#### FIRE PREVENTION PLAN

Moss Road, Lyon Road Industrial Estate, Kearsley, Bolton, Lancashire BL4 8NB

## **Circle Recycling Ltd**

Version:	1.2	Date:	18 April 2023		
Doc. Ref:	LRIE-2948-B	Author(s):	CP Checked: CR		CRL
Client No:	2948	Job No:	001		



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REGISTERED IN THE UK | COMPANY NO. 4850754

# **Document History:**

Version	Issue date	Author	Checked	Description
1.0	07/10/2021	CP		Draft for client
1.1	12/11/2021	СР	CNW	Application copy
1.2	18/04/2023	СР	CRL	Operator name change

THIS DOCUMENT IS DUE FOR REVIEW IN <u>OCTOBER 2024</u> OR AS A RESULT OF ANY INCIDENTS WHICH MAY LEAD TO THE REQUIREMENT FOR IMMEDIATE REVIEW, WHICHEVER IS THE SOONER

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# **Site Information & Key Contacts List**

Site Address:	Moss Road, Lyon Road Industrial Estate, Kearsley, Bolton, Lancashire BL4 8NB					
Site Operator:	Circle Recycling Ltd	National Grid Ref:	SD 74429 44360			

CONTACT	DESCRIPTION	OFFICE HOURS	OUT OF HOURS	
Matthew Cook	Director & Secretary	01204 570615	07779 561457	
Robert Bint	Director	01204 570615	07779 561457	
Robert Bint	Technically Competent Manager	01204 570615	07779 561457	
Royal Bolton Hospital Minerva Riad, Farnworth,	Local NHS Hospital (Main)	01204 390390	999	
Bolton BL4 OJR	Accident & Emergency (A&E)	999	999	
Kearsley Medical Centre Kearsley Medical Centre, Jackson St, Kearsley, Bolton BL4 8EP	Local Doctor Surgery (GP)	01204 462200	999 or 112	
Greater Manchester Police – Little Hulton Police Station	Local Police Non- Emergency	0161 856 5229	999 or 112	
Bridgewater Street, Little Hulton, Manchester M38 9LG	Police Emergency	999 or 112	999 or 112	
Greater Manchester Fire and Rescue Service – Farnworth Fire Station Albert Road, Farnworth, Bolton BL4 9HF	Fire and Rescue Service (in Emergency Dial 999)	01204 909503	999 or 112	
Environment Agency (Preston Office) Lutra House, Dodd Way, Walton Summit Centre, Preston PR5 8BX	Environmental Regulator	03708 506506	0800 80 70 60	
Bolton Metropolitan Borough Council Development Management Town Hall, Bolton BL1 1RU	Local Council General Enquiries	01204 336000	01204 336900 or 999	
United Utilities	Mains Water Supplier	0345 672 3723	0345 672 3723	
Iconic Recycling 45 Canal Bank, Eccles, Manchester, M30 8AA	Primary specialist waste and permitting compliance advisors	01204 282429		
Oaktree Environmental Ltd Lime House, 2 Road Two, Winsford, Cheshire CW7 3QZ	Secondary specialist waste and permitting compliance advisors	01606 558833	999 or 112	

#### **KEY RECEPTOR CONTACT LIST**

CONTACT	DESCRIPTION	NUMBER
Cautrac, Moss Rd, Kearsley, Bolton BL4 8NE	Industrial / manufacturing	01204 791122
PHS Group, Unit 36, Moss Rd, Kearsley, Bolton BL4 8NB	Waste Management Facility	02920 809090
Keyframe (UK) Ltd, Unit 29- 32, Lyon Industrial Estate, Moss Rd, Kearsley, Bolton BL4 8NB	Industrial / manufacturing	01204 705718
AFI-Uplift Ltd, Unit 25 Moss Road, Lyon's Industrial Estate, Kearsley, Bolton BL4 8NB	Industrial / manufacturing	0161 707 7895
Thomas Recovery Ltd, 15 Lyon Rd, Unit, Kearsley, Bolton BL4 8NB	Agricultural Premises	01204 861777
Nasip Meat, Unit 26/27/Lyon Rd Ind Est, Bolton BL4 8NB	Manufacturing	01204 573549
David Woods Foods, Industrial Estate, Unit 14 Lyon Rd, Kearsley, Bolton BL4 8NB	Manufacturing	01204 797470
J.M.A Transport Ltd, Unit 12a Lyon Road Industrial Estate, Kearsley, Bolton BL4 8HS	Commercial	07093 066163
Taurus Fitted Bedrooms Ltd, Unit 7 Lyon Rd, Kearsley, Bolton BL4 8NB	Manufacturing	01204 370004
PRSS Solutions UK Ltd, Industrial Estate, Unit 10 Lyon Rd, Kearsley, Bolton BL4 8NB	Industrial / manufacturing	01706 220786
Pfaudler Ltd, Unit 5 Lyon Rd, Kearsley, Bolton BL4 8TG	Industrial / manufacturing	01204 862777
Lancashire Testing Services, Lyon's Industrial Estate, LTS, Springfield Rd, Kearsley, Bolton BL4 8NB	Industrial / manufacturing	01204 792858
Kearsley Academy, Kearsley, Bolton BL4 8HY	School	01204 332555
M61 Motorway	Highways	0300 123 5000
Kearsley West Primary School, Primrose St, Kearsley, Farnworth, Bolton BL4 9DA	School	01204 332600
Queensbridge Community Primary School, St Germain St, Farnworth, Bolton BL4 7BL	School	01204 332577
St Peter's C.E. Primary School, Alexandra St, Farnworth, Bolton BL4 9JT	School	01204 333090
Stonehill Medical Centre, Piggott St, Farnworth, Bolton BL4 9QZ	Medical Centre	01204 573455
Tesco Superstore, Long Causeway, Farnworth, Bolton BL4 9LS	School	0345 675 7267
North Walkden Primary School, Whittle Dr, Little Hulton, Worsley, Manchester M28 3QD	School	0161 921 2921

## N.B. – list will be reviewed every 6 months or sooner if required

# 1 <u>Introduction</u>

#### 1.1 Overview of site operations

- 1.1.1 This document considers the risks associated with a fire at Moss Road, Lyon Road Industrial Estate, Kearsley, Bolton, Lancashire BL4 8NB. The following operations which will take place at the site and are relevant for this Fire Prevention Plan (FPP) are as follows:
  - Household, commercial & industrial waste transfer station with treatment;

## 1.2 **Fire prevention objectives**

- 1.2.1 This FPP has been designed to meet the following objectives:
  - To minimise the likelihood of a fire happening;
  - To aim for a fire to be extinguished within 4 hours;
  - To minimise the spread of a fire within the site and to surrounding neighbouring sites;
     and,
  - To minimise impact of fire on people, environment and businesses.
- 1.2.2 This FPP document will be kept in the site office and in other locations around the site to ensure all operational site staff and contractors are aware and understand the contents of FPP and what they must do during a fire.

## 1.3 **Summary of site operations**

- 1.3.1 In summary the main operations which take place at the site are as follows:
  - Compacting (by loading shovel/360° excavator)
  - Sorting (with loading shovel/360° excavator or by hand)
  - Screening (by using appropriate mechanical screening plant and equipment)
  - Separation (by using appropriate mechanical screening plant and equipment)
  - Shredding (by using appropriate plant and equipment)
  - Baling (by using appropriate plant and equipment)
  - Wrapping (by using appropriate plant and equipment)
  - Magnetic separation of ferrous metals
  - Crushing (by Crusher)
- 1.3.2 The above activities are clearly shown on the Site Layout & Fire Plan which is referenced as Drawing No. LRIE/2948/03 and shown in Appendix I of this FPP.

## 1.4 Hours of operation

1.4.1 The site will be open during the following hours for the delivery, receipt and processing of waste:

Monday to Friday 06:00 – 20:00

Saturday 06:00 – 14:00

Sundays, Bank/Public holidays Closed

Note: The only activities on site which will be permitted outside of these hours are onsite maintenance works, emergency deliveries of waste/plant/machinery and general office use.

## 1.5 **Staffing and Management**

1.5.1 The site will open for the deposit of waste or for other essential operations during the hours listed in Section 1.4. The table below details the staff structure of the site when operating at full capacity. Positions in bold italic print below are the minimum staff requirements when the site is open for the reception of waste:

**Table 1.1 - Staffing Levels** 

Position	Employees	Responsibilities			
Site manager/s	3 <b>(1)</b>	Overseeing and co-ordinating all activities which			
		take place at the site			
TCM (weekly)	1 <b>(1)</b>	Ensuring that the site is being operated in			
		accordance with Health & Safety Legislation			
The above comprise site mand	The above comprise site management who operatives will report to				
Machine / Plant Operator's /	2 <b>(1)</b>	Waste handling/processing, reception and plant			
		operation			
General operatives 2 (1) To conduct site patrols when the site is not		To conduct site patrols when the site is not			
		manned / operational			
Administration staff	1 (1)	Office/administrative duties			

# 1.6 Plant and Equipment

1.6.1 The table below details the plant/equipment on site which may present a fire risk and listed as a potential ignition source. Only trained operators will be permitted to drive/operate the plant/equipment listed below.

