

# FIRE PREVENTION PLAN

Recycling Lives Recycling Park, Longridge Road, Preston PR2 5BX

Recycling Lives Ltd

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1.1	09/01/2020	CP	RLL	Amended as a result of fires from January and August 2020 and also EA / client comments due to significant infrastructure changes
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THIS DOCUMENT IS DUE FOR REVIEW IN **JUNE 2022** 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

<b>Site Address:</b>	Recycling Lives Recycling Park, Longridge Road, Preston PR2 5BX		
<b>Site Operator:</b>	Recycling Lives Ltd	<b>National Grid Ref:</b>	SD 57717 32883
<b>CONTACT</b>	<b>DESCRIPTION</b>	<b>OFFICE HOURS</b>	<b>OUT OF HOURS</b>
<b>Recycling Lives Ltd</b>	Permit Holder	01772 654321	07459 003585 07515 567118
<b>Tal Bapu (Recycling Lives Ltd)</b>	Out-of-hours keyholder (primary contact)	01772 654321	07459 003585
<b>Graeme Slater (Recycling Lives Ltd)</b>	Out-of-hours keyholder (secondary contact)	01772 654321	07515 567118
<b>PSM Ltd</b>	24/7 Monitoring Company	01492 366291	01942 366291
<b><u>Royal Preston Hospital</u></b> Sharoe Green Lane North, Fulwood, Preston, Lancashire PR2 9HT	Local NHS Hospital (Main)	01772 716565	999
	Accident & Emergency (A&E)	999	999
<b><u>Ribbleton Medical Centre</u></b> 243 Ribbleton Avenue, Ribbleton, Preston, Lancashire PR2 6RD	Local Doctor Surgery (GP)	01772 529064	999 or 112
<b><u>Lancashire Constabulary</u></b> Preston Police Station, Lancaster Road North, Preston PR1 2SA	Local Police Non-Emergency	01772 614444	999 or 112
	Police Emergency	999 or 112	999 or 112
<b><u>Lancashire Fire &amp; Rescue Service</u></b> Preston Fire Station, Blackpool Rd, Preston PR1 6US	Fire and Rescue Service (in Emergency Dial 999)	01772 795222	999 or 112
<b><u>Environment Agency</u></b> Cumbria & Lancashire Area Lutra House, Dodd Way, Walton Summit, Preston PR5 8BX	Environmental Regulator	0370 850 6506	0800 80 70 60
<b><u>Lancashire County Council</u></b> County Hall, Fishergate, Preston, Lancashire, PR1 8XJ	General Enquiries	0300 123 6701	101, 999 or 112
<b><u>United Utilities</u></b> Wastewater Services, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington WA5 3LP	Mains water and sewerage supplier	0345 672 3723	0345 672 3723
<b><u>Oaktree Environmental Ltd</u></b> - Lime House, 2 Road Two, Winsford, Cheshire CW7 3QZ	Secondary specialist waste and permitting compliance advisors	01606 558833	

# **1 Introduction**

## **1.1 Overview of site operations**

1.1.1 This document considers the risks associated with a fire at Recycling Lives Recycling Park, Longridge Road, Preston PR2 5BX. The following permitted operations which take place at the site and are relevant for this Fire Prevention Plan (FPP) are as follows

- i) Vehicle storage, depollution and dismantling (authorised treatment facility);
- ii) Waste electrical and electronic equipment (WEEE) authorised treatment facility including the manual dismantling and processing (by shredding);
- iii) Metal recycling facility; and,
- iv) Fragmentising of metal waste and depolluted end-of-life vehicles (ELVs).

## **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 the Fire Prevention Plan (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)
- Magnetic separation of ferrous metals
- Crushing (by Crusher)
- Depollution and dismantling of waste motor vehicles
- Metal recycling (sorting, separation, grading, shearing, baling, compacting, granulating of cables, and cutting using hand-held equipment only, of ferrous metals or alloys and non-ferrous metals into different components for recovery)
- WEEE recycling (sorting, dismantling, separation, shredding, screening, grading, baling, shearing, compacting, crushing, granulation, repair or refurbishment, or cutting of waste into different components for recovery)

1.3.2 The above activities are clearly shown on the Site Layout & Fire Plan which is referenced as Drawing No. RLRP/1040/03 and shown in Appendix I of this FPP.

## 1.4 **Previous fires**

1.4.1 The site had two fires; one on 27/01/2019 and the other on 30/08/2019. Recycling Lives Ltd produced incident reports which are shown in Appendices IV and V of this FPP.

1.4.2 The tables overleaf summarise and review the causes of the fires including a brief overview of improvements made at the site since the fires. The improvements are further discussed in detail throughout this FPP but are briefly outlined below:

- More stringent waste acceptance procedures into this site and other satellite sites
- Addition of 2. no 30,000 litre water tanks to aid in quick suppression
- Addition of infra-red / heat detection cameras throughout the entire site for improved detection
- Additional training for operational and out-of-hours staff in detecting, reporting and suppression measures

- Out-of-hours monitoring by employee of Recycling Lives Ltd reviewing all combustible waste piles
- Removal of inaccessible storage areas from the operational layout
- Prepare and send letters to customers warning them about batteries in waste received

**Table 1.1 – Review and Cause of Fire dated 27/01/2019**

<b>Location</b>	<b>Reason/cause of fire</b>	<b>Improvement</b>
Undepolluted ELV storage	Battery not disconnected from ELV leading to self-combustion of ELV	<ul style="list-style-type: none"> <li>• Revised operational procedures have been implemented to ensure batteries are removed or disconnected from ELVs as soon as they arrive on site. These procedures have been verbally briefed to all of RL's ELV processing sites and will be documented as a Safe Working Procedure.</li> <li>• The numbers of cars stored in the undepolluted ELV storage area has significantly reduced despite fire breaks being in place.</li> <li>• Incident Plans for satellite sites to be reviewed by the Compliance Team to ensure access to similar Plant Operator resource in the event of an out-of-hours emergency at other sites, and evidence from this incident to be incorporated in future emergency training for other sites.</li> </ul>

**Table 1.2 – Review and Cause of Fire dated 30/08/2019**

<b>Location</b>	<b>Reason/cause of fire</b>	<b>Improvement</b>
Pre-shredded and post-shredded material awaiting processing through the fragmentiser	Unknown – likely cause is ignition from shredded battery	<ul style="list-style-type: none"> <li>• Storage location of post-shred material to be changed/removed to allow access for fire-fighting and around pre-shredder and fragmentiser.</li> <li>• Contact made with United Utilities to attempt to ascertain why the planned action to increase pressure to the site was insufficient. Consider other water sources available.</li> <li>• In respect of material received at site from third parties, letters to be sent to customers explaining the dangers of hazardous material mixed within scrap metal, together with the Recycling Lives leaflet "cylinders can kill".</li> <li>• Recycling Lives operatives to be refreshed on fire precautions and waste checking procedures via a toolbox talk.</li> <li>• Installation of infra-red / heat detection cameras to detect early stages of fire to prevent combustion</li> <li>• Installation of 2 no. 30,000 litre water tanks to aid the site and FRS for quick and early suppression</li> </ul>

## 1.5 Hours of operation

1.5.1 The site will be operated according to the hours specified below:

### **Metal Recycling Operations - Fragmentiser**

Monday to Friday	07:30 – 17:30
Saturday	08:30 – 13:00
Sundays, Bank/Public holidays	No operations

### **Metal Recycling Operations - Pre-shredder**

Monday to Friday	07:00 – 20:00
Saturday	08:00 – 17:30
Sundays, Bank/Public holidays	No operations

### **Waste Acceptance of WEEE & ELVs, depollution of ELVs and WEEE treatment internally**

Monday to Sunday	24/7
Bank/Public holidays	24/7

### **Waste Acceptance of Scrap Metal**

Monday to Friday	07:30 – 17:30
Saturday	08:30 – 13:00
Sundays, Bank/Public holidays	No operations

### **General Housekeeping / Plant / Vehicle Maintenance**

Monday to Sunday	24/7
Bank/Public holidays	24/7

## 1.6 Staffing and Management

1.6.1 The site currently has 238 employees working on site throughout a 24-hour period and the table below details the staff structure of the site. Positions in bold italic print below are the minimum staff requirements when the site is open for the reception and processing of waste and, therefore, shows the minimum number of staff available to tackle a fire on site

during operational hours. Only site management [site manager/s, technically competent manager/s (TCMs), site foreman/s], machine/plant operators and general operatives will be permitted to tackle fires on-site.

**Table 1.3 - Staffing numbers and responsibilities**

<b>Position</b>	<b>Employees</b>	<b>Responsibilities</b>
Managing director	1	Overall management of the business
Directors	5	Overseeing management of the site
Site managers	15	Overseeing and co-ordinating all activities which take place at the site
Sheq manager	1	Ensuring that the site is being operated in accordance with Health & Safety Legislation
Technically Competent Manager (TCM)	1	Ensuring that the site is being operated in accordance with the EP and in-line with attendant regulations
Compliance manager	1	Overall compliance of the site in line with the EP
Site foreman	1	Management of site operatives on site
Machine / Plant Operator s / Operatives	60	Waste handling/processing, reception and plant operation
General operatives including Security guard / watchman	117	To conduct site patrols when the site is not manned / operational
Administration staff	40	Office/administrative duties

1.6.2 The primary working hours for staff end at 17:30 hours and after this, there are 30 remaining staff members who work until 00:00; 8 staff until 02:00 and 6 staff until 07:00 i.e. when the main site operations commence. The 6 staff on site between 02:00 and 07:00 comprise operatives who work inside the processing building and a security guard who has camera and video access to the entire site.

## 1.7 Plant and Equipment

1.7.1 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 1.4 - Item of plant, number and function**

Item	Number	Function
Loading shovel	2	Loading/unloading/movement/sorting
360° excavator	2	Loading/unloading/movement/sorting
Telehandlers / re-handling cranes	10	Loading/unloading/movement/sorting
Forklift trucks	30	Loading/unloading/movement/sorting
Pre-shredder and fragmentiser plant	1	Shredding and fragging of scrap metal and ELVs
Depollution rig & tank farm (for storage of drained fluids)	1	Depollution and dismantling of waste motor vehicles
Lefort shear	1	Size reduction and baling of ferrous metals

1.7.2 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.

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

**Table 1.5 - Item of plant, number and function**

Item	Number	Function
Loading shovel	2	Loading/unloading/movement/sorting
360° excavator	2	Loading/unloading/movement/sorting
Telehandlers / re-handling cranes	10	Loading/unloading/movement/sorting
Forklift trucks	30	Loading/unloading/movement/sorting

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

## 1.8 **Correspondence with Fire and Rescue Service**

1.8.1 This document will be sent to the FRS at the same time as the submission of the document to the EA for review.

1.8.2 Recycling Lives 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.

## 1.9 **Sensitive Receptors**

1.9.1 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.

1.9.2 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 1.1 above). These measures will ensure the potential impact on any of the surrounding land is as minimal as practicably possible.

1.9.3 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...

1.9.4 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.

Table 1.6 - Common fire sources and mitigation

Receptor	Receptor Type	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Risk Management
Numerous industrial and commercial uses on Rough Hey Road Industrial Estate, Roman Way Industrial Estate, Red Scar Business Park and off Bluebell Way & Lancashire Way	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 off The Hills including Peacock Hill Close, Shirley Hill Close and off Longridge Road	Residential	As above	Respiratory irritation, illness and nuisance to local population.	Air transport of smoke.	Medium	Medium	Medium	As above
M6 Motorway, B6243 (Longridge Road)	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.	Medium	Medium	Medium	As above
Premier Inn - Hotel	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	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.
Red Scar & Tun Brook Woods	Protected sites – European sites and SSSIs	As above	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Air transport of smoke.	Low	Medium	Low	Procedures set out in this FPP
Savick Brook and River Ribble (Main Rivers) + all other surface waters close to or downstream of the site		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.	Low	Medium	Low	Procedures set out in this FPP.  The site has a sealed drainage system and all firewater runs off into the sewer via a trade effluent consent

## 2 Managing Common Causes of Fire

### 2.1 Details

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

Ref	Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
A	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 style="list-style-type: none"> <li>• Appropriate 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
B	Plant or equipment	Spillages of fuel, sparks from machinery or malfunction caused by ineffective maintenance	Medium	<ul style="list-style-type: none"> <li>• Plant &amp; equipment daily checks and preventative maintenance of plant / equipment by manufacturer.</li> <li>• Any liquid/fuel/oil storage is double banded.</li> <li>• Daily checks of site surfacing and spill kits.</li> <li>• Staff training / toolbox talks.</li> </ul>	Near zero
C	Electrical appliances and cabling	Faulty appliances or damaged/ exposed electrical cables may spark as a result of a power surge	Medium	<ul style="list-style-type: none"> <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
D	Discarded smoking materials	Risk of ignition of stored wastes from smoking materials which have not been fully distinguished	Low	<ul style="list-style-type: none"> <li>• Designated smoking area on site and smoking policy.</li> </ul>	Near-zero
E	Sparks from loading buckets/shovels	Scraping of loading buckets/shovels causing sparks which may ignite stored wastes	Low	<ul style="list-style-type: none"> <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
F	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	<ul style="list-style-type: none"> <li>• Only trained staff can use 'hot works' equipment i.e. oxy-acetylene.</li> <li>• Staff and contractors follow safe working practices including a permit to works system when carrying out hot works.</li> <li>• Daily fire watch for a suitable period after hot works have ended, particularly at the end of a working day.</li> </ul>	Low
G	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	<ul style="list-style-type: none"> <li>• There are no industrial heaters (or associated pipework) used heat areas of the site.</li> <li>• Proposed Energy-from-Waste plant is a trial and also situated in separately partitioned area with suitable fire walls.</li> </ul>	Low



Ref	Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
H	Hot exhausts	Potential source of both primary and residual heat to stored wastes	High	<ul style="list-style-type: none"> <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>• 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
I	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 style="list-style-type: none"> <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
J	Hot loads	Imported wastes which may contain materials which are above ambient temperature	High	<ul style="list-style-type: none"> <li>• All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>• Letters sent to customers with fines for any objects which could cause combustion.</li> <li>• Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
K	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	<ul style="list-style-type: none"> <li>• There are no overhead power lines which traverse the site.</li> </ul>	Near-zero
L	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 style="list-style-type: none"> <li>• Hot works procedures in place.</li> <li>• There are space heaters, furnaces, incinerators and other sources of ignition 6 metres away from combustible and flammable waste.</li> <li>• Proposed Energy-from-Waste plant situated in separately portioned area with suitable fire walls.</li> </ul>	Low
M	Batteries within waste deposits	Ignition of stored wastes via batteries within imported wastes	High	<ul style="list-style-type: none"> <li>• All loads are inspected in accordance with strict waste acceptance procedures including wastes received into satellite sites.</li> <li>• BAT Procedures in place for baled wastes.</li> <li>• Letters sent to customers with fines for any objects which could cause combustion i.e. lithium batteries.</li> <li>• Quarantine area and rejected waste containers on site for quick isolation of load containing batteries.</li> <li>• All batteries on site stored in dedicated containers in suitable areas on site.</li> </ul>	Medium
N	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 style="list-style-type: none"> <li>• All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>• Letters sent to customers with fines for any objects which could cause combustion.</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

Ref	Source	Risk	Magnitude of Risk / Likelihood	Brief outline of Mitigation (refer to Section 4 for storage/monitoring procedures)	Magnitude of risk / likelihood following mitigation
O	Reaction between wastes	Combustible waste piles may ignite in the event of a fire and worsen the effects if wastes react	High	<ul style="list-style-type: none"> <li>All loads are inspected in accordance with strict waste acceptance procedures.</li> <li>Letters sent to customers with fines for any objects which could cause combustion.</li> <li>Quarantine area and rejected waste containers on site for quick isolation of load.</li> </ul>	Low
P	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 style="list-style-type: none"> <li>ELVs are inspected in accordance with strict waste acceptance procedures including wastes received into satellite sites.</li> <li>Spill kits available throughout the site.</li> <li>Suitable and sealed drainage system.</li> <li>Storage of unpolluted ELVs take place on segregated area on site.</li> <li>Vehicles visually inspected throughout the day with any noticeable leakages being depolluted as a priority.</li> <li>All depollution takes place inside a building.</li> <li>Minimum daily checks for spillages around the site.</li> <li>Staff training / toolbox talks.</li> </ul>	Low
Q	"Tramp" metal	Metal could be hot from mechanical processing and interact with lighter waste causing a fire	High	<ul style="list-style-type: none"> <li>All loads are inspected in accordance with strict waste acceptance procedures including wastes received into satellite sites.</li> <li>BAT Procedures in place for baled wastes accepted into the site.</li> <li>Letters sent to customers with fines for any objects which could cause combustion i.e. lithium batteries, gas cylinders.</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>Infra-red / heat detection cameras in place providing full coverage over mechanically treated scrap metal/WEEE or ELVs.</li> </ul>	Low

## 2.2 **Fuel/Oil Storage**

2.2.1 There are two separate areas where fuels are stored on site:

- Oils/fluids drained from ELVs; and,
- Oils/diesels for vehicles, plant and equipment associated with the site.

2.2.2 The location of the above areas are shown on Drawing No. RLRP/1040/03 and 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 the tank.

2.2.3 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 Hot works can take place in various areas of the site i.e. on fixed plant therefore it is not possible to designate an area for this. The site does have designated workshops where other hot works take place i.e. welding, cutting which are shown on Drawing No. RLRP/1040/03. The site's hot works procedure permit to work example is show in Appendix VII.

## 2.4 **Smoking Policy**

2.4.1 Smoking is prohibited in all waste management and storage areas and a designated smoking area is available on site as shown on Drawing No. RLRP/1040/03.

## 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 RLRP/1040/03 following cessation of activities and external separation distances of 6m are observed between plant and any combustible or flammable material.
- In the building, all plant will be powered-down and completely shut off prior to cessation of operations on any given day.
- Plant which is not in use for any extended period is stored at least 6 metres from combustible waste.
- 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.

2.5.3 All fixed mechanical treatment plant other than the FPD disassembly line is powered down after 20:00 including the pre-shredder & fragmentiser, all shredders, the wash plant and the downstream sorting line. This will reduce any potential impact of plant failure during non-operational hours.

## 2.6 **Site Security**

- 2.6.1 The site security infrastructure is clearly shown on Drawing No RLRP/1040/03 and considered suitable to prevent trespassers. In addition to this, there is an out-of-hours security guard who is positioned near the access of the site who will carry at least 3 patrols of the site which would take on average 30-60 minutes during a 10 – 14-hour shift following cessation of the main site operations at 17:30.
- 2.6.2 There is 24/7 remotely accessible CCTV fitted with full site coverage and off-site supervision. The site also has heat and flame detection cameras installed on site which are further discussed in Section 7.4 of this FPP. The location of CCTV and heat/flame cameras are indicatively shown on Drawing No RLRP/1040/03.
- 2.6.3 The CCTV and heat/flame cameras were installed by ADJ Fire and Security and are monitored 24/7, 365 days per year by PSM (Professional Surveillance Monitoring). The design, installation and maintenance of all automated detection systems are covered by an appropriate UKAS-accredited third party certification scheme and if there is a trigger, they will verify with the operator by email notification or call before ringing the emergency services. This manual step is necessary to prevent numerous false alarms i.e. if a fork lift drives past the camera the exhaust can trigger.
- 2.6.4 Any unusual or suspicious activity picked up which is not in line with site specific procedures will mean a call to the emergency services which would present the risk of arson.
- 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 **Electrical Faults or Damaged/Exposed Electrical Cables**

- 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 south-west 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 consignment notes (including hazardous) and transfer documentation will be fully checked to ensure the waste matches the pre-acceptance information received.
- 3.1.2 As the majority of waste imported into the site will have come from alternative Recycling Lives Ltd satellite sites, following weighing, the baled ELVs and scrap metal can be deposited directly onto the pre-shredder pile as the ELVs will have been depolluted as per the DEFRA guidance and scrap metal will have been pre-sorted and baled under permitting or exemption regulations. All other waste which Recycling Lives Ltd accept into the site will be a mixture of hazardous and non-hazardous WEEE which have their own dedicated storage areas on site and may undergo treatment as detailed in the sections below.
- 3.1.3 Any wastes identified during the incoming waste inspections which do not conform to site acceptance criteria will not be accepted and/or removed and quarantined immediately to await safe removal from site and 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.
- 3.1.4 Reference should be made to Sections 2.1, 3.1 – 3.4 of Recycling Lives Ltd BAT procedures (see Document Ref. RLRP-1040-J) which further detail waste acceptance procedures and ensure no incomparable wastes are accepted into the site.
- 3.1.5 **Radiation detection** - The weighbridge to the west is fitted with a high specification radioactive detection system to ensure only suitable loads are deposited at the site and none of a reactive nature.

## 3.2 **Third-party waste deliveries**

3.2.1 The site also accepts third party deliveries which are tipped in a public tipping bay shown as Pile **UY3** on Drawing No. RLRP/1040/03. Third party tips will be subject to the same procedures above and also a thorough inspection following tipping to ensure the waste is compatible for further treatment. This inspection will be carried out by site operatives who are suitably trained in detecting the following:

- The presence of leaking fluids
- The presence of hazardous comments i.e. batteries, catalytic convertors
- The presence of other components which could lead to a flame or audible event i.e. airbags, unauthorised (combustible waste) in the ELV]
- Gas cylinders, sealed containers

3.2.2 In addition to this, Recycling Lives Ltd have issued warning letters to customers for the presence of foreign objects or gas cylinders and if any are found, Recycling Lives Ltd enforce the following:

- i) A £150 fine will be administered in confirmed cases of a sealed canister being found in a customer's scrap.
- ii) If the customer continues to send in foreign objects, Recycling Lives Ltd will contact the customer to discuss the incident and to develop an understanding of root cause and how the issue can be prevented in future.

3.2.3 On 14/11/2019 Recycling Lives Ltd stated that "since 16/09/2019, 13 occurrences of hazardous items found in waste have been recorded including gas bottles, batteries, a cylinder left in a heater in the public tipping area which has resulted in a number of trade customers being fined as a consequence.



### 3.3 Waste storage following acceptance and prior to mechanical treatment

3.3.1 In summary the following different categories of waste are accepted and stored in the following areas prior to further processing:

- i) Undepolluted ELVs - directed to the undepolluted ELV storage to await depollution and dismantling of all potentially hazardous components; the depolluted ELVs are then directed to the depolluted ELV storage to await pre-shredding prior to fragmentising.
- ii) Ferrous scrap metal, baled depolluted ELVs and non-hazardous WEEE are all tipped in the area shown on Drawing No. RLRP/1040/03. The waste material will be tipped and then spread on the floor so that any waste which can't be shredded i.e. pressurised vessels can be picked out. If the baled ELV shows any signs of incompatible waste or leaking fluids (see section 3.2.1 above), the bale will be broken in accordance with sections 3.1.2 – 3.1.4 of Ltd.'s BAT document.
- iii) Once the above materials have been sorted then the excavator will move the materials in to the pre-shredder "in-feed" processing area shown on Drawing No. RLRP/1040/03 ready for processing through prior to fragmentising.
- iv) Hazardous WEEE will be directed to a dedicated area of the building as shown on Drawing No. RLRP/1040/03 and undergo manual dismantling and mechanical processing. All plastic removed from this WEEE which could contain persistent organic pollutants (POPs) will be directed to **UY13** prior to shredding and further separation / processing in the downstream plant inside the building.
- v) Non-hazardous WEEE arising from the public tipping bay (**UY2**) or pre-sorted from other Recycling Lives Ltd sites will be directed to pile **UY11** where it will undergo a further sort to separate any contaminated or hazardous WEEE; the non-hazardous/non-contaminated WEEE will be then stored in **UY12** prior to processing.
- vi) Non-ferrous metal will also be directed to a dedicated area of the building shown on Drawing No. RLRP/1040/03 for storage and treatment.

