

BARDON WASTE TRANSFER STATION


FIRE PREVENTION PLAN

LEICESTERSHIRE COUNTY COUNCIL

NOVEMBER 2020



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SITE:	Bardon Waste Transfer Station – Fire Prevention Plan
CLIENT:	Leicestershire County Council
DATE:	November 2020
REFERENCE	IV.343.19
DEVELOPMENT PROPOSAL:	Operation of a Waste Transfer Station.

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Date:	November 2020	
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1.0 REVIEW**1.1 Document Review Procedures**

This Fire Prevention Plan Document is to be reviewed every year or when required by a change in operations, breach of permit, or substantial fugitive emissions.

Table 1: Document Review

Date of Review	Comments	Name and Signature of Reviewer	Date of Next Review
July 2020	Plan Prepared		July 2021

2.0 OVERVIEW

2.1 Report Context

This section of the Environmental Permit Application responds to Part B4 of the Environmental Permit application form, and specifically details the operating, monitoring and management procedures for the activities undertaken on site.

This document has been prepared by Ivy House Environmental Limited (Ivy) on behalf of the Applicant, Leicestershire County Council (LCC) as part of the management for the proposed Bardon Waste Transfer Station.

The operator proposes to undertake the temporary storage of various hazardous and non-hazardous wastes which will be collected as part of the Council's duties as follows:

- Storage and Transfer of Clinical Wastes which will include cytotoxic chemicals and dead animals;
- Storage and Transfer of Waste Electric and Electronic Equipment (WEEE);
- Storage and Transfer of Cement Bonded Asbestos Wastes;
- Storage and Transfer of Food Wastes;
- Storage and Transfer of 'other' Household Wastes; and
- Storage and Transfer of Commercial and Industrial Wastes (C&I).

The storage activities will take place as shown on Drawing Number BWT-MAB-00-ZZ-DR-A-1101-S3-P03. Wastes may be bulked up for disposal or recovery elsewhere. Treatment would consist of only of manual sorting or manual separation of waste into different components for disposal, (no more than 50 tonnes per day) or recovery.

All waste will be brought onto site via delivery vehicles. The waste materials will be unloaded at the front of the relevant bay for that material for inspection. Once the material has been inspected, it is either moved/pushed into the assigned storage area.

It is proposed that there will be a total annual throughput of 100,000 tonnes per annum for the facility with a total storage capacity on site of 3,500 tonnes.

The Fire Action Plan has been produced in accordance with Environment Agency guidance entitled 'Fire Prevention Plans' published in January 2020. The report identifies the potential

causes and effects of a fire, and describes the measures that will be in place to prevent the occurrence of a fire at the site. In addition, the report would provide details of the planned response to a fire incident and explain how fire water would be contained. All staff have access to the Fire Prevention Plan. Fire drills are undertaken annually as a minimum or after changes to procedure. As part of the induction and probation process, all new staff are trained in accordance with the requirements of the Fire Prevention Plan and must show understanding of the contents, and the ways of working.

This document forms part of the site's Environmental Management System (EMS) and will be reviewed on an annual basis and in the event of any incidents.

2.2 Site Location and Layout

The site will be located in the District of North West Leicestershire, approximately 880m east of Ellistown and 10.0 km northwest of the city of Leicester. The site is situated within an industrial estate, and is surrounded by commercial premises to the south, light industrial to the west, commercial premises to the north and a quarry to the east. The site is centred at approximate National Grid Reference (NGR) SK 44657 11125.

The site location and the environmental permit boundary is provided on Drawing Number BWT-MAB-00-ZZ-DR-A-1101-S3-P03 and a receptor plan can be found in Appendix A.

Access for staff and visitors to the site is achieved via Interlink Way South, located to the north of the site. The nearest residential dwelling is located approximately 589m southwest of the site on an unnamed road which is accessed off the B585.

A waste transfer facility is proposed which would have a maximum throughput of 100,000 tonnes per annum (tpa). The facility comprises both indoor and outdoor storage areas. The site will house non-hazardous wastes and selected hazardous wastes (including clinical wastes) within the sites building, with the exception of wood wastes, road sweepings, gas bottles, WEEE wastes, asbestos wastes (in a secure container) and inert wastes which will be housed within an outdoor canopied area.

