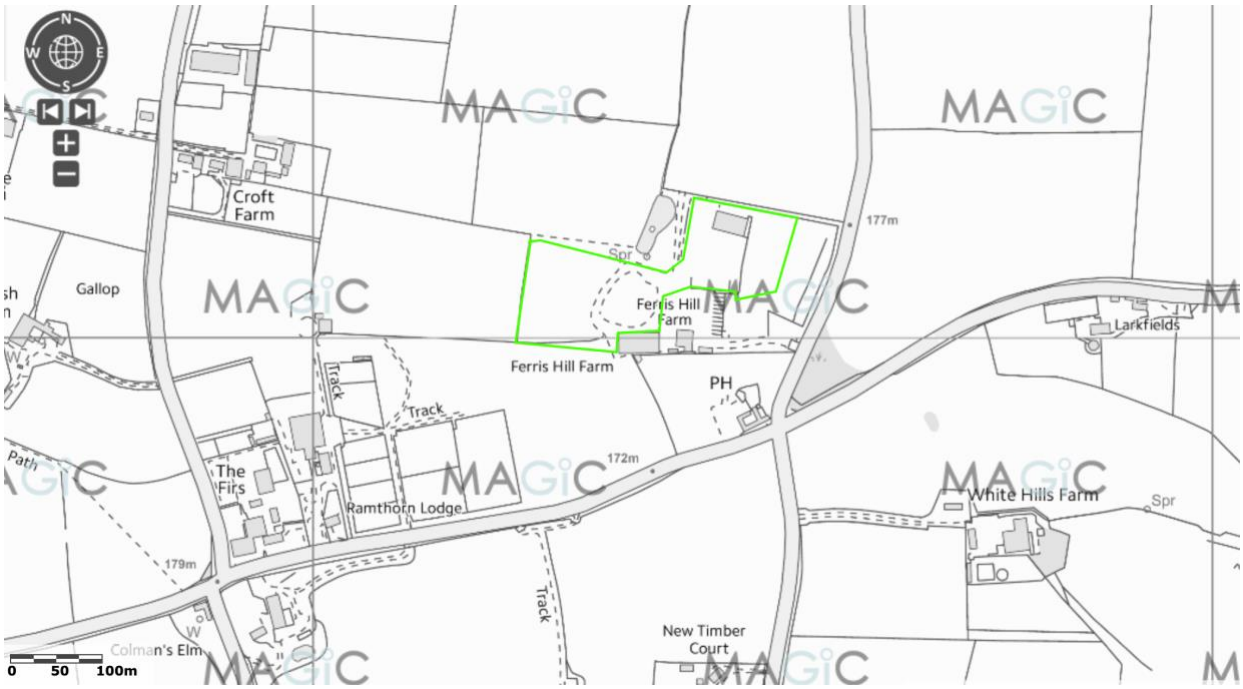
NIGEL MATTHEWS

T/as Banbury Plant & Skip Hire

FIRE PREVENTION PLAN

Waste treatment with transfer facility at

Ferris Hill Farm, Sibford Road, Hook Norton, Banbury, Oxfordshire OX15 5JY



Site Location

DOCUMENT CONTROL SHEET

Version Reference	Date	Reason for Change	Issued by
Original FPP-01	04/12/2019	Normal Variation Application to Permit	NM

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1. Introduction

1.1 Roles and Responsibilities

Mr Nigel Matthews has the overall responsibility for ensuring these procedures are adhered to and the day to day responsibility is that of the Competent Person, by the WAMITAB qualification scheme, for compliance with the Environmental Permit. The Site Manager is specifically responsible for:

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

1.2 Purpose

The primary purpose of this Fire Prevention Plan (FPP) is to:

i) minimise risk of fire;

ii) extinguish fire within 4 hours; and

iii) minimise spread of fire:

This FPP has been written to satisfy the above criteria and to guide staff and contractors in the prevention of fire. This FPP also confirms the actions to be taken in the event of fire, in order to minimize any impact on the environment and to control the fire where appropriate. This FPP will be issued to the Fire Brigade and be available at the site office in the event of a fire, to aid with fire-fighting.

1.3 Scope

This FPP has been prepared in accordance with Environment Agency guidance, Fire Prevention Plans, Version 3 November 2016. It relates to the storage of combustible waste at the site. Any yellow highlighted areas within the FPP are measures that need implementing subject to acceptance of this FPP. Both Annexes F & G are future layouts and site setup subject to acceptance of the FPP.

1.4 General considerations

This Fire Prevention Plan [FPP] is an associated document alongside the Environmental Management System of the site. The individual fire emergency procedures for each part of the site form part of the FPP.

External activities: the total potential external site is approx. 4,000m2 on which the storage and processing of combustible wastes and the provision of a quarantine area and the storage of combustible wastes will be carried out. All other sorted wastes which are considered combustible materials are stored externally in bays constructed of concrete–formed bays and boundary walls with fire resistance of 4 hours or steel roll-on-off containers [internally or externally]. The largest is 350m3, see Annex F.

The external area of hard-standing for the processing and storage of non-combustible inert materials, hardcore and aggregates is approximately 13,400 m2.

Internal activities: there is one waste treatment building providing an internal area of 875m^2 in which non-combustible waste treatment, segregation of soils and aggregates with a low-level of hand-sorting to clean the materials to prevent contamination of output materials and storage activities are carried out.

The site is bordered and protected as follows:

- N boundary is formed the building [surrounds the operating area of the site] for the tipping of non-combustible waste and processing (subject to combustible contaminants that are removed through manual picking process);
- S boundary to the main entrance to the site [surrounds the operating area of the site] is constructed of a concrete solid wall to 4m high which protects the stored materials as shown in Table 2, the highest of which is 3.5m;
- W boundary is formed by a sleeping policeman to enclose the tipping of non-combustible waste and processing (subject to combustible contaminants that are removed through manual picking process);
- E boundary is formed by an enclosed recycling plant [surrounds the operating area of the site] made up of an enclosed trommel screen, conveyors, magnets and enclosed picking line with bays made from concrete/steel and steel frame for the collection of recyclates, this is linked to the building on the N boundary.

The site is constructed of concrete surfacing in areas where combustible wastes are stored or treated and the drainage is to silt filtration tank (D1) thereafter to fully sealed 33,000 litre tank, see Annexes F & G. The site has sealed drainage in the area where combustible wastes are stored and processed and all areas of the site fall to the lower north west side of the site where the silt tank is installed.

One fire hydrant is located close to the main site entrance. Access to the site monitored by staff and CCTV 24/7.

2. Causes of Fire

The following have been identified as potential causes of fire and their relevance to this site is given in Table 1.