Table 1.2 - Item of plant, number and function

Item	Number	Function
Loading shovel	3	Collection/deposit of skips
360º excavator	2	Collection/deposit of roll on roll off skips
Forklift truck	3	Loading/unloading/movement/sorting
Hopper, conveyor, trommel, picking line and magnet	1	Mechanical treatment/sorting of mixed waste
Weighbridge	2	Accurately weighing of loads
Crusher	1	Size reduction of inert waste
Baler	1	Baling/compaction of light waste

1.6.2 Note: The plant/equipment on site may vary and additional equipment may be hired-in to cope with busy periods, larger jobs or jobs with specific requirements.

1.6.3 The additional table below details the plant available to aid in fire suppression or manoeuvring of waste to reduce the spread of fire.

Table 1.3 - Item of plant available for fire-fighting, number and function

Item	Number	Function
Loading shovel	3	Collection/deposit of skips
360° excavator	2	Collection/deposit of roll on roll off skips
Forklift truck	3	Loading/unloading/movement/sorting

1.6.4 Maintenance of all site plant is described in Section 2.5 of this FPP.

## 1.7 Correspondence with Fire and Rescue Service

- 1.7.1 Circle Recycling Ltd will seek a two-yearly response from the EA and FRS (or sooner should a fire incident occur) with regards to their FPP and associated operations on site. This regular correspondence will ensure all measures to prevent, mitigate and contain fires on site are up to date and deemed sufficient by the FRS.
- 1.7.2 The FRS were contacted during the preparation to obtain information relating to the nearest fire hydrants to the site. This information is shown on Drawing No. LRIE/2948/03 and in Section 10.3 of this document.

#### 1.8 **Sensitive Receptors**

- 1.8.1 A Sensitive Receptors Plan has been provided in Appendix I to highlight all main receptors within 1,000m of the site which could be affected by a fire at the site. To minimise the impact on the local area and associated receptors from a fire on site, this document details mitigation measures which will decrease the likelihood of a fire occurring on site and limit the size and duration of a fire if it does occur (as per Section 1.2 above). These measures will ensure the potential impact on any of the surrounding land is as minimal as practicably possible.
- 1.8.2 Contact details for surrounding industrial, commercial, retail and leisure premises are shown in Section 8.3 including and procedures of how receptors with human population would be notified of a fire.
- 1.8.3 The table overleaf details a risk assessment of all the receptor types within 1km radius of site, and likely impacts on each e.g. smoke, road closures, impacts on businesses etc...

Table 1.4 – Receptor information and fire mitigation

Receptor	Receptor Type	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Risk Management
Numerous surrounding industrial and commercial uses	Industrial / commercial premises	Fire causing the release of polluting materials to air (smoke, fumes and particulate matter)	Respiratory irritation, illness and nuisance to local population.  Financial loss of businesses due to closure of adjacent roads/evacuation of premises.	Air transport of smoke.	High	Medium	Medium	Procedures set out in this FPP.  Toolbox talks and liaison meetings with receptors to review procedures in the event the site is subject of a fire.
Residential dwellings in the surrounding area	Residential	As above	Respiratory irritation, illness and nuisance to local population.	Air transport of smoke.	High	Medium	Medium	As above
Sxhools	School	Fire causing the release of polluting materials to air (smoke, fumes and particulate matter)	Respiratory irritation, illness and nuisance to local population.  Financial loss of businesses due to closure of adjacent roads/evacuation of premises.	Air transport of smoke.	High	Medium	Medium	Procedures set out in this FPP.  Toolbox talks and liaison meetings with receptors to review procedures in the event the site is subject of a fire.
Surrounding highway networks (M61)	Major road networks	As above	Closure of roads due to excessive smoke fumes.  Increased risk of accidents due to poor visibility.	Air transport of smoke.	High	Medium	Medium	As above
Nearby leisure / retail	Leisure / retail	As above	Respiratory irritation, illness and nuisance to local population.  Financial loss of businesses due to closure of adjacent roads/evacuation of premises.	Air transport of smoke.	Medium	Medium	Low	Procedures set out in this FPP.  Toolbox talks and liaison meetings with receptors to review procedures in the event the site is subject of a fire.
Surface Waters including Blackleach Reservoir (LNR & LWS)	Surface Waters	Direct run off of fire water across site or to surface waters.  Fire causing the release of polluting materials to air (smoke, fumes and particulate matter).	Loss of amenity, deterioration of water quality, killing of flora / fauna and other local wildlife	Air transport of smoke.  Direct run off of fire water across site to surface waters.	Med	Medium	Low	Procedures set out in this FPP.  The site has a sealed drainage system.
Habitats and species including Deciduous Woodlands and protected species	Protected sites and species	As above	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Air transport of smoke.	Med	Medium	Low	Procedures set out in this FPP

# 2 Managing Common Causes of Fire

# 2.1 <u>Details</u>

2.1.1 The following table outlines common causes of fire and outlines specific examples of these sources, the associated risks and any mitigation measures necessary to manage them:

Table 2.1 - Common fire sources and mitigation

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
Arson or vandalism	Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage/containment measures	Medium	<ul> <li>Suitable site security infrastructure.</li> <li>Vehicle checks on arrival to the site.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Staff training / toolbox talks.</li> </ul>	Near-zero
Plant or equipment	Spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	Medium	<ul> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Any liquid/fuel/oil storage is double bunded.</li> <li>Daily checks of site surfacing and spill kits.</li> <li>Staff training / toolbox talks.</li> </ul>	Near zero
Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	Medium	<ul> <li>Fixed wiring testing is carried out 5 years and portable appliances are PAT tested 12 months in accordance with Legislation.</li> <li>Daily checks for dust and fluff on wiring / electrical appliances.</li> </ul>	Low
Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	Low	<ul> <li>Smoking in dedicated area of the site away from waste storage areas</li> <li>Smoking policy on site</li> </ul>	Near-zero
Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	Low	<ul> <li>Fire extinguishers are fitted in the cab of all loading plant.</li> <li>Staff training / toolbox talks.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> </ul>	Low
Hot works	e.g. welding, soldering, cutting, etc. which involve the use of high temperature equipment which may be a source of both primary and residual heat to stored wastes	Medium	No hot works will take place on site	Low
Industrial heating	Industrial heaters and/or pipework used to heat internal and external areas on site which may, in turn, supply heat to stored wastes increasing the risk of combustion	Low	There are no industrial heaters (or associated pipework) used heat areas of the site.	Low
Hot exhausts	Potential source of both primary and residual heat to stored wastes	High	<ul> <li>Fire extinguishers are fitted in the cab of all mobile plant.</li> <li>Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Out-of-hours storage of plant &amp; equipment away from combustible or flammable wastes.</li> <li>Daily checks for dust and fluff on plant/equipment before and use of equipment.</li> </ul>	Low

Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
Build-up of loose combustible waste, dust and fluff	Light waste and ambient particulates with high combustibility settling and building up in key areas in and around plant/machinery and around exhausts	High	<ul> <li>Fire extinguishers are fitted in the cab of all loading plant.</li> <li>Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Minimum daily checks for dust and fluff on plant/equipment before and use of equipment at the start/end of each working day.</li> </ul>	Low
Hot loads	Imported wastes which may contain materials which are above ambient temperature	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
Overhead power lines	Any overhead power lines on or around the site may ignite in the event of a fire and worsen the effects	Low	There are no overhead power lines which traverse the site.	Near-zero
Ignition sources	Activities or appliances which use a source of both primary and residual heat to treat waste or manufacturer material or plant/equipment	Medium	<ul> <li>Hot works procedures in place.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>Minimum daily checks for dust and fluff on plant/equipment before and use of equipment at the start/end of each working day.</li> <li>Out-of-hours storage of plant &amp; equipment away from combustible or flammable wastes</li> <li>No idling policy in place</li> </ul>	Low
Other combustible non-waste materials on or near the site not mentioned above i.e. gas cylinders / LPG tanks	Any combustible non-waste materials on or near the site may ignite in the event of a fire and worsen the effects	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> <li>Dedicated storage areas for cylinders and LPG tanks on site.</li> </ul>	Low
Reaction between wastes	Combustible waste piles may ignite in the event of a fire and worsen the effects if wastes react	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
Leaks and spillages of oils and fuels	Fuels and combustible liquids leaking or trailing from site vehicles and ELVs can combust or cause accidents leading to combustion	High	<ul> <li>Spill kits available throughout the site.</li> <li>Suitable and sealed drainage system.</li> <li>Continuous (minimum twice daily) checks for spillages around the site.</li> <li>Staff training / toolbox talks.</li> <li>Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> </ul>	Low
"Tramp" metal	Metal could be hot from mechanical processing and interact with lighter waste causing a fire	High	<ul> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load containing batteries.</li> <li>Minimum daily checks on mechanically processed scrap metal at the start/end of each working day.</li> <li>Staff training / toolbox talks for continuous monitoring throughout the day to detect signs of a fire caused by dust settling on hot exhausts and engine parts.</li> <li>No mechanical treatment of scrap metal expected to take place at the site</li> </ul>	Low

#### 2.2 **Fuel & Hazardous Fluids Storage**

- 2.2.1 The location of the above areas are shown on Drawing No. LRIE/2948/03 and will comprise red and white diesel and AdBlue. The procedures for fuel storage on site are as follows:
  - Tanks are surrounded by a bund capable of containing a minimum of 110% of the volume of fuel stored in the tank.
  - All pipework and associated infrastructure will be enclosed within the bund.
  - A lock will be fitted to the tank valve to prevent unauthorised operation.
  - All valves and gauges on the bund will be constructed to prevent damage caused by frost.
  - No combustible waste will be stored within 6 metres of any fuel/fluid's storage without a fire wall in place.
- 2.2.2 The tanks are clearly marked showing the product within and also their capacity. In addition to daily checks by staff for the tank's integrity, the tanks are also alarmed to ensure the operator notified in advance prior to the tanks being full.