The design of the facility will ensure that Waste Collection Vehicles (WCVs) can safely deposit waste within reception areas which are situated in front of each of the bays. Single streams of waste such as wood, WEEE, road sweepings and inert wastes and gas bottles are taken directly to relevant outside covered bays for bulking and onwards transfer. Other mixed wastes may be manually separated into their individual components i.e. plastics, paper and metals if required. Green wastes will be stored within an appropriate bay. Cement bonded asbestos wastes will be stored in a lockable container within the external storage area, while

food wastes and clinical wastes will be stored within lockable containers within the site building.

All non-conforming wastes which are received on site are either rejected upon inspection, or if they are received, will be stored in the non-conforming waste quarantine area to await onward disposal. Waste in the non-conforming waste quarantine bay is aimed to be removed as soon as is practicable and where possible, within 5 working days depending on the nature of the item.

The waste transfer station will have a maximum capacity of 3,500 tonnes of material on site at any one time. All waste will be stored within dedicated bays, containers or covered areas as outlined in Drawing Number BWT-MAB-00-ZZ-DR-A-1101-S3-P03. Note that while the WEEE and outside areas are of a fixed storage capacity, the building will comprise of push walls which will mean that bays and the internal structure of the building can be adjusted as required. However, LCC will ensure that there is no more than 450m³ of waste within the internal bays at any one time. Therefore, the information outlined in Table 2 below represents the largest pile sizes. All wastes will be stored as follows:

Table 2: Anticipated Storage Volumes

Material	Max Height	Length/width (m)	Max Volume (m ³)	Max Area (m ²)	Min Separation (m)
Paper, cardboard and rags	4	As shown on Drawing Number BWT-MAB-00-ZZ-DR-A-1102-S3-P02 Dimensional assessment waste piles – all bays are 4m high by 10m wide by 10m deep.			
Plastic Rubber and other materials	4				
Wood Wastes	4				
WEEE	4				
Food Wastes	4				
Cement Bonded Asbestos	4				
Clinical Wastes	4				

The fire quarantine area is an area where burning wastes can be placed to extinguish them. It will also be an area where unburnt wastes can be moved to prevent them catching fire. The fire quarantine area as outlined on Drawing Number BWT-MAB-00-ZZ-DR-A-1103-S3-P02. The quarantine area will be sized to be able to contain at least 50% of the largest stock pile,

and is fully bunded with sealed drainage and fire-resistant walls. The 5m high fire resistance walls will enable a 1 m head room for any wastes that are required to be stored in this area. In accordance with the Wish Guidance, this enables the at least 6m separation between the quarantine area and the nearest waste pile to be reduced. Any wastes stored in this area (due to a fire) will be removed as soon as it is practicable.

2.3 Proposed Activities

This application seeks to allow LCC to undertake the following waste activities:

- D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced);
- R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced);
- D14: Repackaging prior to submission to any of the operations numbered D1 to D13;
- D9: Physico-chemical treatment not specified elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12;
- R3: Recycling/reclamation of organic substances which are not used as solvents;
- R4: Recycling/reclamation of metals and metal compounds; and
- R5: Recycling/reclamation of other inorganic materials.

The site will ensure that there is no more than 50 tonnes of hazardous wastes onsite at any one time. Note that D9, R3, R4 and R5 will not occur for clinical and Healthcare wastes.

2.4 Plant and Equipment

The following items and machinery may be available for use on site:

- Waste storage building;
- Lockable containers;
- Wheeled loading shovel(s);
- Weighbridge;
- External storage bays;

- Tractor;
- Jet wash;
- Water tanks;
- Dump truck; and
- 360° Excavator.

All plant and equipment will be maintained in accordance with the manufacturer's guidance.

Staff will only be permitted to operate machinery and undertake activities for which they have received appropriate training, as detailed in Section 6 of this report.

2.5 Operating Hours

The Facility will operate on a 24 hour a day basis, 7 days a week, including weekends and public holidays.

