EMR Group Ltd

Fire Prevention and Mitigation Plan

EMR Newport

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Fire Prevention and Mitigation Plan – (EMR Newport Dock)

Introduction

In line with National Resources for Wales (NRW) Fire Prevention and Mitigation Plan (FPMP) this document has been generated to focus on aspects of fire prevention and appropriate fire response, **a**nd aims to facilitate the prevention of fires and for a fast and effective response in any waste fire emergency.

Fire Prevention and Mitigation Plan - Objectives

This document forms part of the site's Environmental Management System (EMS) held on site and intended to satisfy NRW's requirements as a 'standalone' and specific FPMP with regards to waste activities undertaken by EMR at their Newport Dock Facility. This FPMP 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 FPMP 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 site is located at Northside, South Dock, Alexandra Dock, Newport NP20 2WE. The site is surrounded predominately by commercial and industrial premises with access via controlled Associated British Ports. **Visitors may only gain access if escorted or with specific permission**. The surrounding land use consists mainly of commercial and industrial premises; however, there are sensitive receptors located within close proximity to the site.

Nearby SSSI's

Severn Estuary – 900m SE of the site
River Usk – 550m NE of the site (Appendix 2)

1.2 Site Activities

The activities on site consist of storing WEEE, handling and processing (WTEE, shearing, dismantling, depollution of ELV's, train dismantling) of ferrous and non-ferrous scrap metal.

Handling is by means of mobile plant either diesel or electric powered. Processing is in fixed locations through the hot cutting, Ferrous Shear, End-of-life vehicle depollution area, fridge

plant area and train dismantling area. Maintenance activities are conducted by approved contractors as required.

1.3 Layout/Infrastructure

The site consists of an area, covering approximately 9.56 hectares, the grid reference for the centre of the main site is ST 31766 84995.

1.4 Types of Combustible/Flammable Materials

Combustible wastes stored at the ferrous yard are light iron, small mixed WEEE, End of Life Vehicles (ELVs), batteries (including those removed from ELVs during depollution), shear bottoms, tyres, general waste, wood, and oily rags.

'Combustibles' do not include flammable substances such as waste petrol and gas cylinders.

1.4.1 Combustible

Combustible waste materials (e.g. ferrous metal grades) normally present at the EMR Newport Dock site will comprise the following:

1. Light Iron (frag-feed)
2. End of Life Vehicles (ELVs)
3. Small Mixed WEEE
4. WTEE
5. Lead Acid Batteries
6. Shearing
7. Train dismantling
8. General Waste (offices & welfare facilities)
9. Paper and Cardboard (office)
10. Wooden pallets
11. Tyres

1.4.2 Other Flammable Materials

Other flammable substances that will be stored at EMR Newport Dock will include:

1. Diesel / fuel oil (fuel for mobile plant; HGVs)
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 Persistent Organic Pollutants (POPs)

Relatively small amounts of materials containing POPs are normally encountered on site. The most common are SMW, 'pluggy cables' which are the cables attached to the electric plugs for fridges but these are removed at the fridge plant pre-acceptance stage before fridges are processed in the fridge plant and stored in designated containers prior to dispatch off site for permitted and authorised disposal (normally high temperature incineration).

If a waste type is likely to contain POPs, then it is assumed that it does unless there is evidence to prove otherwise, for example, through analysis.

All wastes containing POPs is separated from other waste and stored separately.

If there is a fire, the Fire and Rescue Service (FRS) is informed that there are wastes containing POPs on site and the relevant penstock and shut-off valves are closed to prevent polluting fire water reaching the sewer or water courses (see Emergency Plan).

1.5 Alternative Measures Employed

The water availability on site falls short of the expected 2000L/min for a minimum of 3 hours however we have implemented the following –

- Robust waste acceptance procedures ensuring that only fridges are accepted. In the unlikely event that prohibited items are discovered during the waste acceptance process they will be segregated and quarantined.
- Early detection of fire by vigilant and trained staff will result in wastes quickly being moved into the quarantine area nearby. This will result in less waste on fire and therefore less water needed.
- Use of 2 water tanks on site to initially tackle a fire with a total capacity of 50,000 L until the Fire Service attend site.
- The nearest fire service is 10 minutes away and once on site they will make use of the unlimited water available in the dock.