## 2.3 **Hot Works Procedure**

2.3.1 No hot works will take place at the site.

# 2.4 **Smoking Policy**

- 2.4.1 A designated smoking area is available on site as shown on Drawing No. LRIE/2948/03. Any smoking on site including the use of e-cigarettes will be done in accordance with the operator's smoking policy which is available in the site office.
- 2.4.2 No smoking will take place within 6m of combustible or flammable material and all personnel on site who wish to smoke will be told to discard their cigarettes within a dedicated bin adjacent to the smoking shelter.

## 2.5 **Mobile and fixed plant maintenance**

- 2.5.1 All mobile and fixed plant on site including vehicles in the fleet are subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts.
- 2.5.2 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:
  - Machinery is mechanically sound for use and no presence of black fumes or trailing liquids visible prior to use or following shutoff of plant/equipment.
  - Mobile plant is stored in the out-of-hours plant storage area as shown on Drawing No LRIE/2948/03 following cessation of activities and external separation distances of 6m are observed between plant and any combustible or flammable material.
  - No plant will be stored in the building out-of-hours
  - Plant which is not in use for any extended period is stored at least 6 metres from combustible waste in the dedicated area on site.
  - All plant and equipment vehicles are fitted with fire extinguishers in the cab. Rubber strips are not considered appropriate as they are usually removed via uneven and bumpy ground.
  - Dust from processing/treatment operations on site can settle throughout the working
    day onto processing plant, plant exhausts and engine parts so a fire-watch will be
    implemented after cessation of works and equipment powered down for 1 hour each
    day to remove any dust/fluff using brushes, hoses etc... Any build of dust/fluff will be
    removed from the equipment and deposited into a container to await removal from site
    and site management informed.

#### 2.6 **Site Security**

- 2.6.1 The site security infrastructure which is mainly 2.4m high steel palisade fencing is clearly shown on Drawing No LRIE/2948/03 and considered suitable to prevent trespassers.
- 2.6.2 In addition to the above boundary treatments, the site also benefits from 24/7 remotely accessible CCTV fitted with full on and off-site coverage. The types of CCTV on site are:
  - i) A 50m radius pan, tilt and zoom (PTZ) camera located near the site access to monitor all vehicles which access/egress the site including this area out-of-hours to prevent intruders
  - ii) External fixed CCTV cameras strategically located around the site to provide full coverage
  - iii) Internal fixed CCTV cameras inside the transfer building providing full coverage of internal waste storage area
  - iv) Internal infra-red cameras consisting of beams which detect smoke. During operational hours the beams are switched off to prevent false alarms taking place.
- 2.6.3 All CCTV cameras were installed and are monitored 24/7, 365 days per year by Security Monitoring Centres Ltd (Custodian Monitoring) who are UKAS accredited who would contact the up to 5 members of staff in the event of the following:
  - Suspicious activity during operational hours: staff negligence, intrusions of the site perimeter, flames, smoke, accidents leading to a fire
  - **Out-of-hours incidents**: smoke detection inside transfer building, intrusions (human only), unusual movement throughout the site.
- 2.6.4 Custodian monitoring will contact the operator with a text or ring alert in the event of one of the above incidents in order to contact the emergency services, receptors, EA, staff and attend the site to prevent a large-scale incident happening.
- 2.6.5 The site security measures (fencing/gates) will be inspected on a daily basis and any defects which impair the effectiveness of the security will be repaired to the same or better

standard within 7 working days. All repairs will be noted on the site diary within 24 hours of the event.

2.6.6 If unauthorised access becomes apparent as a problem at the site the security measures will be reviewed and improvements implemented.

# 2.7 <u>Electrical Faults or Damaged/Exposed Electrical Cables</u>

- 2.7.1 All fixed wiring electrical cabling on site will be inspected daily by staff and serviced in accordance with Legislation (3/5 years) by fully qualified and certified electrical contractors to undertake both Planned Preventative Maintenance and Reactive Maintenance (under contract) of the following:
  - a) Fire detection & alarm system;
  - b) Emergency lighting;
  - c) Machinery checks / services (as per manufacturers' instructions).
- 2.7.2 In terms of portable appliance testing (PAT), this will be serviced annually by qualified and certified electrical contractors.
- 2.7.3 Daily inspections of cabling, etc. will be undertaken and the daily Fire Checklist can be used as a reference. Any potential ignition sources from suspected electrical faults will be isolated and the appointed electrical contractors will be contacted immediately to rectify the situation. Where possible, staff will immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.

# **3** Waste acceptance procedures

#### 3.1 **General**

- 3.1.1 Strict waste acceptance procedures are in place at the site and are summarised below. The waste is delivered to the site via an existing access to the east and upon arrival all waste will undergo a visual inspection on arrival at site prior to progressing through to the weighbridge. Once the vehicle has passed the initial inspection, the vehicle will be directed to the weighbridge where the waste transfer documentation will be fully checked to ensure the waste matches the pre-acceptance information received.
- 3.1.2 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted and removed/quarantined immediately to await safe removal from site. The EA will be contacted (where necessary) if the non-conforming waste discovered is likely to lead to a breach of permit conditions or a potential risk of combustion.

# 3.2 Waste storage following acceptance and prior to mechanical treatment

- 3.2.1 In summary the, site will accept waste in mixed loads from HCI sites and tip them into them into the main reception bay (AREA 1) and then subject to the following:
  - All waste tipped is spread on the floor so any non-conforming material processing i.e. pressurised vessels, hot loads, batteries (if any discovered) can be picked out and immediately quarantined.
  - ii) Once the waste has passed inspection it will be loaded into the first process of the mechanical treatment plant comprising the hopper by a 360° excavator
  - iii) The hopper then feeds a trommel by conveyor which will discharge the fines in the bay below
  - iv) Larger items of the waste then travel through the trommel onto the next conveyor and into a 4-bay picking station where recyclables are hand-picked and deposited in the bays below

- v) Following the above, the waste remaining should be heavier items consisting of inert material which fall off the end of the plant and discharge in the bay below. An overbrand magnet is situated before the drop off to collect any scrap metal within the waste.
- vi) The above wastes which are recycled during the treatment process drop into the bays below which are monitored continuously by staff and then any bays which are full will be emptied and transferred to the external bays to the south.
- 3.2.2 The site will not mix or mechanically process any hazardous waste on site.

# 4 Managing waste storage to prevent self-combustion and the fire spreading

#### 4.1 **General**

- 4.1.1 The site will store the following waste types shown in Section 9.1 of the FPP guidance:
  - HIC Wastes comprising wood, paper/cardboard, plastic, plasterboard and mixed wastes
- 4.1.2 The site will comply with Section 9.1 of the EA's FPP guidance in terms of pile sizes guidance and reference should be made to Drawing No. LRIE/2948/03 which shows the indicative locations of the above wastes. The waste storage table in section 4.2 details the maximum pile sizes which the site will comply with when the relevant areas are not in operation. During operational hours the piles may appear larger due to the constant throughput and quick turnaround of wastes however the operator will minimise pile sizes and store waste materials in their largest form during all instances of out-of-hours as shown below

## 4.2 **Waste storage table**

4.2.1 The following table overleaf details the maximum pile sizes and duration for all wastes and other flammable/combustible material stored on site when the site is not operational. This ensures all piles are stored within Section 9.1 the FPP guidance and a minimum 0.5m freeboard is maintained outside of operational hours.

Table 4.1 – Storage Table Details

Storage Are	Storage Area Details												
Plan Ref	Description	Storage type	Containment / type	Height of firewall (m)	Max width of pile (m)	Max length of pile (m)	Max height of pile (m)	Approx. area (m2)	Conversion factor used	Approx. volume (m3)	Average storage time	Max storage time	Comments
AREA 1	Mixed waste reception area (HCI waste)	Unprocessed	Free standing pile / three-sided concrete interlocking block fire wall	4	15	10	3	150	0.75	338	<2 hours	<48 hours	48 hours is based on Sat - Mon; storage time likely to be less as the pile will continually move throughout the day
AREA 2	Trommel fines	Sorted by trommel screen	Free standing pile / two-sided concrete panel fire wall	3	6.5	6	2	39	0.75	59	<2 hours	<48 hours	As above
AREAS 3 -6	Hand-picked wastes from picking line comprising wood, residual, plastic, paper & cardboard	Processed (by hand)	As above	3	6.5	6	2	39	0.75	59	<2 hours	<48 hours	As above and volume is based on each storage bay. Once bays are full the waste will be transferred to the external overflow bays (AREAS 13 - 19)
AREA 7	Scrap metal	Processed (magnet)	40 cubic yard skip	3	2.5	6.1	2.62	15.25	1	40	<12 hours	1 week	Skip removed when full and replaced with empty skip; timescale dependent on metal content in waste
AREA 8	Hardcore / rubble	Sorted via treatment plant	Free standing pile / two-sided concrete panel fire wall	3	10	6	2	60	0.75	90	<2 hours	<48 hours	See AREA 1 comments
AREA 9	Baled paper & cardboard	Processed, sorted & baled	Bales within three- sided concrete panel fire wall	3	2.5	5	2	12.5	0.75	19	<2 hours	<48 hours	See AREA 3 - 6 comments
AREA 10	Miscellaneous bay i.e. non- conforming waste	Unprocessed (hand sorted)	Free standing pile / three-sided concrete panel & interlocking block fire wall	3	6	6	2	36	0.75	54	<48 hours	<48 hours	See AREA 1 comments
AREA 11	Plasterboard	Unprocessed (hand sorted)	As above	3	6	6	2	36	0.75	54	<2 hours	<48 hours	See AREA 1 comments
AREA 12	Residual waste	Processed, hand sorted by treatment plant	As above	N/A	15	6	2	90	1	180	<48 hours	<48 hours	Acting as overflow bay from AREAS 3 - 6; pile removed sooner if full
AREAs 13 - 18	Overflow storage bays from wastes recycled inside the building	Processed, hand sorted by treatment plant	Free standing pile / three-sided concrete interlocking block fire wall	4	8	8	3	64	0.75	144	<48 hours	<1 week	As above and pile size based on each bay
AREA 19	Soils & stone	As above	As above	4	8	8	3	64	0.75	144	<48 hours	<1 week	As above
AREAs 20 & 21	Hardcore & crushed stone	As above and crushed	As above	4	8	8	3	64	0.75	144	<48 hours	<1 week	As above