3.0 ASSESSING FIRE RISK

3.1 Types of Combustible Waste

The types of combustible wastes received at the site are likely to consist of the following materials:

- Paper and card;
- Plastics;
- Mixed packaging;
- Wood;
- Putrescible waste;
- Green waste;
- Mixed household waste;
- Commercial and Industrial Wastes (C&I);
- Batteries, both lead acid and domestic; and
- Gas Bottles.

The composition of the waste stream will vary depending on the market and is likely to contain various proportions of the materials identified above depending on the source of the waste. The list above is not an extensive list of all permitted wastes (the list of permitted wastes can be found in Appendix C of the Operating Techniques) as it just details those which are combustible and therefore relevant to this report as per the Environment Agency's guidance note 'Fire Prevention Plans, Version 2, dated January 2020'.

3.2 Storage Capacity

The site will store a maximum of 3,500 tonnes of waste and will accept a maximum of 750 tonnes per day. This accounts for an ability to store up to four days of received wastes and the Applicant will aim to turn around all wastes within this timeframe if possible, although some waste streams may be stored for longer due to the low frequency of acceptance onto site, i.e. gas canisters, etc will be received infrequently and so may be stored on site for up to 6 months.

The site will log all incoming wastes to record the dates and relevant information and these records are kept within the site office along with remaining storage capacity within the bays as well as details of pickups to ensure that the site does not stockpile combustible materials for prolonged periods of time. This also enables the site to be able to ensure that they comply with the storage times within the application and to ensure that the 'first in, first out' principal is adhered to. Storage areas for received materials are as shown on the site layout drawing. The anticipated quantities of combustible materials are listed in Table 3 below.

Table 3: Anticipated Quantities of Combustible Materials (Per Bay)

Material	Storage Location and Storage Method	Anticipated Quantity of Combustible waste stored on site at any one time (Approx. tonne)*	Maximum Volume per bay (m ³) using conversion factor of 1 tonne/m ³
Wood Waste	Stored externally within a canopied area	430	450
Mixed Household Wastes	Stored internally within dedicated bays	430	450
Commercial and Industrial Wastes	Stored internally within dedicated bays	430	450
Green Waste	Stored internally within dedicated bays	430	450
Metals	Stored internally within dedicated bays	430	450
WEEE	Stored externally within a canopied area	225	225
Clinical Waste	Stored internally within lockable containers	25	25
Gas Canisters	Stored externally within a canopied area	25	25
Street Sweepings	Stored externally within a canopied area	430	450
		Total = 2,855 (approximately)	

3.3 Amounts of Waste Received Daily

The maximum storage availability for each combustible waste type is 450m³, therefore this is the maximum pile size for each type of waste. The total amount of waste that can be accepted on site each day is 750 tonnes, given a very conservative conversion factor of 1 tonne/m³ to allow for compaction of waste (normal mixed commercial and industrial waste would have a conversion of 0.8 tonne/m³), the total volume of waste on site at any one time will be 3,500m³ or worst case scenario 3,500 tonnes. Bay dimensions are laid out in Drawing Number BWT-MAB-00-ZZ-DR-A-1102-S3-P02.

3.4 Causes of a Fire

With reference to EA guidance, it is considered that the potential causes of fire at the site are as follows:

- self-combustion of received and processed waste materials (e.g. chemical oxidation, microbial decomposition);
- plant or equipment failure;
- electrical faults;
- naked lights;
- discarded smoking materials;
- hot works, e.g. welding, cutting;
- industrial heaters;
- hot exhausts;
- damaged/exposed electrical cables;
- neighbouring sites activities;
- sparks from loading buckets; and
- ignited materials received at the site.

Any of the causes detailed above has the potential to ignite waste materials upon the site although the separated fractions consisting of wood, green waste, paper, cardboard, wood and plastics are recognised as having the highest potential combustibility.

The likelihood of fire on the site is directly proportionate to the suitability of control systems in place through the Operator's Environmental Management System. The procedures for the reduction of fire risk are discussed in detail in Section 4 of this report and it is considered that through the implementation of the control measures discussed within this document that the likelihood of fire on site is considered low.

The consequences of a fire are discussed below with mitigation measures detailed further in Section 4.

