



EMR Group Ltd

# Fire Prevention Plan

EMR SILVERTOWN

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Appendix 1 – Sensitive Receptors **Error! Bookmark not defined.**

Appendix 2 - Wind Rose

Appendix 3 - Site Layout plan

# Fire Prevention Plan – EMR Silvertown

## Introduction

In line with Environment Agency (EA) Fire Prevention Plan (FPP) Guidance, this document has been generated to focus on aspects of fire prevention and appropriate fire response and aims to facilitate the prevention of fires for a fast and effective response in any waste fire emergency response at the EMR Silvertown metal recycling facility.

## Fire Prevention Plan - Objectives

This document forms part of the site's Environmental Management System (EMS) held on site and intended to satisfy EA requirements as a 'standalone' and specific FPP with regards to waste activities undertaken by EMR at our Silvertown (Non-ferrous) Facility. This FPP aims to meet the following objectives:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites

Where EMR fails to meet strict FPP criteria in meeting the objectives laid out above, suitable 'alternative measures' will be demonstrated with the aim of meeting these objectives (see section 1.5 below).

## Section 1 – The Site

### 1.1 Location of Site/Community/Sensitivity

The EMR Silvertown site is situated within an industrial estate at Unit 6, Factory Road, London, E16 2EJ at grid reference: TQ 42825 79905. The site although surrounded by other industry is located approx. 120m south from the nearest residential housing. The River Thames lies directly 180m south of the site and London City Airport is located 0.5Km to the North of the site

### 1.2 Site Activities

Primary site activities includes the buying, processing, storage and treatment of non-ferrous metal wastes i.e. the sorting, baling, cutting, shearing, dismantling, shredding, separation, breaking and bulking of non-ferrous metals including, aluminium, copper, lead, stainless steel and the acceptance, storage and bulking of electrical cables (copper) and lead acid batteries.

### 1.3 Layout/Infrastructure

From Site Layout Plan in (Appendix 3) of site, it can be seen some of the site's footprint is taken up by the main non-ferrous building and most of non-ferrous metal storage and site activities occur within this building.

See Site Plan in Appendix 3 for details.

### 1.4 Types of Combustible/Flammable Materials

Most types of non-ferrous metals are non-combustible (e.g. copper, lead, aluminium, brass are all non-combustible metals) but the combustible waste materials which are normally present on site include light iron, waste lead acid batteries, general waste (from offices and welfare facilities) and wood (mainly wooden pallets).

Flammable materials (non-wastes) and substances normally present on site comprise the following: Diesel / fuel oil; Propane gas bottles; Engine oil and Hydraulic oil.

#### 1.4.1 Combustible Waste

Combustible materials normally present at the EMR Silvertown site will comprise the following:

1. Light Iron (frag-feed)
2. End of Life Vehicles (ELVs)
3. Small Mixed WEEE (hazardous WEEE)

4. LDA (large non-hazardous WEEE e.g. washing machines, tumble dryers)
5. Shearing
6. Lead Acid Batteries
7. General Waste (offices & welfare facilities)
8. Paper and Cardboard (office)
9. Wooden pallets
10. Tyres

No flammable waste fluids are present on site (e.g. fuel from ELVs) as there is no ELV depollution facility on site and no waste material containing flammable substances is accepted (or permitted) on site.

#### **1.4.2 Flammable Substances**

Other flammable substances that will be stored at Silvertown will include:

1. Diesel / fuel oil
2. Petrol (ELV tank farm)
3. Diesel and oil (ELV tank farm)
4. Propane gas bottles
5. Engine oil
6. Hydraulic oil

#### **1.4.3 Non-Combustible wastes**

Non-combustible or low combustible wastes include all grades of:

1. Copper and Copper cables
2. Brass
3. Aluminium
4. Lead
5. OA (oversize iron and steel)
6. No. 1&2 (steel plate and girder and other large items of steel)

#### **1.5 Alternative Measures Employed**

No alternative measures will be employed at this site.