Table 1 Causes of Fire and Applicability to Site

Cause of Fire	EA FPP guidance reference	Applicability to Site
• Arson or vandalism	7.1	Yes – see section 3.2.6
• Self-combustion	7.11	Y
• Naked lights	N/A	No – none on site
• Plant or equipment failure	7.2	Yes – see 3.2.9 Planned Preventative Maintenance
• Electrical faults	7.3	Yes – see 3.2.9 Planned Preventative Maintenance
• Discarded smoking materials	7.4	No – on site smoking is prohibited
• Hot works, for example welding	7.5	Yes – see 3.2.10 Hot works
• Hot exhausts	7.7	Yes – see 3.2.11 Hot exhausts
• Industrial heater	7.6	No – none on site
• Open burning		No – not permitted
• Damaged or exposed electrical cables	7.3	Yes – see 3.2.9 Planned Preventative Maintenance
• Reactions between incompatible materials	7.12	No
• Neighbouring site activities	N/A	No
• Sources of ignition	7.8	Yes – mobile plant – see 3.2.8 & 3.2.9
• Hot loads deposited at the site	7.13	No – see 3.2.5 Fire Quarantine Area
• Batteries in operator's plant	7.9	Yes – see 3.2.1, 3.2.2, 3.2.3, 3.2.7, 3.2.11
• Leaks and spills of oils and fuels	7.10	Yes – 3.2.9, Annex D
• Build up of combustible materials	7.11	Yes – Annex D

Mitigation measures in relation to these activities, where under control of Nigel Matthews, are set out in this FPP.

3. Fire Prevention Plan

Nigel Matthews T/as Banbury Plant & Skip Hire recognises that the risk of fire cannot be eliminated. However, the site will be operated, in accordance with the operator's Environmental Management System [EMS], which addresses key activities and potential emissions and puts control measures in place. Operational Procedures will set out how the site will be operated and provide procedures for the day to day site operations including, daily checks, training, and plant maintenance. Some procedures are directly relevant to this FPP and have therefore also been included. In addition, to following the Operational Procedures, the following reasonable actions will be taken to minimise the risk of fire, in accordance with Environment Agency guidelines.

3.1 Site Plan and Receptors

A Site Layout Plant is given in Annex F showing the key features of the site relevant to the Fire Prevention Plan including site access, security, vehicle parking, materials storage, drainage and buildings, including the location of hose reels and hydrants.

3.2 Preventing Fires

3.2.1 Material Receipt and Storage

Waste acceptance procedures will be followed as set out in the operator's Environmental Management System [EMS]. The facility will be permitted under a bespoke environmental permit for the treatment of solid non-hazardous waste. The site will receive wastes under the direct control of the operator.

All deliveries are checked by a member of staff when collecting wastes from the waste producers and an initial inspection of the load for compliance with the waste transfer note and evidence of hot-load or non-conforming waste, such as hazardous wastes [lithium batteries], will be carried out. The delivery vehicle will arrive at the site and the waste further inspected at the point of arrival on the weighbridge; it will then be directed and then unloaded in the dedicated reception area either W1 or NC depending on material, please see Site Layout Plan Annex F.

On deposit any non-conforming waste with the potential to trigger combustion, such as lithium batteries, aerosols and gas cylinders, will be removed and placed in separate containers for safe storage.

The waste that requires physical-chemical treatment to separate the materials, combustible and non-combustible, for recycling and reuse off-site will be stored in an external concrete-formed bay, see Annex F. All wastes will commence being processed on the day of arrival and there will be no combustible waste stockpiled loose in the building at the end of the working day. This ensures first in first out processing is applied to all site operations.

The treatment process follows prescribed mechanical and manual processes that separate and segregate potentially combustible materials such as wood, paper, cardboard, metal and plastics. Delivered combustible wastes for bulk processing will be deposited at the front of the building (W1) prior to processing. Separated materials will be stored in either bulk concrete-formed bays to the southern boundary of the operating area or under the enclosed picking line, see Annex F. Waste wood material will be tipped directly into the wood bay as per Annex F, then mechanically crushed to a fragment size not less than 30mm to reduce volume for ease of transport to a licensed wood recycler. As a combustible material, wood will not remain on site for no longer than the duration stated in Table 2, as the wood is specifically reloaded for further recovery elsewhere.

Non-combustible wastes will commence being processed in the enclosed building on arrival and the waste will be hand-sorted to remove any contaminates e.g. paper, cardboard & wood etc. Any residual contaminants will be removed through the screening and picking-line plant. The hand-sorted materials will be stored in 30m₃ maximum capacity concrete & steel bays beneath the picking station before being cleared and loaded into either open-top steel containers of $30m^3$ or walking floor artics for transport off-site [paper, card & plastics], or placed in concrete formed bays and baled e.g. wood to provide 4-hour fire break for each bay. The outputs of soil and hardcore will be inspected by the site foreman and competent person daily to validate the level of potentially combustible materials present. Plasterboard waste is stored in a concrete & steel bay and is referenced in Annex F. The bays are emptied when full or before the duration specified in Table 2, whichever is soonest. This ensures no build up of combustible materials and regular removal of materials on a first in first out basis. This practice is arranged by the operator using their own transport or third party and is considered a reliable method of combustible material turnover.

This is further addressed in section 3.2.3.

The permitted annual throughput for the site is 75,000 tonnes with a maximum of 550 tonnes per day of which approx. 80 tonnes per day will be combustible. The picking line operation has a capacity of up to 30 tonnes per hour (tph), the crushing operation has a capacity of up to 100 tph, the soils screening operation has a capacity of up to 60 tph. So a combined heavy and light skip processing capacity of up to 90 tph, not including the hardcore crushing operation.

3.2.2 Waste storage times

Treatment of waste received on site will take place daily on a continuous basis. Processing of incoming wastes is commenced within 24 hours of arrival. The resulting materials for off-site processing are also removed as detailed in Table 2 below.

3.2.3 Waste storage stacks

The waste storage limits are set out in Table 2. It should be noted that the wastes detailed in Table 2 are not considered as specific combustible materials under the Agency's guidance and accordingly are provided for representative purposes of fire prevention and controls.

Table 2 Waste Storage – Solid combustible

Material	Max Height (m)	Max Length/Width (m)	Method of storage	Max Volume (m^3)	Max Area (m^2)	Max Storage (days)
Incoming	3.5	9/9	Loose	285	81	2
Outgoing	3.5	10/10	Loose	350	100	2
Cardboard & paper	3.6	6/1.52	Baled	33	9	7
Plastics	3.6	6/1.52	Baled	33	9	7
Metal scrap; ferrous	3.0	13/2.4	Trailer	90	0	2
Metal scrap: non-ferrous	1	1/1	Container	1	1	7
Plasterboard	3.0	10/5	Loose	150	50	7
Wood	3.0	10/10	Loose	300	100	2
Quarantine:	3.5	10/5	Loose	175	50	2
Total combustible waste stored				1092		

Each bay/container used by the operator will be accessible from two sides in order to put out a fire.

The operator will use their own vehicles or mobile plant to move containers in the event of a fire, see sections 4.1 [fire detection] and 4.3 [firefighting strategy] which will take effect immediately as a fire is notified. The sorting and storing of combustible and other waste is carried out externally by a combination of mechanical and manual means and each waste segregated for transfer for off-site recycling is stored in baled form of 33m^3 or in external storage piles, as per Table 2.

Small quantities of combustible waste not able to be hand-picked on the floor, will be hand-picked in the picking station on the non-combustible waste processing line inside the enclosed recycling system [wood, paper, card and plastics] and will be stored in the specified concrete bays below the picking station which will be protected from direct sunlight. Once each bay beneath the picking station is full it will be moved by mobile plant and emptied into the relevant external bay for bulk storage or placed in an area waiting to be transferred off-site, shown on Annex F.

The separated combustible materials are all stored externally in dedicated concrete-formed bays or in steel trailers, as described in Table 2. The wood concrete-formed bay will have a line marked at 3.0m to identify the maximum storage height

The waste materials will be stored in their largest form.

The operator will ensure that waste will be handled on the basis of 'first in, first out', see 3.2.1.

