

KIBWORTH RECYCLING AND
HOUSEHOLD WASTE SITE

FIRE PREVENTION PLAN

LEICESTERSHIRE COUNTY COUNCIL

JULY 2021



SUMMARY TABLE	
SITE:	Kibworth Recycling and Household Waste Site – Fire Prevention Plan
SITE ADDRESS:	Harborough Road, Kibworth, Leicestershire, LE8 0EX
CLIENT:	Leicestershire County Council
DATE:	July 2021
REFERENCE	IV.342.19
DEVELOPMENT PROPOSAL:	Operation of a Recycling and Household Waste Facility.

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Date:	July 2021	
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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 2021	Plan Prepared		July 2022

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 Kibworth Recycling and Household Waste Centre.

The Operator proposes to undertake the temporary storage of various hazardous and non-hazardous wastes which will be brought onto site by members of the public and via Heavy Goods Vehicles (HGV's) as follows:

- Storage and Transfer of Green Waste;
- Storage and Transfer of Waste Electric and Electronic Equipment (WEEE);
- Storage and Transfer of Street Cleaning Residues;
- Storage and Transfer of Construction and Demolition Wastes;
- Storage and Transfer of Oils, Fats and Paints;
- Storage and Transfer of Acids and Solvents; and
- Storage and Transfer of 'other' Household Wastes.

The Operator seeks to accept 75,000 tonnes of waste per annum, with a total storage capacity of 2,400 tonnes, split between 2,350 tonnes of non-hazardous wastes and 50 tonnes of hazardous wastes. The site will accept up to 400 tonnes of wastes, split between 350 tonnes of non-hazardous waste and 50 tonnes of hazardous wastes.

The storage activities will take place as shown on Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02. Wastes may be bulked up for disposal or recovery elsewhere. Treatment would consist only of manual sorting or manual separation of waste that is received from members of the public into different components for disposal (so that they can be stored appropriately), (no more than 50 tonnes per day) or recovery.

The waste is brought to the site via the general public's vehicles and HGV vehicles. The public will be greeted upon arrival where they will be questioned about what waste they are wanting to deposit and will be directed to the relevant drop off point within the Household Recycling Centre (located on the eastern portion of the site).

The waste brought to the site by HGV vehicles will be separate to that brought to the site via public's vehicles. HGV vehicles will be directed to the bulking area where they will unload the waste directly into the relevant bay for inspection (the bulking area is located to the west of the site as per Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02).

The Fire Action Plan has been produced in accordance with Environment Agency guidance entitled 'Fire Prevention Plans' updated on the 11th January 2021. 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.

A hardcopy of the FPP will be stored on site in a site office and freely available to all staff at all times and an electronic copy will be stored within LCC's systems. In addition, a copy of the FPP will also be placed in the red metal box at the entrance to the site as per the requirements of the emergency services.

2.2 Site Location and Layout

The site will be located approximately 1 km south Kibworth and 15.3 km southeast of the city of Leicester. The site is situated within agricultural land with the A6 to the south and a railway to the north. The site is centred at approximate National Grid Reference (NGR) SP 69822 93236.

The site location and the environmental permit boundary is provided on Drawing Number M00460-MAB-00-ZZ-DR-A-1100-S4-P02 and a receptor plan can be found in Appendix A.

Access for staff and visitors to the site is achieved via Harborough Road (A6), located to the south of the site. The nearest residential dwelling is located approximately 670m northwest of the site on Harborough Road.

The site comprises of the main public Recycling & Household Waste Site area (RHWS) and a Bulking Area for wastes arriving in HGV's from commercial and industrial businesses.

The main Recycling & Household Waste Site yard boasts a number of Roll on Roll off (RoRo) containers which will store separate waste streams (metals, plastics, bottles, paper, hard core, plaster board, green wastes, wood wastes, cement bonded asbestos etc), as well as a canopied area for WEEE wastes (televisions, fridges, computers etc) and a separate area for liquid wastes which will be contained in appropriate tanks that are double skinned (oils, fats, paints etc). In addition, batteries and fluorescent tubes will also be stored within the WEEE area in appropriate containers.