## **Section 2 – Preventing Fire**

### **2.1 Optimum Pile Sizes/Volumes**

Stockpile heights will shrink and grow and therefore the pile dimensions / volumes below are ideal, optimum sizes and on occasion volumes will be larger than those shown but contingency plans will be made to reduce stock pile volumes using EMR transport to transfer material away.

See table 1 below:

#### **2.1.1 Preventing Fire - Table 1 - Combustible Wastes**

(Note: **NC** = Non- combustible; **C** = Combustible; **LC** = Low combustibility)

<b>Waste stream</b>  C- Combustible  LC- Non-combustible	<b>Location</b> (site plan)	<b>How it is stored</b> For example this may include piles, bays, containers, skips, racks, bales	<b>Max. length / m</b>	<b>Max. width / m</b>	<b>Max. height / m</b>	<b>Volume / m<sup>3</sup></b>	<b>Max. time material will be stored</b>
Light iron and / or LDA <b>(C)</b>	Yard	Bays	5	4	4	80	3 months
Small Mixed WEEE (hazardous WEEE) <b>(C)</b>	Yard	Bays	4	4	4	64	3 months
End of Life vehicles (ELVs) <b>(C)</b>	ELV building and yard	Blocks: 2 x ELVs high and 2 x wide.	8	4	2	64	1 month
Cable (copper & plastic) <b>(LC)</b>	Yard and building	Bays / rollonoff containers	4	4	4	64	3 months
Iron-Aluminium composite (Irony ally) <b>(LC)</b>	Yard	Bays	4	4	4	64	3 months
Ferrous Turnings	Yard	Bay	4	4	4	64	1 month
Lead acid batteries <b>(C)</b>	Building	20 x Battery bins	1.5	1	1	1.5	3 months
General waste (incl. office waste) <b>(C)</b>	Yard	2 x 250L wheelie bins	2	1	1	0.25	3 months
Wood waste (broken pallets etc.) <b>(C)</b>	Yard	Pallets	1	1	2	2	3 months

## 2.2 Waste Management Methodology

### 2.2.1 First In/First Out (FIFO)

A FIFO (First in /First Out) waste management regime will be implemented at the Silvertown site. All waste transactions (movements and transfers) and weights measured will be recorded via the weighbridges onto the waste data software system known as 'Trade 2' and data will be inputted on to Trade 2 by trained competent personnel only, such as trained Weighbridge Operatives and Depot Managers. The Trade 2 system also acts as a real time database and tracker to facilitate the tracking of waste, which in turn allows FIFO to be applied effectively.

### **2.2.2 Acceptance**

All wastes accepted into the EMR Silvertown depot will be checked that they are permitted on to the site as described in the site's Environmental Permit and Environmental Management Plan or EMP (formerly Working Plan), or site exemption criteria where relevant; using waste descriptions and relevant European Waste Catalogue (EWC) code six digit codes as listed in the permit (and EMP),. If a Waste Transfer Note (WTN) is available, this will be checked against the requisite detail (as outlined the relevant procedure: EPP 1.1 the Duty of Care – Acceptance of incoming material and completed on the WTN, any non-compliant wastes (including ignition sources, lithium batteries etc.) will be intercepted, managed and controlled as described in the sections below.

For Hazardous Wastes incoming loads may be accompanied by Hazardous Waste Consignment Notes (HWCNs) -see Hazardous Waste section below. [See Waste Acceptance procedures: EPP1.1 The Duty of Care – Acceptance of incoming material.

### **2.2.3 Inspection and Rejection of Waste Material**

All incoming waste that is accepted at EMR sites will be visually checked and inspected following admittance onto the site weighbridge; visual inspection may entail either direct inspection or the use of CCTV cameras (e.g. overhead cameras).

When waste materials have been tipped / unloaded, they will be additionally checked / inspected for non-permitted 'rogue' items or waste materials (including flammable substances and ignition sources) that could contravene (breach) the permit or exemption conditions, including combustible or flammable items or materials or ignition sources (e.g. gas bottles, Li-ion batteries, aerosols). Non-compliant loads will be either quarantined (for onward disposal at an appropriately permitted and approved facility) or rejected from site. Once any problem with the quality of the load is noted and non-compliance has been established, information will be passed back to the weighbridge or to a responsible person by the relevant communication system used in the yard (normally radio) and as soon as the load is checked and passed for acceptance, the load will then be transferred to the appropriate area or stockpile for processing.