Section 2 – Preventing Fire

2.1 Pile Sizes/Volumes

2.1.1 Preventing Fire - Table 1

Waste stream	Location	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m^3	Max. time it will be stored
SMW	WEEE Storage Area	Loose in Bay	18	18	4	600m3	1 Month
Light Iron	1)Near Non-Ferrous Reception 2) Sheared ELV'S (200 units)	1) In a heap 2) In a heap	20 20	20 20	4 4	1600m3 1600m3	3Months
Shearing	By the shear	Loose in stockpile	20	20	4	700m3	3 Month
End of Life Vehicles	By ELV Rig Building	Stored in rows of 3 high by 2 rows deep 50 units	N/A	N/A	N/A		3 Months
Train Dismantling	Railside	Stored on sidings and as per site plan	N/A	N/A	N/A	N/A	3 Months
Lead Acid Batteries	1)Small scales non-ferrous operation 2) Outside ELV Rig	Contained in acid resistant battery bins approx. 1m3 each. 20 x battery boxes	N/A	N/A	N/A	N/A	3 Months
Tyres	Area near ELV Rig	Stable wrapped palletised (1x1x1.8) stacked	15	5	3	225m3	3 Months
Cable	WEEE storage area	Loose in stockpiles	10	4	4	160m3	1 Month
Wooden Pallets		1 x 40 Cubic Yard Container	N/A	N/A	N/A	N/A	3 Months
WTEE							
Pentane/CFC Fridges	Within fridge processing area	Stacked in bays	45	10	3	1,350m3	6 Months
Ammonia Fridges	Within fridge processing area	Stacked in bays	5	5	1	25m3	3 Months
Broken Fridges	Within fridge processing area	In covered bay	5	5	3	75m3	1 Week
Plastics	Within fridge processing area	Bulk bags in bay	10	12	4	480m3	6 Months

1.2.1.4 Fire Prevention and Mitigation Plan

Waste stream	Location	How it is stored	Max. length / m	Max. width / m	Max. height / m	Volume / m^3	Max. time it will be stored
Compressors	Within fridge processing area	Bulk bags in a covered bay	10	12.2	4	488m3	6 Months
Refrigerants	Within fridge processing area	Sealed Container	14	8	2.2	246m3	6 Months
POPs Cable	Within fridge processing area	Bulk bags	10	12	2	240m3	1 Month
Fridge Foam	Within fridge processing area	Bulk bags on bay	10	12	4	480m3	6 Months
Household Cable	In a designated bin in fridge plant building, before being transferred to WEEE storage area	Initially in designated bin, before being loose in stockpile	10	4	4	160m3	1 Month
Waste Oil	Within fridge processing area	Tank	N/A	N/A	N/A	N/A	3 Months
Wood		RORO	N/A	N/A	N/A	N/A	3 Months
General Waste	Outside Main office buildings	RORO	N/A	N/A	N/A	N/A	1 Month

2.2 Waste Management Methodology

2.2.1 First In/First Out (FIFO)

All waste transactions (movements and transfers) and weights measured will be recorded via the weighbridges onto the waste data software system. Data will be inputted by trained personnel only, such as trained Weighbridge Operatives and Depot Managers. The system also acts as a real time data base 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 Newport Dock depot will be checked that they are permitted on to the site as described in the site's environmental permit and the site's Environmental Management Plan (EMP), where relevant, using waste descriptions and relevant European Waste Catalogue (EWC) code six-digit codes as listed in the permits and EMP. If a Waste Transfer Note (WTN) is available, this will be checked against the requisite detail and completed on the WTN. For Hazardous Wastes incoming loads may be accompanied by Hazardous Waste Consignment Notes (HWCNs) - see Hazardous Waste section below.

2.2.3 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. The 'Yard- App' is also used to record and report non-compliant material.

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 treatment on site comprises sorting, hot cutting, shearing, baling and segregation of both ferrous and non-ferrous metals. End of Life (ELVs) is accepted, stored, and treated at the facility. WTEE is accepted, stored, and treated at the facility.

2.2.5 Recording Waste Movement

All waste movements and transactions are recorded electronically on the company's electronic weighbridge software system. Waste returns (for inward and outward waste) are submitted to the EA for all permitted sites.

2.3 Materials/Waste Storage Management

2.3.1 Duration

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

This electronic system allows for the effective stock management of waste materials on site and for logistically efficient inter-depot transfers thus facilitating fast turnaround of materials (<72h) and keeping stock levels at low levels (i.e. within NRW'S FPMP guidelines). This strategy (and the

supporting electronic software system) is also driven by EMR's business model of fast, efficient, and compliant throughput and keeping stock levels low at depots.