The Bulking Area will have covered/canopied storage bays to the west which will contain green waste, wood wastes and other 'residual waste'.

In addition to the above, the site will have covered/canopied storage bays to the west which will contain green wastes, wood wastes and other 'residuals', known as the 'bulking area'.

The design of the facility will ensure that members of the public can safely deposit waste within the appropriate skip and HGV's can safely deposit wastes within the relevant bay in the bulking area.

If household mixed wastes are received on site, they may be manually separated into their individual components i.e. plastics, paper, metals and oversized items, and deposited into the relevant skip or bay.

The site will be fully bunded with sealed drainage. The site will contain any quarantined waste in containers/separate area within the Bulking Area which will be covered with tarpaulin if required (this will ensure that quarantined wastes do not contaminate those which have been deemed suitable for acceptance on the site) as well as a fire quarantine area.

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 recovery or disposal. Waste in the non-conforming waste quarantine area 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 Recycling & Household Waste Site will have a maximum capacity of 2,400 tonnes of material on site at any one-time, maximum waste volumes are outlined below in Table 2 as follows:

Table 2: Anticipated Storage Volumes

Material	Max Height (m)	Length/width (m)	Max Volume (m ³)	Max Area (m ²)	Min Separation (m)
Paper and cardboard	2.6	As shown on Drawing Number M00460-MAB-00-ZZ-DR-A-1102-S4-P03 - Dimensional assessment waste piles. Notes: 1. All bays within the Bulking Area are 4m high by 10m wide by 10m deep. 2. Textiles will be stored within enclosed textile bins. 3. Wastes within the RHWS area are stored in 40cbyd RoRo skips - max height of the skip is 2.6m. 4. Liquid wastes are stored in tanks/IBCs – max height 1.5m 5. Batteries, small WEEE, fluorescent tubes and gas canisters are stored in appropriate containers. 6. Larger WEEE (such as TVs and Fridges) will be stacked appropriately to max. height of 2.6m. 7. Tyres and rubber will be accepted on site in the future and will be stored within one of the spare skips within the RHWS area.			
Plastics	2.6				
Metals	2.6				
WEEE	2.6				
Liquid waste	1.5				
Wood	4				
Textiles	1.5				
Residual Wastes	4				
Green Wastes	4				
General Waste	2.6				
Batteries	1.2				
Gas Cannisters	3				
Tyres and Rubber	2.6				

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 is outlined on the Site Fire Strategy Drawing Number M00460-MAB-00-ZZ-DR-A-1103-S3-P04. 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 will be located at least 6m from other waste piles/skips or buildings. 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 are no more than 50 tonnes of hazardous wastes stored onsite at any one time.

2.4 Plant and Equipment

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

- Roll on Roll off Containers;
- Bays;
- Fire Hydrant (located at the sites entrance);
- Double skinned tanks;
- Compactors;
- Oil Containers;
- Lockable containers;
- Wheeled loading shovel(s);
- Weighbridge; and
- Underground attenuation tank;

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.

Mobile plant when not in use will be stored within a fixed area of the site and away from combustible waste piles, marked as the "On site vehicle storage area" on the Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02.

2.5 Operating Hours

The facility is designed to be operational between the following hours:

- 06:00 – 20:00.

The facility will operate seven days per week, including Public Holidays, with the exclusion of Christmas Day, Boxing Day and New Year's Day.

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;
- Metals;
- Fridges, TV's and Computer Screens;
- Paints and Acids;
- Mixed packaging;
- Wood;
- Putrescible waste (black bin bag waste);
- Green waste;
- Mixed household waste (oversize household furniture etc);
- Batteries, both lead acid and domestic;
- Gas Bottles; and
- Tyres and Rubber.