Where relevant and appropriate the grade and EWC code will be amended on the system / waste transfer note (WTN) if it is different to the description grade (and / or EWC code) it was weighed in as. Once this process has been completed and everything is found to be correct on the WTN / ticket the weighbridge operative will then sign the ticket.

Any material found to be contrary to the environmental permit conditions (e.g. flammable aerosols or rogue gas cylinders present in load), is either rejected from site and loaded back onto the vehicle and the weighbridge or the site supervisor / manager is informed of the rejection, or the waste material /item is isolated (quarantined) in the designated quarantine area and ultimately removed from site and transferred to a suitable permitted and approved waste treatment or disposal facility.

### **2.2.4 Treatment**

The only treatment on site comprises physical treatment, which entails the sorting and segregation of ferrous and non-ferrous metals and batteries and the baling and shearing of these metals as a size reduction process to facilitate bulking of the segregated materials in containers and onward transfer and export for non-ferrous metal recycling.

### **2.2.4 Recording Waste Movement**

All waste movements and transactions are recorded electronically on the company's electronic Trade 2 weighbridge software system. Waste Returns (for inward and outward waste) are submitted to the EA for all permitted sites, this data is accessed from the Trade 2 system.

## **2.3 Materials/Waste Storage Management**

### **2.3.1 Duration and Stock Rotation**

Storage and rotation of scrap will be facilitated by the (real time) Trade 2 electronic waste management system, including stock level sheets, linked to the Trade 2 weighbridge system which is available for all UK EMR depots including EMR Silvertown.

This electronic system allows for the effective stock management of waste materials on site and for logistically efficient inter-depot transfers thus facilitating fast turn-round of materials (< 72h) and keeping stock levels at reasonably low levels (i.e. within EA FPP guidelines). This strategy (and the supporting electronic software system) is also driven by EMRs' business model of fast, efficient and compliant throughput and keeping stock levels low at depots.

No scrap metals or any other waste materials will be stored any longer than 1-3 months. Waste (scrap) materials (as listed) will normally be stored for less than 1 month and will usually be processed and disposed of (recycled) and transported offsite as product (or for further processing) within 1 week. Combustible waste materials (listed in Table 1) under normal circumstances are not stored on site for longer than 72 hours and are normally exported from site within a maximum limit of one week.

In the unlikely event of waste metal being stored longer than 3 months (abnormal or emergency situations), or in piles greater than those specified in FPP guidance – stock rotation will be considered, unless suitable alternative measures can be demonstrated.

### **2.3.2 Waste Bale Storage**

Non-ferrous metal bales may be stored on site from time to time (e.g. aluminium) and are therefore are non-combustible / demonstrate low combustibility. No combustible baled wastes of any type will be stored on site.

### **2.3.4 Storage where maximum pile limits don't apply**

No wastes of this type are accepted or stored on site (for example End of Life Vehicles are not accepted at the Silvertown non-ferrous site).

### **2.3.5 Waste Stored in Containers (Types/Accessibility/Ability to move)**

Batteries are stored in plastic battery bins on site (stackable with fork-lift grooves at base).

General waste and office waste (including paper and cardboard for recycling) will be stored in 250cubic litre wheelie bins. Wood waste (mainly pallets) will be stored and stacked as separate items.

### **2.3.6 External Heating (Solar Radiation) and 'Self-heating'**

Excessive external heating by solar radiation is not applicable to scrap metal wastes, as any heat falling on the surface of a metal stack is conducted along the mass of the metal distributing heat and therefore heat does not tend to build to an ignition temperature. Also in the unlikely event (in the UK) that metal would get very hot (to an ignition temperature) due to solar radiation, all scrap metal is stored at least 6m away from flammable substances, combustible wastes etc. Additionally water hoses will be used to cool the material if necessary.