3.5 Effect of a Fire

Source/Pathway

The effects of a fire may be both immediate and long term, presenting a significant burden for the operator and regulatory agencies. The potential causes of a fire have been outlined within Section 3 above and are reviewed below with reference to EA guidance and provide an assessment of the source and potential pathway for pollution:

- firewater run-off transporting pollutants to surface water and groundwater;
- thermal radiation harming nearby properties and residents leading to fire spread;
- creation of hazardous waste by the fire and impacts of fire-fighting;
- explosions and projectiles harming sensitive receptors and spreading the fire to unaffected areas;
- transport disruption resulting from road and rail closures;
- nuisance from smoke, odour and particulates through the air; and
- threat to life and property.

Receptors

Sensitive receptors within 1000m of the facility have been identified in Table 4 below as is consistent with the Environment Agency's 'Fire Prevention Plan', Dated January 2020.

Table 4: Potentially sensitive receptors within 1000m

Receptor	Direction from Operational Area	Minimum Distance from proposed permit boundary (m)
Designated ecological habitats e.g. Ramsars, SAC, SPA, SSSI		
-		
Other Designations e.g. National Parks, ANOB, World Heritage Sites		
-		
Historic buildings / listed buildings / archaeological sites		
-		
Domestic Dwellings		
South Lane	NE	635
Unnamed Road (off B585)	S	589
Victoria Road	SW	878
St Christopher's Park Homes	W	894
Schools, Shops, Commercial and Industrial		
Innotech Digital Display	W	0

Laura Ashley PHL	E	0
Antalis	N	20
Interlink	N	20
Autoglass	N	20
Crouch Recovery	W	228
AC Valves and Controls	W	115
Healy Group	NW	190
Babcock Critical Services	N	151
Winit UK	N	243
Roca	N	224
VF Corporation	S	300
Bunzl Healthcare	NW	337
Graphic Packaging Europe	NE	354
Munro Limited	E	193
McLaren GT	E	322
Amazon Coalville	NE	323
The Fuel Factory	NE	565
Cliffe Hill Quarry	E, SE	500
Allport Cargo Services	N	243
Volvo	NE	415
MTS Logistics	NE	531
Secure Retail	NE	853
Electract	NE	893
Barret Developments	NE	975
Charnwood Fencing	NE	895
Charnwood	NE	985
Air Products	N	913
Board24 Limited	N	627
Bibby Coalvile	N	664
Antalis (Packaging)	N	785
Schluter Systems	N	463
The Stone and Tile Company	N	543
OMS	N	670
DHL Supply Chain	N	436
J P D Contracts	N	570
Pura Bathrooms	N	685
Trans Continental Marketing	N	739
Hardings Transport Limited	N	807
ESE	N	868
Premier Gym	N	440
Premier Logistics	N	500
Eddie Stobart	N	772
Nestle	N	772
C P R Distribution	N	200
Amazon Services UK Limited	W	340
Chemist Direct	W	483
Ipstock Brick	SW	754
Highway or Minor Road and Railway lines		
B585	SE	215
A511	NE	1,220
Railway line for the Quarry	S	40
Farmland		
Farmland	NW	463
Farmland	E	475
Local Wildlife Sites		
-		

Protected Species		
-		
Protected Habitats		
-		
Surface Water		
Inland river	S	187
Groundwater (sensitivity)		
In accordance with the MAGIC website, the site is not within a Groundwater Protection Zone.		

4.0 FIRE RISK REDUCTION

4.1 General Site Procedures

Arson or vandalism – Site security will ensure that unauthorised access to the site is not allowed, both during the working day and outside of normal working hours. The site will be fully enclosed with a lockable gate which is kept closed and locked outside of working hours. The site will have CCTV cameras located at the gates and at strategic points around the site to prevent vandalism and arson. All visitors are required to report to the office to sign in, any unauthorised visitors found on site are challenged and asked to sign in or leave.