## 4.3 **Conversion factors**

4.3.1 The following conversion factors for calculating waste pile sizes are set out below.

#### **Table 4.2 – Conversion Factors**

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Conversion factors for waste piles are worked out using the following methods set out by the Environment Agency

The maximum length width pile is based on the largest dimension – the volume of the pile has been calculated using the area x height x relevant conversion factor

Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks

Conversion of 0.75 for waste stored within a bay comprising volume of rectangle + pyramid

Conversion of 0.3333 for waste stored in a free-standing stockpile

All containers can be moved and are accessible from one side so a fire can be extinguished

# 4.4 Waste storage residence times

- 4.4.1 The site will ensure more than one contract is set up with destination sites who can take their recycled waste to prevent a backlog building up on site.
- 4.4.2 Each pile is inspected throughout the day by operational staff and in the event of a fire has suitable techniques shown in various sections of this FPP to ensure any fire could be extinguished within the limitations set out in the FPP guidance.

# 4.5 **Free standing piles**

4.5.1 The table overleaf details the combustible waste piles stored on site and procedures to reduce the risk of the waste combusting.

Table 4.3 – Combustible waste storage table for waste stored free-standing piles or bays

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
AREA 1  Mixed waste reception area (HCI waste)	<ul> <li>AREA 1will act as the main waste reception / tipping area for mixed HCl waste.</li> <li>Any large visible recyclables will be hand-picked or extracted using the mechanical grab and placed into one of relevant storage areas at the site.</li> <li>In the event of non-conforming or reactive waste discovered, the waste will be immediately consigned to the quarantine area using the above plant or loaded back onto the delivery vehicle and removed off site.</li> <li>The waste in the stockpile will be tipped at the front (north) of the pile and then extracted into the treatment plant from the rear (south) of the stockpile ensuring the first in first out principle applies to the waste.</li> <li>Stock rotation – It is proposed the maximum duration of waste stored in AREA 1 here will be 48 hours i.e. Sat-Mon if the waste cannot be processed prior to shut down.</li> <li>In order to comply fully with the FPP guidance, the entire pile will be cleared every 12 weeks and deep cleaned to prevent any build-up of material.</li> <li>As the stockpiles are dynamic, the process of tipping and excavating from the pile will be ongoing which will reduce the actual amount of time the piles will be stored prior to processing.</li> <li>The pile is easily accessible for firefighting purposes.</li> <li>The pile will be visually monitored continuously throughout the day by trained site operatives. The operatives have been trained via toolbox talks from site management in recognition of fire i.e. the early signs.</li> <li>The external CCTV located near the pile would detect signs of smoke or</li> </ul>
	movement when the site is closed and as the waste will not be stored for a period of >48 hours, it is considered that no further monitoring required.
AREAS 2 – 6, 8 & 10 -12  Mechanical and hand sorted wastes comprising fines, wood, plasterboard, paper & cardboard and residual	<ul> <li>These storage areas comprise internal storage bays for various waste types which have been sorted during the mechanical treatment process.</li> <li>The waste will be stored 1m below the height of bay ensuring a freeboard is maintained at all times.</li> <li>Stock rotation – It is proposed the maximum duration of waste stored in these areas will be 48 hours i.e. Sat-Mon if the waste cannot be processed or moved prior to shut down.</li> <li>It is proposed to limit the amount of waste stored internally by continually transferring the waste in these bays to the external bays with the exception of any odorous waste i.e. residual.</li> <li>In order to comply fully with the FPP guidance, the entire pile will be cleared every 12 weeks and deep cleaned to prevent any build-up of material.</li> <li>As the waste in these areas have been sorted, the waste is unlikely to contain any material which is likely to cause combustion i.e. a hot load or lithium battery.</li> <li>In the event of a fire breaking out in these piles during operational hours, the waste can be dragged into the quarantine area (if safe to do so) by mobile plant through the various shutter doors to reduce the spread i.e. to an adjacent waste pile.</li> <li>In terms of moving the waste in a fire incident, site management or the FRS will decide on the best course of action from a practical and safety point of view.</li> <li>When the site is closed, the smoke detection will be initiated and checked to see if it is working before the site closes. As the waste internally is stored for no longer than &gt;48 hours, it is considered no further automated detection/monitoring is required.</li> </ul>

#### AREAS 13 -21

Overflow storage bays from wastes recycled inside the building

- These are bays which store wastes which will have been delivered to the site pre-separated or as a result from the wastes sorted in the treatment plant arising from AREA 1.
- The waste stored in these bays will have not undergone any form of mechanical treatment i.e. shredding which is likely to raise the temperature of the waste.
- The waste in this stockpile will be tipped at right hand side of the stockpile and
  extracted from the left in an anti-clockwise formation ensuring the first in first
  out principle will applies. The stockpile is therefore dynamic and, given the
  material throughput of the site, waste will not be stored in these piles for longer
  than 1 week which is a worst-case scenario in the event of a breakdown or plant
  malfunctions.
- All waste is stored is within a interlocking concrete firewall bay.
- As the pile is largely free standing, the waste will be 3m at the top centre of the pile which will form a dome shape so there is a suitable free board of at least 1m between the top of the pile and where the waste hits the wall at a 45-degree angle. All bays are 4m in height.
- The piles are visually monitored throughout the day by site operatives and trained personnel who will be trained via toolbox talks in recognition of fire.
- Apart from the use of loading equipment no other mechanical processing of waste takes place within 6m of waste piles.
- In addition to the CCTV, the waste will be visually monitored throughout the day by site operatives.
- The external CCTV located near the piles to the south of the building would detect signs of smoke or movement when the site is closed and as the waste will not be stored for a period of >1 week, it is considered that no further monitoring required.

# 4.6 Waste stored in baled form

4.6.1 The table below details the waste types which are stored in baled form at the site.

Table 4.4 - Combustible waste storage table for waste stored in baled form

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
AREA 9  Baled Paper & Cardboard	<ul> <li>The bales will be stored 2.0m high i.e. two bales high in one block (approx. 20 bales) and partitioned with a fire wall details of the fire wall are shown in Section 4.8.</li> <li>The bales are visually monitored throughout the day by site operatives and trained personnel who will be trained via toolbox talks in recognition of fire.</li> <li>Apart from the use of loading equipment (the location of which varies throughout the building) no other mechanical processing of waste takes place within 6m of waste piles.</li> <li>There is suitable access via the south of the building (adjacent to the bales) to aid in suppressing or removing the bales in the event of a fire.</li> <li>The area will only be full for a few hours whilst awaiting an articulated load; in reality the area will be less than shown on Drawing No. LRIE/2948/03. It is considered that no turning of bales necessary as they will not be stored for longer than 48 hours and monitored using the techniques below.</li> <li>When the site is closed, the smoke detection will be initiated and checked to see if it is working before the site closes. As the waste internally is stored for no longer than &gt;48 hours, it is considered no further automated detection/monitoring is required.</li> </ul>

# 4.7 **Waste stored in containers**

4.7.1 The table below details the waste types which are stored in containers at the site.

Table 4.5 - Combustible waste storage table for waste stored in containers

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
AREA 7	The waste stored in the container will consist of scrap metal separated by the overband magnet. The metal is stored in a container to ensure the easier
Scrap metal	<ul> <li>transfer and movement of waste from the site.</li> <li>The container is stored on the ground and replaced by an empty container once removed off site.</li> <li>The waste will have been sorted, so the waste is unlikely to contain any hot loads or incompatible waste which could lead to a spark or overheating</li> </ul>
	causing a fire.  The container will be removed from site within 1 week or when full.
	The container is accessible from at least on side and from the top in the event of a fire occurring in the skip to allow access for fire-fighting.
	<ul> <li>The waste will not exceed the height of the container.</li> <li>In the event of a fire breaking out in the skip, it can be dragged into the quarantine area by mobile plant to reduce the spread i.e. to another skip or adjacent waste piles.</li> </ul>
	<ul> <li>All site staff will be given instructions and advised of the importance of stock rotation as part of their training.</li> </ul>
	<ul> <li>Waste can be visually monitored 24/7 throughout the day by site operatives and CCTV. In addition to the CCTV, the waste will be visually monitored throughout the day by site operatives.</li> </ul>
	<ul> <li>In terms of moving the waste in a fire incident, site management or the FRS will decide on the best course of action from a practical and safety point of view.</li> </ul>
	<ul> <li>When the site is closed, the smoke detection will be initiated and checked to see if it is working before the site closes. As the waste internally is stored for</li> </ul>
	no longer than >48 hours, it is considered no further or automated detection/monitoring is required.

