Fire Prevention Plan

Prepared on Behalf of:

Keeble Container Services Ltd

Site Name:

Paynes Lane

Nazeing

Waltham Abbey

EN9 2EX

Environmental Permit Application Reference:

EPR/LB3804LQ/A001

DOCUMENT CONTROL SHEET

Client:	**Keeble Container Services Ltd**
Project:	**Environmental Compliance Support**
Title	**Fire Prevention Plan**
Issue	**1.0**
Date	**06.07.23**
Status	**Submission Version**
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Distribution List

Environment Agency

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1 Introduction

1.1.1 This Fire Prevention Plan explains how operational procedures laid out in this Fire Prevention Plan ensures that the risk of fire is minimised, and any outbreaks are effectively controlled.

1.1.2 This document is separate to any documentation intended to meet the Health & Safety obligations associated with the Regulatory Reform (Fire Safety) Order 2005.

1.2 Interpretation

1.2.1 'Responsible Person' refers to any person trained and responsible for monitoring and reporting as detailed in this Plan i.e., Senior Management (Director, Technically Competent Manager, the Site Manager, and any Supervisors).

1.2.2 'Fire Warden', relates to any person appointed & sufficiently trained with specific responsibilities in the event of a fire.

1.2.3 'Operative', relates general yard staff.

2 Fire Prevention Plan

2.1.1 This Plan has been prepared with reference to the following documents:

- Fire Prevention Plans: Environmental Permits Published January 2021 Environment Agency Guidance.

3 Fire Risk Scoping Exercise

3.1.1 The controls and measures are aimed at reducing:

1) Minimising the likelihood of a fire happening;
2) Aiming for a fire to be extinguished within 4 hours;
3) Minimise the spread of a fire within the site and to neighbouring sites.

3.1.2 The Risk Assessment presented in Section 4 Table 1 underpins the measures adopted.

4 Fire Risk Assessment

Table 1: Possible Causes of Fires as identified within the Fire Prevention Plan Guidance 2018

Potential Source of Ignition	Prevention/Management
Arson;	Enclosed site perimeter Security cameras (24-hour operation)
Self combustion	The site does not intend to accept fine materials such as tyre crumb or wood chip, which can both be prone to spontaneous combustion.
Plant or equipment failure	Daily inspection of all equipment/machinery by operatives, conducted at the beginning of the working day. Full annual inspection of all equipment (LOLER/PUWER). End of Day Procedures
Plant or equipment operation	Inspection procedures as detailed above. Reliance will be placed on Fire Fighting Equipment and the planned preventative maintenance schedule as detailed.
Electrical faults or damaged/ exposed electrical cables	Preventative maintenance of all electrical equipment to ensure that any obvious signs of damage or deterioration do not go undetected.
Naked (hot) light fixtures	No naked sources of ignition are within 6 metres of combustible or flammable materials.
Discarded smoking materials	No smoking in permitted area.
Hot works e.g., welding, cutting	Only trained operatives are authorised to conduct operations involving hot cutting equipment. Activities will not take place with 6 metres of any risk materials. End of Day Procedures.
Industrial heaters	No industrial heaters onsite.
Hot exhausts	Equipment is parked at a safe distance of at least 1 metre from accumulation of risk materials. End of Day Procedures.
Open burning onsite	No open burning takes place onsite.
Incompatible materials	All materials are stored within designated areas. Detailed waste acceptance procedures are followed by all Operatives
Neighbouring site activities	Adjacent sites are commercial and industrial in nature and are not deemed sensitive.
Hot loads deposited at the site	Hot loads are not accepted. Monitoring for hot loads takes place as loads arrive at site with procedures to manage materials. Separation, isolation & storage of combustible materials within identified storage bays/skips/containers.
Weather, e.g., lightning strikes	Naturally occurring and uncontrollable.

4.1 Operational Flow Diagram (Combustible Materials).

4.1.1 The operation is summarised in the Operational Flow Diagram below:

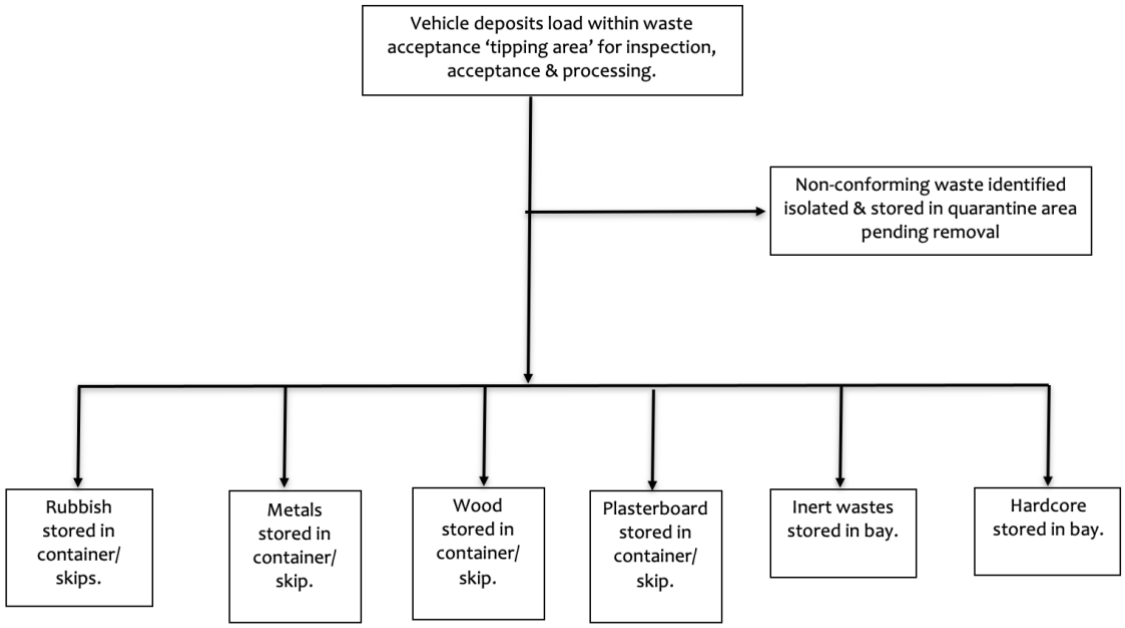


Figure 1: Operational Flow Diagram

5 Preventing Fires

5.1.1 Keeble Container Services Ltd intends to operate a household, commercial and industrial waste transfer station at their site off Paynes Lane. The site receives around 25-50 skips per week.