In terms of managing the volume of stock in order to ensure the limits in Table 2 are not exceeded, the storage limits are defined by the size of each individual bay or trailer and are under the direct control of the site supervisor and competent person. Daily inspections will record available storage capacity and generate a programme of transfer from site using the Daily Check List.

Nigel Matthews t/as Banbury Plant & Skip Hire operates a broad selection of third party fleets to transport separated materials including transport of 30m^3 containers and 100m^3 articulated trailers for the transfer off-site of bulk combustible materials such as residual combustible waste [191210 and 191212] and wood. Nigel Matthews t/as Banbury Plant & Skip Hire has contingency arrangements with additional 3rd parties for bulk transport for recovered materials such as AW Jenkinson for wood, along with scheduled transport for cardboard/paper which effectively minimises daily production and storage levels. All transport is either in-house or scheduled.

Storage of gas cylinders and other potentially combustible wastes

Gas cylinders which enter the site and are found when the waste is deposited are non-permitted waste. They are either returned to the waste producer at the time or are marked for identity and placed in the designated locked cage gas bottle store awaiting collection or return in a secure location in the permitted area. No gas bottles are in use at site. Other non-conforming wastes, see 3.2.1, will be stored in a plastic container of 240l, as shown in annex F.

3.2.4 Waste Storage - Liquids

The potentially combustible fluids used at site will be stored either externally to the permitted area in a steel bunded tank [diesel] or within an enclosed workshop in dedicated containers, provided with bunding, in the various containers provided for that purpose. The liquids will be securely stored.

These containers are individually labelled. Each container stores the following quantities:

Table 3 Storage – Liquid flammable – [not wastes, for use at site]

Material	Max quantity (litres)	Receptacle	Max storage (days)
Diesel	5,000	Bunded tank with fire extinguisher	N/A
Hydraulic oil	199	Plastic drum on drip tray in container with fire extinguisher	N/A
Engine & gearbox oil	199	Steel drum on drip tray in container with fire extinguisher	N/A

The tanks are checked on a daily basis as part of the daily checks. Any defects are reported immediately to the Site Manager, in order to provide alternative arrangements and ensure the damaged tank is segregated and prevented from being used.

All storage tanks meet HSE requirements.

3.2.5 Fire Quarantine Area

A Fire Quarantine Area is required to manage any incoming hot loads and to also provide an area that could be used to place smoldering or burning waste in order to reduce the spread of fire. This is shown in Annex F.

In the event of a fire, burning waste, if safe to do so, waste will be moved to the Fire Quarantine Area using machinery. There is a loading shovel and a excavator on site and these would be utilised to move containers or loose waste.

A 50% capacity of the largest stockpile of combustible waste is required by the guidance, i.e. 350m^3 * 50% = 175m^3/50m^2. The quarantine area is located on impermeable surfacing with drainage to a silt trap and 33,000 litre sealed tank to halt any discharge to contain and treat any potential fire water.

The quarantine area is located to the centre of the site and remote from combustible materials and adjacent to incombustible materials, hardcore and soils, that can be used to smother or extinguish a fire, if required.

Fire reels are located by the quarantine area, see Annex F.

Hot loads are not expected, given the nature of the business. All waste delivered to the site will be under the direct control of the operator. Prior to arrival at site all incoming deliveries will be checked by the operator's drivers for evidence of hot loads at the point of collection and will be checked and processed in accordance with the EMS when on site.

The operator's mobile plant, see sections 3.2.9 and 4.3, will be used to move materials on fire, providing it is safe so to do, and also apply incombustible materials to any fires.

Annex F shows the Fire Quarantine Area and Non-Permitted Waste quarantine bin. This FPP deals with the Fire Quarantine Area and individual recovery materials held in steel containers under existing exemptions.

The Fire Quarantine Area is a dedicated emergency or quarantine area with a clear area of 6m around it. The rationale for this area is:

- The area, c50m^2, is central in the site so is required to be kept clear at all times for access which is in keeping with the operator's access requirements for the site. The capacity may be provided by steel container as an alternative to 'burn-out' in the open.
- Only small quantities of material would ever be put in this site i.e. those that can be dealt with safely by the staff on the site. Larger fires would be dealt with by one of the Oxfordshires FRS, Chipping Norton or Banbury, approximately 11km and 13km away respectively.
- In the event of a fire or observed self-combustion burning waste, if safe to do so, will be moved to the Fire Quarantine Area.
- The Fire Quarantine Area is signposted and marked on the ground.

The quarantine area, when made safe, will be emptied immediately, see section 4.7.

In line with the Environment Agency FPP guidance which expects 'reasonable' actions, it is considered that the above approach provides a reasonable action given the type and size of operation. The main fire risk is considered to be the items detailed in Table 2 above and addressed by the current EA guidance, November 2016. The materials identified in Table 2 are stored separately and in accordance with the Agency guidance for the storage of combustible materials including storage volumes and associated fire breaks. Which will be achieved by the use of a 6m lorry loading/fines bay separating the combustible material bays, also fire resistant fire walls with a resistant burn time of 2 hours.

3.2.6 Security

The following security features will reduce fire risks, particularly from vandalism and operational risks:

- The site will be secured by lockable front gates main site entrance.
- The site office building, workshop and all lockable containers will also be secured when site is closed.
- The facility will be manned at all times during routine operations.
- The site has 24/7 manned security when site is closed, fulfilled by a company employee.
- CCTV is provided by the operator. The operator CCTV is accessible remotely and will be monitored by the operator during out of hours.
- The facility is secured with perimeter fencing and thick hedging.
- All functions of security will be checked on a daily basis and information recorded on the Daily Checks Form Annex D.

3.2.7 Self-Combustion

The potentially combustible wastes are removed from the site as detailed in Table 2. The storage times and quantities are significantly lower than those permitted by the regulatory guidance.

Other measures include emission management, by daily sweeping via manual and mechanical methods, in areas such as around containers when they are exchanged. The cleaning of areas within the site around combustible materials, cleaning by pressure-washer in areas such as the site surfacing where waste is deposited and sorted on a weekly basis. Water-based dust suppression in dry conditions will assist in maintaining reduced temperatures and build-up of detritus at site. No combustible waste is stored for longer than 7 days.

3.2.8 Sources of Ignition

- There are no naked flames, heating pipes, space heaters, furnaces or incinerators at the site.
- Lighting and other electrical appliances are covered in 3.2.12, 4.1 below.
- Mobile plant & equipment risks are identified in 3.2.9 below.
- No hot working, see section 3.2.10, is carried out within 6m of any combustible wastes at site.
- The site will be a no smoking facility.
- There is no burning permitted at site.
- There are no sources of potential ignition within 6m of the neighbouring premises.

3.2.9 Planned Preventative Maintenance

The site operates the following mobile plant;

- 2 number 360o tracked excavators equipped with quick hitch select-a-grab fitments
- 1 number wheeled loading shovel
- Fixed plant comprising a mechanical trommel and picking station
- 2 number fork trucks
- Mobile Screening Plant and Mobile Crushing Plant.
- There are no other items of machinery on site.

There are pre-existing legal requirements for the Through Examination of the Items of Plant & Equipment under HSE legislation and in accordance with the company's EMS all items of plant & equipment are maintained under the manufacturers' maintenance requirements, either under service and maintenance agreements or for minor maintenance, in-house.

The company carries out daily checks on the equipment prior to use. This is provided in Annex E.