The only waste metal (scrap) material likely to self-heat stored on site are the ferrous metal turnings. There are only stored on site for a maximum of 1 month on site. The turnings pile is monitored daily (as part of site inspection) for any self-heating (e.g. presence of steam / white smoke) and the pile is turned using the 360 material handler if required. This is recorded in the site diary.

## **2.4 Managing Common Causes of Fires**

How the business manages common causes of fire is listed in the table 2 below



### 2.4.1 Managing Common Causes of Fire - Table 2

The management, prevention and control of common causes of fire are outlined below.

Managing Common Causes of Fire	
Risk	Control Measure (if required)
Arson	24 hour remotely manned CCTV (MITIE); site inspections are conducted at least twice daily.
Plant/Equipment /small office waste or items.	Fire extinguishers and requisite equipment (e.g. mobile plant) in vicinity of most operational and non-operational areas, maintained according to maintenance schedule.
Batteries	Batteries are removed immediately from ELVs before processing. Fire hoses and fire extinguishers; staff trained in firefighting. 360 material handler (grab crane) used for picking up and isolating burning car in yard (if safe to do so).
Electrical Fault/Maintenance	Fire / heat sensors in buildings containing electrical equipment. Fixed wire testing and maintenance conducted on regular scheduled basis.
Smoking Policy	Smoking only permitted in designated smoking areas
Hot Works	Permit- to –work raised for most hot works activities; fire extinguisher and water made available near-by. Safe Working Procedures in place for all hot work activities.
Industrial Heaters	None are permitted on site.
Hot Exhausts	All plant exhausts are concealed and are never in contact or near flammable / combustible materials.
Batteries	Kept in bin containers areas under cover in building away from ignition sources and other flammable / combustible materials
ELVs	ELVs are stacked 2 x ELVs high (2m) and 2 x ELVs in width (4m). ELVs are accessible from more than one side.
Leaks & Spillages	Spill sorb is applied to all oil and fuel spillages and cleared immediately
Build-up of Loose Combustible Materials	No combustible materials are stored loose in any large volumes, therefore minimal firefighting capacity is required.
Reactions between Wastes	No reactive wastes stored on site but with regard to small chemical containers and gas cylinders ('chemical & solvent smalls'), oxidisers are stored separately from hydrocarbon gases, solvents, paints etc. (e.g. in lockable, steel yellow cabinet, with hazard warning signs applied).
Self-heating	Ferrous turnings are only stored on site for a maximum of 1 month on site. The turnings pile is monitored daily (as part of site inspection) for any self-heating (e.g. presence of steam / white smoke) and the pile is turned using the 360 material handler if required
Hot Loads	N/a
Heat & Spark Protection	Electrical earthing will be installed where applicable; no other ignition sources are normally present on site apart from ad-hoc maintenance welding and oxy- propane cutting (Permit-to-Work is employed where appropriate).
Gas Bottles & Other Flammables	Stored upright in cages and chained (away from ignition sources, other flammable / combustible materials and oxidisers. i.e. min. 6m separation distances)
Smoke/Heat/Flame Detectors	Installed in high risk areas of site (e.g. occupied buildings)

### 2.5 Detection Systems (including out of hours procedure)

The site possesses 24 hour remotely manned CCTV (contracted provider: MITIE) and thermal imaging cameras. Out of normal working hours, MITIE staff monitor CCTV cameras located across site, if a fire (or an intruder) is observed on the thermal imaging cameras, then the Site Operations manager is contacted immediately by telephone (if they are not available then the next person down in the tiered list is contacted by telephone). If it is a fire the Emergency Plan is enacted and the Operations Manager will contact the Fire Rescue Services and then meet them on site (open gates etc.) and assist the FRS with combatting fire, this may include contacting other operational staff living nearby to attend site (e.g. to operate 360 grab crane).

During normal operational hours the site is also monitored at least twice daily (for any smouldering, ignition sources, housekeeping etc.) by the site manager / supervisor and this recorded in the site diary.