5.1.2 Wastes delivered onto site are primarily skips hired out to businesses, construction sites and households. When a skip is reported as full, it is normally collected within 48 hours. All drivers are instructed to inspect loads prior to collection to ensure any potential sources of ignition are not present a will adhere to strict waste acceptance procedures that form part of the site Environmental Management System (as detailed in Appendix FPP1).

5.1.3 Materials will be unloaded in designated 'tipping areas' and inspected for the presence of any fire risks (e.g., glowing embers or explosive materials or signs of flammable liquids), which will be moved to the quarantine area and extinguished.

5.1.4 Extinguished material will be monitored prior to isolation in a designated skip/container, which will be brought forward as necessary & removed within seven working days.

5.1.5 Acceptable materials are stored in areas/containers/skips/bays around the facility dependant on type & composition, as shown on the Site Layout Plan within Appendix FPP2. Combustible materials will be removed from site within one month of acceptance.

5.1.6 Materials stored in the tipping area (Reference 14/18 on the Site Layout Plan as in Appendix FPP2) pending inspection will be constantly monitored & worked (as necessary) to prevent the build up of heat.

5.1.7 A Fire Quarantine Area of at least 12.6m^2 (3.6m x 3.5m) plus a 6m buffer zone is available at all times. The area will accommodate over 50% of the single largest accumulation of combustible waste, equating to 50.4m^3 of waste (stored to a height of 4 metres). The fire quarantine area is located on an impermeable concrete surface as shown on the Site Layout Plan in Appendix FPP2.

5.1.8 The Responsible Person will ensure that a suitable fire quarantine area is available at all times and will conduct a visual check at the commencement of daily operations and throughout the day (fire watch). All staff members will be made aware that an area is to be kept clear for this purpose & its importance.

5.1.9 Potentially explosive & flammable fuels/oils (non-waste materials fuels & lubricating oils/grease) are stored over 6 metres away from stockpiles of combustible waste.

5.1.10 Gas bottles (pressurised canisters) if identified within incoming loads or emptied following use will be isolated and stored within a designated lockable cage in accordance with relevant guidance (location as shown on the Site Layout Plan Appendix FPP2).

5.1.11 Smoking is not permitted within the permitted area.

5.1.12 Only Competent Persons that have completed training will be authorised to perform 'hot work' activities, which are approved by Responsible Persons onsite. A Permit to work system is in place for all hot work activities. If necessary two operatives will complete 'hot work' activities, which will allow one person to complete necessary works & the other to supervise and tackle any sparks generated (this may include watching via CCTV). Fire extinguishers will be kept at hand all times 'hot works' are undertaken. All hot work activities will be undertaken at least 6 metres from any accumulation of combustible materials.

5.1.13 Materials will be stored in their largest form & pile sizes will be minimised wherever possible, according to operational need.

5.1.14 Fire Watch Procedure (During Working Day) Conducted by Operatives every hour:

1. That all mobile plant is parked at a distance from any combustible material (minimum 1 metres) and that there is no trapped debris located within the vicinity of exhausts.
2. That no material is trapped within static plant.
3. That no debris has settled onto hot exhausts and engine parts.
4. That a suitable fire quarantine area is available at all times.

5.1.15 A fire watch will be conducted at the end of the working day as part of the site End of Day Procedures, as detailed at Section 10. In the event of hot work activities being conducted an inspection of the area/material will be conducted every 15 minutes for at least 1-2 hours.

5.1.16 Plant & equipment is subject to manufacturers maintenance. Driver inspection/defect sheets are completed prior to use. Defects are reported & rectified by contractors or inhouse depending on the nature of the repair works required.

5.1.17 Maintenance requirements are recorded in the Site Diary. All records will be kept, and any necessary maintenance recorded. All faulty equipment will be isolated (if required), decision on Management.

5.1.18 Operatives inspect all machinery/equipment on a daily basis to ensure the equipment is in an efficient state. In the event of a leakage or spillage site staff will be alert to any such leakages or trails that might develop during the day and in the event that such is detected the site leakages/spillage response procedures presented in Appendix FPP1 will be actioned.

5.1.19 In the event of a fault with equipment that may pose a risk of fire being discovered the following procedure will be followed: -

1. Switch off the equipment immediately if safe to do so
2. Isolate the equipment; and
3. Report the fault to a Responsible Person. A Responsible Person will inspect the equipment, records the fault in the Defect Sheets & will contact the internal

engineers to complete necessary repairs. A replacement may be ordered, if necessary, to cover interim downtime. A sign will be clearly displayed stating that the equipment is not in use.

5.1.20 Fire extinguishers are strategically located throughout the site. All static plant, mobile plant & vehicles will have fire extinguishers installed. A Responsible Person inspects all extinguishers annually (servicing) & discharged as required. Spent extinguishers are replaced as soon as identified.

5.1.21 Electrical equipment is inspected by a Responsible Person on a weekly basis and detailed in the Site Diary if any defects (loose cables, deterioration, or wear) are identified. Only a qualified electrician will be instructed to assess & complete necessary repairs.

5.1.22 Responsible Persons (Directors) will be alerted via a telephone alarm alert, which would be triggered by visible flames that will activate the alarm and suppression system (deluge system and misting system). Furthermore, Responsible Persons are able to monitor the site via the CCTV cameras remotely at anytime to conduct random checks or to see the extent of any incident.