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

### **4.1 General**

4.1.1 The site stores the following waste types shown in Section 9.1 of the FPP guidance:

- Ferrous metal and non-ferrous metal
- ELVs (depolluted & undepolluted)
- Fragmentiser fluff / Automotive shredder residue (ASR)
- WEEE (hazardous & non-hazardous)
- End-of-life tyres
- Plastics (Haz and Non-haz)

4.1.2 The FPP has also broken down the main storage areas on site into three locations

- i) Upper yard (UY) storage areas
- ii) Lower yard (LY) storage areas
- iii) Internal (INT) storage areas – the internal areas have also been broken down further into 8 no. as shown on Drawing No. RLRP/1040/03.

4.1.3 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. RLRP/1040/03 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 1m freeboard is maintained at all times.

Table 4.1 – Storage Table Details

Storage Area Details (UPPER YARD)										
Plan Ref	Description	Storage type	Containment / type	Height of fire wall (m)	Max length / width (m) of pile out of hours	Out of hours storage height (m)	Approx. Area (m2) Out of Hours	Conversion factor used	Approx. volume (m3) - out of Hours	Max storage time
UY1	LPG tank storage	Unprocessed	Stockpile / 3-sided storage bay using 0.14m concrete panels	3	9	2	115	0.666	153	<3 months
UY2	Public tipping bay for mixed WEEE & scrap metal	Unprocessed	Stockpile / 3-sided storage bay using 0.14m concrete panels	3	18.5	2	250	0.666	333	<48 hours
UY3A	Non-waste parts stripped from ELVs for export	Unprocessed - part removed by hand or mechanical means	Parts stored on racking inside covered area	6	16	3	215	0.666	430	<3 months
UY3B	Exports stripping area	As above	As above	6	20	3	215	0.666	430	<3 months
UY4	Depolluted ELV storage and component removal area (>150mm)	Largely processed / baled and sorted	Free-standing pile; 0.14m concrete panel wall (north)	6	20	4	400	0.333	533	<1 week
UY5	As above	As above	As above	6	20	4	400	0.333	533	<1 week
UY6	Ferrous metals & baled (depolluted) ELVs (pre-shred pile >150mm)	Largely processed / baled and sorted	Free-standing pile; 0.14m concrete panel wall (north)	6	20	4	400	0.333	533	<1 week
UY7	Shredded ferrous metal & ELVs (<150mm) / Fragmentiser infeed	Processed / shredded	Free-standing pile / 0.6m lego block wall (west); 0.14m concrete panel wall (north)	6	20	4	300	0.333	400	<48 hours
UY8	Fragmentiser fluff <30mm (processed) / automated shredder residue	Processed / shredded	Free-standing pile / contained in 3-sided 0.6m lego block wall	4	20	3	65	0.666	130	<1 week
UY9	Fragmentiser fluff <30mm (processed) / automated shredder residue	Processed / shredded	Free-standing pile / contained in 3-sided 0.6m lego block wall	5	20	4	150	0.666	300	<1 week
UY10	As above	As above	Free-standing pile / contained in 3-sided 0.6m lego block wall	5	20	4	175	0.666	350	<1 week
UY11	WEEE reception, sorting and storage area	Unprocessed / pre-sorted	Free-standing pile / partly contained in 3-sided 0.6m lego block wall	4	17	3	205	0.666	410	<48 hours
UY12	Sorted clean (non-haz) WEEE	Sorted	Free-standing pile / partly contained in 3-sided 0.6m lego block wall	5	6	4	115	0.666	306	<1 week
UY13A	Plastic	Sorted	As above	4	13	3	75	0.666	150	<1 week
UY13B	Other material (mixed)	Sorted	As above	4	13	3	75	0.666	150	<1 week
UY14	Hazardous WEEE (fridges)	Unprocessed	Free standing / 0.6m lego block wall to the west	3	14	1	85	1	85	<3 months
UY15	Undepolluted ELV reception and storage	Yes	Unprocessed	Free standing / >10m fire breaks	N/A	18.5	3 (2 ELVs stacked)	225 (27 ELVs = 2 high)	ELV = 8.25m3	<450 (27 ELVs x 8.25)

UY16	Undepolluted ELV reception and storage	Yes	Unprocessed	Free standing / >10m fire breaks	N/A	18.5	3 (2 ELVs stacked)	225 (20 ELVs = 2 high)	ELV = 8.25m <sup>3</sup>	<450 (27 ELVs x 8.25)
UY17	Batteries & catalytic convertors temporary storage during depollution process	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UY18	Batteries & catalytic convertors temporary storage during depollution process	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UY19	Batteries & catalytic convertors temporary storage during depollution process	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UY20	Drained fluids from the depollution process comprising petrol, white & red diesel, oils, fluids i.e. brake fluids and antifreeze	Unprocessed (liquid)	Double skinned, banded steel tanks	3	N/A	1	75	1	Approx. 10,000 litres of fuel	<3 months

Storage Area Details (LOWER YARD)										
Plan Ref	Description	Storage type	Containment / type	Height of fire wall (m)	Max length / width (m) of pile out of hours	Out of hours storage height (m)	Approx. Area (m <sup>2</sup> ) Out of Hours	Conversion factor used	Approx. Volume (m <sup>3</sup> ) - out of Hours	Max storage time
LY1	Battery Storage	Removed from ELVs (unprocessed)	Stockpile inside open fronted building / 3-sided 0.14m concrete storage bay	4	12	3	110	0.666	220	<1 month
LY2	Sorted scrap metal and product bays	Mechanically processed, shredded and sorted	4 no. stockpiles inside / 3-sided storage bay using 0.14m concrete panels	3	4.5 (per bay)	2	35 (per bay)	0.666	40 (per bay)	<1 week
LY3 - 4	Mixed inert metal (30 - 150mm) - Zorba (non-waste)	Mechanically processed	Stockpile inside open fronted building / 3-sided 0.14m concrete storage bay	4	8	3	40	0.666	80	<1 week
LY5	Plastic bales	Mechanically processed	Free standing bales / 2 sided 0.14m concrete panel wall	3	15	2	115	1	288	<1 week
LY6	Sorted scrap metal, product bays and circuit boards	Mechanically processed, shredded and sorted	4 no. stockpiles inside / 3-sided storage bay using 0.14m concrete panels	4	6.2 (per bay)	3	55 (per bay)	0.666	70 (per bay)	<1 week
LY7	Fragmentiser fluff <30mm (processed)	Mechanically processed (pre-shred and fragging)	Stockpile / 3-sided storage bay using 0.14m concrete panels	4	8	3	110	0.666	220	<1 week
LY8	Finished 211 ferrous shred (non-waste and non-combustible)	Mechanically processed	Stockpile / 3-sided storage bay using 0.14m concrete panels and 0.6m lego blocks	5	18	3	225	0.666	450	<1 week
LY9 & 10	Sorted Non-ferrous metal (30mm - 150mm) - aluminium (non-waste)	Sorted - by hand or mechanical means	Stockpile / 3-sided storage bay using 0.6m lego blocks	4	10	3	85	0.666	170	<1 week

Storage Area Details (INTERAL / PROCESSING BUILDING)										
Plan Ref	Description	Storage type	Containment / type	Height of fire wall (m)	Max length / width (m) of pile out of hours	Out of hours storage height (m)	Approx. Area (m2) Out of Hours	Conversion factor used	Approx. volume (m3) - out of Hours	Max storage time
INT1A - 1C	Assorted scrap metal bays	Mechanically processed, shredded and sorted	3 no. stockpiles inside / 3-sided storage bay using 0.6m lego block walls	4	3, 8 & 4	3	35, 90, 50	0.666	70, 180, 100	<48 hours
INT 2	Mechanically sorted bays containing plastic, scrap and WEEE fines	Mechanically processed, shredded and sorted	3 no. stockpiles inside / 3-sided storage bay using 0.14m concrete panel walls	3	4 (per bay)	2	20 (per bay)	0.666	35 (per bay)	<48 hours
INT 3	Container for fines arising from Pile INT 2	Mechanically processed, shredded and sorted	40 cubic yard container	N/A	6.1	2	12.5	1	25	<48 hours
INT 4	Hazardous WEEE comprising IT equipment sorting and dismantling area	Unprocessed	Free standing pile / fire wall to the east	4	20	1	400	1	450	<3 months
INT 5	Hazardous WEEE	Unprocessed and sorted	Free standing pile / fire wall to the east	4	20	1	400	1	450	<3 months
INT 6	Catalytic convertor storage	Removed from ELVs (unprocessed)	Free standing / IBCs or pallets	2	15	1	50	1	60	<1 week
INT 7	End-of-life tyres	Unprocessed	Stacked on racking	4	20	3	100	1	300	<1 week
INT 8	Hazardous WEEE i.e. FPDs & CRTs prior to processing	Unprocessed	Free standing / IBCs or pallets	2	20	1	250	1	375	<1 week
INT 9	Automotive shredder residue arising from the wash plant	Mechanically processed (pre-shred, fragging and washing)	Free-standing / no containment	4	18.5	3	150	0.666	150	<48 hours
INT 10	Automotive shredder residue arising from the wash plant	Mechanically processed (pre-shred, fragging and washing)	Free-standing / no containment	4	8	3	60	0.333	20	<48 hours
INT 11	Filter cake (non-hazardous inert) comprising dirt from ELV fragmentising and washing	Mechanically processed (pre-shred, fragging and washing)	Free-standing / no containment	4	12	3	65	0.333	22	<48 hours
INT 12	Sorted non-ferrous metal (>150mm) dispatch area	Unprocessed - part removed by hand or mechanical means	IBC / pallet containers with acid resistant base <1,000 litres	4	14	3	140	0.666	280	<1 week
INT 13	Hazardous WEEE i.e. FPDs & CRTs	Unprocessed	Free standing pile / fire wall to the east and north	5	20	2	200	1	400	<3 months
INT 14	Sorted scrap metal and product bays arising from trommel and picking line process	Mechanically processed, shredded and sorted	3 no. stockpiles inside / 3-sided storage bay using 0.14m concrete panels	3	4 (per bay)	2	20 (per bay)	0.666	35 (per bay)	<48 hours
INT 15	Automotive shredder residue	Mechanically processed, shredded and sorted	0.14m concrete panel walls to the south - largely free-standing	4	18	3	100	0.333	33	<48 hours
INT 16	Automotive shredder residue	Mechanically processed, shredded and sorted	0.14m concrete panel walls to the east and south - largely free-standing	3	14	2	40	0.666	27	<48 hours
INT 17	Non-ferrous Zorba arising from the eddy current separator	Mechanically processed, shredded and sorted	Free-standing / no containment	N/A	3.5	2	6	0.333	4	<48 hours
INT 18	Heavy material arising from wash plant	Mechanically processed (pre-shred and fragging)	Stockpile inside / 3-sided storage bay using 0.6m lego block walls	3	12.5	2	40	0.666	53	<1 week

INT 19	Tonne bags arising from LCD disassembly line	Mechanically processed, shredded and sorted	Sorted fines material inside 1 tonne bags and containers	N/A	1 (per bay (approx. 10 - 12 no bags	1	1 (per bag)	1	1 (per bag x 10)	<1 week
INT 20	Various storage of ASR and scrap metal arising from fragmentiser downstream line; material only stored temporarily and constantly moved	Mechanically processed, shredded and sorted	Mixture of free-standing, 0.14m and 0.6m concrete walls	N/A	N/A	N/A	Approx 200 in total	N/A	200	<18 hours
<b>Conversion factors for waste piles are worked out using the following methods set out by the Environment Agency)</b>										
<b>Conversion of 1 for materials stored within containers, area of storage in stackable containers and waste/bale stacks</b>										
<b>Conversion of 0.666 for waste stored within a bay</b>										
<b>Conversion of 0.333 for waste stored in a free-standing stockpile</b>										
<b>For ELVs and vehicle shells, each vehicle has an effective volume of 8.25m<sup>3</sup></b>										
<b>For areas containing skips, conversion is calculated by volume of each skip x number of skips</b>										

### 4.3 **Waste storage residence times**

- 4.3.1 The site cannot commit to detailing storage times due to the high throughput and number of storage areas for each pile on site. Each pile stored on site is unique in that it is constantly moved throughout the day.
- 4.3.2 Due to the seasonal fluctuations and markets in scrap metal prices, sites will need to hold stock to ensure they earn a good value for the metal otherwise they will lose significant amounts of money.
- 4.3.3 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.

### 4.4 **Free standing piles**

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



**Table 4.2 - Upper Yard Free standing pile references and procedures to comply with the three FPP objectives**

<b>Pile Ref:</b>	<b>Storage/monitoring procedures to reduce the risk of fire</b>
<p><b>UY1 LPG storage</b></p>	<ul style="list-style-type: none"> <li>• This area contains LPG tanks which have been removed from ELVs during the depollution process.</li> <li>• During the depollution process, all recyclable elements from the LPG tank are removed and removed by forklift to the appropriate storage areas on site; this will mainly consist of small ferrous metal i.e. brackets etc.</li> <li>• The LPG tank is de-gassed in the adjacent building to remove any potential vapour prior to storage in the pile.</li> <li>• Once the tank has been de-gassed, it will be stored here temporarily then be processed through the pre-shredder and frag,</li> <li>• The LPG tanks are stored in the 3-sided firewall and are not prone to self-combustion.</li> <li>• Waste will be immediately inspected by operational staff to ensure it is compliant and the different grades of scrap will be taken to the relevant storage areas on site for further processing.</li> <li>• Any reactive or incompatible waste found in this area will be consigned to the quarantine area or loaded back onto the deposit vehicle.</li> <li>• The waste in this area is then sorted/segregated and is easily accessible for firefighting.</li> <li>• Waste can be visually monitored throughout the day by site operatives.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY2 Public tipping bay for scrap metal &amp; WEEE</b></p>	<ul style="list-style-type: none"> <li>• This area is for public tipping of scrap metal and WEEE following acceptance into the site.</li> <li>• The area is bounded by a three-sided firewall; operational staff will ensure a 1m freeboard is maintained.</li> <li>• Waste will be immediately inspected by operational staff to ensure it is compliant and the different grades of scrap and WEEE will be taken to the relevant storage areas on site for further processing.</li> <li>• Any reactive on incompatible waste found in this area following tipping will be consigned to the quarantine area or loaded back onto the deposit vehicle.</li> <li>• The waste in this area is then sorted/segregated and is easily accessible for firefighting.</li> <li>• Waste can be visually monitored throughout the day by site operatives.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY3A &amp; UY3B Non-waste parts stripped from vehicles which are stored prior to export</b></p>	<ul style="list-style-type: none"> <li>• These areas are where ELVs are dismantled and stripped for salvageable parts.</li> <li>• Any recovered parts from ELVs are stored in these areas to be removed from site as a non-waste i.e. saleable / salvaged item.</li> <li>• The material here is still considered combustible but as it is non-waste and only contains stripped vehicle parts, there is very little chance of contamination.</li> <li>• It is considered that visual inspections of these piles throughout the day it appropriate to ensure staff do not deposit any waste in these areas.</li> </ul>

<p><b>UY5 &amp; UY5 Depolluted ELV storage area and parts / components removal prior to shredding</b></p>	<ul style="list-style-type: none"> <li>• All vehicles will have been fully depolluted and hazardous components removed in this area as set out in the depollution procedure shown in Section 4.5 below.</li> <li>• These areas are bounded by a 6m high, 0.15m wide concrete panel firewall to the north and 6m separation distances between each pile; operational staff will ensure a 1m freeboard from the top of the wall and the 6m separation distance is maintained</li> <li>• The walls comprise 5 no. 1.2m high panels so staff can use the panel heights as guides.</li> <li>• Tipping will be at the rear of the pile and excavated from the front to ensure stock rotation and the first in first out principle applies.</li> <li>• The areas are accessible from three sides for fire-fighting.</li> <li>• The quarantine area is adjacent to this pile to ensure waste can be dragged into this area quickly.</li> <li>• Waste can be visually monitored throughout the day by site operatives.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY6 Baled ELVs, whole depolluted ELVs and ferrous metal (pre- shred pile)</b></p>	<ul style="list-style-type: none"> <li>• These areas are the main areas where waste is stockpiled on site and are primarily the 'in-feed' piles prior to shredding/fragmentising.</li> <li>• The waste is considered to contain 70% of whole depolluted ELVs and 30% baled therefore the stockpile size has been based on the first column for metals as per Section 9.1 of the guidance.</li> <li>• Baled wastes are accepted using the operators 'Best Available Techniques' (BAT) procedures to ensure they are compliant.</li> <li>• All vehicles will have been fully depolluted and hazardous components removed as set out in the depollution procedure shown in Section 4.5 below.</li> <li>• These areas are bounded by a 6m high, 0.15m wide concrete panel firewall to the north and 6m separation distances between each pile; operational staff will ensure a 1m freeboard from the top of the wall and the 6m separation distance is maintained.</li> <li>• The walls comprise 5 no. 1.2m high panels so staff can use the panel heights as guides.</li> <li>• All of the ferrous metal will have been pre-sorted to ensure it is the correct grade of scrap to reduce the risk of incompatible loads.</li> <li>• Tipping will be at the rear of the pile and excavated from the front to ensure stock rotation and the first in first out principle applies.</li> <li>• The areas are accessible from three sides for fire-fighting.</li> <li>• The quarantine area is adjacent to these piles to ensure waste can be dragged into this area quickly.</li> <li>• Waste can be visually monitored throughout the day by site operatives.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY7 Shredded ferrous metal &amp; ELVs (&lt;150mm) / Fragmentiser infeed</b></p>	<ul style="list-style-type: none"> <li>• This waste consists of the fragmentiser infeed and will have been subject to shredding meaning the waste is likely to be &lt;30mm in size.</li> <li>• The pile benefits from the 6m high, 0.15m wide concrete firewall to the north and the shredder benefits from 5m, 0.6m lego block firewall housing.</li> </ul>

	<ul style="list-style-type: none"> <li>Operational staff will ensure a 1m freeboard from the top of the wall and the 6m separation distance is maintained using the same methods in the previous column.</li> <li>The areas are accessible from two-three sides for fire-fighting.</li> <li>In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY8 - 10 Fragmentiser fluff</b></p>	<ul style="list-style-type: none"> <li>This pile contains the fragmentised waste (fluff) or automotive shredder residue (ASR).</li> <li>The fluff / ASR is &lt;30mm and can be easily scooped into the quarantine area by working plant in the event of smoke, flames occurring following detection by staff.</li> <li>These areas have dedicated 0.6m lego block concrete fire walls for the initial out feed and additional space which allows for an overflow. The same procedures apply in previous sections in terms of operational staff monitoring the pile height/pile size.</li> <li>The pile is accessible from four sides for fire-fighting.</li> <li>These areas are usually cleared daily to prevent a backlog on the frag plant.</li> <li>In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY11 WEEE reception, sorting and storage area</b></p>	<ul style="list-style-type: none"> <li>This area is for the storage and sorting of WEEE following acceptance into the site.</li> <li>Waste will be immediately inspected by operational staff once deposited in the bay to ensure it is compliant and the different grades WEEE will be taken to the relevant storage areas on site for further processing.</li> <li>The area is bounded by a three-sided firewall.</li> <li>Operational staff will ensure a 1m freeboard is maintained by eye.</li> <li>Tipping will be at the rear of the pile and excavated from the front to ensure good stock rotation and the first in first out principle applies.</li> <li>The bay is easily accessed for firefighting.</li> <li>Waste is visually monitored throughout the day by site operatives.</li> <li>In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY12 &amp; 13 Sorted WEEE &amp; WEEE Containing POPs</b></p>	<ul style="list-style-type: none"> <li>These areas contain sorted (clean) WEEE arising from UY11, plastic bales or plastic arising from the LCD disassembly line and dirty circuit boards.</li> <li>No treatment of waste takes place in this area as it only acts as a holding area prior to shredding.</li> <li>This area is bounded by a minimum 4m high, 0.6m wide lego block firewall to the north and east and south and a 6m separation distance to the west and north.</li> <li>Operational staff will ensure a 1m freeboard from the top of the wall and the 6m separation distance is maintained using previous procedures.</li> <li>Tipping will be at the rear of the pile and excavated from the front to ensure stock rotation and the first in first out principle applies.</li> <li>The areas are accessible from three sides for fire-fighting.</li> <li>The quarantine area is adjacent to these piles to ensure waste can be dragged into this area quickly.</li> <li>Waste can be visually monitored throughout the day by site operatives.</li> </ul>

	<ul style="list-style-type: none"> <li>• No form of monitoring other than visual required.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>UY14 Hazardous WEEE (fridges)</b></p>	<ul style="list-style-type: none"> <li>• This area contains non-hazardous WEEE i.e. household appliances which have been pre-sorted on or off site.</li> <li>• No treatment of the WEEE takes place in this area.</li> <li>• The fridges are stored prior to removal of hazardous gases in the adjacent degassing building.</li> <li>• The fridges are then stored freely on the ground prior to onward processing or removal off site.</li> <li>• The fridges are not stacked and are only stored on the ground in rows.</li> <li>• The quarantine area is adjacent to these piles to ensure waste can be dragged into this area quickly.</li> <li>• The fridges are visually monitored throughout the day by site operatives.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<p><b>UY15 -UY16 Undepolluted ELVs</b></p>	<ul style="list-style-type: none"> <li>• This area is where ELVs are stored prior to depollution.</li> <li>• The site can depollute up to 150 ELVs per day so they are not stored in this area for longer than 1 hour but some may be stored for 48 hours to cover weekends/bank holidays etc...</li> <li>• The ELVs are stored in rows ensuring there is access for fire-fighting to the ELVs stored on the outer rows and as the ELVs are only two high, there is access from the top using one of the operators 360<sup>0</sup> grab.</li> <li>• Any vehicles which are severely damaged i.e. leaking oil, burn outs will be depolluted immediately or consigned to the quarantine area.</li> <li>• Any visible oil leaks will be swept up using spill kits and deposited into an adjacent spill bin.</li> <li>• A member or members will continue to monitor this area for presence of oil.</li> <li>• Batteries will be removed from ELVs in this area to prevent short circuiting.</li> <li>• Area proposed to benefit from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>

**Table 4.3 - Lower Yard Free standing pile references and procedures to comply with the three FPP objectives**

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
<p><b>LY1</b> <b>Battery storage</b> <b>(lead acid from ELVs)</b></p>	<ul style="list-style-type: none"> <li>• Dedicated IBC containers which contain the batteries each have volume of 1000 litres.</li> <li>• The above containers are stored under cover an open fronted building.</li> <li>• There is access to the containers via the buildings open front and they would be removed from site when full using a forklift truck.</li> <li>• <b>Stock rotation</b> – For IBCs containing batteries, these will be removed as ‘loads’ for onward distribution to a permitted facility and will be stored in stacks comprising a single load. Once the stack is full, the batteries will be loaded onto a delivery vehicle and removed from site.</li> <li>• The batteries are stored within an open fronted building ensuring access for fire-fighting. The building has fire walls to the north, east and west to prevent over-spilling and the same rules apply to the previous table in terms free boarding requirements.</li> <li>• The pile is inspected constantly by operational staff throughout the day.</li> <li>• It is considered no further monitoring other than visual required</li> </ul>
<p><b>LY2</b> <b>Sorted metal bays</b> <b>including non-waste</b></p>	<ul style="list-style-type: none"> <li>• These piles are the clean scrap and product which have been sorted manually / mechanically on site and are stored until the bay is full which are then removed off site. On average the bays will be emptied 2-3 times per day.</li> <li>• There are fire walls to the north, east and west.</li> <li>• As this waste has been sorted, there is very little chance of contamination or any incompatible waste.</li> <li>• It is considered that visual inspections of these piles throughout the day is appropriate to ensure staff do not deposit any waste in these areas.</li> <li>• There is full access for fire-fighting in this area and freeboards will maintained through continuous monitoring by operational staff.</li> </ul>
<p><b>LY3 - LY4 &amp; LY6</b> <b>Mixed scrap metal</b></p>	<ul style="list-style-type: none"> <li>• This area is an open fronted building facing south with firewalls to the west, north and east.</li> <li>• The waste is known as ‘Zorba’ scrap which is essentially waste extracted from beneath the eddy current and is primarily aluminium which is non-ferrous and has a very low risk of self-combustion.</li> <li>• Same procedures in above section will apply.</li> </ul>
<p><b>LY5</b> <b>Plastic bales</b></p>	<ul style="list-style-type: none"> <li>• This area contains the plastic element of wastes which can be recycled i.e. components from WEEE or scrap appliances.</li> <li>• This area comprises an open fronted building facing south with firewalls to the west, north and east.</li> <li>• All of the plastic will have been manually dismantled and is then fed directly into the baler by hand.</li> <li>• Once an articulated load of baled plastic is available, the bales will be stored in-situ and collected by an articulated lorry daily if they are not taken for shredding. This helps keep the pile low.</li> <li>• The pile is inspected constantly by operational staff using the baler.</li> <li>• When the baler is not in operation, a 6m separation distance from the waste will be applied.</li> </ul>