A fire extinguisher is kept in the cab of each item of mobile plant, which also has a battery isolation switch to disconnect the battery when the item of equipment is not in use, i.e. will prevent the battery causing a spark when the site is closed.

The liquids [not waste] stored and used at site in containers are checked daily for any damage that may cause leaks or spillages.

All faults needing corrective action will be reported to the Site Manager to be implemented.

The electrics will be certified by an electrical contractor and will be checked on a regular basis by an approved contractor.

The operator recognises that even with well-planned maintenance, contingency plans must be in place in the event of a serious breakdown. In order to ensure all permitted waste quantities are adhered to, before the operation commences the operator will ensure it has:

- Contacted relevant plant hire companies to source alternative equipment and spare parts if required.
- A list of alternative facilities to take the waste.
- A number of outlets for each product.

3.2.10 Hot Works

It is not envisaged that hot works or welding will be required, however, the operator has a fully enclosed workshop at site and hot works would be carried out in that controlled environment away from combustible materials.

However, in the event that such works are required, then this work will be carried out by personnel with a permit to work, in an area away from combustible materials under EMS conditions.

3.2.11 Hot Exhausts

During operations, banksmen and site operatives will be vigilant for signs of ignition from operational hot exhausts such as those on vehicles used for transport and stock/waste movement.

At the end of each working day the wheeled grab and tracked excavator are parked and locked in an area of the site away from the combustible waste storage areas as shown in Annex F.

A Daily Site Check at the end of the shift will be undertaken by the site manager or his nominee to check that there is no risk of ignition from exhausts.

See Fire Risk Daily Checks Form Annex E.

3.2.12 Electrics

The building's electrics will be certified by a qualified electrical contractor and checked on an annual basis.

3.3 Additional Actions

Further actions to mitigate fire risk on site include:

- The access route into the site is always kept clear and will therefore provide unrestricted access for emergency vehicles when required.
- Overnight parking of vehicles and mobile plant is over 6m from combustible waste and materials storage areas
- Good housekeeping will be maintained at all times by way of trained staff [EMS] and site inspections.
- All fire extinguishers will be checked by an approved third-party contractor.

3.3.1 Daily Checks

Site: At the end of each working day, the Site Manager or trained supervisor will complete a daily check sheet. This will include ensuring that the fixed and mobile plant & equipment along with water supplies and associated equipment is in a safe condition, parked where designated and the site is secured.

Daily inspections will also check for build-up of detritus and similar potentially combustible materials.

Plant, equipment, HGVs: Annex E refers all plant & equipment is checked before use under HSE requirements of PUWER & LOLER.

All HGVs are inspected as part of DVSA requirements.

At the end of each working day, the Site Manager or Fire Warden will complete a daily check sheet. This will include ensuring that the items of mobile plant parked away from the material stockpiles and the site is secured, see 3.2.9 & 3.2.11.

3.3.2 Signage

Signage will be positioned throughout the facility showing Fire Exits and the position of extinguishers and other relevant firefighting equipment.

All waste storage areas will be clearly marked.

3.3.3 Training, Awareness and Visitors

All staff and contractors working on-site will be aware and understand the contents of this FPP. Through site inductions and on-going staff awareness and training, the operator will ensure that all relevant staff and contractors will:

- Understand what they must do during a fire.
- Know where the fire prevention plan is kept.
- Participate in regular exercises to test how well this FPP plan works and to confirm staff understand what to do. There will be an annual exercise which will include a full test of the fire action procedure. In addition, there will be random audit checks which will target different members of staff. This will be carried out several times throughout the year.

In addition:

- Fire alarms will be installed and tested weekly.
- An annual fire alarm drill will be carried out to test the effectiveness of the evacuation plan.
- A nominated member of staff will be trained to satisfy the function of the Fire Warden.

For visitors to the site:

- They will be escorted at all times following signing in.
- They will understand the no smoking policy for the site.
- When signing in, information on the fire exits and muster points will be provided.

In accordance with the EMS all training and awareness raising will be recorded.

4. Fire Detection and Management

4.1 Fire Detection

All waste treatment and storage activities of non-combustible material will be carried out internally and combustible material will be treated and stored externally. The operator proposes a scheme to detect fire based on the following risk management practices which are proportionate to the nature and scale of waste management activities carried out, see section 3.2.1, and the associated risks, and provides for the site to be under review on a regular basis:

- The site is manned whenever the site is open to receive combustible wastes by trained staff;
- The turnaround time of the combustible waste is fast;
- There is no combustible waste left stockpiled in the building at the end of the operational day and all waste will be stored in steel containers or concrete bays;
- The operator uses other parts of the site when permitted operations are closed; and
- The operator has 24/7 site-based security

On-site staff will visually inspect all waste being tipped on site for evidence of smouldering or fire, as part of an ongoing monitoring of the site as a whole. During out of hours the on-site security will be supervising the site on CCTV continuously monitoring the wastes in storage [containers] for evidence of potential fire risk which is a task that will be undertaken as part of the general management and inspection of the site.

The operator's nominated out of hours emergency response procedure is by way of 24/7 site-based security provided directly by the operator's overnight site security. This provides an immediate initial response to the outbreak of fire at site and will enable the FRS access to the site, see Annex I. The operator's director is the nominated emergency response person and will be in attendance within 15-20 minutes which provides fast support to the outbreak of fire at site.

During operational hours all staff are trained to be vigilant in terms of fire detection checking for signs of fire at site from smoking exhausts, smouldering wastes and similar. The site foreman will complete a final end of day check of the site to ensure there is no evidence of fire and that all equipment is parked in its allotted position.
The site is equipped with CCTV coverage which is accessible remotely by the operator and emergency response staff. Furthermore, the site has security 24/7 with CCTV access when the site when is closed/out of hours.

All forms of security staff are trained in the operator's emergency procedures in case of fire detection and will contact FRS and Site Manager as part of the Emergency Procedures, see 4.3 below. The on-site security will respond to an emergency immediately and enable the site to be open to receive FRS and to commence fire-fighting. In the event of a fire the operator will notify the neighbours, as identified in Annex C. In the event of any signs of smouldering material, the operator will implement the emergency fire-fighting procedure, see section 4.3. Fire reels and extinguishers will be provided at strategic points adjacent to any processing equipment and the points of entry to the building. These will be inspected by an approved contractor. Any defects to plant, equipment or fire-fighting equipment will be reported to the TCM and corrective action will be arranged on the same day.