The composition of the waste stream will vary and is likely to contain various proportions of the materials identified above. 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, updated 11th January 2021'.

3.2 Storage Capacity

The site will store a maximum of 2,400 tonnes of waste and will accept a maximum of 400 tonnes per day. This accounts for an ability to store up to four days of received wastes

and the Operator 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. Gas canisters/bottles are not the type of wastes at risk from ignition due to decomposing wastes, therefore sub-surface temperature monitoring is not required. Gas bottles will be stored individually in cages in the gas bottle storage area as shown on the Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02.

The site will log all incoming wastes (where relevant), it will not be possible to log all incoming wastes to the Recycling and Household Waste Site area, however it will be possible to keep a record of what waste is within this area and what waste is removed for onwards recovery or disposal from this area.

All materials accepted via HGV's will be accompanied by the relevant documentation via transfer or consignment notes and these records are kept within the site office along with remaining storage capacity within the bays, skips and tanks as well as details of pickups to ensure that the site does not stockpile combustible materials for prolonged periods of time.

This 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	Maximum Volume (m ³)	Maximum storage time
Paper and Cardboard	Household Recycling Centre - Skip	31	<3 months
Plastics	Household Recycling Centre - Skip	31	<3 months
Metals	Household Recycling Centre - Covered Skip	34	<3 months
WEEE	Household Recycling Centre – Canopied Area	52	<3 months
Liquid waste	Household Recycling Centre – Tanks, Canopied Area	3	<3 months
Textiles	Household Recycling Centre – textile bin, enclosed	5	<3 months
Wood	Household Recycling Centre and Bulking Area – Covered Bays and Skips	210	<3 months

Residual Wastes	Bulking Area – Covered Bay	265	<3 months
Green Waste	Bulking Area and Household Recycling Centre – Covered Bay and skip	295	<3 months
General Waste	Household Recycling Centre – Covered Bay	31	<3 months
Batteries	Household Recycling Centre – Container, Canopied Area	3	<3 months
Gas Canisters	Household Recycling Centre – Canopied Area	20	<6 months
Tyres and Rubber	Household Recycling Centre - Skip	31	<3 months

3.3 Amounts of Waste Received Daily

The maximum storage availability for each combustible waste type is listed in Table 3 above. It shows that the maximum pile size is the green waste heap which is 295 m³. The total amount of waste that can be accepted on site each day is 400 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 no more than 2,400 m³ or 2,400 tonnes. Bay dimensions are laid out in the Dimensional Assessment Waste Piles Drawing Number M00460-MAB-00-ZZ-DR-A-1102-S4-P03.

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, tyres/rubber 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 3.4 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', updated 11th January 2021.

Table 4: Potentially sensitive receptors within 1000m

ID on the Receptor Plan	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			
1	Marriot Drive	NW	722m
2	Milestone Close	NW	827m
3	Braymish Close	NW	815m
4	Harborough Road	NW	750m
5	New Road	NW	911m
6	Fairway	NW	960m
7	Birdie Close	NW	915m
8	Wentworth Close	W	950m
Schools, Shops, Commercial and Industrial			
9	Kibworth Golf Club	SW	443m
10	Beech Tree Bunnies	SSE	768m
11	Unnamed Farm	SW	300m
12	Kibworth Gun Club	SE	500m
13	Premier Music International	NW	500m
14	ACI Financial	NW	487m
15	Readicut Crafts	NW	470m
17	Total Community Care	NW	487m
18	UK Property Finance	NW	493m
19	Cornerstone Tax Advisors	NW	501m
20	Jefferson Payroll Bureau	NW	510m
21	Secured-loans.co.uk	NW	496m
22	Creative World of Crafts	NW	508m
16	CLA UK	NW	519m
24	Crouch Recovery	NW	531m
25	Dynamic Wealth	NW	561m
26	Farleys	NW	625m
27	Spenders Motorcycles	NW	653m
30	Allotments	N	50m
29	Kemps Clothing	NW	850m
28	Horsewear House Ltd	NW	684m
23	DD Automotive	NW	646m
Highway, Minor Road and Railway			