<p><b>LY7 Fragmentiser fluff</b></p>	<ul style="list-style-type: none"> <li>• This area acts as an overflow pile for fragmentiser fluff which will usually be clear of material.</li> <li>• There is a firewall to the south and east and the same rules apply to the previous table in terms free boarding requirements.</li> <li>• Reference should be made to pile UY8 in terms of storage / monitoring requirements.</li> </ul>
<p><b>LY8 Finished 211 ferrous shred (non-waste)</b></p>	<ul style="list-style-type: none"> <li>• This area is the main discharge area from the radial stacker conveyor from the frag plant and is exported as a non-waste.</li> <li>• The material here is still considered combustible but as it is non-waste there is very little chance of contamination as it has undergone mechanical treatment.</li> <li>• It is considered that visual inspections of this pile throughout the day is appropriate to ensure staff do not deposit any waste in these areas.</li> </ul>
<p><b>LY9 – LY10 Sorted Non-ferrous metal (30mm - 150mm) - aluminium</b></p>	<ul style="list-style-type: none"> <li>• All piles will have been pre-sorted to ensure the correct waste is stored to reduce the risk of incompatible loads.</li> <li>• These areas are bounded by a three sided 0.6m wide concrete firewall; operational staff will ensure a 1m freeboard is maintained.</li> <li>• Tipping will be at the rear of the pile and excavated from the front to ensure stock rotation and the first in first out principle applies.</li> <li>• The waste here has a very low risk of self-combustion as it is not been compacted and therefore will not generate heat.</li> <li>• These bays can be easily accessed for firefighting.</li> <li>• Waste can be visually monitored throughout the day by site operatives.</li> <li>• No form of monitoring other than visual required.</li> </ul>

**Table 4.4 - Internal Free-standing pile references and procedures to comply with the three FPP objectives**

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
<p><b>INT 1A – 1C</b> <b>Fines arising from the frag sorting line process</b></p>	<ul style="list-style-type: none"> <li>• These areas are storage bays for different sizes of scrap metal fines arising from the fragmentiser sorting line.</li> <li>• In the event of overheating or combustion, the fines can be easily scooped by mobile and transported to the quarantine area.</li> <li>• The bays are constantly moved throughout the day so the waste/material is not stored for long durations.</li> <li>• The pile is accessible for fire-fighting via the adjacent roller shutter door.</li> <li>• These areas are usually cleared daily to prevent a backlog.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>INT 2 Sorted recyclable wastes from the mechanical treatment of WEEE &amp; scrap metal</b></p>	<ul style="list-style-type: none"> <li>• These piles are the mechanically sorted scrap and WEEE which have shredded and separated on site.</li> <li>• The bays are stored until full which and then removed off site. On average the bays will be emptied 2-3 times per day.</li> <li>• The bays storing the waste are three sides concrete panel fire walls.</li> <li>• As this waste has been mechanically sorted and separated using specialist plant, there is very little chance of contamination or any incompatible waste leading to combustion.</li> <li>• It is considered that visual inspections of these piles throughout the day it appropriate to ensure staff do not deposit any waste in these areas.</li> <li>• There is full access for fire-fighting in this area via the roller shutter doors and freeboards will maintained through continuous monitoring by operational staff.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<p><b>INT 4 &amp; 5</b> <b>Hazardous WEEE</b></p>	<ul style="list-style-type: none"> <li>• This area is designated for the storage IT equipment i.e. computers/monitors prior to dismantling/sorting/processing.</li> <li>• There is suitable access for fire-fighting via roller shutter doors to the east.</li> <li>• The storage is flat, on the ground and to a maximum height of 2m; there is a 6m separation distance around all sides of the storage pile.</li> <li>• The IT equipment arrives to the site in the operator’s own vehicles and are pre-sorted/segregated to ensure the waste type is compatible.</li> <li>• The IT equipment are not prone to self-combustion.</li> <li>• The IT equipment will be only stored for a temporary measure prior to the above sorting/processing activities.</li> <li>• The IT equipment will be stored 6m away from building walls.</li> <li>• As there are 24-hour operations inside the building, the area benefits from continuous monitoring by staff patrolling the building outside of normal operating hours.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<p><b>INT 8 &amp; 13</b> <b>Hazardous WEEE</b></p>	<ul style="list-style-type: none"> <li>• This area is designated for the storage of TVs containing flat panel displays (FPDs) prior to processing through to the FPD shredder.</li> <li>• There is suitable access for fire-fighting via roller shutter doors. The area has a 2m high, 0.6m wide lego block fire wall to the west measuring 20m in length and the rest of the pile is open allowing access for fire-fighting.</li> </ul>

	<ul style="list-style-type: none"> <li>• The FPDs arrive to the site in the operator's own vehicles and are pre-sorted/segregated to ensure the waste type is compatible.</li> <li>• The FPDs are not prone to self-combustion.</li> <li>• The FPDs will only be stored as a temporary measure prior to being shredded or if the shredder is not in use.</li> <li>• The FPDs are only stored to a height of 1m and there is access from above as well as four sides.</li> <li>• The FPDs are stored 6m away from building walls are monitored 24 hours a day by staff.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<b>INT 6 Catalytic convertors</b>	<ul style="list-style-type: none"> <li>• This is a dedicated portioned area for catalytic convertors (cats) which are non-combustible and only stored internally due to risk of theft.</li> <li>• The relevant item of scrap will have been removed during the depollution process meaning it will not spark or overheat which could start a fire.</li> <li>• The cats will be stored in containers or on the floor to allow for easy access i.e. removal.</li> <li>• The cats are stored to the height of the container i.e. 1.0m - 1.2m.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<b>INT 7 Tyres</b>	<ul style="list-style-type: none"> <li>• This area contains tyres which are wrapped ready for removal off site and stored as a temporary measure.</li> <li>• The tyres will have a 6m separation distance from all four sides.</li> <li>• The tyres are not prone to self-combustion and are continually monitored during operating hours by trained operatives.</li> <li>• The tyres have not undergone treatment so will not overheat.</li> <li>• The tyres will not be stored higher than 2.5m.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<b>INT 9, 10, 15 &amp; 16</b>	<ul style="list-style-type: none"> <li>• This is the non-recyclable ASR arising from the fragging and washing of the material.</li> <li>• The areas will have a mixture of 0.15m wide concrete panel walls and 0.6m wide lego block concrete fire walls top contain all the material in the bay.</li> <li>• The pile is accessible from the east for fire-fighting.</li> <li>• These areas are cleared daily to prevent a backlog on the frag plant.</li> <li>• The area benefits from continuous monitoring by operational staff 24/7 and the 24/7 flame/heat detection cameras.</li> </ul>
<b>INT 11</b>	<ul style="list-style-type: none"> <li>• This is the cake/sludge which predominantly inert in nature and will not combust so no measures are proposed to tackle any a fire based on the non-combustible nature of the pile.</li> </ul>
<b>INT 14</b>	<ul style="list-style-type: none"> <li>• This area is for further segregating scrap metal via a trommel and picking line process.</li> <li>• The same procedures will apply as per pile <b>INT 2</b>.</li> </ul>
<b>INT 17</b>	<ul style="list-style-type: none"> <li>• This is the same material as INT 3 however will be stored on the ground instead of a container so same procedures apply.</li> </ul>
<b>INT 18</b>	<ul style="list-style-type: none"> <li>• This pile contains the heavier metal fraction arising from the wash plant/frag sorting line process.</li> <li>• In the event of overheating or combustion, the fines can be easily scooped by mobile and transported to the quarantine area.</li> <li>• The bays are constantly moved throughout the day so the waste/material is not stored for long durations.</li> <li>• The pile is accessible for fire-fighting the adjacent roller shutter door.</li> <li>• These areas are usually cleared daily to prevent a backlog.</li> <li>• The area benefits from continuous monitoring by operational staff 24/7</li> </ul>



## 4.5 Discharge bays from frag sorting line and FPD line

4.5.1 Piles referenced as **INT 19 & 20** comprise various wastes which are ejected out of the machinery. It is not considered necessary to provide full storage information in relation to these piles as they are stored temporarily and moved every couple of hours with the wastes being transferred to dedicated storage areas on site to prevent a backlog of the downstream, sorting lines and FPD disassembly line.

4.5.2 The majority of piles are also considered be non-ferrous metals comprising zorba, aluminium etc. which would not combust. In terms of monitoring procedures, reference should be made to the other internal piles stored

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
<b>INT 19 - Tonne bags arising from the LCD disassembly line</b>	<ul style="list-style-type: none"> <li>• All outputs arising from the LCD disassembly line due to hazardous nature and risk of mercury are deposited directly into bags or containers.</li> <li>• This line is operated outside of 'normal' operating hours i.e. through the night and someone is always present as they have to monitor mercury emissions meaning the discharge bags/containers are manned on a 24/7 basis.</li> <li>• As the quantities of waste stored is relatively low i.e. &lt;between 500kg – 1 tonne for each separated material, it is considered that manual suppression from hoses and extinguishers is considered suitable.</li> <li>• Bags/containers can also be scooped using mobile plant and removed into the quarantine area if necessary.</li> <li>• In addition to continuous monitoring by operational staff, the area benefits from 24/7 heat and flame (infra-red) detection cameras linked to monitoring company and staff keyholders.</li> </ul>
<b>INT 20 – Variety of scrap and ASR from the downstream frag sorting line</b>	<ul style="list-style-type: none"> <li>• These areas comprise of wastes which are ejected out of the machinery listed on Drawing No. RLRP/1040/03.</li> <li>• It is not considered necessary to provide full storage information in relation to these piles as they are stored temporarily and moved every couple of hours with the wastes being transferred to dedicated storage areas on site to prevent a backlog of the downstream line.</li> <li>• The wastes in these piles will also vary too frequently throughout the day and the storage bays/output areas cannot be excessive otherwise the whole fragmentiser process would have to be shut off.</li> <li>• The majority of piles are also considered be non-ferrous metals comprising zorba, aluminium etc. which would not self-combust or ignite via the surrounding machinery.</li> <li>• On average the discharge areas are moved up to 6 times per day meaning they are not stored for longer than 3-4 hours.</li> <li>• All of the areas benefit from continuous monitoring by operational staff 24/7 with suitable manual suppression form hoses and extinguishers.</li> <li>• There is also multiple mobile plant to excavate any material.</li> </ul>

## 4.6 Waste stored in containers

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

**Table 4.5 - Container references and procedures to comply with the three FPP objectives**

Pile Ref:	Storage/monitoring procedures to reduce the risk of fire
<b>UY17-20</b> <b>Temporary battery &amp; catalytic convertor storage (IBCs)</b>	<ul style="list-style-type: none"> <li>• Dedicated IBC containers which contain the batteries each have volume of 1000 litres.</li> <li>• The above containers are stored under cover within the depollution building.</li> <li>• There is access to the containers via the depollution building open front and they would be removed from site when full using a forklift truck.</li> <li>• <b>Stock rotation</b> – For IBCs containing batteries, these will be removed as ‘loads’ for onward distribution to a permitted facility and will be stored until full, then loaded onto a delivery vehicle and removed from site or into LY1 or INT 6 for holding prior to removal.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<b>UY20</b> <b>Drained fluids from ELVs</b>	<ul style="list-style-type: none"> <li>• These areas consist of double skinned/bunded, non-combustible storage tanks and store the fluids drained from the depolluted ELVs.</li> <li>• There are 5 no. tanks in total which store the different types of liquids i.e. waste oil, petrol, diesel and antifreeze/coolant.</li> <li>• The tanks are fitted with alarms which alert the operator when near capacity and then pumped/emptied by a suitable drainage contractor.</li> <li>• There is a fire wall to the north of these tanks to partition them from the operational areas to ensure their integrity is not compromised.</li> </ul>
<b>INT 12</b> <b>Non-ferrous metal storage and despatch area</b>	<ul style="list-style-type: none"> <li>• These areas are designated as the ‘non-ferrous’ areas and contain the high value metal which are largely non-combustible and stored internally due to risk of theft.</li> <li>• The relevant item of scrap will have been pre-segregated on arrival meaning it will not spark or overheat which could start a fire.</li> <li>• All scrap is deposited in the despatch area and loaded into the appropriate container then stored prior to onward recycling.</li> <li>• No form of monitoring other than visual required.</li> </ul>
<b>INT 3 – Fines from the eddy current</b>	<ul style="list-style-type: none"> <li>• The waste has been separated as following the shredding process will contain metal and no other incompatible wastes</li> <li>• <b>Stock rotation</b> – The container is removed from site on average 3-4 per day when it reaches capacity. This ensures the waste will not be stored longer than proposed.</li> <li>• As the container is only 2m high, it is easily accessible from the top for suppression so any fire inside it can be put out.</li> <li>• There will always be someone working in this area throughout the day so it will never be left unmanned.</li> </ul>

## 4.7 **Where pile sizes don't apply / ELVs**

4.7.1 Undepolluted ELVs are brought to the site via a recovery vehicle then manoeuvred (driven or by plant) into the area on Drawing No. RLRP/1040/03 to await depollution. The lead acid batteries are removed from the vehicle immediately and the ELV will be depolluted within 48 hours on arrival to the site as per the following procedures:

- Disconnect or remove the main lead acid battery immediately after receipt and prior to storage awaiting full depollution. Batteries are removed from the ELV and stored in adjacent containers (**UY23**).
- Set heater control to maximum and then remove fuel, oil filter, coolant, washer, brake fluid and power steering caps. The liquids will be removed/drained and stored in the tanks shown on Drawing No. RLRP/1040/03.
- Wheels are then removed and stored in one of the relevant areas on site or sold if suitable.
- Other items such as catalytic convertors will be removed from the ELV and deposited into the containers in **INT 6**.
- The ELV will then be assessed for pyrotechnic devices and deployed using a suitable procedure or removed from site for subsequent neutralisation.
- It would take approximately 15-30 minutes to drain the vehicle and then the ELV will be deposited in Piles UY5 - UY8.

4.7.2 **Ignition sources from ELVs** – The operator will use the International Dismantling Information System IDIS to obtain information on any specific depollution procedures which may be required where staff are unsure of the vehicle to obtain information on procedures for removal or in situ deployment of air bags or other pyrotechnics. All employees will be suitably trained in the use of IDIS through toolbox talks which are discussed in the later sections of this FPP.

4.7.3 **Alternative measures** - The storage of undepolluted ELVs on site exceeds the two rows but Recycling Lives Ltd propose the following alternative measures to ensure the three FPP objectives are met:

- To extinguish a fire in the centre of the pile, there are 5-10 mobile plant users during up until 20:00pm; 3-4 up until 12:00am and 2 after 12:00am - 07:00am) who can assist with this as per the below.
- One plant user can remove one ELV from the centre of the pile to the adjacent quarantine area in 10 seconds equating to 6 ELVs per minute, 60 ELVs in 10 minute which is the whole pile. This means the fire will not spread.
- The ELVs are not normally stored for >48 hours which is much less than the stated <3 months in the guidance.
- The main lead acid battery will have been disconnected from the ELV on arrival to reduce the impact of spontaneous combustion.
- The ELVs will not be stacked higher than two which ensures stability is maintained and also access via mobile plant. This is below the permitted three in the FPP guidance.
- The quarantine area is immediately adjacent to where the ELVs are stored.
- There will be a 10m separation distance between **Piles 15 & 16** which are also a >10m from any storage of surrounding combustible or flammable material which is an additional 4m in excess of the required 6.
- There is access for quick suppression via 2 no. 30,000 litre first strike water tanks which have been designed and agreed with the FRS recommendation that their hose can connect.

## 4.8 **Fire walls and bays**

4.8.1 The concrete firewalls shown on Drawing No. RLRP/1040/03 and described above consist of a mixture of:

- i) 0.6m sealed interlocking lego blocks; each block measures 1.6m x 0.6m x 0.6m and manufactured by a reputable company; and,
- ii) 0.14m reinforced concrete panel walls.

- 4.8.2 The walls on site are used to separate waste material where either:
- i) Waste is stored without separation
  - ii) Waste is stored within 6m of the site perimeter
  - iii) Waste is stored within 6m of internal/external building walls (with the exception of non-ferrous metal which is considered non-combustible)
- 4.8.3 **Freeboard** - Where waste material is stored against walls a minimum 1m freeboard will be maintained so in the event of a fire, flames/waste material will not spread into adjacent bays and accelerate the spread.
- 4.8.4 The concrete walls are designed and constructed to the BS8110 Pt2 'Structural use of concrete Part 2 Code of practice for special circumstances' and BSEN1992-1-2 'Design of concrete structures. General rules. Structural fire design' and in accordance with BSEN1992, the fire resistance of concrete structures over 100mm will have a fire resistance of 1200°C for 4 hours.
- 4.8.5 As the walls have been manufactured by suitable companies and to a British Standard the walls will:
- resist fire (both radiative heat and flaming)
  - 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
- 4.8.6 All waste stored within walls is accessible from at least one side to ensure the waste can be removed using the large number of plant available at the site,
- 4.8.7 The firewalls will be checked as part of the below daily inspection programme and any other walls installed at the site will be supplied by a BS supplier.

## 4.9 **Waste stored in excess of 4m (alternative measures)**

- 4.9.1 During operational hours, the waste storage height may exceed the height of the 4m due to continuous high throughput of the site and the nature of operations. The piles will still be

monitored to ensure they do not exceed the height of the storage bay. It must be outlined that during non-operational hours, piles will be reduced to those shown on Table 4.1 (Waste Storage Table).

4.9.2 The site also operates 10 re-handlers during operating hours, and will be able to mobilise all of them immediately in the event of an incident to assist with firefighting during operational hours which will reduce the spread. During out-of-hours, there will be plant scattered in all areas of the site for quick aid of fire-fighting as shown on Drawing No. RLRP/1040/03.

4.9.3 The operator has demonstrated to the EA and FRS that a 5m pile can be easily dismantled by the re-handlers in good time on alternative sites which has been agreed.

#### 4.10 **External heating from hot weather**

4.10.1 There are no measures proposed to shade stored waste from direct sunlight as piles are constantly turned throughout the day ensuring hot spots do not generate on stockpiles.

## **5 Site inspection programme**

### **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 but will use internal check sheets in line with their ISO 14001 Management System procedures. 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. RLRP/1040/03.

### **5.2 Staff training**

5.2.1 Operational staff are subject to site inductions which includes basic fire emergency procedures. The site has trained fire marshals and fire trained engine operatives who are able 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. RLRP/1040/03 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 The quarantine area has a 20m diameter and if waste was stored to a height of 4.0m as a free-standing stockpile could hold a volume of approximately 400m<sup>3</sup> of material. This is calculated by using the area x height x conversion factor of 0.333 for a free-standing stockpile. Therefore, the quarantine area has the capacity to contain >50% of the maximum pile size for combustible waste on site which is 750m<sup>3</sup>.
- 6.1.3 Waste would be moved to the quarantine area using large number of mobile plant available at the site i.e. cranes, loading shovels, excavators etc... The out-of-hours storage locations are indicatively shown on Drawing No. RLRP/1040/03.
- 6.1.4 In the event of a fire the areas will be used either to 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 bays/pile/containers near any material affected by a fire to prevent fire spreading to adjacent piles. Waste will be moved to the Quarantine Area immediately and within one hour of a fire starting at the latest (if safe to do so).



## **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:

- a) 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 Fire wardens and operational patrols**

7.2.1 Several members of staff on site are trained fire wardens and have received fire awareness training so are deemed competent to detect early signs of fire and to minimise the chance of a fire breaking out in order to meet the three objectives. This will be delegated to other members of operational staff if necessary.

7.2.2 In the external upper yard, there are nine members of staff on site who are trained fire marshals and the marshals are designated to specific areas as shown below:

- 4 no. staff in fragmentiser area (north west)
- 2 no. staff covering the depollution and LPG storage/processing areas

- 3 no. banksman staff covering all other areas storing waste

7.2.3 The staff shown in Section 7.2.2 will be responsible for signing off the site as compliant each working day. In the external yard, most operations cease at 17:30 and 20:00 so a check will take place after 17:30 and 20:00 and would take approximately 1 hour. For operations which are 24/7, these inspections would be following the end of the shift team. During this hour, the above staff will walk around the site with the site plan and daily inspection sheet (Appendix II) which will be completed and handed to the depollution office and main site office who can input the data electronically. Site management will conduct a final walkover to ensure the site is fully compliant.

7.2.4 The staff detailed in Section 7.2.2 will have a duty to ensure the site is compliant prior to operations commencing the following day or next shift. Any areas of the site which are deemed are potential fire risk will be rectified upon detection using out-of-hours staff and mobile plant.

7.2.5 In the lower external yard, the above procedures will apply but there are only 3 members of staff due to the limited amount of waste storage.

7.2.6 In addition to the above, there are an additional 3 no. fire marshals who can co-ordinate additional checks.

### 7.3 **Out-of-hours patrols**

7.3.1 In addition to site patrols during operational hours, the areas of the site which are not operational will be patrolled at least every 3 hours from the last inspection by the out-of-hours security guard of Recycling Lives Ltd who will be trained in the response procedures shown in this FPP (see Sections 7.1 and 8.1).

### 7.4 **Out of hours fire detection (automated)**

7.4.1 Since the previous fires, the operator has installed 20 no. static IP Flame and Thermal Temperature Measurement cameras throughout the site which provide full coverage to areas storing waste which are considered most likely at risk of fire in terms of spontaneous

combustion and self-heating. The locations of the cameras and their splays are indicatively shown on Drawing No. RLRP/1040/03 . The system is connected to the newly installed video wall in the site offices via the HIK Central Software, so that the cameras can be monitored during the day by staff and the third-party monitoring station (see below).

- 7.4.2 The system has been installed by ADJ Fire & Security Ltd and will be monitored 24/7 by PSM Ltd who are an NSI Gold Approved Monitoring Station meaning both installation and maintenance of the automated detection is covered by an appropriate UKAS-accredited third-party certification scheme. Each individual camera is set to a trigger alarm with 70<sup>o</sup>C being for waste storage and in the event of a 70<sup>o</sup>C temperature reading, the system will send a call to the monitoring station who will view the footage to see whether it is a false alarm or if action needs to be taken. If action does need to be taken, the monitoring station will directly log a call with the emergency services and Recycling Lives Ltd out-of-hours contact who lives 5 minutes from the site to ensure swift action is taken to prevent the fire starting and spreading.
- 7.4.3 Details of the static IP Flame and Thermal Temperature Measurement cameras and can be viewed in Appendix VI of this FPP.
- 7.4.4 Details of the site's security infrastructure and 24-hour CCTV and intruder alarm system are outlined in Section 2.7 which are considered ample to prevent arson which could lead to a fire incident.

## **8 Fire response procedures**

### **8.1 Response procedure**

8.1.1 Further to the above measures, the following procedure would apply:

- 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 the Site Layout & Drainage Plan.
- 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. RLRP/1040/03. The nearest fire station is 4 miles away on Whittingham Road is anticipated the response time following a call to the FRS is for them to be on site within <10 minutes.
- 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 and in the emergency services box.
- 8.3.2 As it isn't feasible for a contact number to be provided for every individual residential receptors 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 haven't been shown on the table overleaf.