No waste will be stored longer than 3 months, or in piles greater than those specified in FPP guidance. The waste, listed, will normally be stored for less than one month on site before being processed and transported offsite.

2.3.2 Stock Rotation

A FIFO (First in /First Out) waste management regime will be implemented at the Newport site. All waste transactions (movements and transfers) and weights measured will be recorded via the weighbridges onto the waste data software system and data will be inputted by trained competent personnel only, such as trained Weighbridge Operatives and Depot Managers. The electronic 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.

2.3.3 Waste Bale Storage

No combustible baled waste of any type will be stored on site.

2.3.4 Storage where maximum pile limits do not apply (ELV)

Not all waste on site has a maximum pile limit. See 2.1.1 Table 1 Preventing Fire

2.3.5 Storage of Batteries

Lead acid batteries are stored upright in appropriate weatherproof plastic battery bins on site (stackable with forklift groves).

You must store lithium batteries and Li-ion batteries from train dismantling separately from other batteries. You must store them in a way that prevents them from:

- coming into contact with any liquids
- being damaged

You must quarantine damaged Lithium and Li-ion batteries and store them away from buildings and other combustible materials. You must store them in a suitable waterproof container filled with sand or similar inert material.

2.3.6 Waste Stored in Containers (Types/Accessibility/Ability to move)

General

General waste is stored in minimal quantities in commercial wheelie bins outside the main office. They are not stored within 6m of any combustible wastes.

Wood

Wood is stored in a hook lift bin normally adjacent to the maintenance area. It is accessible on 3 sides and can be easily moved by a material handler if required.

Oily rags

Oily rags are stored in a lidded bin in the ELV rig. Ignition sources are strictly limited in the ELV rig. A fire in a drum of oily rags would be extinguished using a fire extinguisher rather than attempt to move it.

ELV tank farm – fluids removed from ELVs during depollution

The ELV tank farm wastes are largely stored in integrally bunded tanks within a secondary bunded area behind a barrier protecting them from impact damage from mobile plant/ vehicles. They are all treated as fixed tanks with the exception of the brake fluid IBC. All tanks are accessible on all sides

2.3.7 Production Burning (oxy- propane cutting of scrap material)

EMR Newport Dock will conduct Production Burning on site, involving the cutting of oversize scrap materials by oxy-propane burners (or equivalent). Oxy-acetylene burning is prohibited at all EMR sites.

The requirements of the EMR guidance document: 'Burning Equipment and Area Set Up' procedure will be fully implemented on site. Two permanent burning areas will be installed on as shown on the site plan. A risk assessment for the burning activity will be completed before any burning begins, and all necessary control measures will be implemented.

When burning (hot-cutting) anything other than, flat steel plate, uniform undamaged, straight standard RSJ's / girders and scrap rail items – burner's will use item specific POWRAs (Point of Work Risk Assessments) e.g. 'Think Twice' or a Permit to Work (PTW) is completed prior to the activity commencing.

All control measures identified in any risk assessments are implemented prior to the commencement of the activity. Any burners carrying out hot cutting activities are competent and fully trained in this activity.

Cold cutting using mechanical snipper / cleaver may also be used on site negating the requirement for hot cutting (and thus reducing a potential ignition source).

Environmental risks will also be encompassed in the Aspects & Impacts register.

Pre-use checks, rectifications / repairs, and annual inspections will be carried out on all burning equipment and monitored to ensure that all equipment is to the required standard.

Contractor employees will carry a file containing training certificates, current blood lead results, risk assessments, method statements, procedures and any necessary blank pre-use check and risk assessment proformas used by that company.

Fire-fighting equipment will be available nearby in the event of a fire. In the event of a major fire, the Emergency Plan will be enacted.