5.1.23 Operatives conduct routine housekeeping activities (i.e., cleaning & tidying) as necessary and as a minimum on a weekly basis (including all treatment equipment/electrical areas i.e., the electrical cupboard or power supply areas if the Responsible Person deems it necessary during the course of weekly inspections). Cleaning/tidying will include but not limited to pressuring washing/sweeping.

5.2 Self-Combustion

5.2.1 Certain materials can self-combust under certain conditions as a result of: -

1. A physical reaction such as fine materials with large surface areas prone to friction; and/or
2. A biological reaction through degradation processes; and/or
3. A chemical reaction if coming into contact with corrosive substance such as strong acids and bases.

5.2.2 Self-combustion is most possible during hot conditions or where waste is left to stagnate for extended periods or items exist within the waste that cause combustion over a period of time. The likelihood of self-combustion occurring has been assessed as low, as the waste is rotated on a first in first out basis precipitated by frequent emptying of the storage areas/containers/bays. During extreme hot weather water hoses will be deployed to dampen down accumulations of materials to reduce the likelihood of hot spots forming as deemed necessary by a Responsible Person (i.e., Operatives will be instructed as to when they should be deploying water due to extreme weather, which could be in the event of prolonged periods of dry/sunny weather).

5.2.3 Material Management & Mitigation Measure Procedures: -

1. Operatives throughout the working day will monitor each bay/ container holding combustible materials. If the monitoring indicates any evidence of a 'hot spot' forming (such as visible steam, discolouring or odour i.e., indicating degradation) a Responsible Person will be notified, and Condition 1 of Table 2 will be implemented immediately.

6 Detecting & Suppressing Fires

6.1.1 Staff members will be trained on the contents of this Fire Prevention Plan, which is accessible at all times for them to refer to if needed.

6.1.2 All fire-fighting equipment is checked/inspected monthly.

6.1.3 Fire Drill Procedure:

1. A fire drill is carried out annually to confirm that the facilities, procedures and this FPP are effective and that everyone understands what they should do in the event of a fire, and how to evacuate the site.
2. Records must be kept regarding each drill. Special attention should be given if the drill was slow or incomplete
3. All fire points should be checked once a year.

6.1.4 All training records are kept in the Offices.

6.2 Suppression System

6.2.1 Reliance will be placed on the below provisions as detailed in Paragraph 6.2.2 to combat and extinguish a fire.

6.2.2 Equipment available to tackle a fire:

1. Portable AFFF fire extinguishers located as shown on the Site Layout Plan in Appendix FPP2.
2. Swing Reel Hoses supplied by mains water and connected to the water storage tank, located as shown on the Site Layout Plan in Appendix FPP2.
3. Well (dedicated water supply), which will be connect to the fire render, located as shown on the Site Layout Plan in Appendix FPP2.

6.3 Detection System

6.3.1 Reliance will be placed on equipment horns, operatives shouting "FIRE". Given the assessed low risk level & the small quantities of materials are stored in the open yard an automated detection system is not deemed necessary or suitable.

6.3.2 The site benefits from a CCTV monitoring system, which is monitored by Responsible Persons via telephone devices, which will send an alert message in the event that the alarm being triggered.

6.3.3 Location of the CCTV Cameras is shown on the Site Layout Plan (Appendix FPP2).

6.3.4 Operatives can draw attention to or be drawn attention to the situation via vehicle/plant horns.

6.4 Detection Out of Hours

6.4.1 In the event of a fire during non-operational hours the CCTV monitoring system will notify the Responsible Persons via a phone alert to attend site to support the Fire & Rescue Service.

6.4.2 Furthermore, Responsible Persons are able to monitor the site via the CCTV cameras remotely at any time to conduct random checks or to see the extent of any incident.

6.4.3 Location of the CCTV Cameras is shown on the Site Layout Plan (Appendix FPP2).

6.4.4 We confirm that the system is not accredited, but all three objectives of the FPP Guidance can be met as a based on the arrangements detailed in this document the likelihood of a fire happening has been reduced to as far as is practicable, a fire should be extinguished within 4 hours and the spread of a fire will be minimised due to outside arrangements and arrival of Responsible Person outside operational hours.

6.5 Fire Conditions

Table 2: Fire Fighting Conditions

Alert Condition	Characteristics	Action	Preparation
Condition 1	Materials Smoking	Operatives will turn the material stockpiles utilising mechanical equipment to enable any trapped heat to be released.	Fire extinguishers ready for deployment. Be prepared to initiate fire procedures (Section 13). Responsible Person to be notified if not already present.
Condition 2	Visible Flame	Raise the site fire alarm immediately & initiate Fire Procedures detailed at Sections 13 If safe to do so tackle the blaze utilising onsite fire-fighting provisions including: - • Fire Extinguishers Deploy on small scale fires • Swing Reel Hoses (x2) capable of covering an area of 30. • Alert FRS	Prepare the fire quarantine area and water provisions for deployment.
Condition 3	Full Fire Established	Remove materials ablaze to the quarantine area or drag containers and deposit them in the fire quarantine area if safe to do so, so extinguishing/suppressing/tackling can take place, location shown on the Site Layout Plan in Appendix FPP2. On arrival of the FRS the appointed Fire Warden will transfer control of the incident over to the Incident Commander who will direct site operatives accordingly. Well utilisation as required by FRS.	Prepare for the arrival of the FRS and follow all instructions.

6.5.1 These provisions aim as far as reasonability possible to ensure that if a fire were to break out it would be extinguished within 4 hours.

6.5.2 The internal site layout is such that FRS can access all areas of the site at all times and HGVs are able to enter and turn around without obstruction. It is therefore, considered that there is suitable access for fire tenders to manoeuvre freely around the site should a fire break out.