**Table 8.1 – Receptor Contact Information**

<b>CONTACT</b>	<b>DESCRIPTION</b>	<b>CONTACT NUMBER</b>
Allstar Breakers	Adjacent receptor	01772 700607
Rowan Scrap Metal	Adjacent receptor	01772 797999
Horsfield Building Services Engineers Ltd	Adjacent receptor	01772 654402
Red Rose Blinds, Shutters & Curtains	Adjacent receptor	01772 655666
National Federation of Builders	Adjacent receptor	0345 057 8163
Pakawaste Ltd	Adjacent receptor	01772 796688
Booths Central Office and Distribution centre	Adjacent receptor	01772 693800
Spar Distribution / James Hall & Co	Adjacent receptor	01772 706666
T W Fabrications	Adjacent receptor	01772 704800
Kiernan Construction Limited	Adjacent receptor	01772 797687
Watson Manufacturing, S W Watson & Son Ltd	Adjacent receptor	01772 704307
Punjab Meat Traders Ltd	Adjacent receptor	01772 793399
Bako North Western Ltd	Adjacent receptor	01772 664300
Reps Gym	Adjacent receptor	01772 791505
Giddy Kids Ltd	Adjacent receptor	01772 795201
Board24 Limited	Adjacent receptor	01772 781900
Premier Inn Preston East hotel	Adjacent receptor	0333 321 8336
Perrys Preston Motor Village	Adjacent receptor	01772 845432
Bluebell Liveries, Bluebell Way	Adjacent receptor	07988 807233

8.3.3 The above receptors will be contacted by a co-ordinated approach where staff from Recycling Lives Ltd will contact them by phone and/or email.

8.3.4 Following discussions with Lancashire County Council, they have advised that once Emergency Services arrive on site i.e. FRS, Police, the lead authority (usually the Police) will co-ordinate 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.

- 8.3.5 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 plastics 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 Internal suppression/alternative measures

9.1.1 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 eight zones with each zone detailing the available measures for preventing, detecting and suppressing a fire.

RED ZONE – NON-FERROUS METAL STORAGE & WASTE TO ENERGY PLANT				
HOW COULD A FIRE OCCUR AND RISK	PREVENTION	DETECTION	SUPPRESSION	SUMMARY OF RISK ASSESSMENT POST PREV, DET & SUPP TO MEET 3 OBJECTIVES
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Low J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q - Low</p>	<ul style="list-style-type: none"> <li>All the waste stored here (non-ferrous metal) will have been pre-sorted at Recycling Lives Ltd other waste management sites or from Area UY2 so the risk of ignition through incompatible waste being present is minimal.</li> <li>The non-ferrous metal has not been subject to any form of mechanical treatment which would result in the metal overheating.</li> <li>The Waste-to-Energy (W2E) plant has its own enclosed firewall partition and automated shut off system in the event of the plant malfunction which.</li> <li>30 minutes prior to cessation of activities in this the zone, it will be monitored by the fire marshal responsible for this area who will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>No ignition stored within 6m of combustible or flammable material when the zone is not in operation.</li> <li>Once the check has been complete, the marshal 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 the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Procedures shown in Table 4.5.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment takes place after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>During operational hours there will always be a trained member of staff working throughout zone to recognise any fire risk.</li> <li>Out-of-hours there is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> <li>W2E plant has own integrated automated detection and shut off system</li> <li>W2E plant area is monitored by thermal/flame detection camera</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed powder, foam and CO<sub>2</sub> extinguishers.</li> <li>2 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) to the east with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>Access from the south of the building through the roller shutter door for external suppression from the FRS (if required).</li> <li>W2E plant has own automated suppression which will deploy in the event of it overheating; there is also access from the same roller shutter door for external fire-fighting.</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <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>Three procedures met.</li> </ul>



<b>GREEN ZONE – HAZ WEEE (FPDs), TYRE STORAGE &amp; CAT STORAGE</b>				
<b>HOW COULD A FIRE OCCUR AND RISK (SEE TABLE 2.1)</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>SUMMARY OF RISK ASSESSMENT POST PREV, DET &amp; SUPP TO MEET 3 OBJECTIVES</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Low J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q - Low</p>	<ul style="list-style-type: none"> <li>All the waste stored here will have been pre-sorted at Recycling Lives Ltd other waste management sites, from Areas UY2/UY11 or tyres recovered from the depollution of ELVs so the risk of ignition through incompatible waste being present is minimal.</li> <li>There is no waste stored here which will self-combust and would require a source of ignition.</li> <li>No waste stored here has been subject to any form of mechanical treatment which would result in the metal overheating.</li> <li>30 minutes prior to cessation of activities in this the zone, it will be monitored by the fire marshal responsible for this area who will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal 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 to the south of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Procedures shown in Table 4.4.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment takes place in zone after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>During operational hours there will always be a trained member of staff working throughout zone to recognise any fire risk.</li> <li>Out-of-hours there is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed powder, foam and CO<sub>2</sub> extinguishers.</li> <li>2 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) central in this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>Access from the east of the building through the roller shutter door for external suppression from the FRS (if required).</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <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>Three procedures met.</li> </ul>

<b>BLUE ZONE – IT / HAZ WEEE (FPDs &amp; COMPUTER MONITORS) STRIPPING AND STORAGE</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>SUMMARY OF RISK ASSESSMENT POST PREV, DET &amp; SUPP TO MEET 3 OBJECTIVES</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Low J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q - Low</p>	<ul style="list-style-type: none"> <li>All the waste stored here will have been pre-sorted at Recycling Lives Ltd other waste management sites i.e. prisons or from Areas UY2/UY11 so the risk of ignition through incompatible waste being present is minimal.</li> <li>There is no waste stored here which will self-combust and would require a source of ignition.</li> <li>No waste stored here has been subject to any form of mechanical treatment which would result in the metal overheating.</li> <li>The zone is operational 24/7 so 30 minutes prior to cessation of activities i.e. between each shift, the zone will be monitored by three no. fire marshals.</li> <li>The marshals will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal will radio communicate with the site management to discuss any issues or whether sign off can take place and store the inspection sheet on the wall to the east of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Procedures shown in Table 4.4.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment takes place after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>The zone is operated 24/7, 365 days per year so there will always be a trained member of staff present continually monitoring the waste.</li> <li>There is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed water, foam and CO<sub>2</sub> extinguishers.</li> <li>3 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) to the west in this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>Direct access from the east of the building from 2 no. roller shutter doors for external suppression from the FRS (if required).</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <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>Three procedures met.</li> </ul>
<b>LIME GREEN ZONE – WASH PLANT AND DIRECTLY ASSOCIATED ACTIVITIES</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>SUMMARY OF RISK ASSESSMENT POST PREV, DET &amp; SUPP TO MEET 3 OBJECTIVES</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Med J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q - Low</p>	<ul style="list-style-type: none"> <li>With the exception of INT 1, all the material stored in this area will be wet as it has been sorted and separated through the wash plant process. As it is wet, it will have a very low form of combustibility and given the duration of the storage for Areas INT 9-10, this is a suitable fire prevention method.</li> <li>INT 1 – see procedures in Table 4.4 i.e. free-board, storage times etc.</li> <li>The zone is operational 24/7 so 30 minutes prior to cessation of activities i.e. between each shift, the zone will be monitored by three no. fire marshals.</li> <li>The marshals will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal will radio communicate with the site management to discuss any issues or whether sign off can take place and store the inspection sheet on the wall to the east of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment takes place after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>The zone is operated 24/7, 365 days per year so there will always be a trained member of staff present continually monitoring the waste.</li> <li>There is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>INT 1 benefits from detection via automated flame /thermal cameras</li> <li>Security night watchman who will check area at least every 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed water, powder, foam and CO<sub>2</sub> extinguishers.</li> <li>3 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) central in this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>Direct access from the east of the building from 3 no. roller shutter doors and 1 no. roller shutter door to the north for external suppression from the FRS (if required).</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <li>Low risk due to nature of primary activity taking place i.e. wash plant.</li> <li>Waste will not self-combust and easily accessible for fire-fighting.</li> <li>Three procedures met.</li> </ul>

<b>BROWN ZONE – BHS SHREDDER &amp; SORTING LINE FOR WEEE/SCRAP CONTAINING POPS</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>RISK POST PREV, DET &amp; SUPP</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Med J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q – Med</p>	<ul style="list-style-type: none"> <li>Storage of shredded material arising from the shredding of WEEE equipment.</li> <li>All the waste stored here will have been pre-sorted at Recycling Lives Ltd other waste management sites or from Area UY12 and UY13 which have been further sorted on site so the risk of ignition through incompatible waste being present is minimal.</li> <li>UY12, UY13 and INT 2-3 – see procedures in Tables 4.4 – 4.6 i.e. free-board, storage times etc.</li> <li>30 minutes prior to cessation of activities in this the zone, it will be monitored by the fire marshal responsible for this area who will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>The marshals will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal will radio communicate with the site management to discuss any issues or whether sign off can take place and store the inspection on the wall to the north of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment takes place after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>During operational hours there will always be a trained member of staff working throughout the zone to recognise any fire risk.</li> <li>Out-of-hours there is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>INT 2-3 benefit from detection via automated flame /thermal cameras</li> <li>Security night watchman who will check area at least every 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed water, powder, foam and CO<sub>2</sub> extinguishers.</li> <li>2 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) in the external yard to the east of this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>Direct access from the east of the building via a roller shutter door and 1 no. roller shutter door to the north for external suppression from the FRS (if required).</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <li>Low risk due amount of waste stored.</li> <li>Waste easily accessible for fire-fighting.</li> <li>Three procedures met.</li> </ul>
<b>ORANGE ZONE – HALF OF DOWNSTREAM SORTING LINE; BANO SHREDDER (SOUTH); WEEE DISASSEMBLY LINE (SOUTH-EAST)</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>RISK POST PREV, DET &amp; SUPP</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Med J = Low K = Negligible L = High M = Low N = Med O = Low P = Low Q – Med</p>	<ul style="list-style-type: none"> <li>All the material with the exception of INT15-16 stored in these areas are outputs from the downstream sorting plant which is operational 24/7.</li> <li>INT 15-16 are overflow ASR storage areas will usually be clear – procedures clearly shown in Table 4.4 for storage/monitoring procedures.</li> <li>Clear procedures shown in Section 4.5 how the waste in INT 19 -20 is monitored and stored.</li> <li>The zone is operational 24/7 and 1 hour prior to cessation of activities i.e. between each shift, the zone will be monitored by two no. fire marshals.</li> <li>The marshals will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal 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 to the south of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>This is the only piece of mechanical treatment plant which is operational after 00:00.</li> </ul>	<ul style="list-style-type: none"> <li>The zone is operated 24/7, 365 days per year so there will always be a trained member of staff present continually monitoring the waste.</li> <li>There is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> <li>INT 15-16 and associated areas benefit from detection via automated flame /thermal cameras</li> <li>The Bano Shedder and FPD disassembly line benefit from detection via automated flame / thermal cameras</li> </ul>	<ul style="list-style-type: none"> <li>The bano shredder has a filter system with fire suppression system consisting of a 5000 litre first strike water tank with foaming system and electric high-pressure pumps which can be remotely activated upon detection via CCTV.</li> <li>Strategically placed water, powder, foam and CO<sub>2</sub> extinguishers.</li> <li>3 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) central to this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <li>Quick detection in this area due to 24/7 operational and flame/thermal cameras.</li> <li>Adequate initial suppression following the above.</li> <li>Limited amounts of waste stored in each area and continually moved due to 24/7 operations.</li> <li>Three procedures met.</li> </ul>

<b>PURPLE ZONE – HALF OF DOWNSTREAM SORTING LINE</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>RISK POST PREV, DET &amp; SUPP</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Negligible H = High I = Med J = Low K = Negligible L = High M = Low N = Med O = Low P = Low Q – Med</p>	<ul style="list-style-type: none"> <li>All the material stored in these areas are outputs from the downstream sorting plant which is operational 24/7.</li> <li>Clear procedures shown in Section 4.5 how the waste in INT 19 -20 is monitored and stored.</li> <li>The zone is operational 24/7 and 1 hour prior to cessation of activities i.e. between each shift, the zone will be monitored by two no. fire marshals.</li> <li>The marshals will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal 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 to the south of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>Downstream line not operational outside of normal operating hours</li> </ul>	<ul style="list-style-type: none"> <li>The zone is operated 24/7, 365 days per year so there will always be a trained member of staff present continually monitoring the waste</li> <li>There is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> <li>The north half of line benefits from detection via automated flame /thermal cameras</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed water, powder, foam and CO<sub>2</sub> extinguishers.</li> <li>3 no. 30m water hose reels providing full coverage to where any combustible or flammable material is stored.</li> <li>Out-of-hours plant storage (shovels and forklifts) central to this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <li>Quick detection in this area due to 24/7 operational and flame/thermal cameras.</li> <li>Adequate initial suppression following the above.</li> <li>Limited amounts of waste stored in each area and continually moved due to 24/7 operations.</li> <li>Three procedures met.</li> </ul>
<b>LIGHT BLUE ZONE – FPD STORAGE, COMPRESSOR ROOM &amp; SCRAP SORTING/PICKLING LINE</b>				
<b>HOW COULD A FIRE OCCUR</b>	<b>PREVENTION</b>	<b>DETECTION</b>	<b>SUPPRESSION</b>	<b>RISK POST PREV, DET &amp; SUPP</b>
<p>A = Low B = High C = High D = Negligible E = Med F = Negligible G = Med H = High I = Med J = Low K = Negligible L = Med M = Low N = Med O = Low P = Low Q – Med</p>	<ul style="list-style-type: none"> <li>All the waste stored here will have been pre-sorted at Recycling Lives Ltd other waste management sites i.e. prisons or from Areas UY2/UY11 so the risk of ignition through incompatible waste being present is minimal.</li> <li>Clear procedures shown in Section 4.5 how the waste in INT 13 is monitored and stored.</li> <li>Area divided into three subsequent zones i.e. FPD storage, compressor room and scrap sorting picking line to ensure staff can monitor each area as shown below.</li> <li>30 minutes prior to cessation of activities in this the zone (INT 13 &amp; 14), it will be monitored by the fire marshal responsible for this area who will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates). The compressor room has its own detection and shut off system however staff will routinely monitor throughout the day and fire marshal/night watchman out-of-hours.</li> <li>The marshal will carry out a full inspection using the daily check inspection form in Appendix I as a reference (the operator may use their own forms / templates).</li> <li>Once the check has been complete, the marshal 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 to the south of the unit.</li> <li>Sign off will only be complete if once the marshal has agreed the fire risk is low, if not, the marshal will rectify the issues or communicate with other staff to help assist.</li> <li>Fixed and mobile plant maintenance checks – see Section 2.5.</li> <li>No mechanical treatment or operations take place in zone after the hours of 20:00.</li> </ul>	<ul style="list-style-type: none"> <li>During operational hours there will always be a trained member of staff working throughout the zone to recognise any fire risk.</li> <li>Out-of-hours there is 24/7, 365 days per year CCTV being monitored by accredited third party.</li> <li>The compressor room benefits from detection via automated flame /thermal cameras.</li> <li>Security night watchman who will check area at least every 30 minutes.</li> </ul>	<ul style="list-style-type: none"> <li>Strategically placed water, powder, foam and CO<sub>2</sub> extinguishers.</li> <li>All three areas are easily accessible via roller shutter doors for external suppression i.e. by the FRS</li> <li>Out-of-hours plant storage (shovels and forklifts) available in this zone with 12 staff working until midnight and 4 throughout the night to isolate waste at risk of combusting in the event of a fire.</li> <li>All staff working in the building can operate the hoses and extinguishers.</li> </ul>	<ul style="list-style-type: none"> <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>All three areas suitably portioned.</li> <li>Three procedures met.</li> </ul>

## 9.2 **Site-wide suppression**

- 9.2.1 The site has the following on site suppression measures which are indicatively shown on Drawing No. RLRP/1040/03:
- i) 2 no. 30,000 litre water tanks (60,000 litres in total)
  - ii) 4 no. hydrants with a nominal main of >150mm
  - iii) 12 30m hose reel strategically placed providing full coverage to all internal areas storing combustible and flammable materials.
  - iv) a mixture of a 120 water, foam, powder and CO<sub>2</sub> fire extinguishers located in close proximity to waste piles.
  - v) 2 no. fire engines each with 1,800 litres of water.
- 9.2.2 During normal operational hours i.e. 07:00 – 20:00, there are at least 15 members of staff (5 internal and 10 external) 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.
- 9.2.3 Mobile plant listed in section 1.7 i.e. excavators, loading shovels 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. The site may 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. RLRP/1040/03.
- 9.2.4 Whilst the above sections may not fully extinguish a fire, they will provide a suitable interim period of suppression and prevention of a large-scale fire until the arrival of the emergency services.

### 9.3 **Out-of-hours staffing numbers to provide suppression/fire-fighting**

- 9.3.1 There are approximately 10-12 operational staff working outside normal operational hours i.e. 20:00pm – 00:00am; 4 of which are trained in using mobile plant to assist with fire-fighting.
- 9.3.2 After the hours of 00:00am until normal operations commence at around 07:00am, there are the following staffing numbers available:
- i) **External yard (5 staff):** 3 members of staff with 2 available for use of all mobile plant; 2 other members of staff for maintenance/site checks
  - ii) **Building/warehouse (3 staff):** 1 trained in using mobile plant and 2 other operatives
  - iii) **Lower yard** – same as external.
- 9.3.3 In addition to the above, there are also 3 other maintenance staff and a security guard who are not trained in using mobile plant but have the ability to communicate with staff via radio. Internal members of staff can radio for external members (and vice-versa) to assist with fire-fighting meaning there will always be at least 3 staff trained in using mobile plant from the hours of 00:00 – 07:00.

## **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 Although the largest piles on site measure 600m<sup>3</sup> (Piles UY6 & UY7), this FPP has based the largest pile measuring 750m<sup>3</sup> which would require 900,000 litres (900m<sup>3</sup>) of water for a minimum of 3 hours which equates to 300,000 litres per hour; 5,000 litres per minute, 83 litres per second.

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

10.2.1 The site has 2 no. 30,000 litre water tanks which can act a direct first strike attack to the fire which the FRS can connect their high-volume pressure pump to which has a flow of approximately 5,000 – 6,000 l/m. During this, the FRS can then co-ordinate an additional means of water using fire hydrants. The tanks would always remain accessible as there is a 10m gap between piles UY15 - U14, 22m gap between UY15 -UY11, a 12m gap between UY14 - UY11 and an 18m gap between UY12 -UY14. There are also 16m and 20m gaps between the tanks and the nearest waste piles i.e. UY12 and UY 14.

10.2.2 The site has access to a number of 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.

10.2.3 The Parnaby wash plant has approximately 50,000 litres of water in the main water tank and the existing hose reels can be fitted to this tank which provide a 30m radius; as shown on Drawing No. RLRP/1040/03. and the piles are accessible via various roller shutters in the building. There are no proposals to install additional tanks at the site.

10.2.4 There is also access to a number of fire extinguishers which are strategically placed around the site.

10.2.5 There are two fire engines with 1,800 litres of water in each for additional suppression to the hoses and extinguishers.

10.2.6 There are also 4 no. fire hydrants located in each corner of the building and although it has been demonstrated that the flow isn't great, the hydrants would provide a water supply to fight a fire.

### 10.3 **Off-site water supply / fire hydrants**

10.3.1 There are also a number of fire hydrants in addition to those on site which can also be utilised by the FRS. The Water Company [United Utilities (UU)] have advised via telephone conversations that the pressure can be increased to reach the required flow following a call from the FRS. The water company mentioned that during the previous fires, no request was made to increase the flow of water by the FRS. The water company also advised they refuse to undertake flow tests due to discoloration to adjacent water networks and whilst an average flow gives a reading, events on the day could lead to a significant drop in flow i.e. another fire in close proximity.

10.3.2 The external hydrant locations are shown on Drawing No. RLRP/1040/03 and the only information available is the following:

- Ref. HO = Private hydrant not controlled by FRS – assumed 100mm main
- Ref. H1 = FRS hydrant at the Junction of Longridge Rd/Roman Way – 300mm main
- Ref. H2 = FRS hydrant near Builders Federation on Rough Hey Road – 100mm main
- Ref. H3 = FRS hydrant near Horsfields on Rough Hey Road – 100mm main
- Ref. H4 = FRS hydrant on Red Scar Industrial Estate – 300mm main

10.3.3 During the previous fires, the flow was considerably low using the on-site hydrants and it was only until water was sourced from H4 that the flow was deemed sufficient. In the event if a worst-case scenario fire, it is considered that the FRS would source water directly from



H1 and H4 which are the largest mains and would appear to have the largest flow. Information is currently being sought from the FRS to determine the duration it would take to obtain a suitable flow to the site.

## **11 Managing Fire Water**

### **11.1 Drainage**

11.1.1 The drainage arrangements for the site are clearly shown on Drawing No. RLRP/1040/03 and summarised as follows:

- a) All drainage from the main building's roof, access road, car parking areas and other concreted areas will all drain to interceptors and eventually discharge into the existing foul sewer system under a trade effluent consent. The entire concrete yard is sealed either by surface drains or 0.15m kerbing to prevent escape of contaminated surface water.
- b) All foul drainage directly links to the foul sewer system.
- c) The inside of the main building is currently surfaced entirely with impermeable concrete surfacing and access points are sealed to prevent ingress of rainwater and egress of contaminated fluids.

### **11.2 Containment of Fire Water (Building and External Concrete Areas)**

11.2.1 The two most recent fires were extinguished successfully and all fire water drained into the foul sewer system using the existing consent which is shown in Appendix III.

11.2.2 In the event of a drainage system malfunction and the site needed to contain fire water as a secondary measure, contingency measures have been provided in the next sections.

11.2.3 It is likely the fire would occur be in one of these areas:

- a) Upper yard containment
- b) Lower yard containment
- c) Internal / waste processing building containment

11.2.4 **Upper yard** - The upper yard would need to contain 900m<sup>3</sup> of water based on a worst-case scenario fire. The upper yard area of the site measures approximately 16,950m<sup>2</sup> and the

lower yard which is entirely sealed with kerbing and walls (minimum 0.1m) measures 18,900m<sup>2</sup>; meaning there is ample containment to the fire water required at 0.03m<sup>3</sup>.

11.2.5 **Building** - The building is entirely sealed and measures approximately 15,165m<sup>2</sup>; the largest pile is **INT11** requiring 480m<sup>3</sup> of water to extinguish and therefore requiring 0.04m containment. It is likely water would flow into the lower yard which has already demonstrated sufficient containment as shown in the above section.

11.2.6 The above has been based on closing interceptors and plugging drains using drain plugs and penstock valves to create a pond/lagoon on site as all areas a relatively flat with a gradual fall to gullies. This has not been demonstrated on Drawing No. RLRP/1040/03.

11.2.7 **Fire water booms** - The fire water booms will be industry approved and consist of the same product as those issued to the FRS by the EA in their grab packs which all appliances now have. The firewater booms come in 100m rolls so can be cut to the required 70m length required for this site.

11.2.8 **Using the boom - the boom is used as follows:**

- Unroll the boom and seal one end with either an overhand knot or by using cable ties provided.
- Position boom and fill two large outer compartments with water from a hose reel.
- Seal open end with second cable tie.

11.2.9 An example of the boom is shown overleaf referenced as (f) extracted from the EA grab back.



11.2.10 If there is any deviation from the above drainage arrangement, an amended FPP will be submitted for approval by the EA and FRS.

### 11.3 Removal of fire water

11.3.1 The operator has a discharge consent / trade effluent agreement as shown in Appendix III to discharge fire water into foul sewer via the sites sealed drainage system. This is also demonstrated in the Fire Incident Report shown in Appendix IV which was produced by Recycling Lives Ltd.

## **12 During and after an incident**

### **12.1 Notifying nearby properties**

12.1.1 The nearest receptors within 200m of the site i.e. other users of the Industrial Estate will be informed of the fire by employees of the operator by phone or foot and the FRS, Local Council and EA will be contacted to ensure further properties are informed should the fire become problematic i.e. local business, houses

### **12.2 Contingency Planning**

12.2.1 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.

12.2.2 No waste will be accepted on site until the post-fire site recovery procedures outlined in below have been fully implemented and the site is authorised to re-open for trade and waste acceptance.