If any maintenance burning (oxy-propane cutting) or welding activities are taking place on site, this is monitored frequently and if it is a high risk activity (e.g. burning activities close to flammable materials) then a Permit-to-Work (PTW) is raised and issued by a competent, authorised person.

EMR use one of two types of thermal cameras and at the Silvertown non-ferrous site the one installed is the Q1941 which operates by detection by variation of pixel count.

The Q1941 detects on pixel count it on movement in the detection area – IE person, tree blowing, white bag blowing across the site scrap moving. On alert the alarm is sent to the external monitoring station for them to act on. All EMR IP cameras used are made by Axis.

In addition, MITIE (Contractor) actively monitor the site (CCTV) out of hours, originally employed to identify intruders they are now also used to visually detect fires, which they report to authorised /designated person (s) (usually depot manager on their mobile phone, followed by next person on list if unobtainable – see internal contact on Emergency plan).

Sequence of actions following detection:

- MITIE once they have detected the fire will contact list of individuals shown on Emergency Plan (see attached showing named individuals and mobile telephone numbers).
- The first contact to respond will immediately make their way to the site
- Authorised (AP) will isolate the site (electricity) as shown in EP, if relevant and required.
- AP will assess the fire and organise key drains to be blocked with appropriate drain mats / bungs if safe to do so and confirmation to MITIE that they have arrived on site
- AP will close the penstock valve and contact emergency services (FRS) and the EMR area manager plus next nearest site staff
- AP will wait for assistance from additional site staff and attempt to fight the fire (if safe to do so) according to EMR fire safety procedures until the FRS arrive and they will then relinquish control to the FRS commander.

Smoke alarms (Category 3) will also be installed in main office/ weighbridge office buildings.

The level of detection system is appropriate for the type of facility, in particular the non or low-combustibility of the materials stored on site. The fire detection systems implemented have been designed to ensure that the three main aims of the EA's FPP guidance are met; namely minimise the likelihood of a fire happening, aim for a fire to be extinguished within four hours, and minimise the spread of fire within the site and to neighbouring sites.

The thermal imaging cameras on site are positioned to cover all the operational areas of the site and all waste piles (i.e. where combustible wastes and flammable substances are stored).

## **2.6 Demonstrating Quality of Stock**

Strict waste acceptance, inspection and rejection procedures ensure quality of stock (with removal of prohibited items or rejection / quarantining of contaminated loads. Additionally EMR export facilities possess ISO9001 EoW (End of Waste) quality management systems (e.g. EMR Tilbury Dock), therefore this a significant driver to ensuring metal grades meet minimum quality standards (e.g. requirement for at least < 2 % contamination in many scrap metal product grades)

### **Section 3 – Preventing Spread/Limiting Impact of Fire**

This section is to demonstrate that the company can limit the impact/spread of any fire (should it happen), and that it aims to extinguish any fire within 4 hours.

#### **3.1 Separation distances**

Separation distances between piles of combustible scrap metal will be a minimum of six metres, limiting the spread of any fire, which will also allow for the emergency services to access any fire and for the site to move materials in and out of the designated quarantine area as and when required. Combustible waste metals will also be separated from other combustible metal, flammable materials (e.g. gas cylinders) and parked or stationary mobile plant by a minimum of 6 metres.

#### **3.2 Use of Fire Walls**

Fire walls will be used as an alternative to separation distances when feasible (for example the walls of the building).

#### **3.3 Storage of Waste in Bays**

Fire walls will also be used as part of storage bay infrastructure for combustible metal wastes, and where separate piles can be stored without the need for any separation distance. Consideration will be given for available 'freeboard' space between the top of the pile and that of the bay walls, to prevent fire spread through flying sparks and hot embers by leaving a serviceable gap at the top of the pile below the height of the bay walls.

Bays walls on site will be comprised of steel plate, 6mm thick and 2m high and of various lengths and will act as 'Fire walls' (see MCRMA Technical Paper no. 7). Waste / scrap materials stored in bays at the Silvertown site are mainly non-ferrous scrap materials which are non-combustible materials (excepting zinc); no combustible ferrous waste materials will be accepted and stored at the Silvertown site. Combustible waste materials on site will normally be either stored in dedicated bays (e.g. zinc) or in bins (e.g. paper and cardboard).