7 Fire Prevention Equipment Inventory and Procedure

Table 3: Fire Equipment Inventory

Material	Procedure	Trained User	Location
Personal Protection Equipment	Full range of PPE readily available for use.	All staff are issued with PPE.	Provisions are contained within the Site Office.
Fire Extinguishers	Fire Extinguishers are used in the event of fires.	All staff are trained on how, when & what types of Fire Extinguishers should be used in the event of a fire depending on the composition of the material ablaze.	At locations throughout the site- as shown on the Site Layout Plan (Appendix FPP2).
Fire Water Hoses	Hoses used in the event of a fire.	Staff are trained on how and when to use the hoses.	At locations throughout the site- as shown on the Site Layout Plan (Appendix FPP2).
Dedicated Water Supply Well	Well used in the event of a fire.	Fire & Rescue Service.	Location as shown on the Site Layout Plan (Appendix FPP2).

8 Material Storage & Management

8.1.1 Wastes delivered to the site are deposited within the Waste Acceptance Area for inspection/sorting/processing. A minimum separation distance as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 1) will be maintained at all times.

8.1.2 Concrete is a non-combustible material and has a slow rate of heat transfer that provides shielding from heat and enables natural cooling. It is accepted in the industry that concrete "can be described as virtually fireproof"[1]. The concrete retaining walls will prevent any sparks escaping. Concrete can provide up to 4 hours (240 minutes) fire resistance (radiation & spreading), which meet the A1 class fire resistance standard (DIN EN 13501-1).

8.1.3 Inert Wastes are stored in bays as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 7/8).

8.1.4 Residual Rubbish, Metals, Wood & Plasterboard are stored in containers/skips as detailed in Section 9 Table 4 & as shown on the Site Layout Plan in Appendix FPP2 (Reference 2/3/4/5/6), which benefit from a 0.5 metre separation distance between each one.

8.1.5 The Waste Industry Safety & Health Forum (WISH) guidance Waste 28 Reducing Fire Risk At Waste Management Sites (Issue 2 April 2017), confirms the suitability of steel as a material for use in fire breaks (See page 47). The Chief Fire Officers Association amongst other bodies has endorsed this guidance. A report by the British Constructional Steelwork Association identified 550 Celsius as the limiting temperature for a steel structure with four sides such as a skip container to maintain its stability[2]. The risk associated with steel is melting, which happens at around 1365 Celsius.

8.1.6 Container/Skip Isolation Procedure

A. Operatives on identification of a fire within a container will enact procedures as detailed at Table 2.

B. Each container/skip will, if safe to do so be moved utilising the excavators (by connecting the grab head to the lip of the container/skip) & dragged to the fire quarantine area, after which extinguishing (smothering/burying or deployment of water) will be attempted pending FRS arrival.

8.1.7 Containment in identified areas/skips/containers (as shown on the Site Layout Plan in Appendix FPP2) ensures materials are isolated from potential sources of ignition and from environmental elements such as wind (fanning). The storage bays or containers will ensure that materials are well ventilated and able to cool naturally, whilst providing a thermal barrier.

[1] http://www.concretecentre.com/Performance-Sustainability-(1)/Fire-Resistance.aspx
[2] http://www.tatasteelconstruction.com/file_source/StaticFiles/Construction/supplements/Fire_Protection_Supplement.pdf

8.1.8 During extreme hot weather fire hoses will be deployed to dampen down accumulations of combustible wastes to reduce the likelihood of self-combustion, if deemed necessary by a responsible person (i.e., extreme heat wave).

8.1.9 At least once every quarter, the storage areas will be inspected for damage and repaired as needed as part of the preventative maintenance regime.

8.1.10 The site will turn over materials as quickly as practicably possible, operating a 'first in first out' policy, as detailed in the procedure in Section 8.1.11. Materials will be kept onsite until sufficient quantities have accumulated to constitute an economic onward load, or the maximum storage limits detailed at Table 4 have been reached, i.e., no material will be left within the containers/skips as these will be loaded directly onto HGVs and transported to an authorised receiving site.

8.1.11 First In First Out Procedure:

1. Operatives will deposit all 'new' incoming wastes at the front of any accumulation within the waste acceptance area.
2. Containers/skips once full are removed from site, with no residual materials remaining once they have been removed, which will ensure no older materials are left onsite for a prolonged period of time.

9 Combustible Material Storage Arrangements

Table 4: Combustible Materials Storage Arrangements

Reference Point Site Layout Plan Appendix FPP2.	Combustible Material	Storage Arrangements	Width Maximum (metres)	Depth Maximum (metres)	Height Maximum (metres)	Volume Maximum (metres cubed)	Minimum Separation Distance From Other Combustible Waste (metres)	Storage Time Onsite (Working Hours/Days)
1	Waste Acceptance Area	Stored loose in bay	5	5	4	100	0.5	1 Month
2	Mixed Rubbish	Stored loose in container	2.5	6	2.5	37.5	0.5	3 Months
3	Plastic	Stored loose in bay	2.5	6	2.5	37.5	0.5	3 Months
4	Wood	Stored loose in bay	2.5	6	2.5	37.5	0.5	3 Months
5	Residual Rubbish	Stored loose in bay	2.5	6	2.5	37.5	0.5	3 Months
6	Metals	Stored loose in container/skip	2.5	6	2.5	37.5	0.5	3 Months
7	Inert Soil & Stone	Stored loose in bay	4	4	5	80	-	-
8	Hardcore	Stored loose in bay	4	4	5	80	-	-
9	Plasterboard	Stored loose in skip	4.2	1.6	1.6	12	0.5	3 Months
Grand Total:						459.5m^3		

10 End of Day Operations

10.1.1 All operatives conduct an end of day inspection on all mobile equipment once parked to ensure that no trapped debris is located in the vicinity of the exhausts.