## 4.8 **Fire walls and bays**

- 4.8.1 There are two different sets of firewalls used which:
  - Reduce the need for 6m separation distances between different waste piles; and
  - Reduce the need to provide a 6m separation from the waste and permit or site boundary.
- 4.8.2 The table overleaf details the type of wall and demonstrates their properties to:
  - a) resist fire (both radiative heat and flaming); and,
  - b) have a fire resistance period of at least 120 minutes to allow waste to be isolated and to enable a fire to be extinguished within 4 hours.

Table 4.6 – Fire wall details and specifications

Firewall type	Width	Site location / use	Specification
Concrete panels	0.15m	INTERNAL	Concrete panels - Class A1 in accordance with Clause 4.3 4.4 of EN:13369 - >120 minutes
Interlocking concrete legio block	0.8m	EXTERNAL	Interlocking concrete blocks - Class A1 in accordance with Clause 4.3 4.4 of EN:13369 - >120 minutes

- 4.8.3 The above walls are checked throughout the day by staff via daily inspections if any gaps or damage to the walls are present which could compromise their integrity, the walls will be repaired and sealed as soon as practically possible.
- 4.8.4 For waste which is stored in and against walls, a suitable freeboard will be visually monitored throughout the day by operational staff who are loading/removing waste to/from the bay to ensure waste stockpiles don't exceed the freeboard height of the bay. The stockpile will be reduced immediately i.e. by moving wastes to quarantine area if a freeboard cannot be maintained. In the event of breakdowns, the operator will divert waste material to an alternative site until the freeboard is maintained. It is not possible to scientifically calculate the flame height as each waste pile is different

and could contain a number of different sizes/grades of waste leading to a lesser or greater flame height.

## 4.9 **External heating from hot weather**

4.9.1 It is considered that external waste will not be at risk from over-heating as the only combustible waste stored externally will be sorted waste in bays and as waste in each bay will be subject to continual movement and monitoring, , the waste will not be stored for a period where it could combust from exposure to sunlight.

#### 4.10 **Stock rotation and seasonal variations**

- 4.10.1 Details of stock rotation are clearly shown in Sections 4.5– 4.7 for all wastes which are stored and processed on site.
- 4.10.2 In the event of destination site closures or seasonal demands for wastes leading to a longer storage duration, the operator can divert incoming waste and send stored waste to alternative site's using the EAs public register for alternative sites who could take this material or they would contact the destination sites where waste from the site will be sent.
- 4.10.3 The operational outputs and residues produced by the site and the disposal or recovery routes are detailed as follows which the operator has outlets for:
  - a) Brick/rubble for crushing to produce 6F2 aggregate or similar product under the operator's Aggregates Protocol.
  - b) Some materials will not be recovered after processing (or will not be fit for use at recovery sites) such as clays and some soils. These materials may be disposed at suitably permitted landfill site.
  - c) Fines as material for site restoration works on site or used as landfill cover.
  - d) Soils used on site for site restoration works or blend with compost for topsoil creation for re-sale.

- e) Metals metals removed from the overband magnet will be taken to a suitably permitted site for further recovery.
- f) Rejected material will be removed from site as detailed in Section 2.6.
- g) Wood Used for biomass or animal bedding
- h) Paper/cardboard and plastic Sent to paper/plastic recycler for further treatment
- i) Waste unsuitable for processing will be sent to a suitably permitted site.
- 4.10.4 The list of outlets has not been provided due to confidentiality purposes however the contracts will range from weekly monthly depending on seasonal variations and demand for material.

#### 4.11 **Wind**

- 4.11.1 As can be seen from Drawing No. LRIE/2948/03, the vast majority of wastes are stored internally or externally within concrete bays (with a minimum 1.0m freeboard), and a sheltered from the wind.
- 4.11.2 In the event of a fire, the largest stockpiles (i.e. AREA 1) will be reduced in height using mobile plant if it is safe to do so,
- 4.11.3 In the event large quantities of fire water are used, impermeable areas are sealed by kerbing and all water is engineered to fall into interceptors.

# 5 <u>Site inspection programme</u>

## 5.1 **Daily checks**

- 5.1.1 Site management are responsible for carrying out daily site walks for checking drainage systems, security measures and waste storage areas. Site management can reference the Fire Checklist shown in Appendix II. The site also carries out weekly inspections for firefighting equipment to ensure they are fit for purpose.
- 5.1.2 Carrying out the above checks daily will keep the levels of dust, fibre, paper and other loose combustible materials, which could aid in the acceleration of a fire, on site surfaces to a minimum and ensure all containment of wastes on site are functioning effectively in accordance with the storage limitations provided in the table on Drawing No. LRIE/2948/03.

## 5.2 **Staff training**

- 5.2.1 Operational staff are subject to site inductions which includes basic fire emergency procedures. Site management are suitably trained to carry out these inductions.
- 5.2.2 A full test (drill) of the procedures in this document will be carried out every 12 months to test that the plan works. The first test will take place within one month of the agreement of this document with the EA. The outcome and any follow up training for staff will be documented in the site diary and relevant forms in the operator's EMS. The Fire Checklist and training form in this FPP may also be used during the drill.

## 5.3 **Toolbox talks**

5.3.1 All operational staff on site have received fire awareness training / tool box talks off trained staff i.e. the operations, site or technically competence manager on their staff induction to detect early signs of fire and to minimise the chance of a fire breaking out in order to meet the three objectives.

# **6** Quarantine Area

- 6.1.1 In accordance with the EA's FPP guidance an area of the site has been designated as the quarantine area as shown on Drawing No. LRIE/2948/03 which is accessible at all times. This area also allows for a 6-metre buffer from the site perimeter and other stored waste or materials on site.
- 6.1.2 It is considered the largest waste pile/area on site is **AREA 1**'s and if the area was full would have a volume of approximately <422m<sup>3</sup>. The quarantine area proposed has an area of 175m<sup>2</sup> and a volume capacity of <230m<sup>3</sup> (if wastes are piled 4m high) which is capable of holding more than 50% of this stockpile.
- 6.1.3 Waste would be moved to the quarantine area using mobile plant available at the site i.e. telehandlers. The out-of-hours storage locations for mobile plant is shown on Drawing No. LRIE/2948/03.
- 6.1.4 In the event of a fire, the quarantine area will be used to either isolate wastes which are smouldering to allow safe dissipation of heat without placing other areas on site at risk of ignition; or, to remove any wastes stored in piles/containers near any material affected by a fire to prevent fire spreading to adjacent piles.
- 6.1.5 Waste will only be moved to the quarantine area if safe to do so following judgement by site management co-ordinating the fire response procedure or the FRS.

# 7 Detecting Fires & Response Procedures

# 7.1 Fire detection procedure (manual)

- 7.1.1 If a fire is detected or suspected by a member of staff during operational hours, the relevant person will conduct the following procedure report to site management:
  - Raise the fire alarm (if not already done by another staff member) or sound fire alarms/communicate via radio or ring out-of-hours key holders. Timescale for this will be upon detection i.e. seconds
  - b) Assess the intensity and scale of the fire and make a judgment as to whether the fire can be managed without the requirement for assistance from the emergency services i.e. using the hose or fire extinguishers. This process should take less than 60 seconds. If fire requires further assistance, a call will be logged to the FRS then the procedures in 8.1 followed.
  - c) Initiate evacuation of staff and visitors on site to the meeting point and instruct delegated person(s) to conduct a roll-call to ensure all site users are accounted for.
    Timescale variable depending on staff on site estimated within 5 minutes.
  - d) If viable and safe, instruct necessary site staff to commence extinguishment. Timescale variable depending on size of fire, suppression can be within minutes if safe to do so.

# 7.2 Automated/out-of-hours detection

7.2.1 The external site benefits from a 24 hour remotely accessible CCTV system and internal areas benefit from infra-red/smoke detection cameras which will both detect a fire event. The site will not be operational during the following:

Monday to Friday 20:00 – 06:00

Saturday – Monday 14:00 – 06:00

Sundays, Bank/Public holidays All day

7.2.2 During the above hours, the infra-red/smoke detection cameras will monitor all internal waste storage and the external intruder CCTV system will monitor the wider site and alert the out-of-hours security guard and operator of any incidents. If a fire were to occur out-of-hours, the operator would be provided with a call or alert by the security monitoring station which would detect the incident and then conduct the following procedures shown in Section 8.1.