### **12.3 Post Fire Site Recovery**

12.3.1 If a recovery procedure is required, Recycling Lives Ltd would instigate the following;

- a) Remove damaged material to a permitted facility that is able to 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 and EMS procedures and improve upon where 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

REVISION HISTORY

Rev	Date	Init	Description
-	17.04.19	CP	Initial Drawing
A	05.11.19	CP	Client/EA comments
B	16.01.20	CP	Client/EA comments
C	26.03.20	CP	Variation application copy
D	15.04.20	CP	EA Schedule 5 comments
E	23.04.20	CP	EA / client comments
F	26.05.20	CP	EA / client comments
G	25.06.20	CP	EA / client comments

KEY

- Permit boundary
- Waste storage areas
- Temporary storage areas
- Non-waste storage areas
- Fuel oil storage
- Waste recycling / storage buildings
- Other buildings / workshops/offices
- Impermeable concrete surfaces with sealed drainage (upper level)
- Impermeable concrete surfaces with sealed drainage (lower level)
- Unsurfaced / landscaped areas
- Foul drainage
- Surface water drainage
- Manhole
- Gullies
- 600mm - 800mm logbo blocks
- 150mm - 500mm concrete panel walls
- Quarantine areas (with 6m buffer zone)
- Hot works area (indicative)
- Hot works
- Fire fighting equipment (extinguishers, etc.)
- Plant shutdown (indicative)
- Fire alarm (indicative)
- Sprinklers
- Designated smoking area
- Access route for emergency services
- On site fire hydrants
- Fire assembly points
- Thermal & fire CCTV camera locations (indicative)
- Out-of-hours storage
- ECS Eddy current separator
- ASR Automotive shredder residue (Fragmentiser fluff)
- OM Overband magnet

Storage Area Details (UPPER YARD)

Plan Ref	Description	Can waste self combust through self-ignition i.e. spark, flame or overheating	Storage type	Containment / type	Height of fire wall (m)	Max Length / Width (m) of pile out-of-hours	Out of hours storage height (m)	APPROX. Area (m2) out-of-hours	Conversion factor used	Approx. volume (m3) - out-of-hours	Max storage time
UV1	LPG tank storage	No	Unprocessed	Stockpile / 3-sided storage bay using 0.14m concrete panels	3	18	2	115	0.666	153	<3 months
UV2	Public tipping bay for mixed WEEE & scrap metal	No	Unprocessed	Stockpile / 3-sided storage bay using 0.14m concrete panels	3	18.5	2	250	0.666	333	<48 hours
UV3A	Non-waste parts stripped from ELVs for export i.e. bumpers, doors	No	Unprocessed - part removed by hand or mechanical means	Parts stored on racking in covered area	6	16	3	215	0.666	430	<3 months
UV3B	Exports stripping area	No	Unprocessed - part removed by hand or mechanical means	Parts stored on racking in covered area	6	20	3	215	0.666	430	<3 months
UV6	Depolluted ELV storage and component removal area (>150mm)	No	Unprocessed / baled and sorted	Parts stored on racking in covered area	6	20	3	215	0.666	430	<3 months
UV5	Depolluted ELV storage and component removal area (>150mm)	Yes	Unprocessed / baled and sorted	Free-standing pile, 0.14m concrete panel wall (north)	6	20	4	400	0.333	533	<1 week
UV6	Ferrous metal & baled (depolluted) ELVs (pre-shred pile) (>150mm)	Yes	Largely processed / baled and sorted	Free-standing pile, 0.14m concrete panel wall (north)	6	20	4	400	0.333	533	<1 week
UV7	Shredded ferrous metal ELVs (<100mm) / Fragmentiser infeed	Yes	Largely processed / baled and sorted	Free-standing pile / contained in 3-sided 0.6m logbo block wall	6	20	4	400	0.333	533	<1 week
UV8	Fragmentiser fluff (<30mm) (processed) / automated shredder residue	Yes	Processed / shredded	Free-standing pile / contained in 3-sided 0.6m logbo block wall	4	10	3	65	0.666	130	<1 week
UV9	Fragmentiser fluff (<30mm) (processed) / automated shredder residue	Yes	Processed / shredded	Free-standing pile / contained in 3-sided 0.6m logbo block wall	5	12	3	150	0.666	300	<1 week
UV10	As above	Yes	Processed / shredded	Free-standing pile / contained in 3-sided 0.6m logbo block wall	6	20	4	300	0.666	600	<48 hours
UV11	WEEE reception, sorting and storage area	No	Unprocessed / pre-sorted	Free-standing pile / partly contained in 3-sided 0.6m logbo block wall	4	17	3	205	0.666	410	<1 week
UV12	Sorted clean (non-haz) WEEE	Sorted	Sorted	Free-standing pile / partly contained in 3-sided 0.6m logbo block wall	5	6	4	115	0.666	306	<1 week
UV13A	Plastics	Sorted	Sorted	Free-standing pile / partly contained in 3-sided 0.6m logbo block wall	4	13	3	75	0.666	150	<1 week
UV13B	Other material (mixed)	Sorted	Sorted	Free-standing pile / partly contained in 3-sided 0.6m logbo block wall	4	13	3	75	0.666	150	<1 week
UV14	Hazardous WEEE (fridges)	No	Unprocessed	Free standing / 0.6m logbo block wall to the west	3	14	1	85	1	85	<3 months
UV15	Undepolluted ELV reception and storage	Yes	Unprocessed	Free standing 3 no. rows of 10 ELVs, 2 high	N/A	18.5	3 (12 ELVs stacked)	225 (30 ELVs = 2 high)	ELV = 8.25m³	<500 (30 ELVs x 8.25)	<48 hours
UV16	Undepolluted ELV reception and storage	Yes	Unprocessed	As above	N/A	18.5	3 (12 ELVs stacked)	225 (30 ELVs = 2 high)	ELV = 8.25m³	<500 (30 ELVs x 8.25)	<48 hours
UV17	Batteries & catalytic converters temporary storage during depollution process	No	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UV18	Batteries & catalytic converters temporary storage during depollution process	No	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UV19	Batteries & catalytic converters temporary storage during depollution process	No	Removed from ELVs (unprocessed)	IBC / pallet containers with acid resistant base <1,200 litres	N/A	2.4	1	3	1	3	<48 hours
UV20A	3 no. 1,000 litre containers for oils, brake fluids & antifreeze	No	Unprocessed (liquid)	Double skinned, bonded steel tanks	3	N/A	1	3 (1 per tank)	1	3,000 litres	<3 months
UV20B	Mixed fuels	No	Unprocessed (liquid)	Double skinned, bonded steel tank	3	N/A	1	3	1	3,000 litres	<3 months
UV20C	Fuels	No	Unprocessed (liquid)	Double skinned, bonded steel tanks	3	N/A	1	4	1	4,000 litres	<3 months
UV20D	Diesel	No	Unprocessed (liquid)	Double skinned, bonded steel tanks	3	N/A	1	4	1	4,000 litres	<3 months

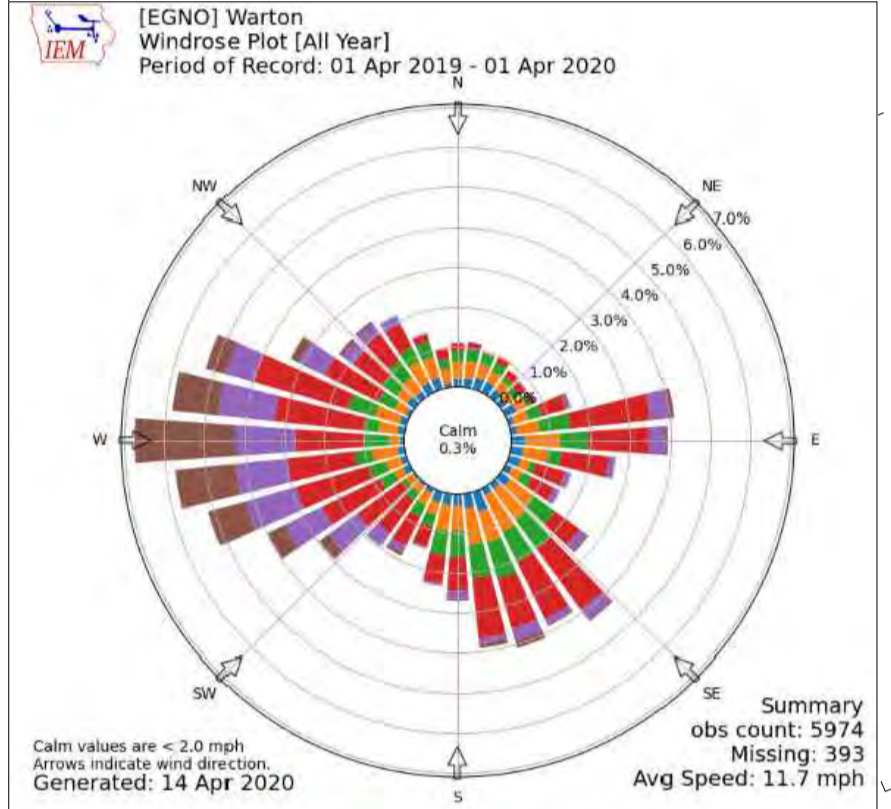
Storage Area Details (LOWER YARD)

Plan Ref	Description	Can waste self combust through self-ignition i.e. spark, flame or overheating	Storage type	Containment / type	Height of fire wall (m)	Max Length / Width (m) of pile out-of-hours	Out of hours storage height (m)	APPROX. Area (m2) out-of-hours	Conversion factor used	Approx. volume (m3) - out-of-hours	Max storage time
LV1	Battery Storage	No	Removed from ELVs (unprocessed)	Stockpile inside open fronted building / 3-sided 0.14m concrete storage bay	4	12	3	110	0.666	220	<1 month
LV2	Sorted scrap metal and product bays	Yes	Mechanically processed, shredded and sorted	4 no. stockpiles inside 3-sided storage bay using 0.14m concrete panels	3	4.5 (per bay)	2	35 (per bay)	0.666	40 (per bay)	<1 week
LV3 - 4	Mixed iron metal (30 - 150mm) - Zorba (non-waste)	No	Mechanically processed	Stockpile inside open fronted building / 3-sided 0.14m concrete storage bay	4	8	4	40	0.666	80	<1 week
LV5	Plastic bales	Yes	Mechanically processed	Free standing bales / 2 sided 0.14m concrete panel wall	3	15	2	115	1	230	<1 week
LV6	Sorted scrap metal, product bays and circuit boards	No	Mechanically processed, shredded and sorted	4 no. stockpiles inside 3-sided storage bay using 0.14m concrete panels	4	6.2 (per bay)	2	155 (per bay)	0.666	202 (per bay)	<1 week
LV7	Fragmentiser fluff (<30mm) (processed)	Yes	Mechanically processed (pre-shred and tagging)	Stockpile / 3-sided storage bay using 0.14m concrete panels	4	6.2 (per bay)	2	115	0.666	220	<1 week
LV8	Finished 211 ferrous shred (non-waste and non-combustible)	No	Mechanically processed	Stockpile / 3-sided storage bay using 0.14m concrete panels and 0.6m logbo blocks	5	18	3	225	0.666	450	<1 week
LV9 - 10	Sorted non-ferrous metal (>150mm - <100mm) - aluminium (non-waste)	No	Sorted - by hand or mechanical means	Stockpile / 3-sided storage bay using 0.6m logbo blocks	4	10	3	85	0.666	170	<1 week

Storage Area Details (INTER- / PROCESSING BUILDING)

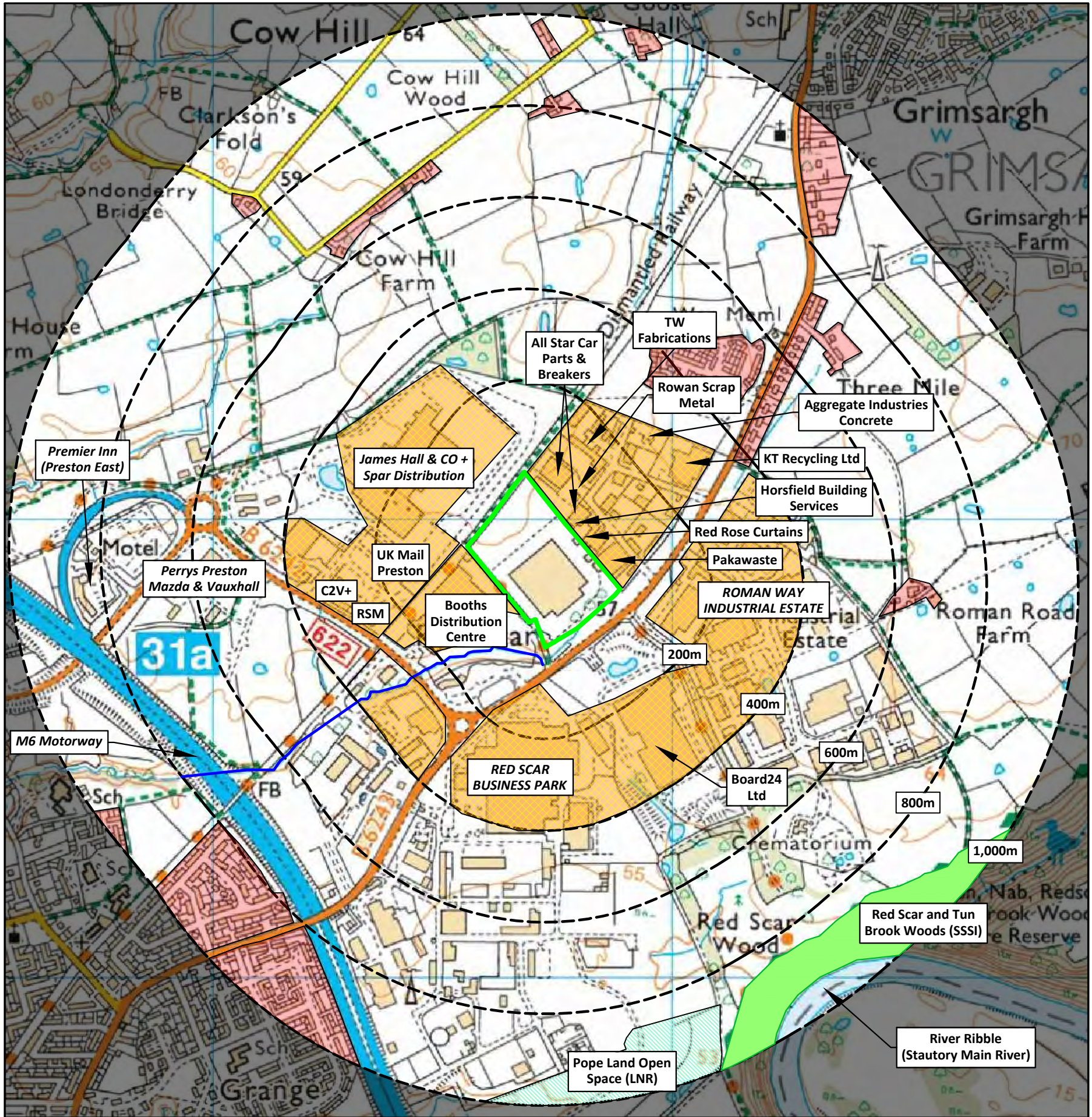
Plan Ref	Description	Can waste self combust through self-ignition i.e. spark, flame or overheating	Storage type	Containment / type	Height of fire wall (m)	Max Length / Width (m) of pile out-of-hours	Out of hours storage height (m)	APPROX. Area (m2) out-of-hours	Conversion factor used	Approx. volume (m3) - out-of-hours	Max storage time
INT1A - 1C	Assorted scrap metal bays	Yes	Mechanically processed, shredded and sorted	3 no. stockpiles inside 3-sided storage bay using 0.6m logbo blocks	3	3, 8 & 4	3	35, 50, 50	0.666	70, 180, 100	<48 hours
INT 2	Mechanically sorted bays containing plastic, scrap and WEEE fines	Yes	Mechanically processed, shredded and sorted	3 no. stockpiles inside 3-sided storage bay using 0.14m concrete panel walls	3	4 (per bay)	2	20 (per bay)	0.666	35 (per bay)	<48 hours
INT 3	Container for fines arising from INT 2	Yes	Mechanically processed, shredded and sorted	40 cubic yard container	N/A	N/A	1	12.5	1	12.5	<48 hours
INT 4	Hazardous WEEE comprising IT equipment sorting and dismantling area	No	Unprocessed	Free standing pile / fire wall to the east	3	4	1	400	1	400	<3 months
INT 5	Hazardous WEEE	No	Unprocessed and sorted	Free standing pile / fire wall to the east	4	20	1	400	1	400	<3 months
INT 6	Catalytic converter storage	No	Removed from ELVs (unprocessed)	Free standing / IBCs or pallets	2	15	1	90	1	90	<1 week
INT 7	End-of-life tyres	Unprocessed	Stacked on racking	Stacked on racking	4	20	3	100	3	300	<1 week
INT 8	Hazardous WEEE i.e. FPDs & CRTs	No	Unprocessed	Free standing / IBCs or pallets	2	20	1	250	1	250	<1 week
INT 9	Automotive shredder residue arising from the wash plant	No	Mechanically processed, shredded and sorted	Free-standing / no containment	4	18.5	3	150	0.666	300	<48 hours
INT 10	Automotive shredder residue arising from the wash plant	No	Mechanically processed (pre-shred, tagging and washing)	Free-standing / no containment	4	8	3	60	0.333	60	<48 hours
INT 11	Filter cake (non-hazardous inert) comprising dirt from ELV Fragmentising and washing	No	Mechanically processed (pre-shred, tagging and washing)	Free-standing / no containment	4	12	3	65	0.333	65	<48 hours
INT 12	Sorted non-ferrous metal (>150mm) dispatch area	No	Unprocessed	IBC / pallet containers with acid resistant base <1,000 litres (open at the top)	5	20	2	140	1	400	<1 week
INT 13	Hazardous WEEE i.e. FPDs & CRTs	No	Unprocessed	Free standing pile / fire wall to the east and north	3	4 (per bay)	2	20 (per bay)	0.666	35 (per bay)	<48 hours
INT 14	Sorted scrap metal and product bays arising from trommel and picking line process	Yes	Mechanically processed, shredded and sorted	3 no. stockpiles inside 3-sided storage bay using 0.14m concrete panels	3	4 (per bay)	2	20 (per bay)	0.666	35 (per bay)	<48 hours
INT 15	Automotive shredder residue	Yes	Mechanically processed, shredded and sorted	0.14m concrete panel walls to the south - largely free-standing	3	14	2	109	0.333	100	<48 hours
INT 16	Automotive shredder residue	Yes	Mechanically processed, shredded and sorted	0.14m concrete panel walls to the east and south - largely free-standing	3	14	2	40	0.666	53	<48 hours
INT 17	Non-ferrous Zorba arising from the eddy current separator	No	Mechanically processed, shredded and sorted	Free standing / no containment	N/A	3.5	2	8	0.333	4	<48 hours
INT 18	Heavy material arising from wash plant	No	Mechanically processed (pre-shred and tagging)	Stockpile inside 3-sided storage bay using 0.6m logbo blocks	3	12.5	2	40	0.666	53	<1 week
INT 19	Tonne bags arising from LCD disassembly line	No	Mechanically processed, shredded and sorted	Sorted fines material inside 1 tonne bags and containers	N/A	1 (per bag approx. 10 - 12 no bags)	1	1 (per bag)	1	1 (per bag x 10)	<1 week
INT 20	Various storage of ASR and scrap metal arising from fragmentiser downstream line, material only stored temporarily and constantly moved	Yes/No	Mechanically processed, shredded and sorted	Mixture of free-standing, 0.14m and 0.6m concrete walls	N/A	N/A	N/A	Approx 200 in total	N/A	200	<18 hours

CONVERSION FACTORS  
Conversion factors for waste piles are worked out using the following methods set out by The Environment Agency  
Conversion of 1.3 for materials stored within containers, area of storage in stackable containers and waste/bale stacks  
Conversion of 0.666 for waste stored within a bay  
Conversion of 0.333 for waste stored in a free-standing stockpile  
For areas containing skips, conversion is calculated by volume of each skip x number of skips  
Conversion of 0.4 for 4.5m x 1.8m x 1.2m per bay



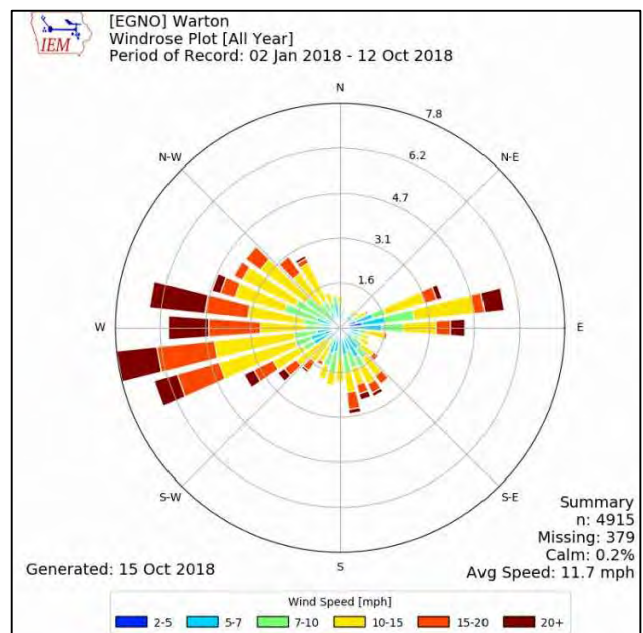
Scale Bar (1:10,000)

0 m 100 200 300 400 500 m

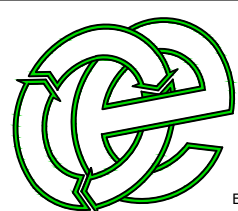


**KEY:**

- Permit boundary
- Statutory Main River (Savick Brook)
- Watercourse i.e. ditch, stream, river
- Watercourse i.e. pond, lake etc.
- Workplaces (includes agriculture industry, commerce and retail)
- Industrial/commercial properties within 400m of the site
- Residential receptors
- Class A, B, C roads
- Railway line
- Wooded areas
- Public footpath



Compass Wind Rose for Warton (EGNO)  
02/01/2018 - 12/10/2018



**Oaktree Environmental Ltd**  
Waste Management and Environmental Consultants  
Lime House, 2 Road Two  
Winsford Industrial Estate  
Winsford, Cheshire CW7 3QZ  
Tel: 01606 558833  
E-mail: sales@oaktree-environmental.co.uk

Client: Recycling Lives Ltd

Site: Recycling Lives Recycling Park Longridge Road, Preston, Lancashire PR2 5BX

Date: 2 May 2019

Printed At: A3

Title: SENSITIVE RECEPTORS PLAN

Scale: 1:10,000

Revision: -

Drawn By: CP

Drawing No: RLRP/1040/04

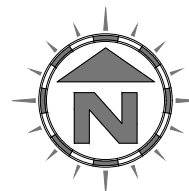
Client No: 1040

Job No: 4028

Checked: --

**Notes:**

- (1) Boundaries are shown indicatively.
- (2) Wind rose data shows the prevailing wind direction to be W.