2.4 Managing Common Causes of Fire

2.4.1 Managing Common Causes of Fire - Table 2

Managing Common Causes of Fire	
Risk	**Control Measure (if required)**
Arson	EMR Newport Dock site is located at Northside, South Dock, Alexandra Dock, Newport NP20 2WE. The site is surrounded predominately by commercial and industrial premises with access via controlled Associated British Ports. **Visitors may only gain access if escorted or with specific permission**. The surrounding land use consists mainly of commercial and industrial premises The site also benefits from 24-hour thermal imaging CCTV. The CCTV system can be monitored remotely. These security measures will ensure any potential for arson on-site is prevented.
Plant/Equipment	All operational mobile and fixed plant is maintained and inspected by a competent person (completed in line with manufacturer's guidance). All records are kept on site in the main offices. Mobile and fixed plant are fitted with fire detection and suppression systems which have service and maintenance schedules. All plant and equipment on site are assigned safe working procedures, pre use check sheets and maintenance schedules. All defects are recorded on the action log. These pre-use check sheets ensure that before work commences, processing equipment is inspected accordingly. In addition to the above, at the end of each day operators of plant and equipment are given time to clean down their machines. This includes use of an on-site jet wash to remove any potential build-up of combustible waste, dust or/ fluff. All mobile plant is equipped with fire extinguishers located in the cab.
Electrical Fault/Maintenance	It is recognised that electrical faults are a common cause of fires (normally providing ignition). Only trained, competent and approved persons are permitted to work electrical systems. Fixed testing is carried out at least every 5 years by a competent electrician and PAT testing is carried out every year by a competent electrician. Full details of required electrical testing and maintenance are detailed within EMR's Electricity guidance. This document ensures that electrical equipment is properly constructed, installed, maintained and that the installations are suitable for the environment in which they will be operating.

	All electrical equipment is inspected prior to use to ensure that it is in safe working condition and all cables and plugs are checked to ensure that they are in good working order and that there is no obvious damage and that all covers and guards are in place. Electrical panels and distribution boards on-site all have a metal cover which is kept closed, electrical components / switches are only exposed when this is opened. These covers prevent any build-up of combustible waste, dust or fluff on electrical panels.
Smoking Policy	A smoking area has been designated at the side of the main office building. This is a safe distance (well in excess of 6 meters) away from any combustible wastes.
Hot Works	Permit- to –work is raised for most hot works (also fire extinguisher /water is made available in the vicinity of any hot work activities). A separate, secured and designated 'burning area' has been established away from combustible materials and flammable substances, with suitable fire controls. Cold cutting using mechanical snipper / cleaver is also used negating the requirement for hot cutting (and thus reducing a potential ignition source). Some maintenance hot cutting will occur on site as and when required. Hot works can only be carried out if a permit to work has been issued by Site Management. A 60 minutes fire watch will be needed following the end of any hot works on site.
Industrial Heaters	Industrial heaters such as portable electric bar heaters, paraffin heaters etc. are banned from all EMR depots and sites across the UK.
Hot Exhausts	Risk assessments undertaken at all EMR Scrap Metal facilities demonstrate that ignition exhausts from mobile plant pose a low risk. When the site is closed, mobile plant will be parked at least 6m from combustible material.
Batteries & ELV	Batteries are removed from ELVs on arrival and stored in minimal quantities on receipt at the non-ferrous small scales area. The full bins are removed to the covered battery storage area once they are filled. Battery bins are not stored within 6m of any other combustible wastes. Polluted ELVs are processed to remove flammable and combustible liquids daily and moved to the shear area located within easy reach of the firewater tank. In emergency situations where an e-vehicle battery or other lithium ion battery is found to be damaged the services of a specialist contractor are called upon to remove the battery in an appropriate container or the battery is transferred to a suitably labelled, water-filled IBC in a suitable quarantine area to await specialist removal to an appropriately authorised facility.
Leaks & Spillages	All spills will be cleaned up immediately using the spill kits available on site. If discovered, any leaking vehicles will be repaired or moved to the maintenance area where spill containment can be deployed without obstruction to the yard activities.