10.1.2 A Responsible Person conducts a final end of day inspection prior to closure to ensure: -

1. All mobile plant is parked in the designated parking area over 1 metre away from accumulations of combustible wastes.
2. Whenever possible no material will be left uninspected in any 'tipping area'.
3. No debris has settled onto hot exhausts and engine parts (Fire-watch).
4. Everything is switched off.
5. No visible signs of flames or embers are present
6. The security system is activated.
7. No one remain within the yard after closure

11 Fire Water & Containment

11.1.1 As required by the Fire Prevention Plan Guidance, a minimum water supply of at least 2,000 litres/min for a minimum of 3 hours is required for a 300 cubic metres pile of combustible material. This equates to 6.6 l/min (2000/300) per cubic metre of combustible material. At least 118,800 litres of water (6.6 l/min x 100 = 660 l/min x 180 minutes) would be required were the complete contents of the single latest accumulation ablaze. Reliance will be placed on the fire fighting provisions as detailed at Table 5 below.

Table 5: Fire Fighting Provisions

Fire Suppression Provisions & Water Delivery Systems	Specification	Cumulative Supply l/mins	Total Volume m3 Available (for up to 180 mins)
Primary Suppression Equipment (Non-water Provisions)			
Fire Extinguishers (Powder AFFF/Co2)	An array of Portable Fire Extinguishers suitable for tackling a range of fires.	-	-
Secondary Suppression Equipment (Water Provisions)			
Fire Hose	60 l/min connected directly to the mains water supply.	60	10,800
Fire Hose	60 l/min connected directly to the mains water supply.	120	21,600
Grand Total		120	21,600
Tertiary Suppression Equipment (Water Provisions)			
Fire Tender	45mm standard jet capable of delivering 2000 l/min (once connected to the onsite well)	2,000	360,000
Grand Total		2,000	360,000

11.2 Fire Fighting Water

11.2.1 In the event of water being required the following provisions are available:

- Fire Hoses:
  Six fixed pressuirsed hoses, which are connected directly to the water storage tank (feed via the mains water supply) and powered via a pumping system. Each hose is capable of delivering 66 l/min, locations as shown on the on the Site Layout Plan within Appendix FPP2. In the event of deployment, the fire procedures detailed at Table 2 and in Section 13 will be implemented. This system should control the spread of a fire in the early stages of development.
- Well (Adjacent to the Proposed Permitted Area):
  A dedicated well is located adjacent to the proposed permitted area which could be used by the FRS by dropping a pipe into the well and enabling an unlimited supply of water to combat a fire (location of well shown on the Site Layout Plan in Appendix FPP2). Once connected to the well a Fire Tender can deliver 2,000 l/min from an unlimited supply of water.

11.2.2 A Fire Tender is capable of delivering up to 6,000 litres of water at 2,000 l/min in a single load (through a 45mm standard jet), whilst it is being connected to the dedicated well.

11.2.3 Once the FRS have arrived onsite water-based fire-fighting provisions will only be deployed on FRS instruction.

11.2.4 The provisions detailed at Table 5 are capable of delivering the required 660 l/min as per the EA Fire Prevention Plan Guidance.

11.3 Firewater Containment

11.3.1 Resultant firewater will be contained within operational areas via concrete retaining walls and concrete kerbing and the deployment of sandbags across a section of the permitted area (approximately 10 metres) location as shown on the Site Layout Plan (Appendix FPP2) to contain all firewater run-off.

11.3.2 On average a 15kg sandbag is 0.8m wide x 1.25m length x 0.1m high, so 16 sandbags in all would be deployed to build a sandbag wall, (stacked two high). It is anticipated that it would take 10 minutes to construct the sandbag wall. A supply of at least 16 sandbags will be kept onsite at all times. Sandbags are stored in an IBCs for rapid deployment. The location of sandbags and the deployment lines are details on the Site Layout Plan Appendix FPP2.

11.3.3 Given the floor area of the site is over 715.4m^2 and the height of 0.2m, up to 143,000 litres (715 x 0.2 = 143m^3) of firewater would be retained within the site if required. This does not account for evaporation, which will occur to some degree (25% allowance). Overall, the onsite provisions for firewater containment are more than sufficient to the anticipated 118,800 litres of water stated in Paragraph 11.1.1.

11.3.4 Operatives will be instructed by a Responsible Person (Company Director in the first instance) on when to construct a sandbag wall, which will depend on real time events onsite.

Sandbag Monitoring & Replacement Procedures

1. Sandbags will be stacked, covered with a lid, and stored undercover, and a Responsible Person will monitor these bags. If necessary, sandbags will be rotated (i.e., those sandbags at the bottom of the stack will be placed at the top of the stack during the course of the inspection)
2. Sandbags will be replaced as necessary as determined by the ongoing inspections.