**Revision Details:**

Rev:	Description:	Date:
-	Initial drawing	02/05/19



# Appendix II

## Record Keeping Forms

<b>RECYCLING LIVES LTD</b>							
<b>DAILY SITE INSPECTION FORM</b>							
						DAY →	
TYPE OF INSPECTION ↓	TIME OF INSPECTION (START)						
	TIME OF INSPECTION (FINISH)						
EMERGENCY ACCESS							
SECURITY - GATES							
SECURITY - FENCING							
SITE ROADS / SURFACES (CLEAR FROM HAZARDS)							
APPROXIMATE WEATHER TEMPERATURE							
WASTE CONTAINERS							
WASTE TYPES - COMPATIBILITY							
COMBUSTIBLE WASTE STORAGE (WITHIN PROPOSED LIMIT)							
COMBUSTIBLE WASTE STORAGE (AWAY FROM POTENTIAL IGNITION SOURCES)							
FIRE FIGHTING EQUIPMENT E.G. FIRE EXTINGUISHERS, HOSE REEL							
STAFF ON SITE HAVE RECEIVED FIRE SAFETY TRAINING							
CONCRETED AREA AND SEALED DRAINAGE (INTEGRITY)							
DRAINAGE FUNCTIONING							
HOT EXHAUSTS FIRE WATCH							
NO SMOKING SIGNS IN PLACE							
QUARANTINE AREA CLEAR							
WELFARE / OFFICE FACILITIES							
ELECTRICAL APPLIANCES AND CABLING CHECK							
HOT EXHAUSTS FIRE WATCH (DUST/FLUFF CLEANED REMOVED)							
LITTER (I.E. LOOSE COMBUSTIBLE WASTE MATERIALS)							
REJECTED WASTE TYPES / STORAGE							
FIRES (ANY INCIDENTS REPORTED)							
PLANT/EQUIPMENT MAINTENANCE CHECKS							
DUST							
TRAINING RECORDS							
OTHER (SEE NOTES BELOW)							
INSPECTION CARRIED OUT BY							
<b>NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):</b>							
<b>CHECKED BY</b>				<b>SIGNATURE</b>			
<b>POSITION</b>				<b>DATE</b>			
<i>Sheet</i>				<i>of</i>			

**RECYCLING LIVES LTD  
 PREVENTATIVE MAINTENANCE CHECKLIST**

<b>CHECKED BY</b>	<b>POSITION</b>
<b>DATE</b>	<b>DATE OF LAST CHECKLIST</b>

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

**RECYCLING LIVES LTD - EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW**  
**EMPLOYEE TRAINING NEEDS ASSESSMENT / REVIEW**

EMPLOYEE NAME				DATE COMPLETED			
POSITION				REVIEW DUE			
TRAINER				OUTCOME	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			
<b>NOTES AND ACTIONS:</b>							

## **Appendix III**

# **Trade Effluent Agreement**

Recycling Lives Limited

Recycling Lives Centre  
Essex Street  
Preston  
PR1 1QE

Thirlmere House  
Lingley Mere Business Park  
Lingley Green Avenue  
Great Sankey  
Warrington WA5 3LP

Telephone 01925 234000  
**www.unitedutilities.com**  
RCTE: P Jones  
Direct Line: 01925 674244

Date: 9 April 2013

FAO The Company Secretary

Dear Sir

**TRADE EFFLUENT – WATER INDUSTRY ACT 1991 - Longridge Road Preston  
Lancashire PR2 5AR**

Further to your TRADE EFFLUENT NOTICE dated 6 March 2013, I enclose your CONSENT TO THE DISCHARGE OF TRADE EFFLUENT.

This document is issued by virtue of Statutory Powers granted by the Water Industry Act 1991 and as such a “true copy” has now been placed on public record. The Consent to Discharge relates solely to the trade effluent described in your Trade Effluent Notice and you must notify United Utilities Water PLC of:

- a) any proposed changes to the nature and composition of the effluent;
- b) any proposed changes to the rate of discharge and/or daily volume;
- c) any proposed change of name of your Company (or trading name);
- d) permanent termination of the discharge

The conditions laid down in the Consent are the only conditions under which United Utilities Water PLC will undertake to receive your effluent into the foul sewer. Any failure to comply with such conditions is an offence under the Water Industry Act 1991.

In accordance with our Charges Scheme, an application fee of **£378** is now payable for this Consent. An invoice will be sent to you shortly.

In respect of clause 10a) of the Consent, I understand that representative samples of the trade effluent may be obtained from manhole after the interceptors marked 'x' on the plans. You should note that officers designated in writing by United Utilities Water PLC shall have right of safe access at all reasonable hours without notice for the purpose of obtaining a sample of trade effluent.

The volume of trade effluent can be determined by;

Site area of 26,550m<sup>2</sup> (as agreed) x average rainfall

It will not be necessary for you to install additional apparatus to measure the trade effluent as required by clause 10b) of the Consent. If circumstances change I will write to you again revoking this exemption.

Yours faithfully

Wastewater Catchment Manager  
Wastewater Services

## WATER INDUSTRY ACT 1991

### CONSENT TO THE DISCHARGE OF TRADE EFFLUENT

Whereas **Recycling Lives Limited**

(hereinafter called "the Trader") whose Head Office or Registered Office is at

**Recycling Lives Centre Essex Street Preston PR1 1QE**

Is the **owner/occupier** of the trade premises at:

**Longridge Road  
Preston  
Lancashire  
PR2 5AR**

and by the Trade Effluent Notice dated **6 March 2013**

Have applied to UNITED UTILITIES WATER PLC (hereinafter called "the Company") for consent to discharge trade effluent from the said trade premises into the sewers.

Under the provisions of the above mentioned Act the discharge of trade effluent in accordance with the said Trade Effluent Notice would not be lawful without the consent of the Company.

NOW THEREFORE in exercise of the powers conferred upon them by the above Act the Company HEREBY CONSENT to the discharge of trade effluent by the Trader from the said premises into their sewers SUBJECT TO THE FOLLOWING CONDITIONS:

#### Nature of discharge

- 1a) Subject to the provisions of conditions 6,7,8 and 9 below the nature or composition of the trade effluent to be discharged under this Consent shall be solely as specified in the said Trade Effluent Notice and shall consist solely of waste water derived from **vehicle wash and contaminated site run off.**
- 1b) The trader shall give to the Company prior written notice of any change in the process or the process materials or any other circumstances likely to alter the constituents of the trade effluent as set out in condition 1(a). In such circumstances, no substance of which the Company has not had previous notice, may be discharged unless and until the Company has agreed to accept the substance at a limit imposed by the Company which shall then be deemed to be incorporated in this Consent by agreement and shall not prejudice the right of the Company to serve a Direction earlier than two years from the date of such incorporation.

The Trader shall also give not less than seven days written notice to the Company of any change in the name of the occupier or owner.

#### Sewer affected

2. The sewer into which the trade effluent may be discharged and the point of discharge is the foul sewer situate at **Longridge Road (MH 8706).**



- Connections** 3. No connections shall be made to the said sewer without the prior approval of the Company and all such connections shall be constructed and maintained to the satisfaction of the Company at the expense of the Trader.
- Maximum volume of discharge** 4. The maximum amount of the trade effluent discharged in any one day of twenty four hours shall not exceed **1,331** m<sup>3</sup> without prior written consent of the Company.
- Maximum rate of discharge** 5. The highest rate at which the trade effluent may be discharged shall not exceed **16** litre/sec.
- Matters to be eliminated prior to discharge to sewers** 6. The following matters shall be eliminated from the trade effluent before it is discharged into the sewers of the Company:
- a) petroleum spirit;
  - b) calcium carbide;
  - c) carbon disulphide;
  - d) except as provided in paragraph 7 hereof, the prescribed substances listed in Schedule 1 to The Trade Effluents (Prescribed Processes and Substances) Regulations 1989, as amended from time to time, insofar as they are in concentration greater than the background concentration (as defined in the said Regulations);
  - e) where the trade effluent derives from a prescribed process mentioned in Schedule 2 to the said Regulations, and except as provided in paragraph 7 hereof, asbestos (as defined in the said Regulations) and chloroform in concentration greater than the background concentration (as defined in the said Regulations);
  - f) organo-halogen compounds including pesticide residues and degreasing agents;
  - g) any substances which either alone or in combination with each other or with any other matter lawfully present in the said sewers would be likely to;
    - i) cause a nuisance or produce flammable, harmful or toxic vapours either in the sewers or at the sewage works of the Company;
    - ii) injure the sewers or interfere with the free flow of their contents or affect prejudicially the treatment and disposal of their contents or have injurious effects on the sewage treatment works to which it is conveyed or upon any treatment plant there;
    - iii) be dangerous to or cause injury to any person working in the sewers or at the sewage treatment works;
    - iv) affect prejudicially any watercourse, estuary or coastal water into which the treated effluent will eventually be discharged.

**Matters to be limited prior to discharge to sewer**

7. The trade effluent shall not contain
  - a) Cyanides and cyanogen compounds which produce hydrogen cyanide on acidification in excess of 1 mg/l
  - b) Separable grease and oil in excess of 100mg/l
  - c) Sulphates as SO<sub>4</sub> in excess of 1,000 mg/l
  - d) Sulphides, hydrosulphides, polysulphides and substances producing hydrogen sulphide on acidification in excess of 1 mg/l
  - e) Total suspended solids at pH 7.0 and dried at 110° C in excess of 1,000 mg/l
  - f) Toxic metals in excess of 10,000 ug/l either individually or in total ie Antimony, Beryllium, Chromium, Copper, Lead, Nickel, Selenium, Silver, Tin, Vanadium, Zinc;

**Temperature**

8. No trade effluent shall be discharged which has a temperature higher than 43.3°C (110°F).

**pH value**

9. No trade effluent shall be discharged having a pH of less than 6 or greater than 10

**Inspection Chamber**

10.
  - a) An inspection chamber or manhole shall be provided and maintained by the Trader in a suitable position in connection with each pipe through which the trade effluent is discharged and shall be so constructed and maintained as to enable a person readily to obtain at any time samples of the trade effluent so discharged, to the approval of the Company.
  - b) Suitable apparatus for measuring and automatically recording the volume and composition of trade effluent discharged shall be provided and maintained in working order by the Trader in connection with every such pipe, unless otherwise exempted in writing by the Company.
  - c) If the measuring and recording apparatus as aforesaid ceases to function satisfactorily, then the Company shall have the right to make estimates of the volume and composition of the trade effluent until such time as the said apparatus is again operating to the satisfaction of the Company.
  - d) Records shall be kept by the Trader of the volume, rate of discharge, nature and composition of the trade effluent discharged to the sewer, together with any records required to be kept by the Trader under the provisions of any Notice of Determination issued by the Secretary of State under Sections 120 and 132 of the Water Industry Act 1991. Such records shall be kept available for inspection at all reasonable times by an authorised officer of the Company and copies shall be sent to the Company on demand.
  - e) The foregoing provision of this condition shall be deemed to be complied with if other methods of sampling the trade effluent, determining its nature and composition, and measuring and recording the discharge are agreed and confirmed in writing by the Company.

**Payment**

11. Payment shall be made to the Company on demand of charges in respect of the reception, conveyance, treatment and disposal of the trade effluent in accordance with the Company's Charges Scheme in force from time to time.

**Dated 9 April 2013**

Issuing Office      Wastewater Services  
Lingley Mere Business Park  
Lingley Green Avenue  
Great Sankey  
Warrington  
WA5 3LP

Signed

WASTEWATER CATCHMENT MANAGER  
for and on behalf of United Utilities Water PLC

Your attention is drawn to Section 122 of the Water Industry Act 1991 which provides that any person aggrieved by any conditions attached to this Consent may appeal to the Director General of Water Services.

## **Appendix IV**

# **Recycling Lives Ltd – Fire Incident Report from Fire of 27/01/2019**

# Incident Report

<b>Premises Name</b>	Recycling Lives Recycling Park.
<b>Address</b>	Longridge Road, Preston, Lancashire, PR2 5BX
<b>Incident Date</b>	Sunday 27 January 2019
<b>Author</b>	Dave Gallagher, Head of Safety & Compliance

## References:

- A. Fire Risk Assessment, Recycling Lives Recycling Park, author Matthew Chenery, dated September 2018
- B. DRAFT Fire Prevention Plan, Recycling Lives Recycling Park, prepared by Oaktree Environmental Consultants v1.3 dated 5 December 2018 [*pending Environment Agency Feedback*]
- C. EAP009 Accident, Incident and Environmental Incident Management Plan latest revision dated 6 Dec 2018

## 1.0 Incident Overview

At around 0100hrs on the morning of Sunday 27 January 2019 a fire broke out within a storage area of end of life vehicles on the Top Yard of Recycling Lives Recycling Park (RLRP). The fire broke out in wet, windy conditions and the storage area contained around 150 end of life vehicles at the time. CCTV evidence shows that the source of ignition was a car within the middle of the stack.

The alarm was raised, and Lancashire Fire and Rescue Service attended, supported by operational staff from Recycling Lives. Recycling Lives staff worked with the fire service personnel to contain and extinguish the fire. The fire was extinguished at around 0400hrs.

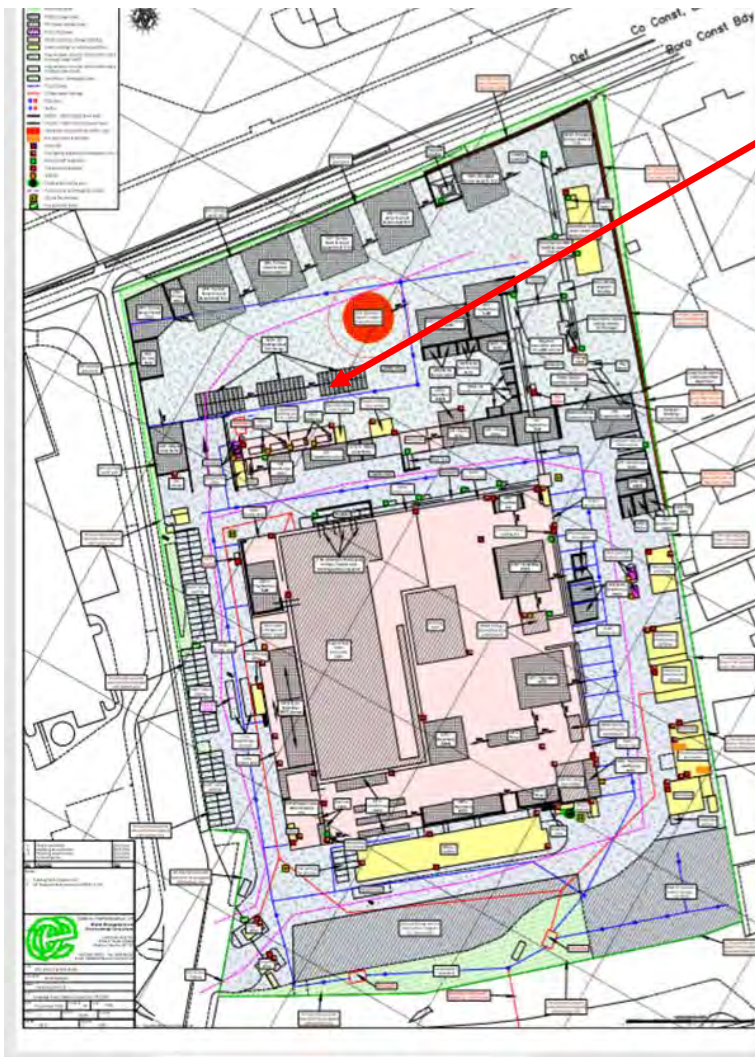
There were no injuries and no damage caused to plant or critical infrastructure. Some damage was done to concrete surfaces where the cars were sited. RLRP continued with normal operations on Monday 29 January, with repairs to the yard concrete commenced on the same day.

## 2.0 Incident Timeline

Time	Event
0050hrs Sunday 27 January 2019	First signs of smoke emitted by car in the storage area visible on CCTV footage
0055hrs	First signs of flame visible on CCTV footage
0106hrs	Emergency 999 call made. It is believed the alarm was raised independently by three separate sources: <ol style="list-style-type: none"> <li>1. Security staff member (Fiona Weir) from neighbouring Booths Distribution Centre – made the initial 999 call</li> <li>2. CCTV Monitoring Station</li> <li>3. Night Shift Operational Staff working the Granulator Plant within the downstream</li> </ol>
0109hrs	Keyplus Mobile Security Patrol Arrived on Site
0113hrs	Graeme Slater (Facilities Manager and Keyholder) received call from Monitoring Station
0113hrs	First Fire Officer arrives at site
0115hrs	First 2 x Fire Appliances arrive at site
Around 0400hrs	Fire Extinguished
Sunday 28 January 2019	External Relationship Management and Site Clean-up, Normal Maintenance Operations continue on site

### 3.0 Fire Location

Plan Sourced from Reference B DRAFT Fire Prevention Plan



Fire Broke out in storage area of end-of-life vehicles on the Top Yard at RLRP

### 4.0 Source of Ignition

The incident remains under investigation by Lancashire Fire and Rescue Services and this report reflects the findings of an internal investigation undertaken by Recycling Lives Ltd.

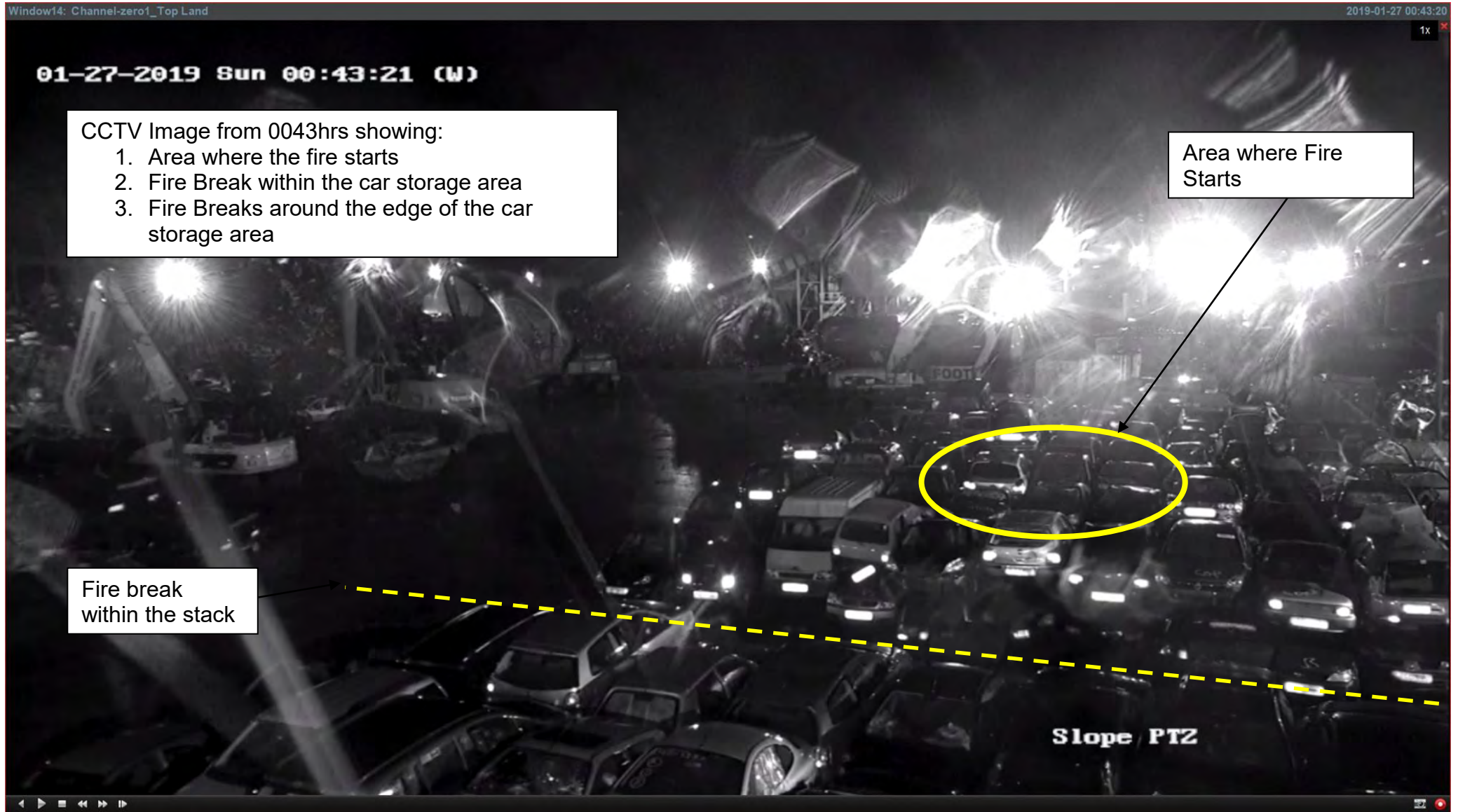
CCTV evidence shows the following:

- At 0043hrs, there are no apparent disturbances in the storage area. There is rain on the lens of the CCTV camera (Slope PTZ) facing the stack of cars. There is no evidence of other activity on site. There is a 6m fire break in place 1 x row in front of the area where the fire appears to start.
- At 0050hrs the first signs of smoke are visible from a car in the centre of the storage area.
- At 0055hrs flames are visible on CCTV.

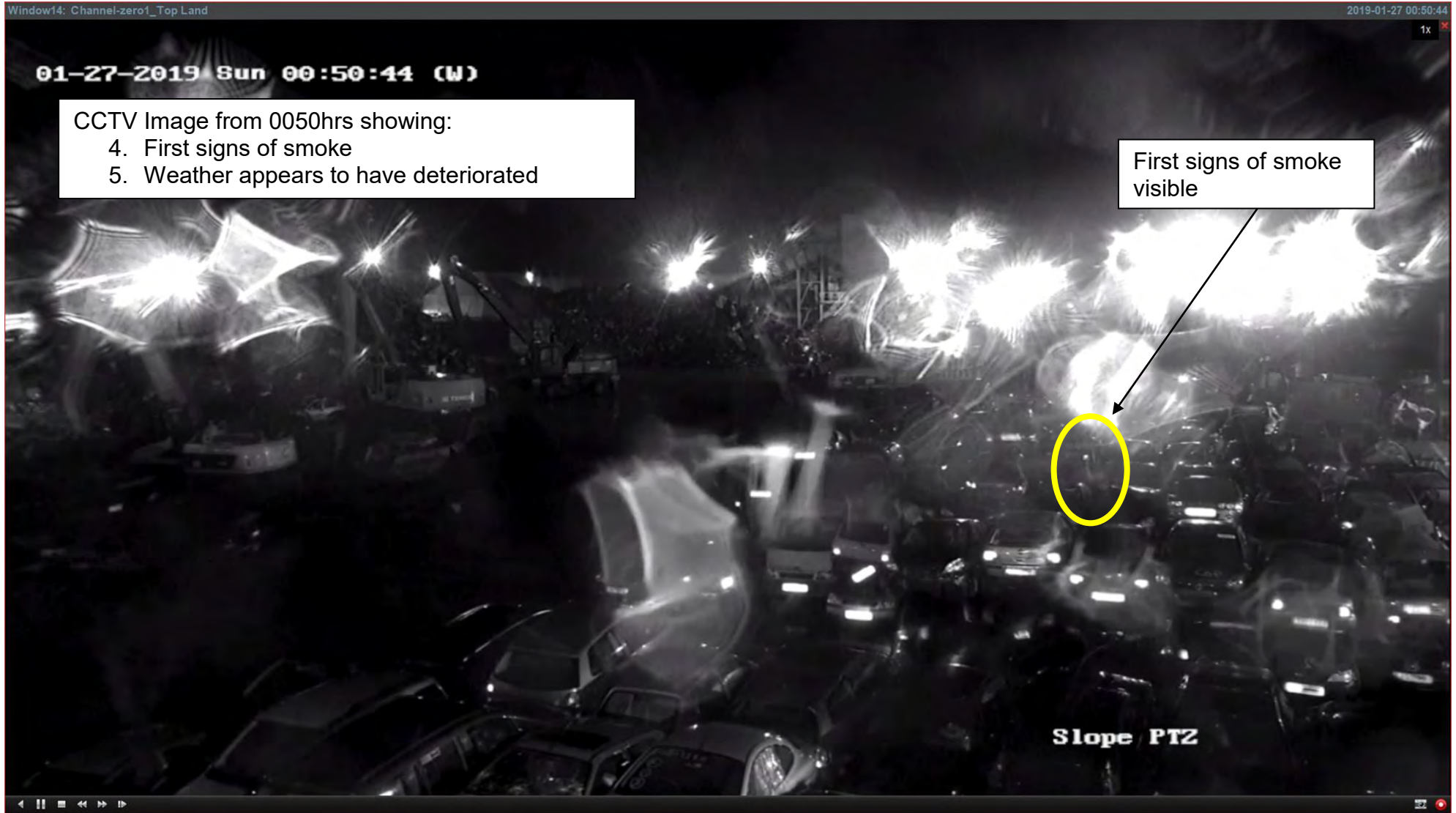
The most likely source of ignition is considered to be an electrical or battery fault in one of the un-depolluted cars. It is possible that the weather may have contributed – the wind was a strong North Westerly and may have disturbed one of the cars.

All cars in the storage area were destroyed by the fire making further investigation into the exact source of ignition impossible.