32	Harborough Road (A6)	S	10m
33	W Langton Road	N	125m
34	Railway	N	18m
Farmland			
31	Farmland	W	14m
31	Farmland	N	36m
31	Farmland	E	30m
31	Farmland	S	20m
31	Farmland	SE	65m
Local Wildlife Sites			
-	-		
Protected Species			
-	-		
Protected Habitats			
-	-		
Surface Water			
35	Langton Brook	S	950m
36	Drainage Channel flowing into the Langton Brook	NE	10m
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 public vehicles will be meet at the Greeting Area by an authorised member of staff, while all other 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 and soil/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 storage areas. All plant and machinery will be inspected daily for leaks. The site will be inspected 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 to the quarantine area to await removal to an appropriately designated facility.

Electrical Faults – All electrical equipment will be routinely checked by an approved competent person (PAT tester as well as an electrician) this will occur 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. A designated smoking area will be available on site. This will be located near or within the car park as shown on the Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02.

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.

In addition, a permit to work will be generated and signed off before any hot works start. There will be a fire watch on site when undertaking hot works, consisting of a two-man team, one to do the works, one to keep watch during the works. Once hot works are completed there will be a period of a two-hour watching brief for any signs of fire. In addition, the Recycling Operatives present on site during the working day will be able to carry out fire watches as part of their daily routine.

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. Site vehicles will not be left idling immediately adjacent to stockpiles of combustible materials to reduce the risk of auto ignition from hot exhaust gases. The meet and greet staff will advise members of the public to turn off engines when unloading wastes into the relevant skips. At the end of the working day, mobile plant and vehicles will be parked within a dedicated area away from storage areas as shown on Site Layout Plan, Drawing Number M00460-MAB-00-ZZ-DR-A-1101-S4-P02. 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. Recycling Operatives will also keep a watching brief for fire during all operational hours as part of the daily routine and at the end of each working day.

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 Recycling Operatives or Area Supervisor 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 Site Layout Plan, Drawing No. M00460-MAB-00-ZZ-DR-A-1101-S4-P02.

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 a farm which is located approximately 336m southwest of the site boundary. Due to the fire prevention measures which include CCTV cameras, it is considered that due to the location of the activity, even in the event of a fire, it could not impact on the nearby farm.

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 use temperature probes which will monitor stockpiles to ensure that the waste piles remain at an acceptable temperature. 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 containment, 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 – 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, skips and tanks/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. The site may also move piles of unburnt material, adjacent to a fire, to prevent spread. Details of the location of the quarantine area are provided in the Site Fire Strategy Drawing No. M00460-MAB-00-ZZ-DR-A-1103-S3-P04.

As set out in the EA guidance, the size of the quarantine area is sufficient to accommodate 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, residual wastes and fines. These materials will be stored in their relevant bays/skips and care will be taken via use of temperature probes (where relevant) and daily inspections to ensure that they do not heat to the point of spontaneous combustion. It is likely that these wastes that are stored within the Bulking Area, if they are to be stored for longer than 5 working days, will be turned regularly (at least daily) to prevent temperature build up.

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 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.

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.

Loosely tipped, potentially combustible materials as identified above are stored within separate, clearly marked bays, cages, tanks and skips within the Recycling & Household Waste Site area and within the external Bulking Area as shown on Site Layout Plan, Drawing No. M00460-MAB-00-ZZ-DR-A-1101-S4-P02.

With the exception of WEEE wastes, liquid wastes, batteries and gas canisters, all wastes within the Recycling & Household Waste Site area will be contained within Roll on Roll off Skips and as such, fire separation distances do not apply as the skips will act as fire resistant walls. Note, that the WEEE storage area maintains a 6m distance from other types of wastes, the site boundary and buildings. In addition, the RHWS area will also be provided with fire walls separating the areas housing skips containing combustible wastes as shown on the Fire Strategy Drawing No. M00460-MAB-00-ZZ-DR-A-1103-S3-P04.