4.2 Fire suppression

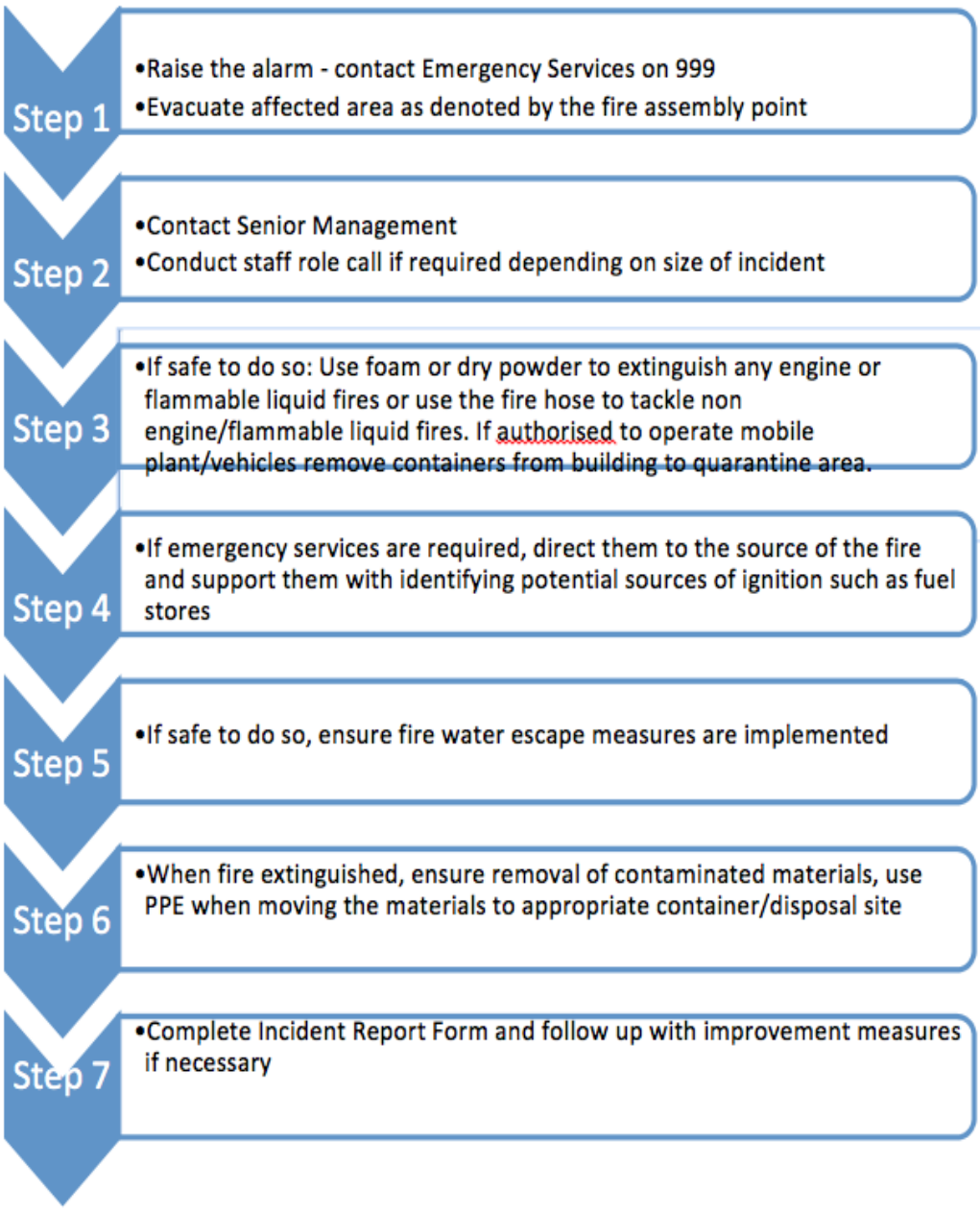
- **Fire extinguishers:** have been provided at strategic points around the site, such as by bunded fuel storage tanks, and internal offices. These were installed and are maintained by an external contractor.
- **Fire hose reels:** 2 number have been installed externally. Each has a 30m reach which means they can cover all the external storage and processing areas of the site used for combustible wastes. These are hydrant-fed [1 number 100mm hydrants at the boundary of the site entrance which provides a 4,200l/minute supply] and are shown Annex F.
- **Water bowsers:** 2 number 1000 litre bowsers
- **Water sprays:** 1 number dust suppression unit
- **Infrastructure of waste treatment area:** i) the waste treatment area for the reception and sorting of light/combustible wastes is equipped with a permanent supply of water for dust suppression and fire-fighting purposes and ii) the waste treatment area for the heavy/non-combustible [with minimal combustible fraction] wastes is equipped with a water-based dust suppression system and accordingly reduces the temperature of wastes and the atmosphere. The suppression system is available whenever the treatment process is active.

4.3 Firefighting strategy

In the event of a fire being detected, the following steps will be taken:

- See page below

The site has been laid out to enclose combustible materials in the concrete walled bays and store some non-combustible and quarantine material externally. By providing a vehicle loading bay between the combustible materials and soils to the rear of the bays e.g. soils can be used as a natural form to suffocate the fire through the use of mechanical plant are per soil on site.
In addition, in the event of a fire breaking out at the premises that requires attendance by the Fire Rescue Service [FRS] the site would remain closed until the FRS confirm that the site is safe to occupy.



The contact list of emergency numbers in Annex C will be retained in the Site Office and updated as required by the Site Manager.

4.4 Seasonality and Pile Management

The management of the combustible waste produced by the treatment of non-hazardous waste is not dependent on seasonality, accordingly, no extended quantities or storage times as shown in Table 2 are anticipated.

The quantities of each combustible material, shown in Table 2, is limited by the physical dimensions of the site therefore there is no further capacity to store beyond the quantities stated. The operator only accepts wastes from their own clients and can therefore control the input quantities at site, see 3.2.1. The operator, through their existing operations at site, has existing outlets for all of the combustible materials produced including metal, cardboard, plastics and wood.

The operator also maintains a list of alternative outlets that could be used in the event that the primary outlets can no longer receive the materials. The list is kept up to date and maintained in the site office.

4.5 Water Supplies

Water supplies for firefighting will include:

- **Fire hydrant:** Will provide water at a minimum of 4,200 l/minute[2]. There is one 100mm supplies located to the right of the main entrance to the property with stand pipes, as shown on the Annex F.
- **Fire Hoses:** 2 number 30m fire hoses provide cover to all areas of the site and will provide water at a rate of upto 4,200 l/minute.
- **Other water supplies:** the operator maintains two number 1,000 litre water storage bowsers for use in fire-fighting and dust suppression at site. These are kept full and are topped up by water mains or fire reels as required.
- **Fire Rescue Service:** Located approx. 11km & 13km [see 3.2.5 above] from site and will be able to attend site in approx 15 minutes, see Annex H.

4.6 Managing Fire Water

The largest storage pile of combustible wastes is 350m^3, as shown in Table 2.

Fire water would be generated from within the external storage area of the site which is bunded on 3 sides by concrete walls/formations with an impermeable site surface with falls towards the left North West corner of the site where a silt tank leading to a sealed tank is installed, see Table 4.

Temporary barriers will be placed across the opening to the site access, marked in Annex F, to provide a sealed storage area for fire water. The temporary barrier will be formed by placement of sand bags which are 50cm in length and 20cm in height. The operator will provide and maintain a supply of pre-filled wrapped in plastic [polypropylene] sandbags which are stored, i) opposite to the operating site entrance access on the western boundary for deployment. The supply is close to the point of deployment, see Annex F, and away from the source of fire.

The pre-filled sandbags will be placed on plastic sheeting to form an impermeable barrier in the identified areas of the site to prevent firewater escaping the boundaries as shown on Annex F. The sand bags will be recorded on delivery to site and form part of the daily inspection procedure to ensure the sand bags are fit for purpose. Site staff will be trained in the requirement to place the sandbags in position from the local sandbag storage point. The requirement for the storage of sandbags has been calculated at two sandbags high across the 10m metre entrance as 40 sandbags being required, and this is shown in Annex F. The requirement for supplies of pre-filled wrapped in plastic sandbags is calculated as 2 pre-filled wrapped in plastic sandbags high as shown on Annex F and deployment will be completed within minutes of the Emergency Procedures being activated which refers to daily operational staff or emergency response staff and site security staff.