Plant or equipment failure – A documented regular maintenance and inspection programme will be operated for all site areas including site machinery. All plant and equipment will be subject to regular maintenance and will be operated in accordance with manufacturers specifications. Plant and equipment will be stored within the 'equipment storage area' which is located well away from waste piles. All site vehicles will be equipped with fire extinguishers and firefighting material (fire extinguishers, sand etc) will be kept at strategic locations around the site. At the end of each day, plant and equipment is stored within a dedicated area away from waste stockpiles. All plant and machinery will be inspected daily for leaks. The site will be swept at the end of each working day to allow for any leaks within working areas to be identified and remedied. Soils or sand which is available on site can be used to soak up spillages, allowing for spilled materials to be easily scooped up and removed appropriately at a designated facility.

Electrical Faults – All electrical equipment will be routinely checked by an approved competent person (PAT tester as well as an electrician) this occurs yearly. All equipment will be replaced when and as required and will be operated strictly in line with manufacturer's instructions. In the event of any electrical faults, the site will call out a registered electrician who will investigate the cause of the problem and will repair any electrical systems when and as needed.

Naked lights – There are no naked lights on site.

Discarded smoking materials – The operator will enforce a "No Smoking Policy" on all areas where waste will be received and stored.

Hot works – Staff or contractors will follow approved safe working practices when undertaking hot working (e.g. cutting and welding) and will ensure that this is undertaken away from areas where waste is being stored when possible. Safe working practices will include undertaking hot works away from combustible materials (or removing combustible

materials from the area where the hot works will take place), employing two man teams, maintaining awareness of works going on within the site, ensuring that fire extinguishers are available and ensuring that only those who are appropriately trained will be authorised to carry out hot works.

Industrial heaters – The site does not use industrial heaters.

Hot exhausts – All site vehicles will be fitted with fire extinguishers and operatives/drivers will be trained in their use. Vehicles will not be left idling immediately adjacent to stockpiles of combustible materials to reduce the risk of auto ignition from hot exhaust gases. At the end of the working day, mobile plant and vehicles will be parked within a dedicated area away from storage areas. This will minimise the potential for fires from hot or overheated plant/vehicles. In addition, all machinery will be checked to ensure that no loose waste falls onto hot exposed metalwork.

Open burning (on site or adjacent sites) – Waste will not be burnt within the site boundary.

Cleaning of Equipment – Cleaning will occur in accordance with the manufacturer's guidance for all plant and equipment. As stated in the Environmental Risk Assessment in the application, cleaning will take place in accordance with the sites Environmental Management System. The EMS outlines that plant and equipment will be cleaned when it is deemed necessary and at the end of the working day.

Damaged or exposed electrical cables – All onsite electrics are installed and tested by a qualified engineer. As part of housekeeping and general maintenance, any exposed or damaged cables are reported to the site manager immediately and action is taken accordingly.

Reactions between incompatible materials – All material is stored in accordance with health and safety legislation. Any fuels or oils which are used for maintenance purposes are stored appropriately as shown on the site layout plan, diesel will be stored within a diesel cage and is appropriately banded, oils are stored within double skinned tanks as shown on Drawing Number BWT-MAB-00-ZZ-DR-A-1101-S3-P03.

Neighbouring site activities – Due to the location of the site, the nearest neighbour which could impact on the site in the event of an offsite fire is located to the east of the site boundary. Due to the fire prevention measures which include infrared CCTV cameras and a sprinkler system, it is considered that due to the location of the neighbouring activity, even in the event of a fire, it could not impact on the Operators site.

External Heating and Sources of Ignition – During hot weather, additional care will be taken to monitor stockpiles. No sources of ignition such as naked flames and space heaters

are to be located near combustible waste materials. The site will install infrared CCTV cameras which will monitor stockpiles to ensure that the waste piles remain at an acceptable temperature. Note that as per the Environmental Risk Assessment, waste will be turned once the temperature reaches 50°C to ensure the waste cannot form 'hot spots' and to provide adequate ventilation.

Sparks from loading buckets – Material is unloaded directly into the relevant bays or the waste reception area, where it may be manually sorted if required and then moved directly to the relevant storage area. The site is fully equipped with fire extinguishers as are all vehicles.

Incompatible wastes – All wastes are inspected prior to being moved to the relevant bay. Any wastes which are not appropriate to be accepted at the facility i.e. are not within the permitted waste list are either rejected before they are unloaded or are moved to the quarantine area for removal from the site. All combustible materials are stored in accordance with EA guidance as outlined in Table 5 of this report. All bays and containers are clearly marked as to their contents to avoid incompatible wastes being accidentally mixed.