## **8** Fire response procedures

#### 8.1 Response procedure

- 8.1.1 Further to the measures detailed in Section 7, the following procedure would apply in the event of an incident:
  - a) Call the Fire Response Service (FRS) immediately using 999.
  - b) Call the EA's Emergency Contact Number.
  - c) Competent person to ensure suitably trained employee initiates the three penstock valves in the site's surface water drainage system shown on t Drawing No. LRIE/2948/03.
  - d) Prior to the FRS arriving, inform all neighbouring premises likely to be affected as a result of the fire in terms of potential road closures, smoke inhalation and action to be taken i.e. **stay indoors** (see Section 8.3).
  - e) If not previously informed, senior management of the company will be informed at this point of the details, nature and extent of the fire and whether assistance from staff from other depots is required.
  - f) Ensure access routes are clear (see Section 8.2).
  - g) If safe to do so, site management will inspect the location of the fire, to identify immediate risks to surrounding premises and the FRS.
  - h) Ensure operators of appropriate machinery are standing by in a safe location to help create fire breaks, under the direction of the FRS when they arrive.
  - i) Ensure relevant site staff are standing by in a safe location to deploy additional surface water protection equipment where required under the direction of the FRS when they arrive (booms, etc.).
  - j) Site management will identify themselves to the FRS as soon as they arrive on site and will provide them with a copy of this document and update them with relevant information in terms of fire location, possible reason, waste on fire and projected impact which will assist them in dealing with a fire more effectively.
  - k) Implement pollution control measures) if safe to do so.

8.1.2 In the event of site management being absent from site, the operator will ensure the TCM or a suitably competent deputy is available during operating hours to take command of an incident should one occur.

### 8.2 Access for emergency services

- 8.2.1 The site has clear access points for the emergency services as shown on Drawing No. LRIE/2948/03. The nearest fire station is approximately 1.5 miles away on Frederick Street and it is anticipated the response time following a call to the FRS is for them to be on site within <5 minutes. The out-of-hours contact for the site will be situated on the site notice board and this person can provide the FRS with the code for accessing the site on the event of a fire. There are also three other fire stations located within a 10km radius of the site.
- 8.2.2 The width of the surrounding roads and gateway exceeds the minimum required by the FRS which is 3.7m. Site management will also ensure the 3.7m access routes are maintained throughout the working day and before cessation of works during site inspections.

### 8.3 **Notifying receptors**

- 8.3.1 The contact numbers of key sensitive receptors identified within 1km of the site who could be directly affected in the event of a fire along with the Receptor Plan will be stored within the site office. The numbers/contacts are also shown in the pre-pages of this FPP. Other numbers may be added to this list or existing numbers changed throughout the lifetime of this FPP.
- 8.3.2 As it isn't feasible for a contact number to be provided for every individual residential receptor and individual business within 1km, the most sensitive receptors and closest business receptors have been included within the table overleaf. it is considered these receptors could pass on the incident to adjacent premises who contact information hasn't been provided in this FPP.

- 8.3.3 Following discussions with Bolton Council, they have advised that once Emergency Services arrive on site i.e. FRS, Police, the lead authority (usually the Police) will coordinate a systematic approach to ensure all the relevant sensitive receptors within 1,000m are notified. This will involve via telephone calls, personal visits (knocking on doors) and or using a load speaker while driving around the associated catchment. In addition to this, the Emergency Services would also publicise the fire on their Social Media outlets and contact local news websites, radios who can also provide updates on the incident. The Council will not commit in providing written communication to demonstrate their approach as it would depend on the type/size of fire as they have numerous approaches.
- 8.3.4 The police with the assistance of ECSS and any other attending authority will ensure all relevant properties are informed of the fire event and given clear instructions of the actions they need to take.

#### 8.4 **Control of Combustion Products**

- 8.4.1 Combustion products likely to be associated with the waste stored at the site include PAHs, dioxins and particulate matter including black smoke from general mixed waste and scrap metal. The receptors will be advised of this during notification.
- 8.4.2 The release of combustion products may be controlled by the low size of waste piles at the site and the swift removal of burning wastes to the quarantine area (thus reducing spread of fire and reducing the amount of combustion products created).

## 9 Suppressing fires & firefighting techniques

#### 9.1 Site-wide suppression

- 9.1.1 The site has the following on site suppression measures which are indicatively shown on Drawing No. LRIE/2948/03:
  - i) Hose reels strategically placed providing coverage to areas storing combustible and flammable materials.
  - ii) Mixture of water, foam, powder and CO<sub>2</sub> fire extinguishers located in close proximity to waste piles.
  - iii) 1,500 litre water bowser and water cannon (used primarily for dust suppression)
- 9.1.2 During normal operational hours, there are at numerous members of staff who are fully trained in using mobile plant to assist with fire-fighting which would include suppression using the above and isolating waste at risk of combusting using mobile plant as shown below.

#### 9.1.3 In addition to the above:

- The buildings also have strategically placed water, foam and CO2 extinguishers.
- Out-of-hours plant storage (shovels and forklifts) to isolate waste at risk of combusting in the event of a fire.
- Direct access into the building for external suppression from the FRS (if required).
- All waste piles stored internally are below the limits shown within the FPP guidance in terms of size and duration reducing the size of a fire.
- All staff working in the building can operate the hoses and extinguishers.
- 9.1.4 Mobile plant i.e. shovels, excavators, forklifts will be used to move unburned material to the quarantine area and away from waste that is on fire to prevent it from spreading. The waste on fire which will have been separated will be quenched using suppression by staff or the FRS. The waste will be kept here until the fire has been extinguished.

9.1.5 The site could also fill a sealed skip with water and load burning waste into it. Access routes into and out of buildings including out-of-hours plant storage is clearly shown on Drawing No. LRIE/2948/03.

## 10 Water supplies

#### 10.1 **General**

- 10.1.1 Section 16 of the EA's FPP mentions the site should have enough water available for firefighting to take place and to manage a worst-case scenario. A worst-case scenario would be the largest waste pile catching fire. As the site has reduced stockpiles since the previous fires, it is considered that a fire would not spread into adjacent piles due to the measures implemented throughout site which are documented in this FPP.
- 10.1.2 The largest combustible waste pile on site equates to <422m³ and to extinguish within 3 hours it would require approximately 241,120 litres (241m³) of water requiring a flow of approximately 1,334 litres per minute based on the calculation provided in the table below.

Table 10.1 - Water supply calculations (Largest Stockpile)

Maximum pile volume in m <sup>3</sup>	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on/off site in litres
422	422 x 6.67 = 2,815	2815 x 180	506,700 (506m³)

### 10.2 **On-site water supply**

- 10.2.1 The site will have access to on-site hoses which connect to the mains water supply which can be used for dousing any hot loads i.e. in the quarantine area or for any small fires which could break out. There will also be a 1,500-litre water bowser and dust cannon on site which can be re-filled using the hose. A standard hose will have a flow of approximately 30/40 l/m in connected to a high-pressure washer.
- 10.2.2 There is also access to a number of fire extinguishers which are strategically placed around the site.

### 10.3 External suppression - Fire Hydrants

- 10.3.1 In consultation with the FRS, there is a fire hydrant situated approximately 15m 20m of the site access, 50m from AREA 1 and approximately 135m for the waste storage areas. The hydrant is considered to be in full working order and is situated on a nominal 150mm main. There is also a further hydrant situated 30m north of the site access. The location of these hydrants are shown on Drawing No. LRIE/2948/03 and LRIE/2948/04.
- 10.3.2 Contact was made with both the FRS and United Utilities and both are unable to provide a flow rate for the hydrant off-site therefore the following guidance extracted from The Local Government Association (LGA) / Water UK National Guidance Document details the following flow rates which should be considered for this site. As the hydrant is located in an area of industry and being on a 150 mm nominal diameter:
  - Up to one hectare 20 litres per second.
  - One to two hectares 35 litres per second.
  - Two to three hectares 50 litres per second.
  - Over three hectares 75 litres per second.
- 10.3.3 As the above site is considered in an area industry and the industrial estate measures over three hectares the flow rate of the hydrant should be approximately 4,500 l/m which easily exceeds the required flow in l/m and suitable for extinguishing the fire within 3 hours.

## 10.4 <u>Internal suppression/alternative measures</u>

10.4.1 Where wastes are stored inside the main storage and processing building it is considered the below measures are suitable in ensuring the three objectives of the FPP guidance are met without the need for an automated suppression system. The building has been divided into two areas with each area storing waste/combustible material detailing the available measures for preventing, detecting and suppressing a fire.