All persons will be capable of handing the pre-filled wrapped in plastic sandbags into position and complete the building of the required barrier walls through the operator's nominated emergency staff [N Matthews, owner] will be able to place the temporary barriers within 5 minutes during working hours and the same out of hours subject to a delay of 15-20 minutes to attend – see training below.

The closest and largest potentially combustible materials are stored 10m distant from the location of the pre-filled wrapped in plastic sandbags which are stored approx. 5m from the required deployment position which will provide sufficient time for the placement of the equipment without harm to human or environmental health.

The operator's Emergency Procedures will be practised to place 20cm high sandbags to ensure the procedure can be complied with. Upon placement, the pre-filled wrapped in plastic sandbags form the complete physical barrier required by their application. Staff will be trained in the use of the emergency measures, be equipped with any specialist PPE and will be aware of when to deploy them, if safe to do so i.e. if human life will not be put at risk. A record of this training will be maintained and fire drills will take place as recorded in the MS.

An analysis of potential fire water generation below, shows that the fire water could be contained within the building & site in the Table 4 below.

Table 4 Fire Water Management Calculation

Litre/min/1m3 of waste (l)a	6.6
Largest combustible pile (m3)	350
Litre per minute required (l)	2310
Litres over three hours (l)	416,000
Sealed tank [1] volume (l)	33,000
External site storage volume (l)c [including sealed tank but excluding building storage capacity]	498,200 [>416,000 available]

a Based on EA guidance that 2000l /minute of water is required for a 300m3 stockpile for three hours.
b Including 20cm temporary barriers [sand bags] deployed at 2 sets of gates, see 4.1, to contain water.
c Based on of open area of site, excluding building footprint, external material piles Table 2, with equivalent of a minimum of 0.125m [sleeping policeman and kerb height] upstand to all boundaries, 640,000 litres.

There is one fire hydrant located approx. 50m from the entrance/combustible waste to the site which provide water to 2 number fire reels at site can provide this volume of water. The two fire reels are located approximately 20m from the respective combustible waste piles of wood and residual waste [largest]. In addition, the Fire Service Chipping Norton Fire Station is 11 km from the site and will be supplied with this FPP and will assess it, if a water supply truck would be required on site in the event of a fire it is approx. 15 minutes journey. The combined controls set out above demonstrate that fire water would be contained within the external area of the site by a combination of sealed drainage and temporary barriers.

There is no discharge to surface waters or soakaway from the permitted area. In order to remove any contained fire water from the site the operator will use a tanker to extract the fire water from the bunded building and internal sealed drainage system, see 4.7 below.

The operator notes that one of the available options in the FPP guidance is the use of soil or crushed brick to suffocate a fire and this could be a contingency option at site and will form the basis of discussion with the Agency. This is particularly relevant as the site will store specified wastes i.e. soils outside the combustible waste storage area and therefore a supply of suitable materials will be held at site at all times and are stored within 10m & 30m from the quarantine area and can be easily managed by the operator's mobile plant & equipment, see 3.2.9, and could represent the most efficient way in managing a fire and reducing fire water quantities significantly. The on-site loading shovel has the capacity to load soil, the excavators have the ability to spread the material in the quarantine area to a low level for the shovel to tip the soil and suffocate the fire. This will only be attempted when there would be no physical harm or danger to the staff and machine operators, otherwise the FRS will be called immediately to attend.

4.7 Incident Management

In the event of an incident, the responsible person in Annex C will contact neighbours and all waste will be diverted to a third-party operator. The operator will maintain a list of alternative sites for its own use and to advise its customers of the change of facility being used to receive their waste, if required. There are a number of other waste management facilities in the locality including a permitted landfill approximately 30km from the site.

Once the fire has been extinguished and the site has been deemed safe to enter, an assessment of the fire damage will be made. Arrangements will be made to tanker away the fire water to allow access to the building. Any fire residues will be loaded into containers and removed from the site for disposal. All equipment will be checked by the manufacturer to ensure that it remains fit for purpose. Any repairs will be made by the manufacturer and the commissioning phase will need to be signed off by the manufacturer before waste processing recommences.

The fire-fighting equipment will also be checked by the installers to ensure that they are fit for purpose. Any repairs will be made in accordance with the manufacturers recommendations. The cause of the fire will be investigated to understand what occurred and what measures need to be in place to prevent a recurrence. Advice will be sought from the FRS and this Fire Prevention Plan updated accordingly.

Annex A: Location of Key Sensitive Receptors

The sensitive receptors shown below are within 1km of the site.

The site is located within an established industrial site and site is surrounded to all sides by agricultural land.

There are NO schools, care homes, hospitals and major transport links or similar sensitive receptors, including road and rail, within 1km of the site.

There are NO drinking water supplies within 1km of the site.

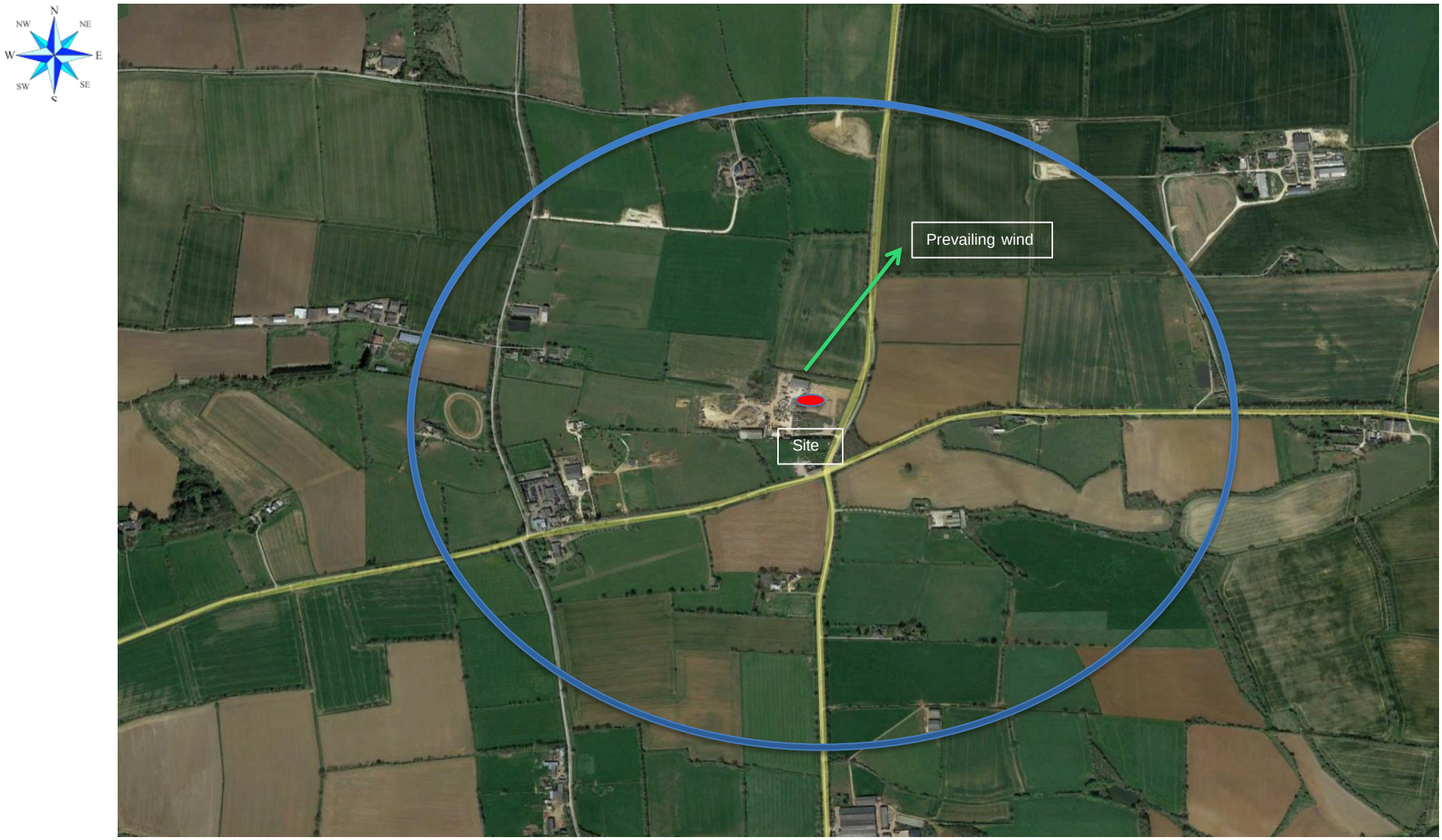
The closest Fire Stations are approx. 11km & 13km away at Chipping Norton and Banbury respectively.