Hot loads deposited at the site – A fire quarantine area shall be retained at all times in the event that a 'hot load' is delivered to site or if a 'hot spot' is identified in the stored waste. This area will have an impermeable surface with sealed drainage. LCC may also use existing materials (sands etc) which have been brought onsite to smother hot loads or small fires if these are detected. Any material that does ignite, with permission of the fire department who will state if it is safe to do so, will be moved to the quarantine area so as to extinguish and control fire spread. It will also be used to move piles of unburnt material, adjacent to a fire, to prevent spread. Details of the location of the quarantine area are provided in the Drawing No BWT-MAB-00-ZZ-DR-A-1101-S3-P03.

As set out in the EA guidance, the size of the quarantine area is sufficient to accommodate more than 50% of the largest waste pile.

Self-Combustion - In order to prevent spontaneous combustion of materials, care will be given to storage arrangements for certain waste types. These shall include green material including wood and wood products, general waste, food wastes and fines. These materials will be stored in their relevant bays/containers and care will be taken via use of the thermal CCTV cameras to ensure that they do not heat to the point of spontaneous combustion. It is likely that these wastes, if they are to be stored for longer than 5 working days, will be turned regularly (at least daily) to prevent temperature build up.

An infra-red CCTV system will be installed monitoring the individual waste piles within the building. The system will monitor the temperature of the waste providing live information to the Operator and its staff of the condition of the waste and will automatically notify staff in

circumstances where the temperature exceeds 50oC. This will allow the identification of any developing heat spots within the waste. Such heat spots (greater than 50oC) can then be managed to ensure that the waste is cycled and removed off site for disposal or treatment to minimise the risk that the temperature exceeds the point where the waste may self-combust. Where high risk heat spots are identified this waste may be moved to the fire quarantine area to separate it from the waste stockpile and allow it to be doused if necessary.

Sprinkler System with individual heat detection heads - In case of a fire the waste stockpiles are covered by a sprinkler system that has individual heat detection sensors on each head. Each bay zone will be covered by several sprinklers. Where a fire, or excessive heat, is detected by any individual sprinkler head then it would automatically activate all sprinklers within the zone dousing the waste within the zone with water. The sprinklers are designed to be triggered at 68oC. Such a system will support containment of the fire to the immediate locality of the stockpile and suppressing its development whilst minimising the quantity of contaminated run off. In the unlikely circumstances the fire spreads then further sprinklers in wider zones would automatically activate to suppress any further development and minimise any damage to the building.

4.2 Waste Storage and Stock Management

An inventory of potentially flammable waste materials, and their storage locations, will be kept up to date on site. All storage areas will be clearly marked so as to identify to staff what is contained within these areas so as to avoid incompatible wastes being placed in the wrong areas. Any staff involved in hot working will be notified of the location of all potentially flammable materials prior to the commencement of works. All raw materials will be managed and stored in accordance with the provisions set out in Table 5 below, these are consistent with the requirements of CIRIA C736.

It is a condition of the Environment Agency's Fire Prevention Plan guidance that combustible wastes shall be stored for no longer than six months prior to disposal.

Where relevant, waste will be stored in accordance with EA guidance whereby the following will be strictly adhered to:

Table 5: Maximum Pile Sizes

Waste Type	Loose and more than 150 mm (m ³)	30 to 150mm or baled (m ³)	Less than 30mm (m ³)
Tyres and rubber	450	300	300
Wood	750	450	300
Compost and green waste (excluding during the active composting process)	750	450	450

RDF and SRF	450	450	450
Plastics	750	450	300
Paper and Carboard	750	750	450
Textiles	750	750	400
WEEE containing plastics, including fridges, computers and televisions	450	450	450
Metals other than WEEE (including crushed ELV's, which are classed as 'baled' waste for the purpose of this table)	750	450	450
Fragmentiser fluff	450	450	450

Loosely tipped, potentially combustible materials as identified above are stored within separate, clearly marked bays and storage areas both within the sites building and within the external covered area as shown on Drawing No. BWT-MAB-00-ZZ-DR-A-1101-S3-P03. Bays which house more than one waste pile will have a separation distance of 2.6m between the two waste piles and the Push/Pull fire resistant walls will provide a minimum distance 1.6m at the base of the walls and 250mm at the top of the walls between neighbouring waste piles. The Push/Pull walls have been designed so as to provide headroom between the top of the waste pile and the top of the wall to ensure sufficient free board so as to prevent a spark accidentally 'jumping' the barrier. This will ensure that fire does not spread to other stockpiles.