12 Contingency Planning

Table 6: Contingency Plans

Eventuality	Procedures/Measures
Contingency Planning in the event of a fire	Measures could include: - 1. The site will cease all operations and will not accept any further waste material (contact appropriate customers/contractors if necessary) until FRS arrives. 2. Employees will be advised of the situation. 3. Enact fire procedures as detailed within Sections 13 of this FPP. 4. The site will only reopen once FRS has advised it is safe to do so. 5. Fire damaged waste will be processed as appropriate. If this is not possible then it will be stored in the isolation facility and then removed from site.
Accident	Measures may include: - 1. The affected area will be isolated and an appointed 'first aider' will be contacted to attend to any injured party. 2. If necessary, the emergency services will be contacted. 3. A Responsible Person will decide on a case-by-case basis if cessation of operations around the affected area and reception of waste is necessary until the appropriate emergency services have arrived. 4. A Responsible Person will complete an Accident Investigation Report.
Seasonality (Including Transportation Shortages)	Measures could include: - 1. Confirm current storage times for materials accumulated onsite. 2. Contact outlets for the specified stream and arrange transportation. 3. Transport all waste accumulated within a designated container, even if it may be economically undesirable to do so, i.e., the container for transportation is not full. 4. In the event of no outlet being viable a last resort would be to transport the specified material to a landfill site via a third-party haulier to ensure that the storage limit maxima are not exceeded.
Supply Chain Failure (Including Transportation Shortages)	Measures could include: - 1. Confirm current storage times for materials accumulated onsite. 2. Increase monitoring of material stockpiles onsite. 3. Contact outlets for the specified stream and arrange transportation. 4. If the outlet is not receiving the specified waste stream, contact other outlets. 5. Conduct investigations into potential alternative outlets if potential outlets are not accepting specified streams. 6. Require cessation of deliveries until further notice and potential transportation to alternative sites. 7. Seek advice from EA.
Breakdowns (Mechanical Equipment)	Measures could include: - 1. Immediate isolation of the affected machinery. 2. External contractors notified to complete repairs 3. Hire in relief equipment in interim if needed. 4. Reschedule material despatch to align with scheduled repairs and or relief machinery availability.
Site Closure	Measures could include: - 1. Appropriate signage will be erected notifying any visitors that operations have been suspended. 2. Advise customers of the situation. 3. No more wastes will be accepted on to site. 4. Contact all potential outlets to ensure that all waste material is managed in accordance with the waste hierarchy where possible. 5. Notify EA that customers & receiving outlets have been contacted and provide scheduled dates for material removal. 6. Notify EA once stockpiles have been reduced to acceptable level

13 Fire Alert Procedures

Procedure in Event of Fire <u>on the site</u>

i. There must be no hesitation in raising the alarm. Any person discovering a fire must immediately operate the fire alarm, or (where an alarm is not provided) shout 'FIRE' to warn others in the vicinity. Fire alarms must not be used for any purpose other than as a signal for fire action or pre-arranged fire drills.

ii. Everyone must immediately leave the site and proceed directly to the designated assembly area upon hearing the alarm. The mobile plant/machine operators are, if possible, to remove their machines from the fire vicinity at that time; park and turn off their machines at a safe distance from the fire without blocking any Emergency access routes. No one is to return to the affected part of the site until it is confirmed safe to do so by the Responsible Person in charge of the premises.

iii. The Responsible Person in control of the site must check that FRS has been called and that a delegated member of staff knows where to direct FRS. In addition, the Responsible Person in control must check that occupants of adjacent units have been notified.

iv. The Responsible Person in control of the site must ensure that the site has been evacuated and in particular: -

   1. Supervise the orderly evacuation of visitors and staff.
   2. Supervise roll calls and collect and collate information, e.g., persons not at the assembly point. Collect information about the fire location and source.
   3. Ensure first aid is given if required.

v. On arrival FRS will take charge and the Responsible Person must co-operate with the FRS Officers. See Fire Service Act 2004 Sect. 45 for Fire Service Powers of entry.

vi. Contact neighbouring identified receptors within proximity to the site on identification of a fire & those that are contactable within a 1km radius of the facility as detailed in <u>Appendix FPP6</u> if instructed to do so by FRS (Major Incident).

14 Post-Incident Procedures

1. Clean up contractors will pump out & remove all accumulations of firewater run off from wherever required onsite following samples being taken and the waste correctly characterised.
2. Inspection of all equipment to be conducted prior to reinstating.
3. All burnt material to be removed to an appropriately licenced disposal site.
4. Post incident reports and enquiries.
5. Notify the Environment Agency, Environmental Health, and FRS that the site has been reinstated.
6. Review and update this Fire Prevention Plan in light of incident & provide a copy to any key stakeholders (EA/FRS).

15 Periodic Review

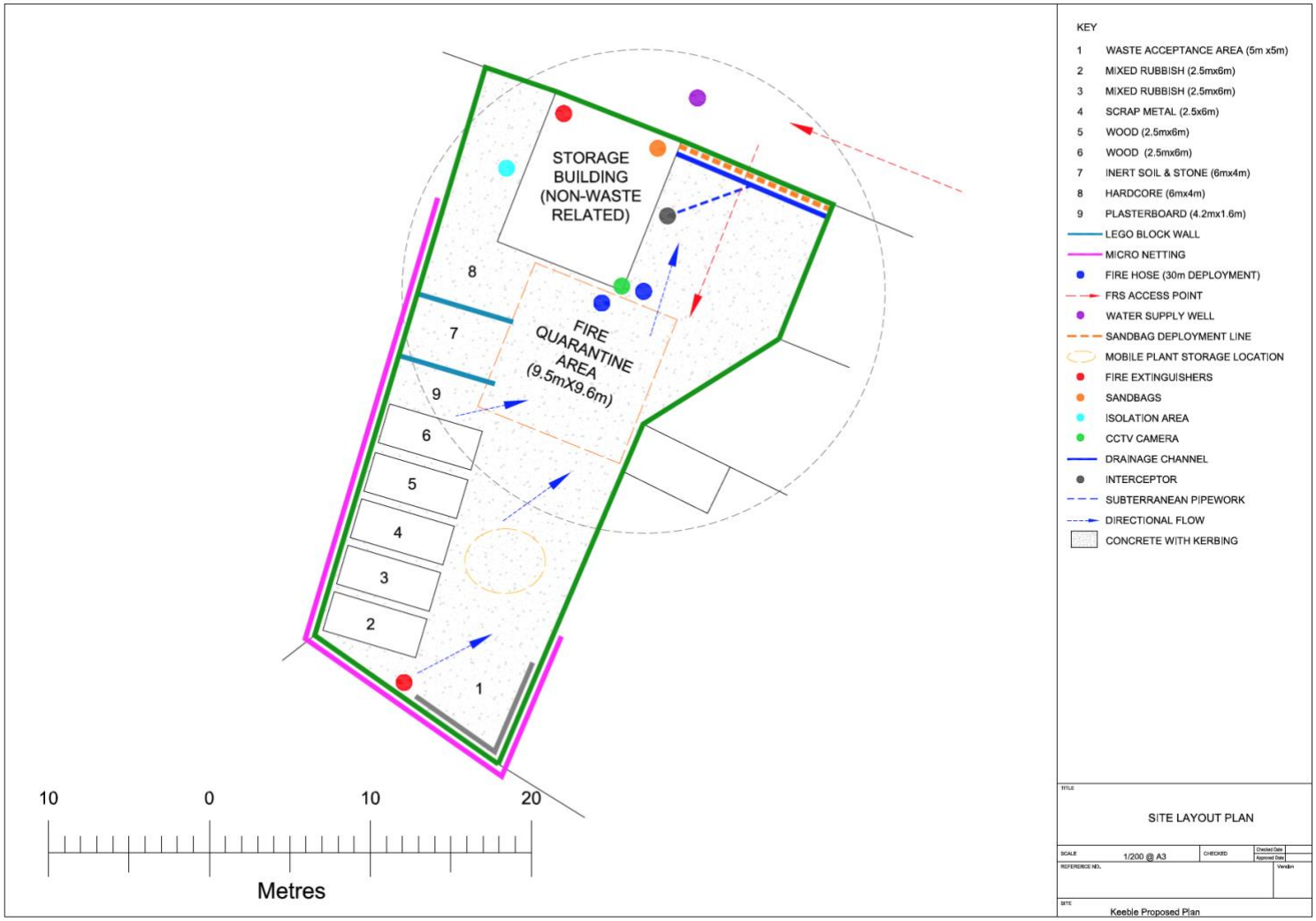
15.1.1 The adequacy of this Fire Prevention Plan will be reviewed as necessary or on an annual basis as a minimum.