1.2.1.4 Fire Prevention and Mitigation Plan

Build-up of Loose Combustible Materials	Regular housekeeping activity is undertaken on site to prevent the build-up of loose potentially combustible material on site (such as general waste).
Reactions between Wastes	All waste streams are separated on site to avoid 'reactions' that may cause self heating or subsequent combustion to occur. The wastes are stored in their own designated areas whether stock piles, bays or containers. Reactions of self heating cannot occur with any large form materials on site.
Hot Loads	EMR don't accept hot loads (e.g. from foundries) at any of its sites in the UK; if a hot load was to arrive at the site it would be identified through our waste acceptance procedures and rejected at the weighbridge. If this was not possible the load would be moved into the main designated quarantine area immediately where emergency procedures would be followed (see also section 3.5)
Heat & Spark Protection	In the ELV processing rig only approved equipment is used in this area to prevent the potential for sparks igniting any fuels / fuel vapours. Any sources of ignition will be kept away from all flammable materials (e.g. fuels, oils, solvents) – This will be a minimum distance of 6 meters. For example, flammable materials will be kept away from any maintenance hot works area. Mobile shovel drivers are required to lift the bucket from the ground when moving and only lower and engage with the ground before scooping and lifting scrap or other waste materials, to minimise the risk of any sparking. Rubber strips cannot be used at scrap metal processing sites because of the cutting and abrasive properties of waste scrap and concrete surfaces (life span of such strips would be very short for these types of site activities). Mobile plant (hot exhausts) do not operate near flammable sources (tanks / containers of flammable substances clearly signed and separated by barriers); the loading shovel also possesses radar to prevent collision (and also prevent proximity) with objects.
Gas Bottles & Other Flammables	Flammable liquids are stored on site in double skinned tanks within a bunded area; see storage location in Appendix 1 All vehicles, tanks, drums are maintained and stored in a suitable manner. In the event that rogue gas cylinders are identified within incoming scrap, they are segregated and stored in the designated cage on site; refer to site plan for location (Appendix 1). Mobile plant will not operate near flammable storage areas (except for associated refuelling activity).
Smoke/Heat/Flame Detectors	A petrol vapour detector alarm is installed inside the ELV depollution building, and its set to alarm below the Lower Explosive Limit threshold.

	As part of their general duties, operational staff are mindful of any sign of fire or potential or sources of ignition. Staff are trained to continually check for any signs of fire, and report any emergency immediately over issued site radios that connect with the main office. A Fire Watch is part of the daily walk routine and will be undertaken at the end of each day throughout the whole site. These are recorded on the daily site diary. Where any defined hot work take place this is done under Permit-to-work and are closed out with a specified Fire watch of the area. This will be a of at least 30 minutes following the completion of any 'Hot works' (e.g. welding). Site office/ welfare building is fitted with smoke detectors to provide an early warning in the event of fire within the office facilities. The site benefits from CCTV cameras which will aid the visual detection of fires. The CCTV system outside of normal operating hours is monitored remotely Staff are aware of the risk of fire on site and scrutinise areas of the yard during the working day as they go about their business. Any incident is investigated and recorded (event log / site diary).
Training	EMR provides training to all employees through a combination of Safe Working Procedures (SWPs), Environmental Protection Procedures (EPPs), and external training courses. Training courses, including refresher courses are scheduled and controlled through a training matrix, this includes fire related training. All operational staff receive fire extinguisher training and certain appointed staff receive Fire Warden training (at least one per depot). High pressure hose training is given to a number of operational staff including how to operate the firewater tank controls. All site staff will be provided with Fire Prevention and Mitigation Plan Awareness training, dependent on level this will either take the form of a Tool Box Talk (for site operatives) or one to one training with site management encompassing the whole of the plan in detail (given by the regional SHE Manager / SHE Specialist). All employees are also made aware of the company's environmental policy and their roles and responsibilities through tool box talks or seminars. On commencement of employment employees are given an induction course and they are advised of the environmental and safe working practices, aspects and impacts of their operation (which includes fire prevention and control). Employees are informed and updated of changes in procedures etc. and any changes to emergency preparedness and response requirements. EMR ensure adequate cover is provided with respect to Operator Competence. The Site

	Manager will possess the relevant WAMITAB qualification and additional cover is provided within the group for periods of absence or holidays.
Hot Weather	There is no evidence that hot weather impacts on the metal stockpiles on site. In the ELV and maintenance areas, any used rags will be stored in lidded bins and kept inside.

2.5 Detection Systems

2.5.1 Detection Systems in Use

During operational hours the site is monitored by the site manager and supervisor. The site possesses 24 hour remotely manned CCTV (external contractor) and thermal imaging cameras. This means the site is also monitored outside operational hours. If there is a fire then the Fire & Rescue are contacted to attend in the first instance. An authorised person (AP) will also be contacted to attend.

The level of detection system is in place is appropriate for the type of facility, in particular the non-combustibility 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 NRW's FPMP 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).