Storage arrangements for all materials will be undertaken with due consideration given to access of fire fighting vehicles. The layout of the site will ensure that access is available to all areas of the site and to fire appliances in the event of a fire. The site manager will be responsible for maintaining manageable stockpiles on site and ensuring that access is available to all areas of the site for emergency vehicles.

5.0 CONTAINING AND MITIGATING THE EFFECTS OF A FIRE

5.1 Fire Response

Any fire on site will be treated as an emergency and will be extinguished at the earliest opportunity. If necessary, the Fire Brigade will be summoned.

Firefighting equipment will be located in the site office, in accordance with Fire Regulations. All fire extinguishers shall be clearly marked and tested at appropriate intervals to confirm their integrity. Site operatives will be made aware of their location and trained in their correct use.

The the site will have a two dedicated above ground tanks on site which will provide firefighting water. The first tank will have a capacity of 600m³ and will service the sprinkler system within the sites building. The second tank will have a capacity of 67m³ and will service the wastes which will be stored outside (wood wastes and road sweepings). In the event of a fire, firefighting water from these tanks will drain to an underground effluent tank which is fitted with a shutoff valve to prevent discharges to the environment. This water will be tested before being released from site (either to the stormwater system if acceptable, or tankered off site for onwards treatment or disposal).

The maximum waste pile on site will be 450m³. Utilising Environment Agency guidance, and instruction from the environment agency the site will require 516,000 litres or 516 m³ of water on site. This will be supplied by the onsite mains water supply and will be stored in the above ground 600m³ tank which will be connected to the sites sprinkler system which has been designed to be able to deploy 18mm of water per minute in the event of a fire.

The additional tank which will service the wastes stored externally will have a volume of 67m³ which will be available for firefighting water. This tank is not connected to a sprinkler system, and will only be available for firefighters when they arrive on site.

In the event of a fire at the site, the following procedure will be implemented:

- i) Raise the alarm;
- ii) Cordon off the area, clearing employees to a safe area and prevent any further access to the site. Conduct a check to ensure that all persons present on the site are safe and accounted for;
- iii) Attempt to control the fire using the appropriate appliances on site. If the fire is small use mobile plant and attempt to separate the burning material from other waste. Contact the Fire Brigade on 999;

- iv) When practicable and safe to do so, inform the Environment Agency of the incident in accordance with the conditions of the Environmental Permit;
- v) Report the situation to the Fire Brigade on their arrival;
- vi) Close all surface water drainage outlets from the site;
- vii) Collected fire water to be retained within the site boundary via the internal water retention system and will be contained within the sites effluent tank;
- viii) Once the fire has been extinguished, seek the advice of the Fire Brigade on future precautionary action; and
- ix) Record all details in the site diary.

The site manager will act upon the advice issued by the Local Fire Service in the event of a fire. The decision as to whether a controlled burn is suitable in any instance of an outbreak of a fire will be at the discretion of the Local Fire Service.

Following a fire, unburned material will be separated from burnt material using on site plant to prevent combustion or contamination of the unburnt material. This will occur as soon as is feasible.

Any incidents of fire will result in the accumulation of fire residues. It will be the responsibility of the Site Manager to arrange for the safe disposal of the fire residues. A shovel will be used to collect the residues. This will then be treated as 'non-compliant waste' for disposal at an appropriately permitted facility.

The following table provides relevant contact details for individuals and relevant authorities in the event of a fire at the facility.