The closest hospital is approx. 12km away, Horton General Hospital.

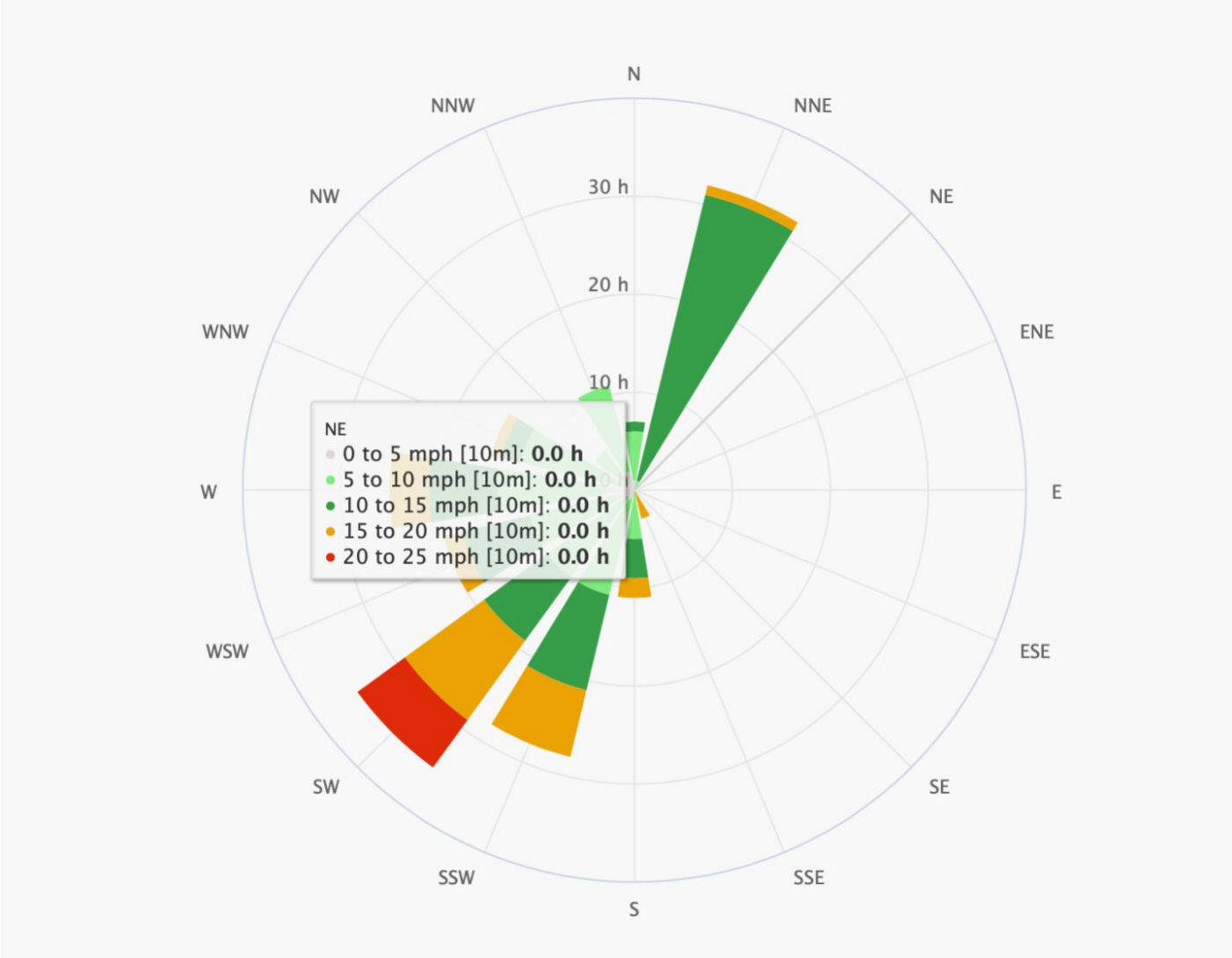
These are identified in the list below.

Human Receptors:-

1. **Ramthorn Lodge (Business Units) – 500m**
2. **WhiteHills Farm – 500m**
3. **Croft Farm – 550m**
4. **The Firs (Car Garage) – 580m**
5. **New Timber Court – 500m**
6. **Six Ash Farm – 765m**
7. **Colman's Elm – 710m**
8. **Fodge Farm – 870m**
9. **Larkfields – 500m**



1km Blue Ring



Wind rose for Hook Norton

Based on historical records [30 years]; source Meteoblue

Annex B: Staff Contact and Training Register

Name	Job Title	Contact Telephone Number	FPP Training Received (Insert Date)	Signature

Annex C: Emergency Contact Numbers

SITE DETAILS			
Location: Ferris Hill Farm, Sibford Road, Hook Norton, Banbury, Oxfordshire			
Postcode: OX15 5JY			
Site Access Grid Reference: SP 35535 34994			
SITE CONTACTS	Name	Office Hours (specify)	Out of hours
Owner: operator	Nigel Matthews T/as Banbury Plant & Skip Hire	01608 730215	
Owner:	Nigel Matthews	01608 730215	07831 406223
Site Manager:	Nathan Matthews	01608 730215	07947 332245
Site Supervisor:		01608 730215	
Security Contact:	Nathan Matthews	01608 730215	07947 332245
Landowner / Agent:	Nigel Matthews	01608 730215	07831 406223
EMERGENCY SERVICES		Office Hours	Out of hours
Emergency		999	999
Medical: Horton General Hospital, Oxford Rd, Banbury OX16 9AL		01295 275500	01295 275500
Police:		999	999
Fire:		999	999
REGULATORS		Office Hours	Out of hours
Health and Safety Executive (HSE)		0151 922 9235	0151 922 9235
Local Authority: Cherwell District Council		01295 227001	01295 227001
Environment Agency (Local)		03708 506 506	03708 506 506
EA (24 hour emergency hotline)		0800 80 70 60	0800 80 70 60
Natural England		0845 600 3078	0845 600 3078
UTILITY / KEY SERVICES	Name	Office Hours	Out of hours
Water undertaker:	Thames Water	0800 316 9800 (24hrs)	
Sewerage undertaker:	Thames Water	0800 316 9800 (24hrs)	
Gas supplier:	N/A		
Electricity supplier:	Western Power	0800 6783 105 (24hrs)	
Oil supplier:	N/A		
Fuel supplier:	Ackerman & Niece	01869 340202	
Chemical supplier:	N/A		
Oil spill contractor:	N/A		
Maintenance contractor:	N/A		
Electrician:	N/A		
Plumber:	N/A		
Locksmith:	N/A		
Joiner:	N/A		
OTHER KEY CONTACTS	Name	Office Hours	Out of hours
Head Office:	Nathan Matthews	01608 730215	07947 332245
Adjacent landowners:	Steve Hyatt		
Neighbours:	James Clarke	01608 737210	
Specialist advisors:	Lumnia Consulting – Environmental Services	07770 978800	07770 978800