Bays located within the Bulking Area will house single waste streams and will boast fire resistant walls which will be resistant for 120 minutes in accordance with Environment Agency Guidance. The fire-resistant walls have been designed to provide separation between wastes and will be 200mm thick. Fire resistant walls for the Bulking Area have been designed so as to provide a 1m headroom between the top of the waste pile and the top of the wall. Fire walls

within the RHWS area will provide a 0.5m headroom between the top of the container/skip and the top of the wall. This will ensure there is a sufficient headroom so as to prevent a spark accidentally 'jumping' the barrier and that fire does not spread to other stockpiles/skips. The location of all fire-resistant walls is shown on the Site Fire Strategy Drawing No. M00460-MAB-00-ZZ-DR-A-1103-S3-P04.

Fire walls within the RHWS area and external bay walls in the Bulking Area will be constructed from 200mm thick concrete panels, and the separation Push/Pull walls in the bays within the Bulking Area will be constructed from Alphablocs, which are made of concrete produced with Carbonate Aggregate. Both were tested for fire resistance and will provide 2-hour fire resistance in accordance with the EA's FPP guidance.

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 Recycling Operatives or Area Supervisor 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 site will utilise water from the fire hydrant at the entrance to the site in the event of a fire. In accordance with Agency guidance the hydrant will be able to provide 1,200 litres per minute per cubic metre of waste. The existing hydrant on site was designed in line with the minimum standards specified for industrial units in "National Guidance Document on the Provision of Water for Firefighting" which should provide 20 litres/second flowrate.

The largest pile size on the site is estimated to be the green waste pile within the Bulking Area which will store a maximum of 295 m³ of material at any one time, thereby requiring the fire hydrant to be able to deliver a total of 355 m³ of water.

In addition to the fire hydrant, the site will have dedicated attenuation tank which will collect all site surface water. This tank will have a twofold purpose; to provide additional water in the event of a fire, and to provide a central drainage point for any firefighting water to be collected. The underground attenuation tank will be 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).

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 firewater to be retained within the site boundary via the internal water retention system and will be contained within the sites attenuation 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 Recycling Operatives 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 Area Supervisor 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	
Leicestershire County Council	Area Supervisor/Technically Competent Manager			
Environment Agency	Local Area Officer		0370 850 6506	
Local Fire Service		Emergency	999	

5.2 Detection of fire

As the site does not have a building there is no requirement to install an automated fire detection system at the site.

The site will rely on regular fire watches being carried out on site as a means of detecting any potential fires. A Recycling Operative will be designated daily to carry out fire watches in the RHWS area and the Bulking Area. The fire watch will include the inspection of all skips and waste storage areas within the RHWS site for any signs of overheating and fire, as well as the bays within the Bulking Area. The fire watch will also include inspection of any mobile plant and equipment used on site. In addition, all Recycling Operatives present on site will be briefed and trained to keep a watching brief for fire during all operational hours as part of the daily routine.

If the waste will be stored for longer than 3 months within the Bulking Area or RHWS (this is highly unlikely given the 5-day turnaround of waste within the RHWS area) the fire watch will include temperature monitoring of relevant waste piles using temperature probes.

In addition to the above, there will be a fire watch carried out at the end of the working day, including any temperature monitoring, if required, and at the start of operations when the site opens the next day.

5.3 Suppression of fire

In the event of fire, the site will follow the procedures described in section 5.1 above. In case of a small fire the Recycling Operatives will use the fire extinguishes to suppress the fire. In case of a larger fire occurring on site, the fire will either be contained within the skip in the RHWS area, or in case of the Bulking Area a fire will be contained within the bays which are equipped with firewalls.

