening down of waste piles to reduce heat generation when outside temperatures are elevated.
- Minimise waste storage times – combustible waste is typically stored for a maximum of one month.

Suffolk Fire and Rescue Service average response time in 2019/20 was 10 minutes².

² <https://www.suffolk.gov.uk/suffolk-fire-and-rescue-service/about-suffolk-fire-and-rescue-service/performance-reports-and-strategic-assessment-of-risk/suffolk-fire-and-rescue-performance/>

The nearest fire station is located approximately a 10-minute drive from the site. It is therefore considered that Suffolk Fire and Rescue Service would be able to start firefighting procedures within 12 minutes of being alerted to a fire at the Site.

If the Operator (or other senior management) is the first responder, they will attempt to suppress the fire before the Emergency Services arrive if it is safe to do so.

6.3 Detection of a fire during operational hours

All members of staff are trained to be vigilant to the signs of fire and to report any incidents to site management.

The emergency services will be informed immediately, by the operator, if there is any evidence / suspicion of a fire on the Site.

The fire watch, during operational hours (in the morning / midday), is undertaken by site personnel, daily. These fire watches are recorded using Inspection Checklists (EMS).

Visual inspections are carried out throughout the working day to check for fires / potential causes of fire. Staff are working to sort / separate the waste throughout the day and will therefore be able to quickly identify any signs that the waste is heating up, producing smoke, or showing any other signs of a fire.

Section 7.0: Contingency Measures During a Fire

The Operator will implement fire contingency plans via procedures contained within the EMS.

Waste imports can be swiftly ceased in the event of a fire. Vehicles used to import waste on to Site are controlled by the Operator and their customers. All Site staff will be instructed to cease the importation of waste in the event of a fire.

During an event there will be no deliveries or export activity from the site, with such operations only allowed once all decontamination activities have been completed to a satisfactory standard. 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 vicinity.

Neighbouring business and residents will be contacted in the event of a fire.

Contact details for neighbouring businesses and residents are included on the Key Contacts Form within the EMS.

In case of circumstances where maximum waste storage times are likely to be exceeded then stockpiles of combustible waste metal will be frequently inspected for any signs that the waste is heating up, producing smoke or showing any other signs of a fire.

The firewater produced from tackling a fire will be removed by a vacuum tanker to a suitably licensed facility. Binder Limited will be used on an emergency basis to remove any firewater on site.

Section 8.0: Suppressing a Fire and Firefighting Techniques

8.1 Use of the quarantine area

The on-Site Fire Quarantine Area accords with the FPP Guidance requirements, see Site Layout Plan. The Fire Quarantine Area may be used for storing materials to prevent the spread of fire or to isolate materials that are likely to re-ignite or have been burned. This will aid in the overall suppression of a fire. The Fire Quarantine Area will be kept free of materials so that it can be used in the event of a fire.

The Fire Quarantine Area has sufficient separation distances (minimum of 6m) from any sources of ignition or stored combustible waste. The Fire Quarantine Area will be able to store approximately 36m³ of waste which is 50% of the volume of the largest stockpile of combustible waste stored on the Site.

Due to the layout of the Site, it is necessary to have a flexible Fire Quarantine Area. The location of this Fire Quarantine Area will vary, however there will be an area of at least 3m x 3m, kept free at all times. The Fire Quarantine Area will not be located within 6 m of combustible waste, flammable materials e.g., fuel, or any sources of ignition.

The flexibility of the Fire Quarantine Area will be covered in the EMS training for new and existing staff. Every staff member must be aware that the Fire Quarantine Area must be kept clear at all times and not be located within six metres of combustible waste, flammable materials, or any sources of ignition.

The Fire Quarantine Area will allow for faster active firefighting regarding the removal of burning or burned material.

8.2 Use of suppression systems

There is combustible waste stored within the building, as such an automated suppression equipment is installed (see Section 6.1).