Appendix FPP1: Leakage/Spillage Response Procedure

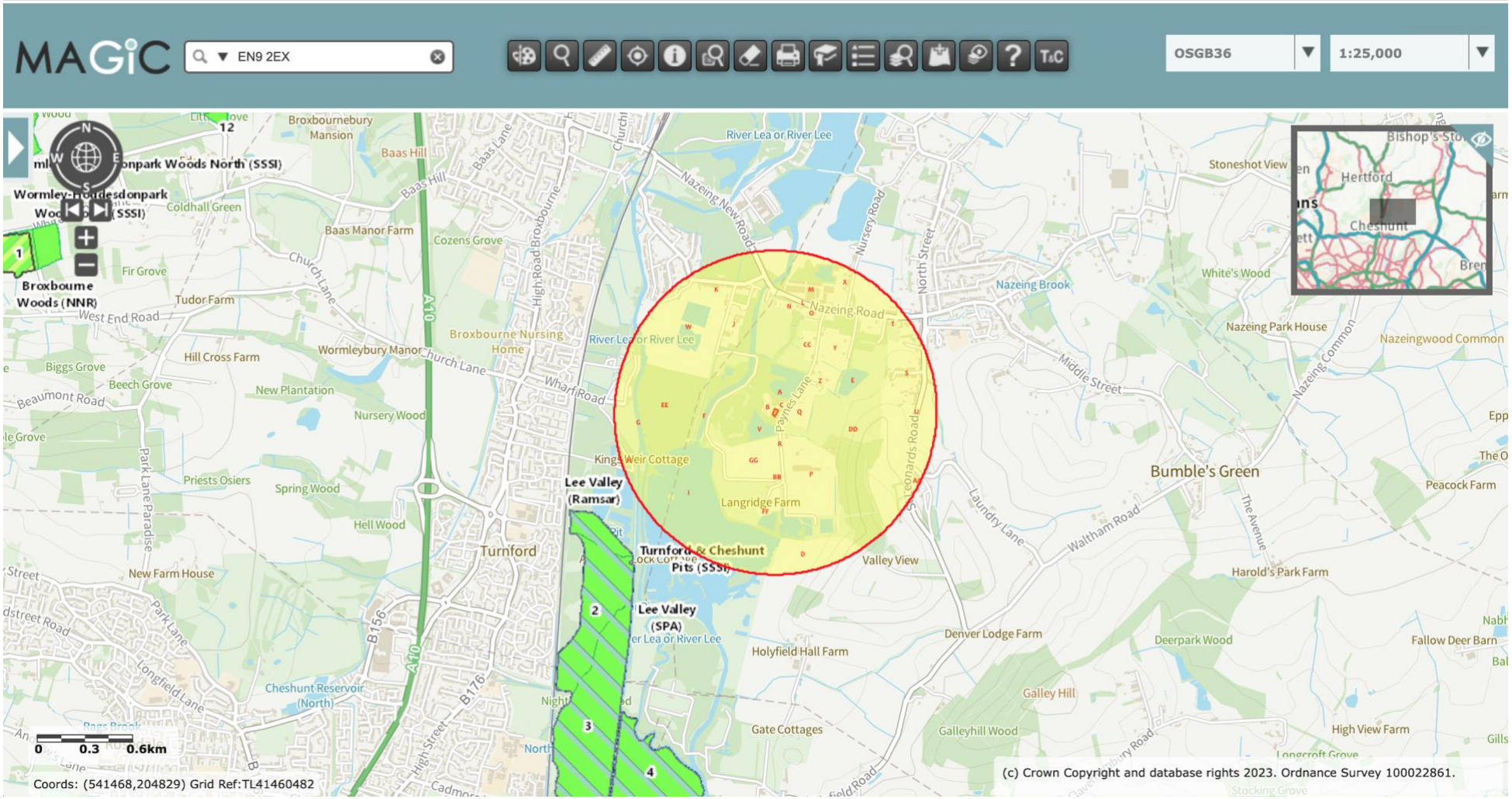
On identification of a Leak or Spillage the following procedure is to be followed to:

1. Prevent unauthorised access to the affected area
2. Prevent uncontrolled escape of potentially contaminating liquids using supply of absorbent materials to control the flow of liquids.
3. If safe to do so, isolate source of leak/spillage to prevent further losses, which may involve switching off a particular piece of machinery & deploying a containment vessel (i.e., drip trays) underneath the affected area.
4. If necessary, initiate controlled evacuation of the site.
5. If the leak/spillage is battery acid, apply a neutralising agent hydrated lime or similar. (Please note that water in a large quantity will only dilute the acidity & will not neutralise it) on the affected areas (Operatives must use appropriate PPE; gloves, face masks & goggles, whilst handling hydrated limes).
6. All contaminated absorbents must be placed in a leak proof container, which is labelled & stored pending removal.
7. Seek specialist advice on decontamination of the site surfaces if necessary
8. Complete an Environmental Incident Record Form (See Appendix EMS1)
9. Any actions taken will be recorded in the Site Diary.
10. Written confirmation of any actual or potential pollution incidents must be submitted to the Environment Agency via the sites Permitting Office within 24 hours.
11. Confirm site clean up with the Environment Agency.
12. Replenish supplies of absorbent materials.

Appendix FPP2: Site Layout Plan



Appendix FPP3: Receptor Location Plan (Smoke & Fire Spreading)



Appendix FPP4: Receptors Identified Contact Details (If Applicable).

Receptor Reference	Receptor Description	Direction From Site	Approximate Distance From Site Boundary (Metres)
A	Local Wildlife Sites (LWS) Lea Valley Central	North & West	90
B	Recycling Operation	Northwest/West	Adjacent
C	Commercial & Industrial Activities	Northeast	Adjacent
D	Open Fields/Land	Southeast	795.9
E	Clayton Hill Lake	Northeast	401.1
F	River Lea (Protected Species European Eel & Migratory Route)	West	394
G	River Lea (Protected Species European Eel & Migratory Route)	West	828.8
H	Kings Weir Cottage Residential	Southwest	893
I	Holyfield Lake	Southwest	707
J	Commercial & Industrial Activities	Northwest	558.6
K	Residential	Northwest	902
L	Nazeing Road (Infrastructure)	North/Northeast	726.5
M	Commercial & Industrial Activities	North/Northeast	740.8
N	Residential	North/Northeast	671.4
O	Residential	North/Northeast	674.8
P	Commercial & Industrial Activities	Southeast	522.1
Q	Commercial & Industrial Activities	East	135.1
R	Paynes Lane (Infrastructure)	South	84.1
S	Residential	East	857.6
T	Residential	Northeast	968.7
U	St Leonards Road (Infrastructure)	East	965.1
V	Waterbody	Southwest	69.5
X	Waterbody	Northeast	930.4
Y	Commercial & Industrial Activities	Northeast	516.8
Z	Commercial & Industrial Activities	Northeast	383.3
AA	Residential	Southeast	971.6
BB	Residential	South	325
CC	Commercial & Industrial Activities	Northeast	464.1
DD	Open Fields/Land	East	468.2
EE	Open Fields/Land	West	672.2
FF	Langdridge Farm	South	536.4
GG	Open Fields/Land	Southwest	290

Risk-Assessment: -The prevailing wind direction is from the South Westerly Direction so any smoke generated would be blown in a North Easterly Direction.

Appendix FPP5: Waste Acceptance Procedures (Extracted from EMS)

15.1.2 Compliance with the permitted waste types is assured by the following measures:

1. When a skip/container is hired prohibited material is clearly stated and reflected in terms & conditions of hire;
2. When collecting the full skip/container the driver will inspect and check to see if any prohibited material is present. If it is, the customer will be notified and advised of the following course of action available:

   a) Removed and left at the customers premises

   b) Accepted and disposed of directly to a site permitted to accept the waste
3. On delivery to site the driver will hand all paper copies of any Duty of Care Documentation to the Site Office, whilst all electronic paperwork will be transferred to the Site Office during transportation; and
4. Once all Duty of Care Documentation has been approved the wastes will be deposited in the Waste Acceptance Area for inspection, acceptance & processing (machine operatives will spread out the loads to aid the visual inspection process).

15.1.3 If any prohibited materials are present the following course of action will be taken:

a) Require the individual to load the non-permitted materials back onto the delivery vehicle; or

b) Accept, isolate & arrange for removal to an authorised waste management facility.

c) Under no circumstances will non-permitted wastes be retained onsite and dealt with as if it is permitted.

d) The Agency will be notified if a delivery is rejected.

15.1.4 If the prohibited material becomes apparent only after the above waste acceptance checks have been completed the following action will be taken:

a) The load will be isolated within the isolation facility (appropriate PPE will be warn if necessary) and removed from site to a suitably permitted facility at the earliest opportunity.

b) In the event that lithium-ion batteries are identified (small batteries or battery packs associated with electrical equipment) they will be isolated will isolated within a dedicated wheelie bin and stored pending removal to a suitably permitted facility.

c) In each case, the incident will be recorded in the Site Diary (taking note of the vehicle registration, date & time of the incident). If identifiable the individual will be notified of the event and reminded of the terms on which waste is

accepted onto site. (It will be at the discretion of the Management Team if they wish to ban an individual/company following an incident).

d) Under no circumstances will prohibited waste be retained onsite and dealt with as if it is permitted.

e) The Agency will be notified if a delivery is rejected.

15.2 Rejection Procedure

15.2.1 Any wastes identified as being unsuitable for disposal at the site will be rejected & recorded in the Site Diary.

15.2.2 A record will be kept of the following pieces of information:

a) Date & time

b) Person rejecting the waste(s)

c) Haulier/customer name and address including carrier's number

d) Vehicle registration number

e) Procedure name and address

f) EWC number

g) Transfer Note Number

h) Waste Description