#### **3.4 Use of Suppression Systems**

Suppression systems will be used as an 'active firefighting' (refer to section 3.5) measure to assist the Fire Rescue Service and their appliances.

##### **3.4.1 Building Suppression and Other Site Suppression Systems on site**

For the type of waste activities employed on site and in the main building a suitable fire suppression system will be in place at the EMR Silvertown site, which will ensure the integrity of the building in any incident and prevent spread to neighbouring property etc. The suppression comprises a combination of fire extinguishers at strategic locations (see site plan), fire hoses and water sprays.

##### **3.4.3 Third Party Certification (UKAS Accreditation)**

- Not applicable (no automated systems)

### **3.5 Active Firefighting**

All operatives receive basic fire-fighting training. Fire-fighting equipment such as fire extinguishers, monitors and hoses are located in strategic areas of the site (see site plan).

Appropriate equipment (hoses / monitors) are strategically located to assist in any fire-fighting required anywhere on site. A quarantine area is also available if materials are required to be moved to this location (see also relevant EPPs and site Emergency Plan)

The sites 360 crane (material handler / grab) can be utilised to move any waste required in the event of a fire to prevent further spread / aid in extinguishing. There is also the sites Forklift Truck that can be utilised in some instances. A Safe Working Procedure: SWP7.3 - Emergency - Fire Fighting (Mobile Plant) v4 outlines this activity in detail. This method has been recognised by the West Midlands Fire Rescue Services as a recognised method of combatting scrap metal fires.

#### **3.5.1 Quarantined (prohibited items) and quarantine Area**

All sealed canisters or other rogue ignition / flammable sources (identified either during the weighbridge inspection, during tipping, or during the opening of a bale), will be removed and quarantined in the lockable rogue gas cylinder cage (if a rogue gas cylinder identified) to await collection by an approved contractor. The sealed canisters are traced back to the customer, and the customer is contacted and fined the appropriate amount (normally £200 for the first offence, leading up to a maximum of £1000).

In the rare event of any larger unauthorised wastes inadvertently being accepted on site, an area of the site would be quarantined/cordoned off until the material can be assessed and appropriately disposed of and EMR staff would be notified of the quarantined material.

The quarantine area of the site (dimensions shown on site plan) during a fire to will be large enough to hold at least 50% of the volume of the largest pile (or ELVs or containers) and a separation distance of 6 metres will be in place away from other combustible wastes and flammable substances.

### **3.6 Water Supplies**

#### **3.6.1 Availability of Water**

Normally there will be sufficient amount of water available for the relatively small quantities of combustible waste material present on site.

The water provision for fire - fighting comprises:

1 x 30,000L tank

1 x 20,000L tank

5 x 1000L IBCs (top cut off) containing water (temporary cover) – to be used as ‘water bombs’ dropped on burning stockpiles (externally only).

Drench tank (filled with water)

Fire hydrants: 2 x fire hydrants are available at the boundaries of the site with a further three within 300m of the site and all hydrants are maintained on a scheduled basis as standard; these hydrants are able to deliver 3000 litres of water per minute.

If 2000L per minute is required to extinguish 300m<sup>3</sup> pile in 180 minutes (guidance) then for the maximum pile volume on site:

180 x 2000L = 360,000L per 300m<sup>3</sup>

80m<sup>3</sup> is the largest stockpile then  $8/30 \times 360,000\text{L} = 96,000\text{L}$  of water will be required but the 360 grab crane would split the material into at least two stockpiles of 40 m<sup>3</sup>.

For a 40m<sup>3</sup> stockpile  $96,000\text{L}/2 = 48,000\text{L}$  of water would be required and with a total of at least 55,000L of water available (does not include additional water available from hydrant).