# Incident Report



# Incident Report

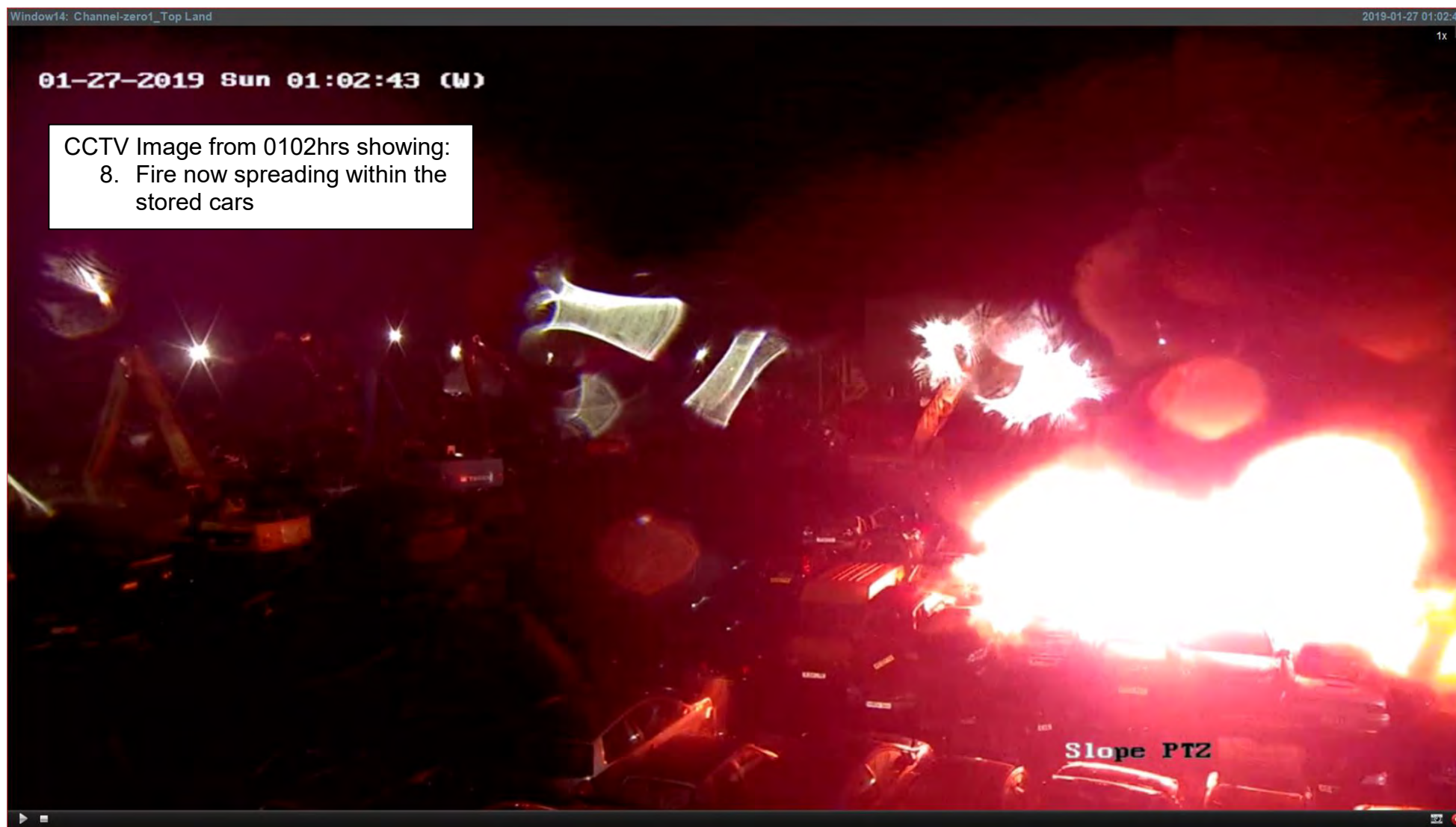




# Incident Report



# Incident Report



# Incident Report

## 5.0 Incident Response

- The first 999 call was made by at 0106hrs by a security guard the neighbouring Booths Distribution Centre. The alarm was also raised by Night Shift Staff working in the Downstream area, and by the Alarm Monitoring Station.
- The nominated keyholder, Graeme Slater, received the first call from the Alarm monitoring station at 0113hrs, by which time the Fire Brigade were already on the way to site.
- Graeme notified Danny Jackson (Operations Director) who set off for site immediately, and a number of other staff were also telephoned and came to site to operate machinery and support the Fire Brigade.

The full investigation report from Lancashire Fire and Rescue Service is awaited, but the following statement was listed on the Fire Service social media (Facebook):

*"When we first arrived we were faced with a significant fire - estimated probably about 100-150 cars involved, which was creating a huge smoke plume and creating issues with access onto the site. Obviously the smoke plume was affecting the local area. What we managed to do was get resources here very quickly, get into some good water supplies locally and we started having a really significant impact on the fire itself. In doing so **we've worked with the site operators, there's been cranes working with us with grabbers on, moving cars out of the way, creating fire breaks. That's allowed us to contain the fire and make sure it's not spread to any adjoining buildings. We've managed to reduce the amount of impact on site. We've also reduced the impact on the environment, in creating fire breaks. We've used a lot of water but that will be contained on site - there's an interceptor system. The environmental impact has been managed.**"*

- Operations Executive Members were informed between 0800-0830hrs on Sunday 27 January 2019
- By this time the key external stakeholders had been informed, including:
  - Environment Agency
  - United Utilities
  - Recycling Lives External Relations
- Contractors had also been ordered to:
  - Empty final chamber of drainage interceptors
  - Undertake repairs to fire-damage concrete surfaces
  - Roadsweep the site to collect final fire run-off mud/water/debris

In sum, the control measures detailed in the Site Fire Prevention Plan (Reference B) were in place prior to the incident, the emergency response was good and the fire was controlled and extinguished with no casualties and with damage minimised.

## 6.0 External Stakeholder Management

### 6.1 Lancashire Fire & Rescue Service:

- Attended the incident and fought the fire.
- Emergency phase was closed and handed over to Graeme Slater at 0930hrs using the Incident Handover Form.
- Issued the statement in Section 5.0 above via social media.
- Further contact is expected from the Fire Service to conclude investigations over the coming days.

### 6.2 Environment Agency:

- Notified by Graeme Slater on the EA National Incident Line at 0500hrs
- Rupert Denye, Environment Officer attended site at 1400hrs and inspected external water courses, confirming the Graeme Slater that no evidence of fire run off pollution was evident.
- 2 x officers visited RLRP Monday 28 Jan 19 at around 1030hrs to discuss the incident with Gary Halpin (Site TCM).

# Incident Report

## 6.3 United Utilities

- Notified by Graeme Slater on the United Utilities incident line around 0600hrs.
- Attended site to inspect water being emitted from interceptors to check no pollutants and confirmed verbally to Graeme Slater that there were no concerns and run-off water could be discharged.

## 6.4 External Media – response managed by Katie Upton – Head of Marketing

- Social Media statements issued from 0730hrs Sunday 27 Jan 19
- BBC North West Tonight reporter attended site at 1100hrs at was escorted by Dave Gallagher and Graeme Slater to take video footage of clean-up operations and undertake a short camera interview with Dave Gallagher which featured in the evening news reports.
- Lancashire Evening Post photographer attended 1300hrs and was escorted by Dave Gallagher to take photographs of the clean-up operation.

6.5 Police CID – attended site briefly on the morning of Sunday 27 Jan 19 and reported to the Fire Brigade Incident Commander. No further contact.

## 7.0 Opportunities for Improvement

- Revised operational procedures have been implemented to ensure all batteries are removed from end-of-life vehicles as soon as they arrive on site. These procedures have been verbally briefed to all ELV processing sites and will be documented as a Safe Working Procedure over the coming days. **Although we cannot unequivocally confirm that the source of the fire was faulty electrics, this measure will significantly reduce the risk of fires within stocks of end of life vehicles.**
- Fire Risk Assessment, Fire Prevention Plan and Accident & Environmental Incident Plans have been reviewed in light of the incident and are considered fit for purpose.
- The Lancashire Fire and Rescue Service Incident Commander gave good feedback on the Fire Breaks that were in place between stock piles of ELVs and metal at RLRP.
- Based on Fire Service Advice given at the time of the incident to Danny Jackson and Graeme Slater, enhance concrete barrier protection has been installed to the fuel tanks in the depollution area to provide improved heat/fire shielding.
- Incident Plans for satellite sites to be reviewed by the Compliance Team to ensure access to similar Plant Operator resource in the event of an out-of-hours emergency at other sites, and evidence from this incident to be incorporated in future emergency training for other sites.

## 8.0 Summary

- A fire broke out at RLRP in a storage area for end of life vehicles at around 0100hrs on Sunday 27 January 2019.
- Emergency Response plans worked effectively and collaboration between Recycling Lives staff and Lancashire Fire and Rescue Services enabled the fire to be brought under control and extinguished.
- There were no injuries and no damage to critical plant and equipment.
- Some concrete repairs have been necessary to fire damaged concrete to ensure the integrity of the top yard impermeable surface.
- Opportunities for improvement have been identified to reduce the likelihood and impact of a future fire.

# Incident Report

## Appendix 1 – EA Visit Confirmation Sunday 27 Jan



**Notice of Powers and Rights**



**Environment Agency**

**Number 093229**  
**Notice of Powers and Rights**  
 Police and Criminal Evidence Act 1984,  
 Code B

---

**Location searched**

Recycling Line  
 Red Scar Ind Est  
 Longridge

Postcode: PR2 5BX

Date: 27.1.19      Time:

**Authorisation**

Statutory Authority with consent     Statutory Authority without consent     Magistrates Warrant

---

**Statutory Power**

<input checked="" type="checkbox"/> Section 108 Environment Act 1995	<input type="checkbox"/> Regulation 69: The Waste Electrical and Equipment Regulations 2006
<input type="checkbox"/> Section 129 Environment Act 1995	<input type="checkbox"/> Regulation 68: Waste Batteries and Accumulators Regulations 2009
<input type="checkbox"/> Sections 5 and 6: Control of Pollution (Amendment) Act 1986	<input type="checkbox"/> Regulation 37: Environmental Damage (Prevention and Remediation) Regulations 2009
<input type="checkbox"/> Regulation 35: The Producer Responsibility Obligations (Packaging Waste) Regulations 2007	<input type="checkbox"/> Schedule 6: REACH Environment Regulations 2008
<input type="checkbox"/> Regulation 22: The End of Life Vehicles (Producer Responsibility) Regulations 2007	<input type="checkbox"/> Article 66: The EPC Energy Efficiency Scheme Order 2013

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**Officer in charge of the search**

Name or warrant number: **RUPERT DENYE**

Environment Agency address:

LINDA HOUSE  
 DODD WAY  
 PRESTON

Telephone: 03708 506506

Postcode: **PR5 8BX**


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**A summary of the powers and rights is given overleaf**

EP008 05/19

# Incident Report

## Appendix 2 – Fire Service Incident Handover Form



**Incident Handover Form**      No **4959**

Incident Type <b>SEABOARD FIRE CUMERAL</b>	Incident Number <b>190607187</b>
Incident Address <b>RECYCLING LIVES PRETOWN PR2 5Bx</b>	
Incident Commander Rank/Name <b>OWN JOHN COSTELLO</b>	Service Headquarters phone number <b>01772 866842</b> (8am-4pm) Monday to Friday
Contact details <b>01772 795377</b>	

**Representative receiving responsibility**


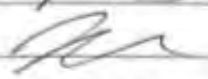
Name (print) <b>GRAEME SCARR</b>	Position <b>Facilities</b>
Agency/Organisation <b>RECYCLING LIVES</b>	Date (DD-MM-YYYY) <b>27/01/2019</b>
	Time (24 hrs)

**Hazards Identified**

The incident is now left in your sole charge and control. The following guidance is provided for your safety and for the safety of others.

**DO NOT RELEASE WASTE WATER UNTIL HAD THE INSTRUCTIONS OF UNITED UTILITIES. THAT IT IS SAFE TO DO SO IN THE CORRECT MANNER.**

The above hazards have been identified as far as reasonably practicable by the Incident Commander and have been fully explained. I confirm that I have read and understood the above guidance and agree to accept control of the premises/site. I understand the need to carry out my own risk assessment.

Representative/Responsible person 	Date <b>27/01/2019</b>
Incident Commander 	Date <b>27/01/2019</b>

Privacy Notice – information collected following an incident, in particular personal data, will be managed in accordance with the Freedom of Information Act 2000 and the Data Protection Act. If you wish to know what Lancashire Fire and Rescue Service does with the personal data we collect about you please visit [www.lancfirerescue.org.uk](http://www.lancfirerescue.org.uk) and search for Privacy Notice. Alternatively we can send you a copy of the privacy notice, this can be requested by contacting us on the above mentioned telephone number.

## Appendix 3 – Ongoing repairs to concrete on top yard 28 Jan 19



## Incident Report

### **Appendix 4 – New concrete barriers implemented 28 Jan 19 to shield fuel tanks beside depollution building**





# Incident Report

## Appendix 5 – Clean-up almost completed on Top Yard at 1344hrs Sun 27 Jan 19

\* Note area of damaged concrete highlighted by the yellow ring



## Incident Report

### Appendix 6 – Image showing firefighting process 0307hrs Sun 27 Jan 19

\* Note the Recycling Lives crane in the middle of the picture holding up a car to enable the Fire Service to spray it with water



# **Appendix V**

## **Recycling Lives Ltd – Fire Incident Report from Fire of 30/08/2019**

# Incident Report

<b>Premises Name</b>	Recycling Lives Recycling Park.
<b>Address</b>	Longridge Road, Preston, Lancashire, PR2 5BX
<b>Incident Date</b>	Friday 30 August 2019
<b>Author</b>	Dave Gallagher, Head of Safety & Compliance

**References:**

- A. Fire Risk Assessment, Recycling Lives Recycling Park, author Matthew Chenery, dated September 2018
- B. DRAFT Fire Prevention Plan RLRP-1040-B, Recycling Lives Recycling Park, prepared by Oaktree Environmental Consultants v1.0 dated 1 May 2019 *[pending Environment Agency Feedback in relation to an ongoing Environmental Permit Application]*
- C. EAP010 Emergency Management Plan latest revision dated 30 Jan 2019

**1.0 Incident Overview**

At 2209hrs on the evening of Friday 30 August 2019 a fire broke out within a waste storage pile on the Top Yard of Recycling Lives Recycling Park (RLRP). The fire broke out in dry, windy conditions with a South-westerly wind direction.

The alarm was raised, and Lancashire Fire and Rescue Service attended, supported by operational staff from Recycling Lives. Recycling Lives staff worked with the fire service personnel to contain and extinguish the fire.

Critical control measures listed in references A-C above, in particular the presence of planned fire breaks within the waste material and mobilisation of our Emergency Management Plan, enabled the fire to be contained. There were no injuries. Damage was limited to the power supply to the preshredder plant, and the concrete immediately beneath the area where the fire started.

Concrete repairs commenced on Monday 3 September and a temporary generator was installed on the same day to restore power to the preshredder. The fragmentiser processed “re-run” material on Monday 2 September and yard operations continued, and operation was restored to the preshredder on Tuesday 3 September.

**2.0 Incident Response Timeline**

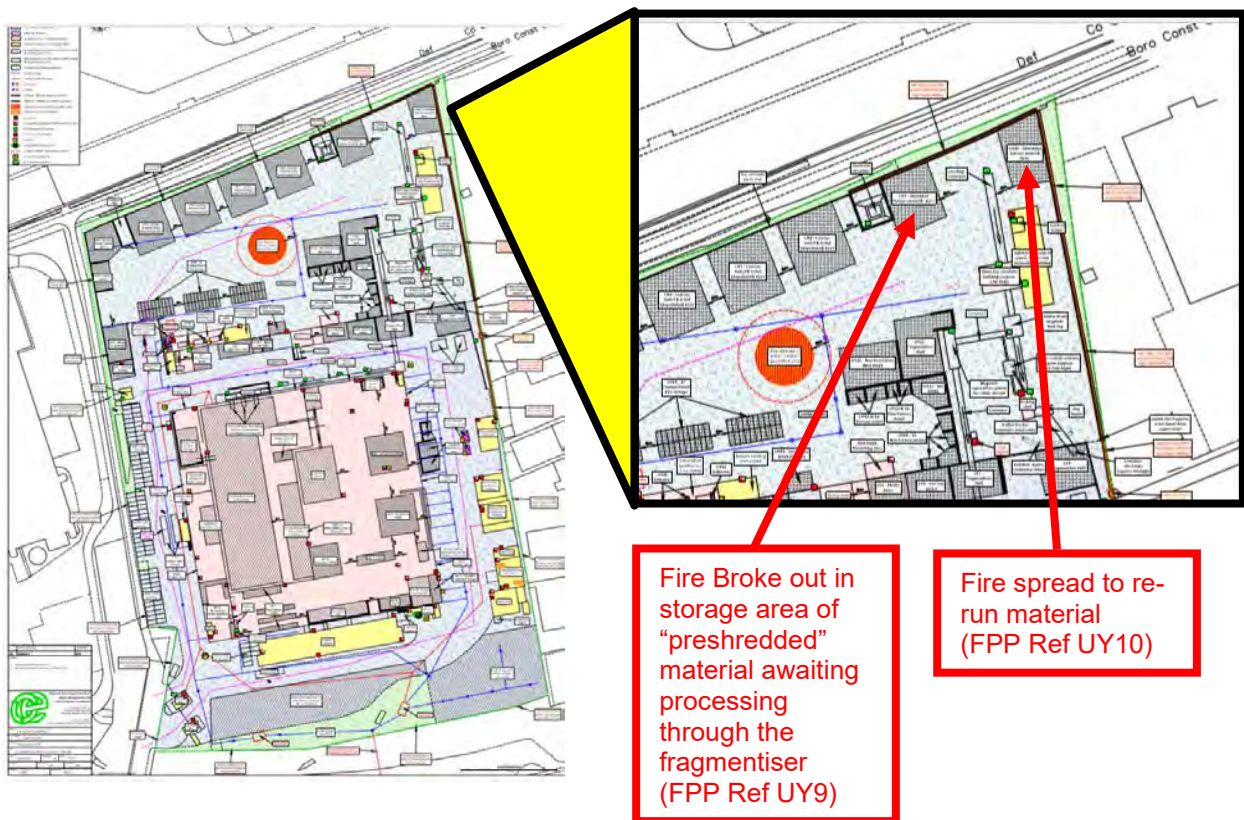
<b>Time</b>	<b>Event</b>
2209hrs Friday 30 August 2019	First flame visible on CCTV footage
2215hrs	Recycling Lives Keyholder Alerted (Graeme Slater)
2215hrs	Emergency 999 call made by Tal Bapu (Night Security), with a second call made by Graeme Slater during which the operator confirmed the fire had already been reported.  The alarm was raised independently by three separate sources: <ol style="list-style-type: none"> <li>1. Tal Bapu – Site Night Security Patrol identified the fire during a routine patrol.</li> <li>2. Zoltan Timar – Night Operative identified the fire.</li> <li>3. Thermal/Flame Camera 4 alarmed.</li> </ol>

# Incident Report

2225hrs	RLRP Gate Opened in preparation for the arrival of emergency services
2233hrs	Lancashire Fire and Rescue Services First Responder arrives at site
2235hrs	First 2 x fire appliances arrive at site
2236hrs	Graeme Slater (Recycling Lives Keyholder) arrives at site and takes command of the Recycling Lives response.
2237hrs	First Recycling Lives Plant Operator arrives on site

### 3.0 Fire Location

*Plan Sourced from Reference B DRAFT Fire Prevention Plan*



# Incident Report

The fire broke out in a storage pile of “preshredded” material (EY9) awaiting processing through the fragmentiser. This material consists of a mix of ferrous & non-ferrous metals mixed with other waste material. It is derived from “preshredding” of depolluted end of life vehicles (ELVs) and other scrap metal sources, including baled cars purchased from third parties and “light iron” purchased over the weighbridge.

All ELVs are depolluted and thoroughly checked by operatives prior to sending to the “preshredder”. All other sources of scrap metal are subject to visual checks by banksman at the point that the load is tipped.

The “preshredder” then separates all material to enable further visual checks by crane drivers, and to ensure that any baled ELVs in particular are “shredded” to ensure that they can be thoroughly checked too.

The remaining material is shredded, of even density and free of flammability/explosion hazards.

The second stock pile (EY10) consists of “re-run material”. This is a dense, ferrous, metal-rich material with mixed waste contained within it. It is extracted during the post-fragmentiser shredding process to ensure quality standards for the final shredded steel product are maintained as it contains too high a waste content. This material is stored and “re-run” periodically using finer shredding grids to ensure full recovery of the recyclable material.

## **4.0 Source of Ignition & Containment of Fire**

Given the existing rigour and checks in place, it is difficult to identify the source of ignition. The investigation has shown the following:

- There is no evidence of arson - nothing visible is thrown over the perimeter fence and no people or plant pass near the waste pile for at least an hour prior to the first flame being visible.
- The last operation in the area (operation of the preshredder) finishes at 2000hrs – some two hours prior to the first flame appearing.
- The waste pile has been undisturbed in the area where the fire first becomes visible since 1645hrs.

### Notes on fire spread/containment

- Once ignited, the fire spreads to the remaining pre-shredded material.
- 10m fire breaks are marked on the perimeter wall either side of the preshredder and fragmentiser infeed conveyor. These breaks were maintained and were effective in both limiting spread of the fire to other waste piles, and protecting the preshredder and fragmentiser plant.
- A strong South Westerly wind did cause the material UY10 (re-run material) to catch fire. Although a fire break was in place between this and the preshredded material, it is likely that a strong South-westerly wind, plus the effects of thermal transfer, caused this material to catch fire.
- The fire within the preshredded material was contained and extinguished within a few hours, but the re-run material retained heat for some time and required dousing to reduce its retained temperature to below 30degC on thermal imaging cameras before the risk of re-ignition was considered low enough to close the incident.

After the incident, both waste piles contained charred metal only, making further investigation of the source of the fire impossible.

# Incident Report



Image from 2209hrs showing first sign of flames

## Incident Report



Image from 2320hrs from Lancashire Fire and Rescue Service “drone” footage

- Shows fire at its greatest extent
- Shows effectiveness of fire breaks between waste piles and key infrastructure
- Shows spread to “re-run” material.



# Incident Report

## 5.0 External Stakeholder Management

### 6.1 Environment Agency:

- Notified by Graeme Slater on the EA National Incident Line at 0032hrs
- EA Officer Lee Collins attended site 0130hrs
- Follow-up call to offer an update at 0600hrs by Dave Gallagher.
- Schedule V notification (in accordance with Environmental Permit requirements) submitted by Dave Gallagher at 0923hrs Sat 31 August.
- EA Permitting Officer Karl Hunter visited site to discuss the incident with Dave Gallagher, Danny Jackson and Beth Mason on Thu 5 Sep.

### 6.2 United Utilities

- Notified by Graeme Slater on the United Utilities incident line around 0100hrs.

## 7.0 Opportunities for Improvement

7.1 The re-run material (UY10) catching light prolonged the incident the fire within the preshredded material made access for fire fighting difficult until the preshredded material had been extinguished.

**PROPOSED ACTION: Storage location for this material to be changed and site Fire Prevention Plan to be updated.**

7.2 Availability of fire water to the site: Lancashire Fire and Rescue Service sourced additional water from Redscar industrial estate (opposite the main site entrance) to enable feeding of the “stinger” and high-volume pump. This meant that Longridge Road needed to be closed.

Section 10.2.4 of the Site Fire Prevention Plan states:

*The site has 4 no. fire hydrants on site as shown on Drawing No. RLRP/1040/03 and no information is available in terms of their flow. Both the FRS and Water Company (United Utilities) have advised via telephone conversations that the pressure can be increased to reach the required flow; neither would confirm this in writing. The water company also advised they refuse to undertake flow tests due to discoloration to adjacent water networks and whilst an average flow gives a reading, events on the day could lead to a significant drop in flow i.e. another fire in close proximity.*

**PROPOSED ACTION: Contact made with United Utilities to attempt to ascertain why the planned action to increase pressure to the site was insufficient. Consider other water sources available and update site Fire Prevention Plan.**

7.3 **PROPOSED ACTION: In respect of material received at site from third parties, letters to be sent to customers explaining the dangers of hazardous material mixed within scrap metal, together with the Recycling Lives leaflet “cylinders can kill”.**

7.4 **PROPOSED ACTION: Recycling Lives operatives to be refreshed on fire precautions and waste checking procedures via a toolbox talk.**

## 8.0 Summary

A fire broke out at RLRP in the evening of Friday 30 August. Although the exact cause of the fire is unknown, measures have been implemented to reduce risk of future fires. Measures have also been proposed to improve ability for a fire to be fought more quickly and to reduce disruption via road closures.