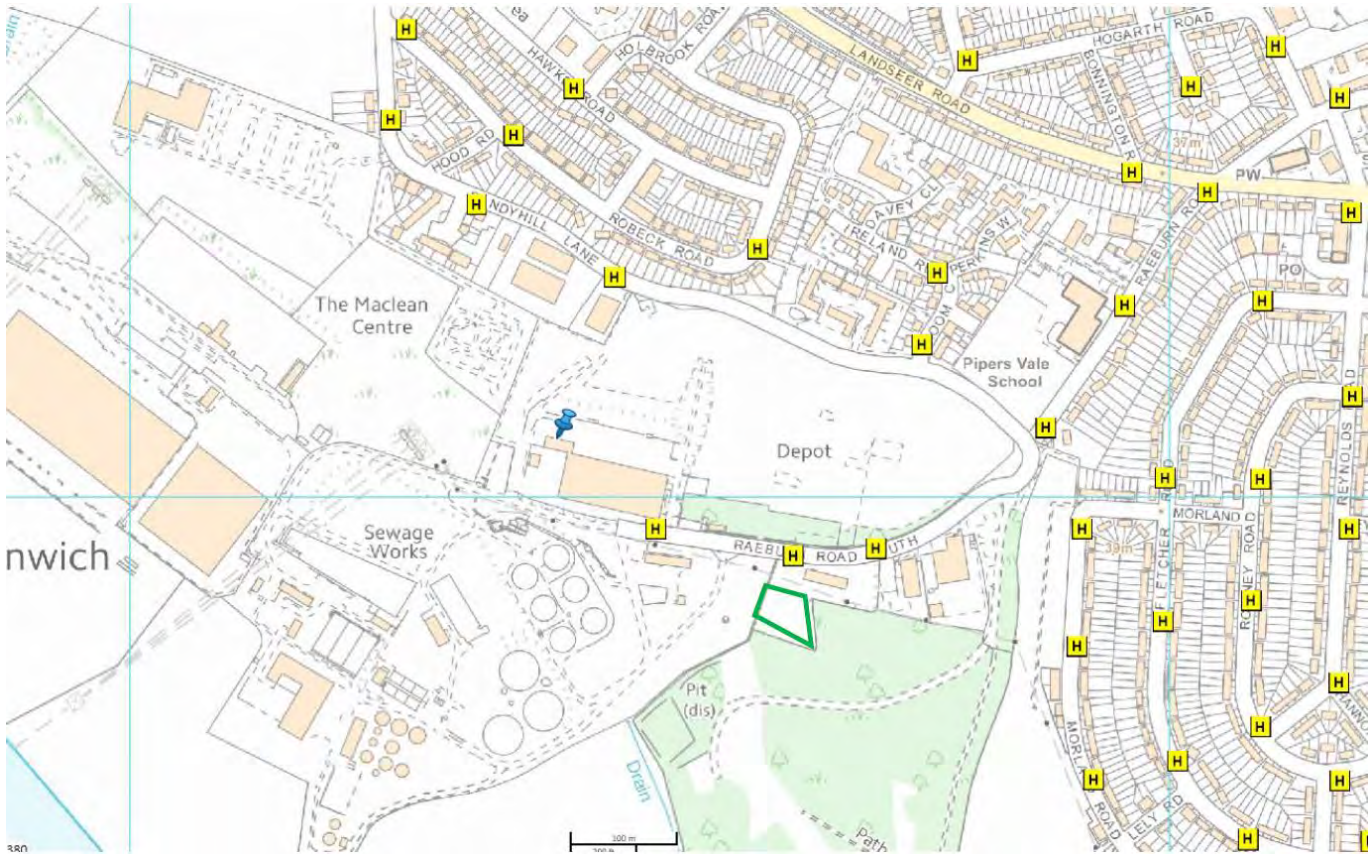
8.3 Use of water

The Site has access to mains water and fire extinguishers are present on site and kept within mobile plant.

Hoses connected to mains water, water storage tank and fire extinguishers will be used as a first response measure in the event of a fire or to extinguish smaller fires before a larger problem arises.

Water is available via fire hydrants, the nearest of which is located on Raeburn Road, approximately 40m north of the permitted area. There are additional fire hydrants located in the vicinity of the site. The Site also maintains a water bowser of 45,000 litre capacity next to the waste storage building, in addition to the mains water and Fire Engine water supply.

Figure 8-1 – Location of fire hydrants



FPP guidance states that a worst-case scenario must be considered. A worst-case scenario may be considered to be the largest combustible waste pile on site catching fire. EA guidance requires that if no other mitigating actions are taken (such as creating a fire break) for a 300m³ pile of combustible material, a water supply of at least 2,000 l/min for a minimum of 3 hours must be available.

Suffolk Fire and Rescue Service have advised that that all hydrants meet the British Standard (BS 750:2012) and therefore are able to deliver a maximum flow rate of 2,000 l/min to a device. The emergency services can utilise the nearby fire hydrants in the event of a fire.

The water suppression information provided from guidance is as follows:

Flow rate required	2000 l/min
Pile size used in guidance example	300m ³
Requisite time period for flow rate requirement	3hrs
Volume of water resulting from the above	360m ³

2000 l/min flow rate for a period of 3 hrs, results in 360,000 l (or 360m³) of water required to extinguish a 300m³ waste pile. $300\text{m}^3 / 360\text{m}^3 = 1.2 \text{ m}^3$ volume of water required to extinguish 1m³ of waste in 3 hrs.

Volume of water required to extinguish 1m ³ of waste in 3hrs	1.2m ³
Maximum pile size of combustible waste on Site	75.6m ³

$$1.2 \text{ m}^3 \times 75.6 \text{ m}^3 = 90.7 \text{ m}^3$$

$$90.7 \text{ m}^3 \text{ of water} \times 1000 = 90,720 \text{ l}$$

$$90,720 \text{ l} / 2000 \text{ l/m} = 45 \text{ mins}$$

Volume of water required to suppress max pile size	90.7 m ³
Hours to extinguish maximum pile size	0.75 hrs (45 mins)

It is calculated that a total of 90.7m³ of water would be required to extinguish a fire involving the largest pile of combustible waste stored on the site. It is calculated that it will take approximately 45 mins to extinguish this fire using the water from the nearby hydrants alone, which is significantly less than the 4-hour guide time, required by the FPP Guidance.