All wastes within the RWHS area are stored either within enclosed compactor containers, skips, or in the case of WEEE waste, in a designated area with a 6m separation distance from other wastes. In addition, when a fire is detected, and if it is safe to do so, the Recycling Operatives will move the waste to the fire quarantine area using the equipment available on site.

5.4 Fire Water

Fire water will be contained on site within a sealed drainage system with an underground attenuation tanks with shut off valves closed to ensure that water does not leave the site. The total capacity of the tanks is 415 m³, which is considered sufficient to contain firewater in a

worst-case scenario of the biggest pile catching fire. All areas where waste will be stored will benefit from impermeable surfacing and an engineered drainage system.

The site's underground storage tanks 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, tanks will be pumped out and the water removed to a suitable site for onwards treatment/disposal, or if after testing, the water quality is of sufficient standard, it may be discharged to the drainage channel which leads to the Langton Brook. As the entire yard is provided with an impermeable concrete surface there is no risk of contamination to ground or groundwater.

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.

5.5 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 a rural location with no residential properties within 500m and no commercial properties within 300m. The site will be accessed directly from the A6 – Harborough Road and will be designed to be operational 12 hours a day 7 days a week (with the exception of Christmas Day, Boxing Day and New Year's Day). It is not considered that there would be any issues with accessing the site or the neighbouring sites in the event of a fire.

5.6 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.

5.7 Recording

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

5.8 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.

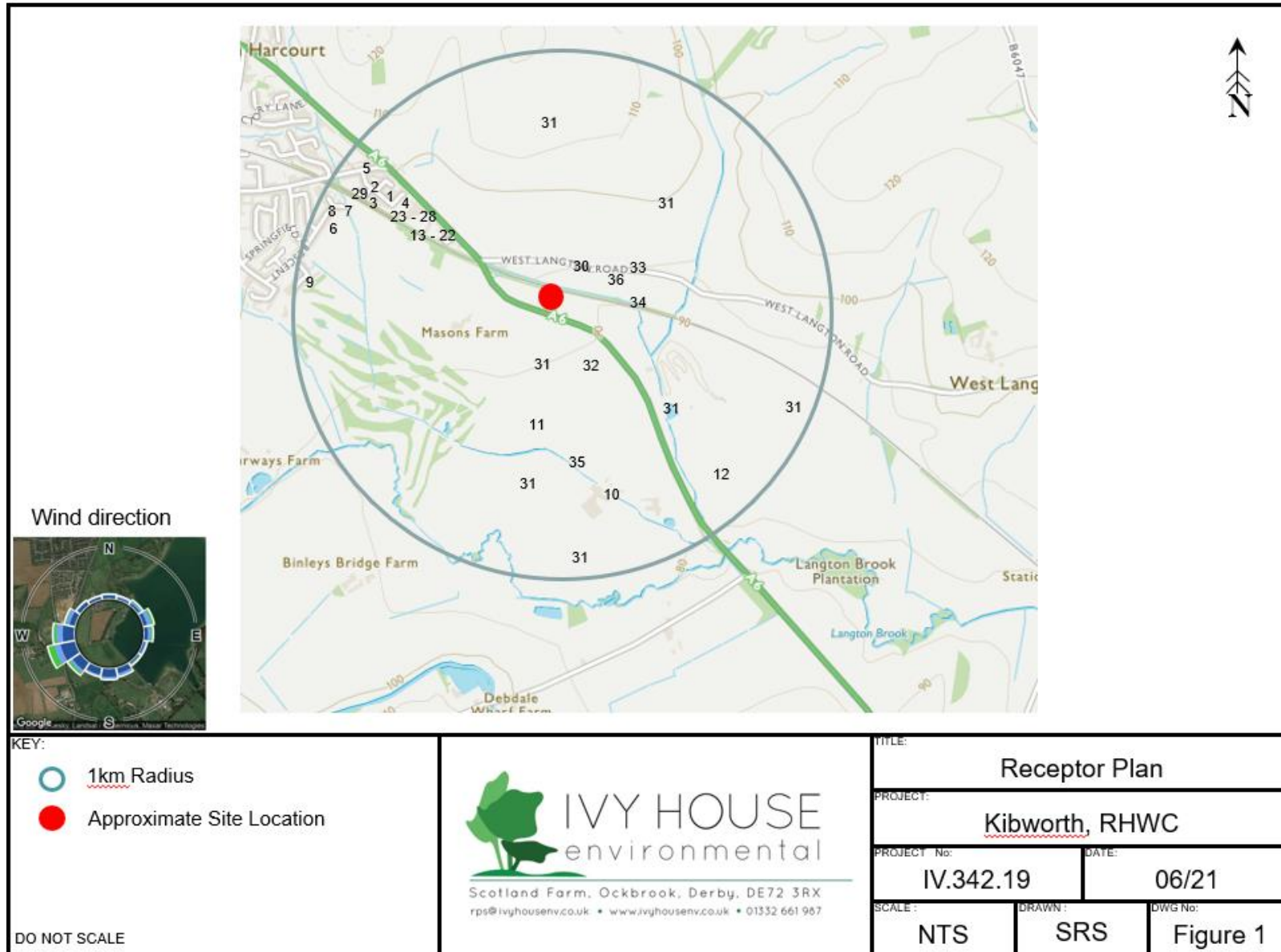
Waste suppliers will be notified via telephone that wastes will not be able to be accepted at the site and will be diverted to the Operators other Household Waste Recycling Centres or Transfer Stations if acceptable to do so and providing this will not cause a breach of permit at that site.