## **Incident Report**


The emergency response plans in references A-C were implemented effectively preventing injury, spread of the fire off site, and critical damage to plant/infrastructure. Fire water was contained on site and all run-off processed through interceptors.

# Incident Report

## Appendix 1 – EA Visit Confirmation Sat 31 Aug

Form LPROB – Notice of powers and rights

No. NW 014464



**ENVIRONMENT AGENCY**

Notice of powers and rights  
Police and Criminal Evidence Act 1984,  
Code B

---

**Address searched**

Address

SOUTH PRESTON	
RECYCLING LIVES	
LONGRIDGE ROAD	
Postcode PR2 5BX	
Date 31/8/19	Time 0130

**Authorisation**

warrant  statutory authority

---

**Statutory power**

Section 108 Environment Act 1995  
 Section 109 Environment Act 1995  
 Regulation 28: The Producer Responsibility Obligations (Packaging Waste) Regulations 1997  
 Section 5 and 6: Control of Pollution (Amendment) Act 1989

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**Officer in charge of the search**

Name

LEE COLLINS - 0203 0251351
----------------------------

Environment Agency address

PO BOX 519
SOUTH PRESTON
CANIS
Postcode PR5 3GD

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**A summary of powers and rights is given overleaf.**

LPROBv001

# Incident Report

## Appendix 2 – Concrete repairs undertaken Monday 2 Sep



# Incident Report

## Appendix 3 – Extinguished waste piles at 1400hrs Monday 2 Sep.

Note also installation of temporary generator to power pre-shredder





# Incident Report

# **Appendix VI**

## **IP Flame and Thermal Temperature Measurement Camera Specs**



7<sup>th</sup> July 2019

Recycling Lives  
Recycling park  
Longridge Road  
Preston  
PR2 5BX

**Our Ref – AM2059(V5)**

Dear Dave,

**RE: Spec & Location of Flame Detection & Thermal Measurement CCTV Cameras.**

Following a site survey, it was agreed to install a thermal monitored CCTV System combining Static IP Cameras with Flame & Thermal Temperature Measurement. This system specification was sent to your insurance provider for approval and came back as satisfactory for the installation of the system to RLRP – Preston.

The Hikvision Thermometric Thermal Network Bullet Cameras have a fixed 15mm lens to cover the key areas that we discussed (Listed below).

This system has been installed onto a HIKvision 9632 Series 32 Way NVR, and will be Monitored by your chosen NSI Gold Approved Monitoring Station, PSM Ltd. The system can also be connected to your newly installed video wall, via the HIK Central Software, so that it can be monitored during the day by yourselves as well as the monitoring station.

**The Following works will be completed:**

1. The following cameras will be supplied and installed -

<b><u>Camera Number</u></b>	<b><u>Camera Location</u></b>	<b><u>Camera Type</u></b>	<b><u>Model to install</u></b>	<b><u>Remarks</u></b>
1	Top Yard – Depollution Area	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception	



			Advanced fire detection,	
2	Top Yard – Incoming Stock	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
3	Top Yard – Pre-Shredder	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
4	Top Yard – Frag Feed Stock	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
5	Frag Building – HV Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
6	Frag Building – Control Panel Room 1	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
7	Frag Building – Control Panel Room 2	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	

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8	Frag Building – Main Motor Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
9	Frag Building – HYD Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
10	Lower Yard – LPG Area	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	Not installed at present please see Camera 20.
11	Lower Yard – Back Road (Plastic Bailer & Stock)	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
12	Compressor Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
13	Door No1 Area	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	

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14	New Down Stream HV Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
15	Parnaby Plant Control Room	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
16	Down Stream 1	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
17	Down Stream 2	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
18	Down Stream 3	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
19	Down Stream 4	Hikvision Thermometric Thermal Network Bullet Camera	15mm lens, 384 × 288 resolution, high sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	
20	WEE – Pile Top Land	Hikvision Thermometric	15mm lens, 384 × 288 resolution, high	This camera has come from the LPG area due to

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		Thermal Network Bullet Camera	sensitivity sensor, behaviour analysis: temperature exception Advanced fire detection,	the area not being quoted for originally. A new camera has been ordered (7/7/19) for the LPG and will be installed when we receive this.
--	--	-------------------------------	--	--

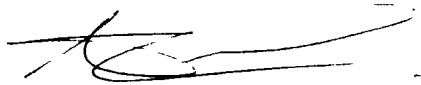
**Maintenance.**

It was agreed that there would be 12 service visits per year to make sure that the cameras are kept clean and to check that they are working correctly. This was a recommendation by the insurance provider, ADJ and the supplier to ensure the system stays in full working order.

**Monitoring.**

Recycling Lives Ltd have appointed PSM Ltd to Monitor the Thermal & Flame CCTV and are dealing with each other directly.

Thank you.

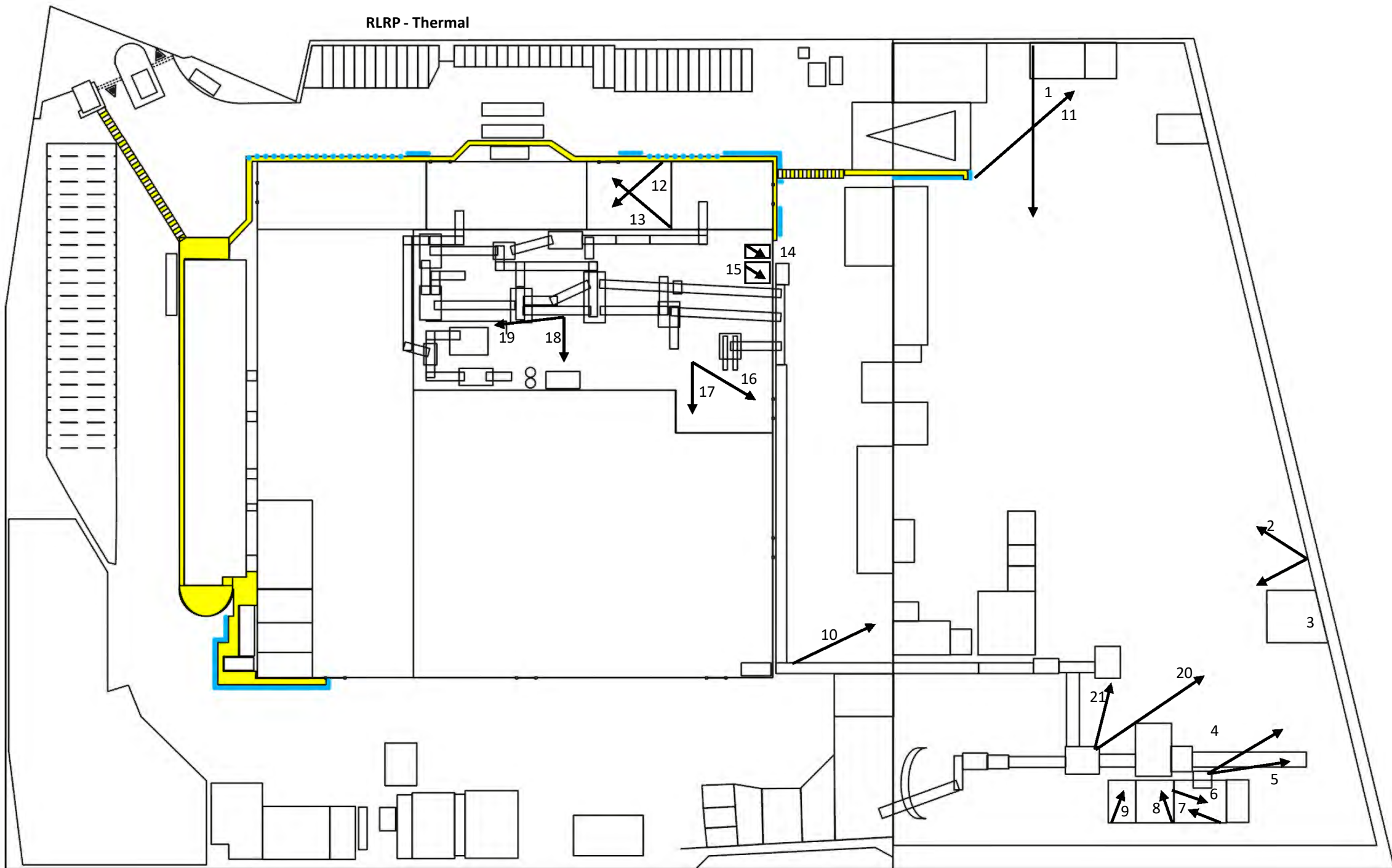


Andy Moore  
 Managing Director  
 ADJ Fire & Security Ltd

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RLRP - Thermal



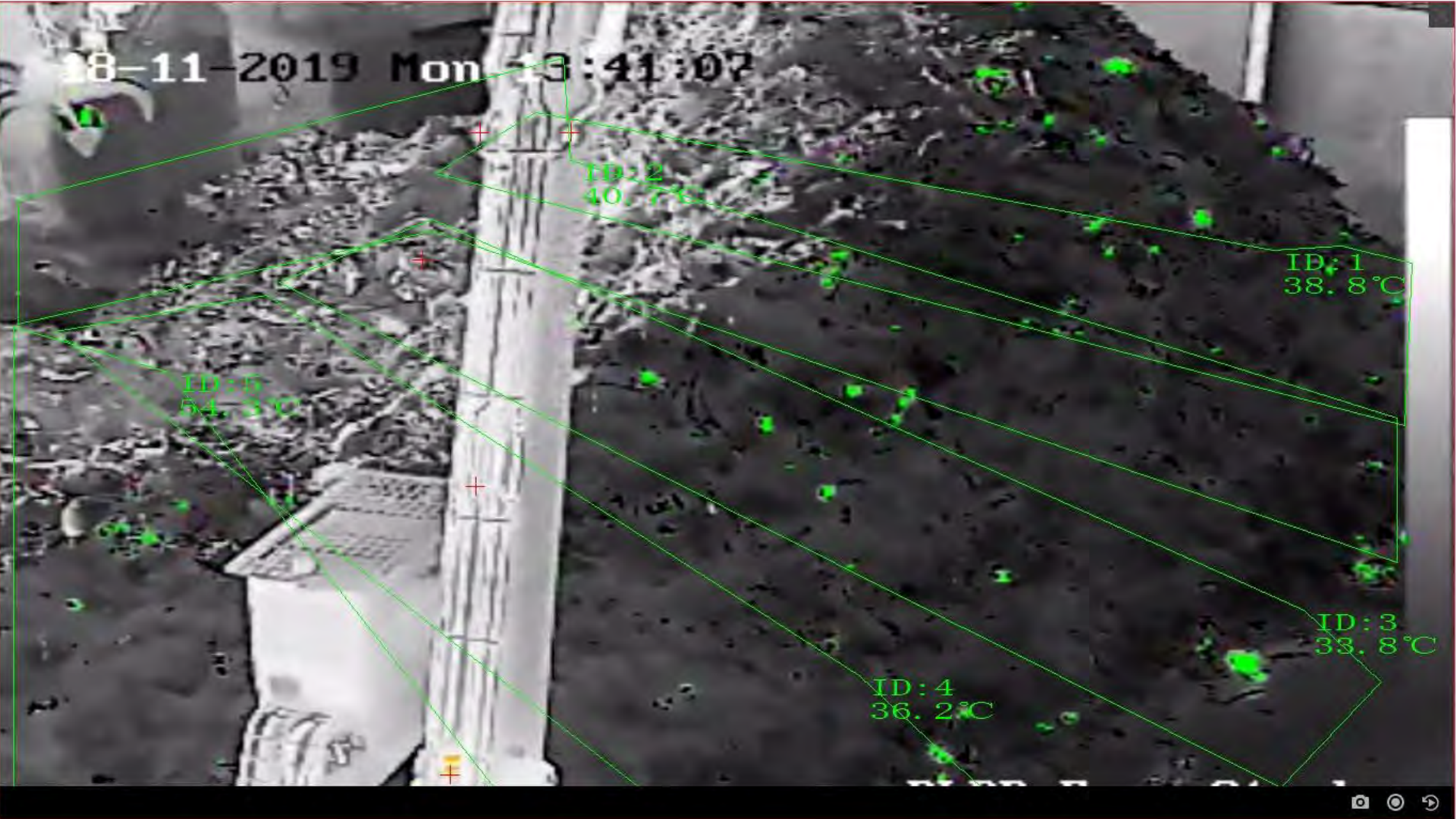
Camera ID	Location/View
1	Depoll Cars Overview
2	Pre-Shred Feed Pile 1
3	Pre-Shred Feed Pile 2
4	Frag Feed Pile
5	Frag In-Feed
6	Frag Control Panel 1
7	Frag Control Panel 2
8	Frag Motor
9	Frag Hydro Room
10	Plastics Area
11	Weee Pile
12	Compressor Room Panels

Camera ID	Location/View
13	Compressor Room High Voltage
14	Downstream Panel Room
15	Downstream High Voltage
16	Downstream Tailing Pile 1
17	Downstream Tailing Pile 2
18	Downstream Central
19	Downstream Control Panels
20	Cyclone Thermal – Pre Shredder front
21	Cyclone Thermal – Central Pile



Depot Front, Areas split to minimise false alarms. As with all the thermal cameras any temperature over the configured range has to remain present in each area for longer then 45 seconds to create a alarm. This prevents vehicle or plant alarming during the day.

18-11-2019 Mon 13:41:07



Frag Feed Stock



18-11-2019 Mon 13:49:02



Frag In Feed

18-11-2019 Mon 13:33:57

ID: 1  
34.5°C



Frag Panel Room 1

18-11-2019 Mon 13:38:52

ID: 1  
28.6°C



Frag Panel Room 2

18-11-2019 Mon 13:40:17

ID: 4  
35.7°C

Average Temperature: 24.8934°C  
Max. Temperature: 33.7934°C  
Min. Temperature: 12.1514°C  
Temperature Difference: 21.642°C

ID: 3  
34.1°C

ID: 1  
22.0°C

ID: 2  
22.1°C

Frag Motor – The detection area avoids the centre of the motor as this has a heater that activates when the motor is not running. The central temperature of the heater can spike to over 150°C

18-11-2019 Mon 13:38:11



ID: 1  
53.1°C

RT PR-Frag Hydro

Frag Hydro Room

18-11-2019 Mon 14:48:28

ID: 2  
19.3°C

ID: 1  
21.1°C



Plastic Bays

18-11-2019 Mon 13:44:11

ID: 1  
25.9°C



00 00 11 00 00



Weee Waste

11-18-2019 Mon 13:47:51

ID: 1  
59.9°C



Compressor Room



18-11-2019 Mon 13:46:18



ID: 1



Compressor Room High Voltage

18-11-2019 Mon 13:51:22



ID: 1  
37.2°C

RLRP-Downstream lockers\_RLRP - Analytic Manual tracking failed. It is not supported by the device.(Error code: HCNetsDK.dll[23].)

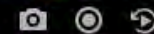
RLRP-Downstream lockers

Downstream Locker Room

18-11-2019 Mon 13:50:08



ID: 1  
10.4°C



Downstream Panel Room

18-11-2019 Mon 14:46:01

ID: 6  
29.5°C  
33.8°C

ID: 4  
34.1°C  
ID: 3  
23.8°C

ID: 2  
17.4°C

ID: 1  
15.2°C

DIRP\_Downstream Tailings 1

Downstream Tailings 1

11-18-2019 Mon 14:45:21



ID: 1  
18.9°C

RT RP\_Downstream Tailings 2

Downstream Tailings 2

18-11-2019 Mon 14:46:44

ID: 1  
20.3°C

ID: 2  
17.6°C

ID: 3  
16.3°C

ID: 4  
15.2°C

ID: 6  
15.0°C

ID: 5  
15.0°C

RI RP\_Downstream 1

Downstream Filter

18-11-2019 Mon 14:47:42

ID: 1  
50.8°C

RT PP\_Downstream Panels

Downstream Panels

18-11-2019 Mon 14:43:34

ID:4  
54.0°C



ID:3  
26.9°C

ID:2  
26.2°C

ID:1  
29.8°C

ID:5  
30.8°C



Pre-shredder Front



18-11-2019 Mon 14:44:29

ID:4  
22.1°C

ID:5  
46.8°C

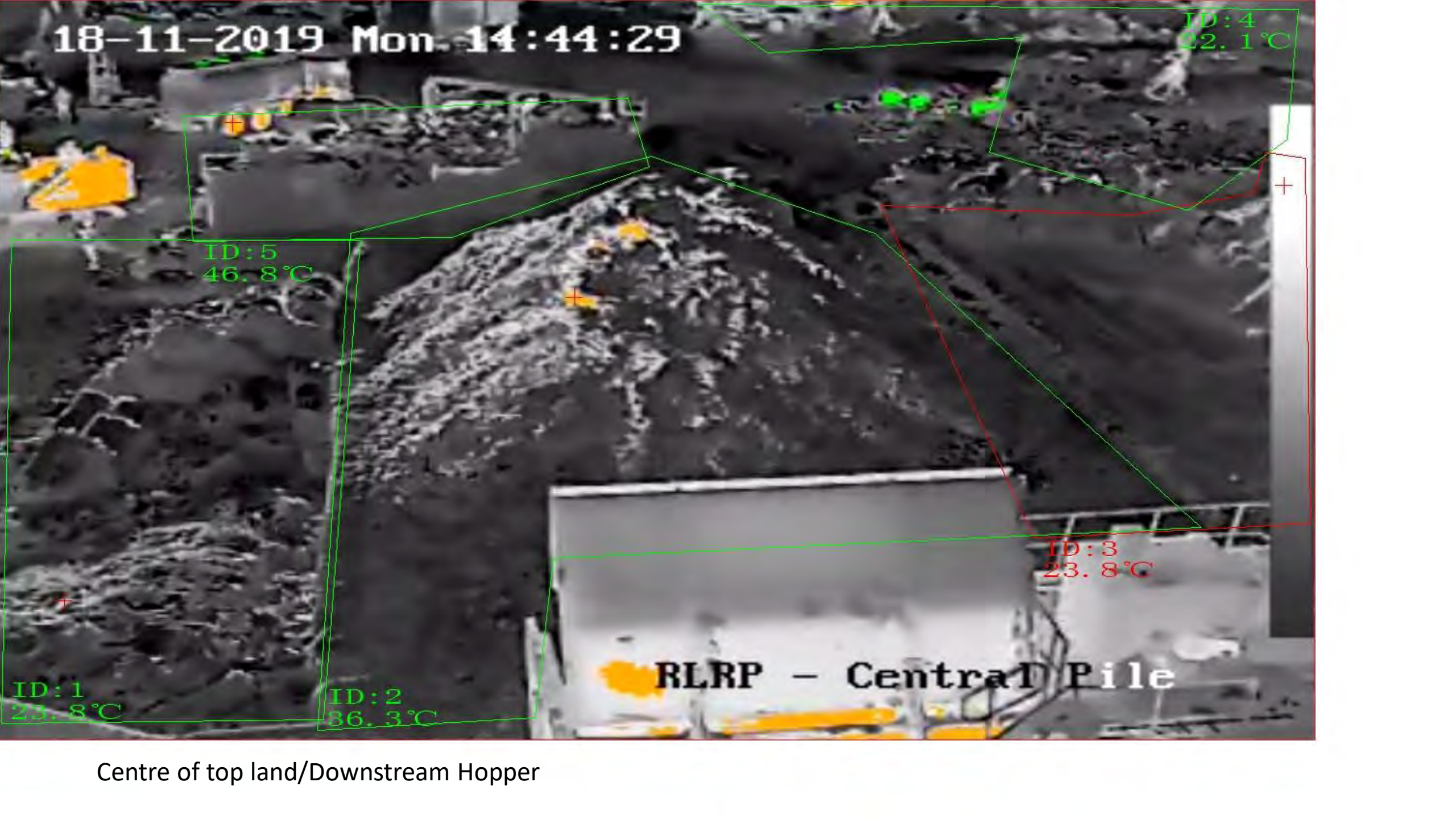
ID:3  
23.8°C

ID:1  
23.8°C

ID:2  
86.3°C

RLRP - Central Pile

Centre of top land/Downstream Hopper



# Appendix VII

## Hot Works – Permit to Work

## Permit to Work – Hot Works

For all operation involving flame, welding and hot cutting  
**This permit is valid only for the job described and the timescales provided**

### Description of work

--

### Location of Work

Building	Floor	Room	Location
Date required (max duration 1 day)		Valid From (time)	
		To	

### Contact Details (method of Contact)

Mobile Phone		Site telephone		Co. Office No.	
Site Project Officer					

Potential Hazards	<input type="checkbox"/> Oxygen enrichment <input type="checkbox"/> Oxygen depletion <input type="checkbox"/> Toxic Gas <input type="checkbox"/> Explosive Gas <input type="checkbox"/> Bio Hazard <input type="checkbox"/> Poor lighting <input type="checkbox"/> Heat <input type="checkbox"/> Noise <input type="checkbox"/> Tripping/falling/striking objects <input type="checkbox"/> Other- provide details		
Control Measures	<input type="checkbox"/> Hazard / equipment Isolated <input type="checkbox"/> Department staff informed <input type="checkbox"/> Protective equipment required - specify:		
Other Identified Hazards		Controls Measures	

### Mandatory Safety Requirements *(See reverse for further guidance)*

### Actioned

All areas to be checked and combustibles removed or protected before commencement of work	
All areas to be screened, protected, roped off as necessary and warnings signs displayed	
All systems associated with the work to be isolated, inclusive of smoke alarms	
Assistant to standby with fire extinguisher suitable for task. (Competent in use)	
Site Manager notified	
Area to be checked/inspected for combustion <b>1 Hour</b> after completion of work	

### Person entering work area


Permit issued by		Date		Time	
Permit Received by		Date			

### Permit cancellation (Estates Dept.)

Name		Date		Time	
------	--	------	--	------	--

### What is 'Hot Works'?

All temporary operations involving open flames or producing heat and/or sparks, this includes, but is not limited to, Brazing, Cutting, Grinding, Soldering, Thawing, and Welding.

### VALIDITY

**Hot works permits are only valid for a maximum of 1 working day.**

**HOT WORKS CHECKLIST** The Permit form guides you through the requirements, this is additional guidance.

Sprinklers and hose streams in service/operable. (Where applicable)

Hot Work Equipment in good condition (e.g., power source, leads, torches, etc. must be inspected prior to use to ensure they are fit for purpose)

Multi-purpose fire extinguishers (2) readily available.

Operative must be competent to use the fire extinguisher

Contact to be made with the site manager to ensure the fire alarm system is protected / isolated as appropriate. **At least 2 days notice is required.**

### REQUIREMENTS WITHIN THE WORK AREA

Area to be checked for combustible materials which must be removed before work can commence, this can include paper, cardboard, dust, lint, debris, flammable liquids and oily deposits. Floors swept clean.

Combustible flooring and other combustible surfaces must be protected with heat protection mats, or other suitable materials.

All wall and floor openings covered.

Walkways protected beneath hot work.

Explosive atmosphere in area eliminated.

Flammable liquids / gas cylinders removed from work area or stored appropriately

Area to be screened, protected and safety signs displayed

### WORK ON WALLS OR CEILINGS

Combustibles moved away from other side of wall.

### FIRE WATCH/HOT WORK AREA MONITORING

Fire watch must be provided during and for a period of 1 hour after work, including any coffee or lunch breaks, remember that adjacent surfaces need to be checked. (Walls, ceiling voids etc.)

### COMPLETION OF WORKS AND FIRE WATCH

Ensure that any fire alarms protection devices have been removed and returned.

**NB** In the event that it is not possible to reset the fire alarm system, and or remove covers for the fire alarm detector heads, then a site specific assessment must be carried out and appropriate controls measures implemented. Security and/or Networks Engineer must be made aware