Table 10.2 – Alternative measures for internal waste storage areas (AREAS 1 & 2)

AREAS 2 - 12					
PREVENTION	DETECTION	SUPPRESSION	SUMMARY OF RISK ASSESSMENT POST PREV, DET & SUPP TO MEET 3 OBJECTIVES		
<ul> <li>All the wastes stored in the building will have been sorted and in the main waste reception area for the site, the waste undergoes a visual check prior to being treated so the risk of ignition through incompatible waste being present is minimal.</li> <li>All waste in will be stored in firewalls and will not be stored for longer than 48 hours it will not self-combust due to excessive storage.</li> <li>The wastes will be continually moved to external areas throughout the day.</li> <li>30 minutes prior to cessation of activities in these areas, the area will be removed of all waste material and staff will carry out a full inspection using the daily check inspection form in Appendix I as a reference.</li> <li>Once the check has been complete, the staff member will radio communicate with the site management to discuss any issues or whether sign off can take place and store the inspection sheet in the office in the west of the unit.</li> <li>Sign off will only be complete if once site management have agreed the fire risk is low, if not, site management will rectify the issues or communicate with other staff to help assist.</li> <li>No ignition source will be stored within 6m of combustible or flammable material when the site is closed.</li> <li>Procedures shown in Section 4.5 – 4.8.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment causing waste to heat up takes place at the site.</li> <li>No waste stored in the above areas out-of-hours.</li> <li>24/7 automated and manual detection to prevent fire and other risks.</li> </ul>	<ul> <li>During operational hours there will always be a trained members of staff working throughout internal areas.</li> <li>Out-of-hours there is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> </ul>	<ul> <li>Strategically placed powder, foam and CO<sub>2</sub> extinguishers.</li> <li>Out-of-hours plant storage (forklift) to the east which could be used to isolate material at risk of combusting in the event of a fire.</li> <li>Access to the areas storing waste from the east of the building through 3 no. roller shutter door for external suppression from the FRS (if required).</li> <li>All staff working in the building can operate the extinguishers.</li> <li>Piles are considerably lower than the maximum permitted in the guidance meaning a fire could be extinguished in line with the three objectives.</li> </ul>	<ul> <li>Low risk due to only sources of ignition to these areas arising from mobile plant or electrical fault – both of which are suitably maintained.</li> <li>Waste will not self-combust and easily accessible for fire-fighting.</li> <li>Due to the nature of waste accepted, it is unlikely to combust and also storage times are significantly low – the piles will be continuously moved throughout the day.</li> <li>Piles significantly less than maximum to extinguishable within 4 hours</li> <li>No flammable/combustible beyond 6m of building</li> <li>Suitable access for fire-fighting via roller shutter doors</li> <li>Quick detection available/</li> <li>Mobile plant available to move flammable/combustible material away from an incident</li> <li>Three procedures met.</li> </ul>		

## 11 Managing Fire Water

#### 11.1 Drainage

- 11.1.1 The drainage arrangements for the site are clearly shown on Drawing No. LRIE/2948/03 and as all of the site operational area is concreted, essentially all surface (rain) water falls generally to the south and south west into a full retention interceptor before entering the combined sewer system. The interceptor is serviced annually will be monitored at least weekly or daily during heavy rainfall events so a drainage contractor can be called in advance to empty the tank if it becomes close to capacity.
- 11.1.2 Foul water drains directly underground into the foul sewer system also via a full retention interceptor.

### 11.2 **Containment of Fire Water**

- 11.2.1 The site surface is generally falling towards the south/south-west (away from the access) and is entirely sealed by a mixture of 0.15m kerbing and concrete walls with no escape points. It is proposed to block all drainage outlets by initiating closure valves to the areas shown on Drawing No. LRIE/2948/03 meaning the fire water is likely to flood the site creating a lagoon effect. Due to the slope of the site, it is unlikely the site access would need to be sealed which is the only other fire water escape point.
- 11.2.2 As detailed in Section 10.1.2, the largest pile on site would require containment for litres 506m³ of water in accordance with the FPP guidance as demonstrated in the table below. The table below also details suitable firewater containment on site which is

Table 11.1 - Firewater Containment Calculation for External yard

Volume of Water (m³)	Containment Area (m²)	Containment Required	Total Containment On Site
506	3,500 (sealed concrete	506/3,500=	0.15m high kerb and
	pad below building)	0.14m <sup>3</sup>	4m high concrete wall

## 11.3 Removal of fire water

11.3.1 Upon successfully extinguishing a fire all standing fire water would be pumped using a hired-in vacuum tanker and deposited to a suitably permitted site.

## 12 After an incident

### 12.1 **Contingency Planning**

- 12.1.1 In the event of a fire the site will cease accepting waste. All customers who wish to deliver wastes during a fire will be notified by site admin staff and any who arrive without prior notification will be turned away. If urgent, deliveries will be directed to an alternative waste facility in the borough; details of which can be found on the EA's public register.
- 12.1.2 No waste will be accepted on site until the post-fire site recovery procedures outlined in the section below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

### 12.2 **General recovery procedure**

- 12.2.1 When the fire has been successfully dealt with the following actions will take place:
  - a) All fires will be reported to the EA on the working day that they occur including all steps taken by site staff, management and/or emergency services to deal with the fire.
  - b) Removal of burnt material to a suitably permitted site.
  - c) Investigation into the cause of the fire, to ensure it does not reoccur.
  - d) A review of the FPP and EMS, associated amendments will be implemented.
  - e) Review of any additional training requirements for site personnel as a result of the incident.
  - f) All fire extinguishers used to tackle the fire will be serviced and replaced after use.
- 12.2.2 In addition to the abovementioned procedures, the sections below outline specific procedures following a fire.

### 12.3 **Site decontamination**

- 12.3.1 Surface water on site will be cleared using the following method:
  - a) Using a tanker/sucker, all standing fire water should be sucked up and taken off site or stored in a tank/bowser prior to removal off site.
  - b) Using all available resources, manually clean out the surface drainage system and underground interceptors/drains removing the debris to the pile of fire damaged waste for removal to landfill or permitted site.
  - c) Using a road sweeper, sweep the yard (damp as required using the bowser) until all ash and clinker has been removed.
  - d) All debris has now been isolated and all contaminated water holding areas have been cleaned and emptied.
  - e) Wash the yard down in entirety using clean water or allow a reasonably heavy rain shower to wash the yard down.
  - f) It is at this stage that site management should decide whether to repeat areas of the clean-up.
- 12.3.2 If the clean-up operation has been deemed complete and the site is deemed suitable for accepting waste, the site will ensure the following:
  - a) Account for all consumables that have been used in the fire and re-order / replace immediately.
  - b) Restack, and re-locate all items used for the surface water protection during the fire to their storage locations ready for future deployment.
  - c) Check monthly that items are still present and correct and still serviceable for use in an emergency.
- 12.3.3 The operator will liaise with the EA throughout the event ensuring they are satisfied with the clean-up programme and notify the operator when the site can begin accepting waste again onto site.

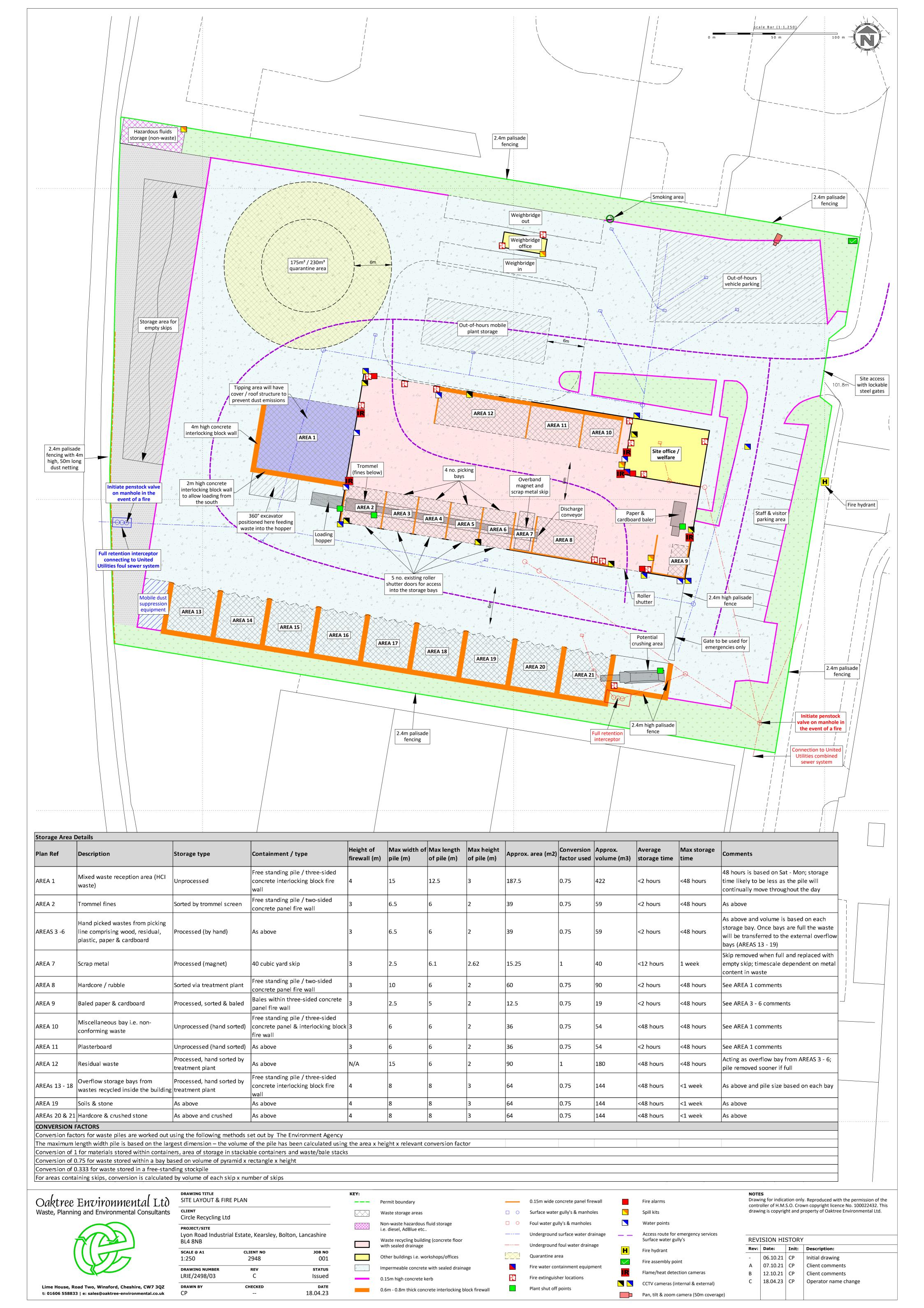
12.3.4 Due to the nature of the site's customers, there are no regular waste contracts which need to be dealt with if the site is closed for a period of time due to any incidents.