Annex D: Daily & Monthly Check Sheet

The following daily check has been completed:

Checks to be made DAILY
1. Security – all security fencing and security equipment is intact
2. Storage areas – housekeeping preventing build-up of detritus in/around treatment equipment
3. Storage areas – pile sizes within limits and below fence lines as appropriate
4. Mechanical lifting equipment locked in central area of site away from storage areas
5. Fire fighting equipment – all hose reels and hydrants are accessible
6. Fire extinguishers – all fire extinguishers are in the correct place and in tact
7. Fire Quarantine area – clear from waste and signage in tact
8. Site drains inspected – for blockages, damage
9. Leaks and spills from mobile plant and stored materials
10. Spill kits in place and equipped
11. Visual checks by site staff for evidence of fire or hot loads/working
12. End of day checks by site foreman – no evidence of fires, hot loads, correct separation distances
Checks to be made MONTHLY
12. Manholes lifted – for inspection for remaining capacity for water & quantity of silt

Date	**Morning check (initials)**	**Evening check (Initials)**	**Issues to Report to Site Manager**

Annex E: Daily Check Sheet – Tracked excavator and wheeled shovel

Check list (Tick for compliant, cross for non-compliant and complete comments)

	Plant:	M	T	W	T	F	S	Comments
Item	Check for							
Tyres	Wear/damage/security							
Engine, Water	Correct levels, leaks							
Lights and warning devices	Correct operation							
Hydraulic System/ All pipes	Correct operation							
Service/Parking Brake	Correct operation							
Attachments [bucket/grab]	Wear/damage/security							
Assess Body work	Damage							
Guards / Glass	Damage/breakage							
Air conditioning / heater	Correct operation							
Greasing points	Cleaned and greased							
Radiator blown out / air filter	Free from debris							
Isolation switches; battery	Functioning							

Any defects must be reported to the site office immediately and a record made in the comments

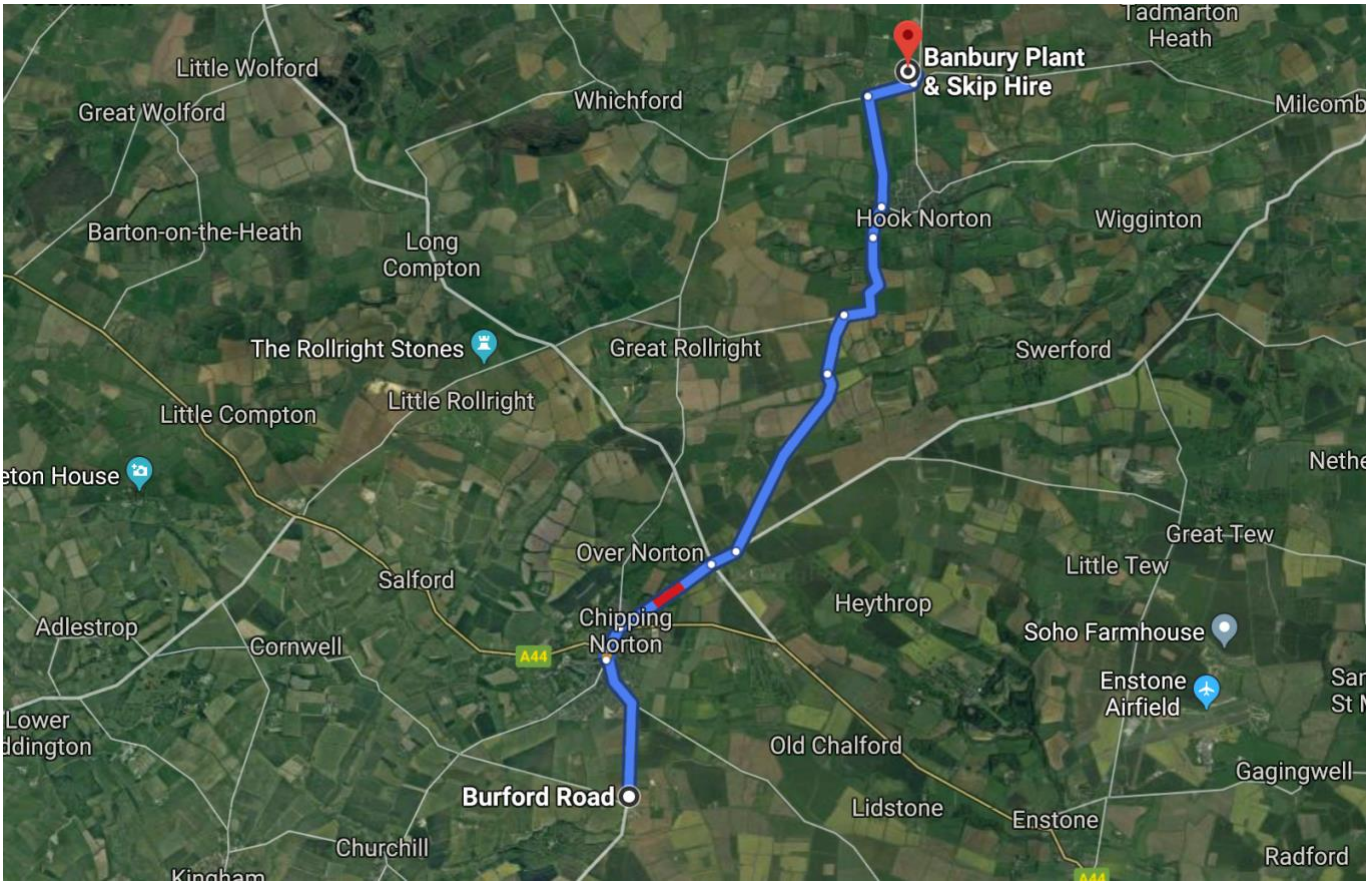
Annex F: Site Layout CGL/PARTC2/5A

PDF SITE LAYOUT ATTACHED

Annex G: Site Drainage Plan

PDF SITE LAYOUT ATTACHED

Annex H: Site Location [Emergency Services Access] Plan



The map represents the location of the site for Emergency Services' access.

Annex I: Site Security Location Plan

Gated access point

Other security information provided in sections 1.4 and 3.2.6.

Annex J: List of Wastes

Permitted Waste to be maintained, as per existing Environmental Permit EPR/XP3298CF, with the addition of:-

ACCEPTED WASTE TYPES

19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified

19 12 12 Other wastes (including mixtures of materials) from mechanical treatment of waste other than those mentioned in 19 12 11