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



Receptor ID	Receptor	Receptor ID	Receptor	Receptor ID	Receptor
Domestic Dwellings		Schools, Shops, Commercial and Industrial		Highway, Minor Road and Railway	
1	Marriot Drive	17	Total Community Crae	32	Harborough Road (A6)
2	Milestone Close	18	UK Property Finance	33	W Langton Road
3	Braymish Close	19	Cornerstone Tax Advisors	34	Railway
4	Harborough Road	20	Jefferson Payroll Bureau	Surface Water	
5	New Road	21	Secured-loans.co.uk	35	Langton Brook
6	Fairway	22	Creative World of Crafts	36	Drainage Channel which flows to the Langton Brook
7	Birdie Close	23	DD Automotive		
8	Wentworth Close	24	Crouch Recovery		
Schools, Shops, Commercial and Industrial		25	Dynamic Wealth		
9	Kibworth Golf Club	26	Farleys		
10	Beech Tree Bunnies	27	Spenders Motorcycles		
11	Unnamed Farm	28	Horsewear House Ltd		
12	Kibworth Gun Club	29	Kemps Clothing		
13	Premier Music International	30	Allotments		
14	ACI Financial	Farmland			
15	Readicut Crafts	31	Farmland		
16	CLA UK				



KEY:

DO NOT SCALE



TITLE: Receptor Table		
PROJECT: Kibworth, RHCW		
PROJECT No: IV.342.19	DATE: 06/21	
SCALE: NTS	DRAWN: SRS	DWG No: Figure 2

**Appendix B – Dimensional assessment waste
piles, Drawing No. M00460-MAB-00-ZZ-DR-A-
1102-S4-P03**

(Under Separate Cover)

**Appendix C – Site fire strategy, Drawing No.
M00460-MAB-00-ZZ-DR-A-1103-S3-P04**

(Under Separate Cover)

**Appendix D – Permit Boundary, Drawing No.
M00460-MAB-00-ZZ-DR-A-1100-S4-P02**

(Under Separate Cover)

**Appendix E – Site Layout Plan, Drawing No.
M00460-MAB-00-ZZ-DR-A-1101-S4-P02**

(Under Separate Cover)