### 3.6.2 Water Calculations - Table 3:

Maximum (combustible) pile volume in cubic metres	Water supply needed in litres per minute	Overall water supply needed over 3 hours in litres	Total water available on site in litres
80m <sup>3</sup> Split into (at least) two piles using 360 grab crane:	2000	96,000L	1. 1 x 30,000 litre tank. 2. 1 x 20,000 litre tank 3. 5 x 1000L IBCs. 4. 1 x Fire hydrant
40m <sup>3</sup>	2000	<b>48,000L</b>	<b>Total water available: 55,000L</b> plus water from fire hydrant

The site will be equipped with 5 x (1000L) opened topped IBCs filled with water which, in the event of a fire, will be hoisted by the grab cranes (on site) and dropped on to any scrap heaps on fire (one by one and only if safe to do so and under direction of a competent person or the FRS where relevant) and these water deluge 'water bombs' will provide an instant large volume of water to aid the extinguishing of the fire - especially in the early stages (note: just the water will be tipped in the event of a fire the IBC will be removed once emptied (as top is cut off, this will be almost instantaneous).

The IBCs will be clearly labelled and stored in strategic locations (and covered to prevent ingress of debris); a loose lid is normally placed on top of each to facilitate the deluge, when needed in an emergency.

### 3.6.3 Managing Firewater (Containment)

Fire water would be contained either within the building or the external concrete impermeable surface of the site, volumes are likely to be low (as volumes of combustible materials are low at the non-ferrous metal site). Any fire water will also be contained within the interceptor as well as on site. Following a major fire, an approved vacuum tanker contractor would be employed to empty the interceptor and dispose of the fire water at an approved and permitted site.

WATER CONTAINMENT CAPACITY (CONTAMINATED /FIRE WATER)	
Estimated volume of fire water generated	55m <sup>3</sup>
Area of site available	11,709m <sup>2</sup>
TOTAL VOLUME AVAILABLE* (average depth at 0.25m):	2,927m <sup>3</sup>

Note\*: the volume of the capacity available does not include the volume of the interceptor (50m<sup>3</sup>).

### 3.7 Notifying Stakeholders

The notification of stakeholders (both internal and external) is detailed in the accompanying Emergency Plan.

### **3.8 Contingency Planning**

In the event of a serious fire and the site needed to close for whatever reason, there are other alternative EMR depots available nearby within the London area that ferrous and non-ferrous metals can be diverted to at short notice:

EMR Edmonton (Ferrous and non-ferrous)

EMR Boreham (ferrous and non-ferrous)

EMR Erith (non-ferrous & ferrous metals / shear site)

EMR Wandsworth (non-ferrous & ferrous metals / shear site)

EMR East Tilbury (Ferrous metal and Shredder site)

EMR Tilbury Dock (Ferrous metal and dock site)

#### **3.8.1 Clearance & Decontamination**

Immediately following a fire incident on site, fire water used in fighting the fire will subsequently generate significant quantities of potentially polluting, contaminated water. This will initially flow towards the nearest drains, through underground pipework and ultimately into the full retention interceptor, discharge to sewer will be prevented until this contaminated fire water is cleared and disposed of.

Once the fire has been extinguished, plans will immediately be made to dispose of any fire water to an authorised and permitted waste facility. EMR as a company, employs only approved and permitted contractors to treat and dispose of waste and waste effluent from its sites.

#### **3.8.2 Becoming Operational**

The disposal of burnt material / waste will largely depend on the waste / scrap itself and the levels of combustion that has occurred; for example partially combusted light iron or steel can waste (in feed) once fully extinguished and cooled will be transferred to an EMR shredder site for further processing in a fragmentiser (as it will largely consist of the remaining residual metals). Other waste materials produced following a fire (e.g. combusted organic / wood waste) would need to be characterised and classified (under WM3) and assessed (WAC test) to ascertain its suitability for landfill (or treatment) and then transferred to (the approved and permitted) waste facility for treatment or disposal. An approved and permitted landfill site will be used to dispose of any waste materials generated by the fire compliantly.

Operations will not continue until the site has been fully contaminated and assessed as fit for purpose, both operationally and in achieving full FPP guidance.