Section 9.0: Recovery After a Fire

9.1 Managing Firewater

The calculation in Section 8.0, Suppressing a Fire & Firefighting Techniques, states that a maximum of 90.7m³ of firewater may be produced when tackling a fire involving the largest pile of combustible waste stored on Site.

In the event of a fire, firewater will collect within the building on the impermeable surface. Mobile booms will be deployed across the buildings entrance to contain the collecting firewater.

The integrity of the site infrastructure, including surfacing and mobile booms are inspected on a regular basis using Inspection Checklists (EMS). Any defects are rectified as soon as reasonably practicable.

Firewater on site will be removed constantly during (if logistically viable) and after a fire event via vacuum tanker by Binder Limited, who are based in Claydon (an approximate 20-minute drive from Site).

9.2 Contingency measures – managing burned materials

There is a chance that waste re-ignites after it has been extinguished. Burned waste will be monitored following a fire to identify any signs that the waste is re-igniting and to ensure that the waste is completely extinguished. Movement of burned waste may minimise the risk of the fire spreading.

Ash and partially burned materials resulting from a fire will be contained and then removed from Site. This is to reduce the risk of contaminants leaching into surface water features / reaching groundwater. Burned materials will be sent to a suitably licensed landfill.

The importation of waste will resume following the removal of burned materials and the removal of firewater from Site.

9.2.1 POPs

Residues from a fire that has involved waste containing persistent organic pollutants (POPs) will be removed from site in accordance with The POPs Regulations 2019.

9.3 Steps to becoming operational

Following a fire, Cooks Waste Kare Limited employ the following steps before accepting waste and becoming operational:

- All burned materials will be removed to a suitably licensed facility.
- All firewater contained on the surface of the site will be removed by Binder Limited to a suitably licensed facility.

- Following any environmental incident on site including fires, details of the event will be recorded on an Accident / Incident form included within the EMS. Completion of the form will enable all the details of the fire to be recorded including sequence of events, causation, size and extent of fire, damage sustained (internally and externally), recording of the investigation and actions taken.

Section 10.0: During and After an Incident

10.1 Dealing with issues during a fire

In the event of a fire on Site, all incoming deliveries in transit for the period during an incident will be directed to a holding position away from Site.

Any vehicles in the processing of delivering waste to the site at the time of the incident will be given any paperwork and directed to leave site.

10.2 Notifying residents and businesses

There are several sensitive receptors within 1km, however any business residents and business near the Site and in the direct path of the prevailing wind will be notified in the event of a significant incident.

Where deemed necessary the local media will be contacted to inform local residents of the incident and to avoid the area if possible.

10.3 Clearing and decontamination after a fire

Waste outputs and fire damaged waste shall be progressively removed when safe to do so to alternative permitted facilities once the material is dampened and there is no likelihood of re-ignition following liaison with the fire service.

The disposal of burned material will largely depend on the waste itself and the levels of combustion that occurred.

Once the fire has been extinguished, and it is safe to do so, checks will be carried out on the structural integrity of any critical infrastructure which may have been near the fire and all external surfaces.

The Site shall not recommence accepting waste until the Fire & Rescue Service and the Environment Agency confirm it is safe to do so and all walls and infrastructure have been checked.

All firewater will be tankered away. The discharge of fire water residues to the surrounding environment will not be permitted.

10.4 Making the site operational after a fire

During the post incident phase any contaminated water will either be removed from site or used to refill the water storage tank in the yard. As oil/fuel floats on top of water it is possible to skim the contamination from the surface and use the water underneath. Alternatively, absorbents can be used to remove the fuel/oils. In this case all used absorbents will be despatched from site under the correct permissions to a permitted site.

Where necessary the site will be decontaminated using appropriate remediation measures including but not limited to the cleaning down and replacing of surfaces and building materials, removal of contaminated fire water run-off, etc.

Prior to commencement of operations after an incident a full review of the site's fire prevention measures, operating procedures and emergency procedures will be carried out. The review will include an assessment of the site's performance, the cause of the outbreak and corrective and preventative measures required to prevent a similar incident.

This FPP will be formally reviewed by Sun Skips, initially **six months after agreement**, and then on an **annual basis** as a minimum to ensure that the controls described are effective and reflect current guidance.

In addition, the FPP will be reviewed following any relevant changes in Site operations or procedures that are likely to have implications from a fire prevention perspective.

Drawing - Site Layout Plan



- Legend:
- Permit boundary
 - Storage

Consultant:
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Client:
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Site:
Raeburn Road South, Ipswich, Suffolk, IP3 0ET

Drawing title:
Layout Plan

Date: 27/09/2024	Scale: 1:400	Paper size: A3 (420×297mm)
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Drawn by: KB	Checked by: GK	Status: Final	Final revision -
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Drawing Ref: 314107 DW01	Drawing No: DW01
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