## 12.4 **Post fire site recovery**

- 12.4.1 If a recovery procedure is required, the operator would instigate the following;
  - a) Remove damaged material to a permitted facility that can deal with it legally.
  - b) Ask engineers to carry out repairs on any plant, vehicles and/or infrastructure.
  - c) Assist the FRS with the fire investigation and where necessary engage the advice from a professional fire consultant.
  - d) Review the FPP procedures and improve upon those which were found deficient.
  - e) Review training requirements for staff.
  - f) Assess whether further preventative measure could be implemented.
  - g) Ensure all fire equipment, where used, is replenished.
  - h) Remove fire water to a permitted facility for disposal.

## **Appendix I**

## **Drawings**



Permit boundary
Surface water body ( pond / pool / lake)
Stream, river, beck

Buildings includes Agricultural, industry, commerce and retail - could also include small houses)

Residential blocks

Class A roads

Class B roads

Class C roads

Local nature reserve / local wildlife site

Protected species

Priority Habitat - Deciduous Woodland

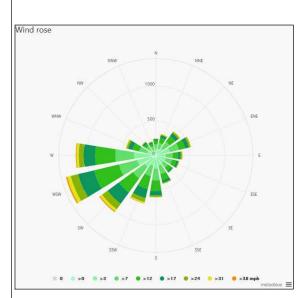
Other woodland areas (non-habitat)

Schools including primary, high, colleges and Universities

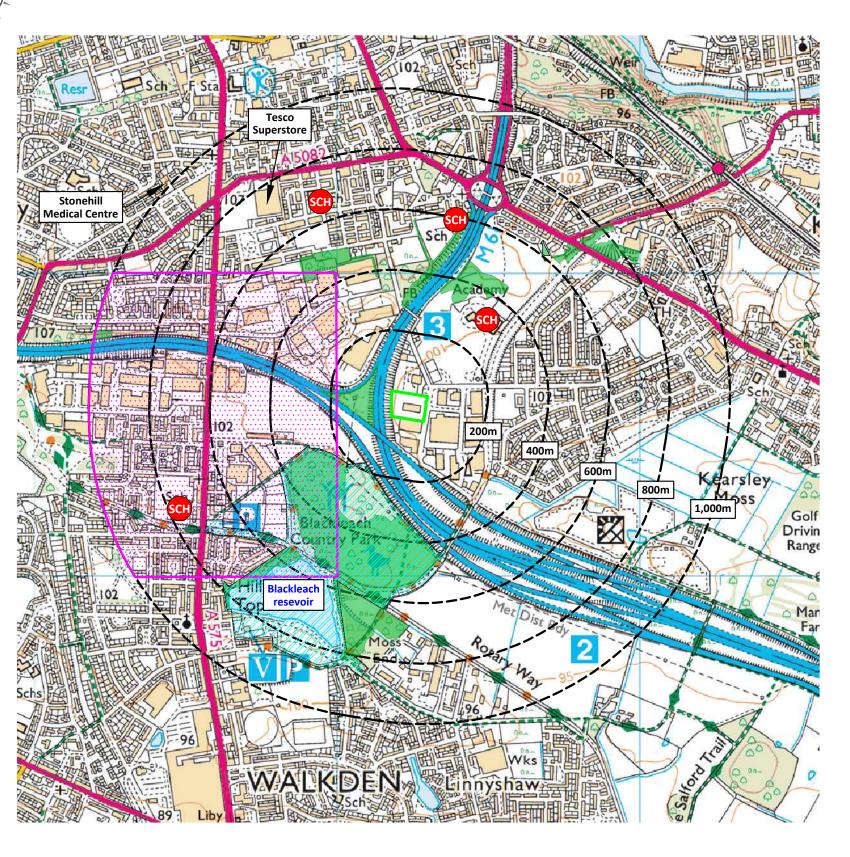
Care homes

Places of worship

H Fire hydrants (indicative)



Compass Wind Rose for Bolton sourced on 21/09/2021
- source: Meteoblue



#### <u>Scale Bar (1:12,500)</u>

0 km 500 m 1 km

#### NOTES

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#### REVISION HISTORY

Rev:	Date:	Init:	Description:
-	07.10.21	СР	Initial drawing
Α	18.04.23	CP	Operator name change

# Oaktree Environmental Ltd Waste, Planning and Environmental Consultants



**DRAWING TITLE**PERMIT BOUNDARY PLAN

CLIENT

Circle Recycling Ltd

ROJECT/SITE

Lyon Road Industrial Estate, Kearsley, Bolton, Lancashire BL4 8NB

1:12,500	2948	001
DRAWING NUM LRIE/2948/0		status Issued
DRAWN BY	CHECKED	<b>DATE</b> 18.04.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ t: 01606 558833 | e: sales@oaktree-environmental.co.uk

## **Appendix II**

## **Record Keeping Forms**

# CIRCLE RECYCLING LTD SITE INSPECTION FORM (DAILY INSPECTIONS) – CNW/RF/4

	(27 )			,					
WEEK STARTING									
TYPE OF INSPECTION		DAY							
		М	Т	W	Т	F	S	S	
FIRE EXITS, ESCAPE ROUTES AND CALL POINTS FREE FROM									
STORAGE OF WASTES/0	CONTAINERS								
SITE ENTRANCE/NOTICE	BOARD								
SECURITY - GATES									
SECURITY - FENCING									
SITE ROADS (CLEAR FRO									
IMPERMEABLE CONCRE	TE AREAS (INTEGRITY)								
INTERCEPTORS									
FUEL & GAS STORAGE A	AREAS								
BAY WALLS (STRUCTUR	·								
	NTED (WHERE NECESSARY)								
WASTE STORAGE LIMIT									
WASTE STORAGE LIMIT									
STORAGE LIMITS	OTHER WASTE								
COMBUSTIBLE WASTES SOURCES)	S (AWAY FROM POTENTIAL IGNITION								
REJECTED WASTE TYPES	S / STORAGE								
NOISE LEVELS	,								
FIRES (ANY INCIDENTS I	REPORTED)								
QUARANTINE AREA CLE	,								
NO SMOKING SIGNS IN	PLACE								
FIRE FIGHTING EQUIPM	ENT								
PLANT/EQUIPMENT MA	AINTENANCE CHECKS								
HOT EXHAUSTS FIR	E WATCH (DUST/FLUFF CLEANED								
REMOVED)	·								
OFFICE/WELFARE FIRE	RISKS CHECKED								
LITTER									
DUST									
ODOUR									
VERMIN									
RECORDS									
COMPLAINTS RECEIVED									
OTHER (SEE NOTES BEL	OW)								
INSPECTION CARRIED C	OUT BY								
NOTES/ACTION (	CONTINUE ON A SEPARATE SHE	ET IF I	NECESS	ARY):					
CHECKED BY		SIGN	IATURE	:					
POSITION		DAT	E	-+					
Sheet		of		-+					

# CIRCLE RECYCLING LTD PREVENTATIVE MAINTENANCE CHECKLIST

CHECKED BY	POSITION
DATE	DATE OF LAST CHECKLIST

	EQUIPMENT ITEM					
OFFICIAL MAINTENANCE CHECK REQUIRED (Y/N)						
IF NO, DATE OF LAST CHECK						
IF YES, DATE OF NEXT CHECK						
IS ITEM IN CORRECT WORKING ORDER						
LEAKAGES OF OIL/DIESEL ON MOBILE PLANT / VEHICLES						
IF NO, WHAT REPAIRS ARE REQUIRED (USE SEPARATE SHEET IF REQUIRED)						
WERE REPAIRS DETAILED ON THE LAST CHECKLIST						
IF YES, HAVE THEY BEEN CARRIED OUT						
ADDITIONAL REPAIRS OR ACTIONS REQUIRED						

### CIRCLE RECYCLING LTD - EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW

#### **EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW**

EMPLOYEE NAME				DATE COMPLETED			
POSITION				REVIEW DUE			
TRAINER				ОUTCOME	PASSED		
POSITION			_		FURTHER TRAINING REQUIRED		
CARRIED OUT /SIGN OFF >	Y/N	SIGNED BY EMPLOYEE	SIGNED BY TRAINER		Y/N	SIGNED BY EMPLOYEE	SIGNED BY TRAINER
ENVIRONMENTAL PERMIT				FIRE PREVENTION PLAN			
MANAGEMENT SYSTEM				FIRE SAFETY			
SITE RULES				EMERGENCY PROCEDURES			
RECORD KEEPING / TRANSFER NOTES				STORAGE /PILE SIZE LIMITS			
RECOGNITION OF WASTE TYPES				STORAGE DURATION			
SECURITY				FIRE DETECTION			
VEHICLE CHECKS				FIRE ALARMS			
PLANT OPERATION				FIRE FIGHTING EQUIPMENT			
PLANT CHECKS				FIRE WATER CONTAINMENT MEASURES			
AMENITY - LITTER, ODOUR, PESTS etc.				SPILL CLEARANCE			
NOTES AND ACTION	NS:						