Other EMR sites will be available to divert incoming scrap / waste materials in the Event of a fire (or other emergency) and details of these sites are provided in the contingency plan outlined above.

Following any environmental incident including fires, details of the event will be recorded and reported on an Event log and on EMR's electronic Evotix SHE management system. This Event log or electronic reporting system will facilitate any investigation and details recorded (including sequence of events, size and extent of fire, damage sustained - internally and externally), the investigation report and actions taken recorded are all recorded on the Evotix Event log

## Appendix 1 – Sensitive Receptors

Provided separately.

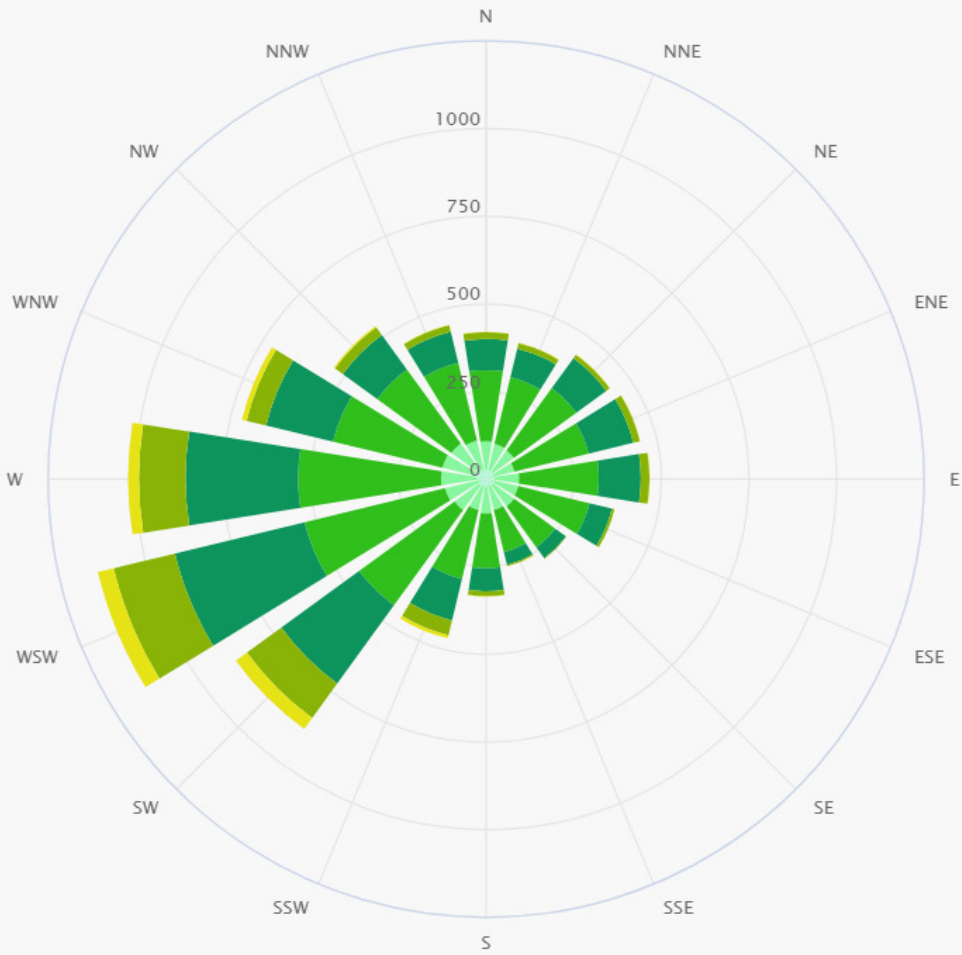
# APPENDIX 2 – Wind Rose (London City Airport)

## Wind rose

London City Airport

51.51°N, 0.06°E (5 m asl).  
Model: ERA5T.

meteoblue®



- < 1 mph
- 1 - 3 mph
- 3 - 5 mph
- 5 - 10 mph
- 10 - 15 mph
- 15 - 20 mph
- 20 - 30 mph
- > 30 mph



APPENDIX 3 – Site Plan