2.5.2 Third Party Certification for Detection Systems (UKAS Accreditation)

During operational hours the site is monitored by the site manager and supervisor. The site possesses 24 hour remotely manned CCTV (external contractor) and thermal imaging cameras. This means the site is also monitored outside operational hours. If there is a fire then the Fire & Rescue are contacted to attend in the first instance. An authorised person (AP) will also be contacted to attend. The level of detection system is in place is appropriate for the type of facility, in particular the non- combustibility 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 NRW's FPMP 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 quality management systems, which is 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) and therefore reducing concentrations of any combustible matter within metal materials / products.

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 waste/products 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 material/waste in and out of the designated quarantine area as and when required. Combustible waste metals will be separated from other combustible metals, flammable materials (e.g. gas cylinders) and parked stationary and mobile plants by a minimum of 6 metres, or a fire-resistant wall. The largest waste pile will be in the ferrous area. However, the size of the ferrous area means that there is adequate space to create numerous small waste piles if required.

3.2 Use of Fire Walls

The site will operate 6 metre distancing between stockpiles and not the use of fire walls.

3.3 Storage of Waste in Bays

Fire walls can also be used as part of storage bay infrastructure, and where separate piles can be stored without the need for any separation distance. Consideration will be given to the availability of ‘freeboard’ space between the top of the pile and that of the bay walls. This is 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. There will be a minimum separation distance of 6 meters between stockpiles of combustible waste material, between combustible materials and flammable substances and between combustible or flammable materials and parked mobile plant unless a firewall separates the two or more types of scrap / waste material. The separation distances will be maintained but there may be times when material is being moved around the site whereby the separation distance may decrease temporarily for short periods of time.

3.4 Use of Suppression Systems

Suppression systems can be used in any ‘active firefighting’ (refer to section 3.5) measure to assist the Fire Rescue Service and their appliances

3.4.1 Building Suppression

For the type of waste activities employed on site and in the main building, a suitable fire suppression system is in place at the EMR Newport site, which ensures the integrity of the building in any incident and prevent spread to neighbouring property. The suppression comprises a combination of fire extinguishers and fire buckets at strategic locations.

3.4.2 Other Suppression Systems in Use

Fire blankets and fire hoses are on site.

3.4.3 Third Party Certification (UKAS Accreditation)

Not applicable (no automated system).

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) is 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 360 grab cranes (material handlers) under strict supervision of a trained Fire Marshall can pull apart burning material in main yard, into smaller burning piles which are spread out and doused with water using either hoses or further water bombs. Smaller piles will require less water, and they can be tracked out (spread out further) to facilitate extinguishing any residual burning.

3.5.1 Availability of Quarantine Area

The quarantined material on site will be located on impermeable concrete pavement. This will be located (see site diagram). 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 one of three (2mx3m) lockable rogue gas cylinder cages (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 and /or ban from site). 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.

3.6 Water Supplies

3.6.1 Availability

EMR Newport has 2 x 25,000-litre tank with modular controls. There is also a fire hose reel. This is all enclosed in a unit. Water tanks will be placed strategically around the site. The nearest fire hydrant is on dock road approx. 500m from the site. The fire hydrant is the property Welsh Water and is 4” /100mm diameter water supply hydrant

3.6.2 Managing Firewater (Containment)

Fire water would be contained within concrete bunded impermeable surface areas of the site. Any fire water will also be contained within the three interceptors located at different points on the site (See Appendix 1).

The discharge of water from the interceptor is controlled by the penstock valve which is closed during a fire to prevent discharge of fire water. 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.

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 area that metals can be diverted to at short notice:

- EMR Darlaston (incl WTEE)
- EMR Cardiff (Excl WTEE)
- EMR Sharpness (Excl WTEE)

3.8.1 Clearance & Decontamination

Immediately following a fire incident on site, fire water used in fighting the fire will subsequently generate 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 firewater is cleared and disposed of. Once the fire has been extinguished, arrangements will be immediately made to dispose of any fire water to an authorised and permitted waste facility as soon as practicable. EMR as a company, employs only approved and permitted contractors to treat and dispose of waste and waste effluent from its sites. Approved Contractors will be used to provide road tankers to suck / remove fire water for offsite treatment and disposal at a permitted treatment and disposal facility.

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 guidance document and assessed (WAC tested) 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 uncontaminated and assessed as fit for purpose, both operationally and in achieving full FPMP 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 SHE management system. This Event log or electronic reporting