Table 6: Emergency Contact Details

Company	Position	Name	Telephone Number	Email
Leicestershire County Council	Out of Hours Number	Emergency	0116 255 1606	
Leicester County Council	Site Manager/Technically Competent Manager			
Environment Agency	Local Area Officer		0370 850 6506	
Local Fire Service		Emergency	999	

5.2 Fire Water

Fire water will be contained on site within its sealed drainage system with shut off valves closed to ensure that water does not leave the site. All areas where waste will be stored will benefit from impermeable surfacing and an engineered drainage system.

Fire water will be retained within the site boundary as all water on site will drain to the underground effluent storage tank, this will ensure that any fire water is contained on site. Firefighting water will be removed from the site, either by discharge to stormwater (after testing) or by tanker to a suitable licensed facility.

Advice will be sought from the Local Fire Service as to the suitability of the use of inflatable bunds and booms to prevent the run off of potentially hazardous firewater. Drain mats will be used where possible to block drains to prevent the ingress of fire water.

The site's external yard has been specifically designed to slope to a central drainage point as shown on the attached site plan where water can be collected. Water will drain to an underground effluent tank which is sufficient to hold the volume of water that is required to be stored under Agency Guidance for the purposes of fighting a fire with spare capacity.

The site's underground storage tank can also be used as additional firefighting water in the event of a fire. Water will be pumped out of the tank to suppress the fire and will then drain back to the tank, as is normal practice on waste sites. After a fire event, the tank will be pumped out and the water removed to a suitable site for onwards treatment/disposal, or if after testing, the water quality will meet a trade effluent discharge consent limits, it may be discharged to sewer. As the entire yard is provided with an impermeable concrete surface there is no risk of contamination to ground or groundwater.

5.3 Site Access and Neighbouring Properties

The Operator will ensure that the site is accessible at all times. The site entrance will be kept clear, and machinery and plant will be parked in a secure parking area, not blocking the access to the site or areas around where waste is stored. The contact details for out of hours are provided in Table 6 to ensure that the site management staff are contactable at all times.

In the event of a fire, it is understood that the fire service can access any property as required to control and extinguish the fire.

The site is located within an industrial/commercial location with no residential properties within 500m. The site is situated directly adjacent to other industrial/commercial properties and will be accessed directly from Interlink Way South. The site is designed to be worked 24 hours a day 7 days a week which will ensure that the site is accessible at all times. It is not considered

that there would be any issues with accessing the site or the neighbouring sites in the event of a fire.

5.4 Reporting and Communication

In the event of a fire, communication with local businesses and residents identified in the sensitive receptor table above will be undertaken to reduce any environmental damage and risks to human health associated with smoke and dust.

The local Fire Service and Environment Agency will be informed of the incident using the contact details provided in Table 6 above.

5.5 Recording

The incident would be recorded in the relevant section of the company's EMS and in the Site Diary.

5.6 Actions following a fire

Further to a fire on site, and upon safe re-commissioning of all plant and equipment, an investigation will be undertaken internally as to the cause of the fire and any future preventative measures to ensure that there is no re-occurrence.

This Fire Action Plan will be reviewed following this investigation to ensure that lessons learnt are documented and implemented in the future. Any new policies and procedures will be documented within this plan and the Environmental Management System.

Any new training requirements for site personnel will be implemented following this investigation however this is not intended to negate the requirement for ongoing training in how to reduce the risk of fire on site.

Waste suppliers will be notified via telephone that wastes will not be able to be accepted at the site and will be diverted to the Operators other Transfer Stations if acceptable to do so and providing this will not cause a breach of permit at that site.

The Operator will notify immediate neighbours either by visiting those neighbours or via telephone that a fire has taken place if the fire could impact off site receptors.

Any firefighting water or charred/burned materials will be removed offsite for suitable disposal as soon as it is safe to do so. If the site requires decontamination, specialist contractors will be called in to do this work.

If the fire has caused the site to be shut, the Operator will ensure, prior to reopening, that any damaged infrastructure is either replaced or repaired and is in good working order. The Operator will also check that the concrete around the site is in good repair and does not contain any cracks.

Appendix A – Receptor Plan
(Under Separate Cover)

Appendix B – Dimensional assessment waste piles

(Under Separate Cover)

**Appendix C – Site fire strategy
(Under Separate Cover)**

**Appendix D – Permit Boundary and Site Layout
(Under Separate Cover)**