

European Metal Recycling Limited Liverpool Alexandra & Gladstone Docks

EPR/RP3794CG & EPR/JB3501MH

Management Plan V8 August 2022

Introduction

European Metal Recycling Limited (EMR) is the largest UK metals recycling company and operates many licensed metals recycling sites throughout the country.

EMR specialises in the recovery and recycling of scrap metals from industry, commerce and householders. Both ferrous and non-ferrous metals are dealt with. The operations used include sorting, processing by fuel gas cutting or mechanical means and grading into categories defined by steelworks and foundries.

The registered office is:

European Metal Recycling Limited Sirius House Delta Crescent Westbrook Warrington WA5 7NS

Registered in England and Wales No. 2954623

In preparing this management plan detailed assessment of site procedures, security measures, processes and likely impact on the environment has been carried out.

During this site assessment the site location and operational plans were checked against current operations and site infrastructure, and updated accordingly. All activities at the site (from receipt of material to final dispatch) were examined with regard to their potential for risking pollution of the environment, causing harm to human health or detriment to the amenities of the locality.

SECTION WP 1 SPECIFIED WASTE MANAGEMENT OPERATIONS

1.1 Summary of the process

EMR operate on 2 docks within Peel Port's Liverpool Docks in Bootle. Both facilities hold environmental permits issued by the Environment Agency.

The permitted operations on-site in the Environment Agency's classification are described in table S1.1 below and include –

a. **Storage:** Storage of metallic wastes.

b. **Checking:** Checking wastes and rejection of wastes excluded from the environmental permit.

c. **Processing:** Processing the metallic wastes (including shredding, flame cutting etc.), processing of end of life vehicles in accordance with ELV regulations and POPs containing plastics.

d. Storage: Storage of processed materials.

Summary description of the waste management operations

Alexandra Dock

Alexandra Dock accepts all forms of ferrous and non-ferrous scrap, including but not restricted to iron, steel, cast iron, stainless steel, copper, zinc, brass, lead, aluminum, tin and their alloys. Goods and residues containing these in combination with non-metallic materials will also be processed. The site has the ability to accept and depollute end of life vehicles however this activity is not currently undertaken at the site.

The area to the right of the main office will be used to unload and load receive rail and the storage of all forms of ferrous and non-ferrous scrap, including but not restricted to iron, steel, cast iron, stainless steel, copper, zinc, brass, lead, aluminum, tin and their alloys. This area will also be used to store furnace ready ferrous steel that is above 95% steel and contains no combustible materials.

The following site activities are covered under the Industrial Emissions Directive:

- Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving treatment in shredders of metal waste, including waste electrical and electronic equipment and end of life vehicle components.
- Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

The remaining operations on-site include:

- Manual vehicle storage, depollution and dismantling (authorised treatment) facility.
- Metal recycling.
- WEEE plastics storage and treatment.

Quantities: Maximum stock levels will be limited to meet the conditions within the Fire Prevention Plan.

Maximum quantities per year:

Activity	Quantity
Non-hazardous shredding	400,000 tonnes
Hazardous waste storage	25,000 tonnes
ELV	30,000 tonnes
WEEE Storage & Treatment	80,000 tonnes
Metal Recycling	370,000 tonnes

Wastes having any of the following characteristics shall not be accepted:

- Consisting solely or mainly of dusts, powders or loose powders,
- Wastes that are in the form which is either sludge or liquid.

Table S1.1 activities				
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex I and II operations	Limits of specified activity and waste types	
A1 Non- hazardous waste shredding	S5.4 A(1) (b) (iv) Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving treatment in shredders of metal waste, including waste electrical and electronic equipment and end-of- life vehicles and their components	R3: Recycling/reclamation of organic substances (including composting and other biological transformation processes) R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic materials	From receipt of metal waste to recovery of shredded materials. Treatment consisting only of shredding and granulation of ferrous and nonferrous metals for recovery. Waste types suitable for acceptance are limited to those non-hazardous specified in table S2.2.	
A2 Hazardous waste storage	S5.6 A(1) (a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes pending any of the activities listed in Section 5.1, 5.2 and 5.3	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced). D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)	Storage of WEEE and hazardous waste to despatch off site for disposal or recovery. Lead acid batteries shall be stored in containers with an impermeable, acid resistant base and a lid or stored undercover to prevent ingress of surface water. Wastes consisting solely or mainly of dusts, powders or loose fibres shall be loaded, unloaded and stored within a building. Waste shall not be stored for more than 6 months without prior written approval from the Environment Agency. Waste types suitable for acceptance are limited to those specified in table S2.3.	
A3 Hazardous waste treatment (POPs plastics)	S5.3 A(1) (a) (ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physicochemical treatment	R3: Recycling/ reclamation of organic substances which are not used as solvents D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12	From receipt of hazardous waste to treatment and transfer of recovered component. Treatment consisting of manual sorting, separation, screening, shredding, granulation, washing of hazardous waste. Treatment of hazardous waste shall be carried out within a building and on an impermeable surface with a sealed drainage system. Waste types as specified in Schedule 2, table S2.4.	

Directly Ass	ociated Activity		
Α4	Physical treatment for the purpose of recycling	R3: Recycling/reclamation of organic substances which are not used as solvents R4: Recycling/reclamation of metals and metal compounds R5:Recycling/reclamati on of other inorganic materials	From shredding of ferrous and nonferrous metals to storage of processed materials. Pre-treatment consisting only of sorting, separation, grading, shearing, baling, compacting, crushing and cutting of metal wastes into different components for recovery. Post-treatment consisting only of sorting, separation and grading of shredded materials.
A5	Storage of non- hazardous waste	R13: Storage of waste pending the operations numbered R1 and R12 (excluding temporary storage, pending collection, on site where it is produced).	From receipt of waste to treatment. Wastes as specified in table S2.2.
A6	Storage of processed materials	R13: Storage of waste pending the operations numbered R1 and R12 (excluding temporary storage, pending collection, on site where it is produced).	Storage of processed separated plastics, ferrous and non-ferrous metals following treatment to despatch off site for recovery. Storage of separated materials including plastics, ferrous, non-ferrous metals and shredder residue following treatment.
A7	Raw materials storage	Storage of raw materials including lubrication oil diesel, Magnetite and defoaming agent.	From the receipt of raw materials to despatch for use within the facility.
A8	Surface water	Site drainage from roof and surface water collected in drainage gullies and drainage pipes to foul sewer.	Collected surface water to pass through retention interceptor to foul sewer.
A9	Storage of processed materials, excluding temporary storage of hazardous waste under Section 5.6 A(1)(a)	R13: Storage of waste pending the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	Storage of hazardous and nonhazardous fractions following treatment under activity A3. Waste shall not be stored for more than 6 months without prior written approval from the Environment Agency. Wastes shall be stored within bays on an impermeable surface.

Activity reference	Description of activities for waste operations	Limits of activities
Activity reference A10 Vehicle storage, manual depollution and dismantling (authorised treatment) facility	Description of activities for waste operations R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R3: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes R4: Recycling/reclamation of metals and metal compounds R5: Recycling/reclamation of other inorganic compounds	 Limits of activities Treatment consisting only of manual depollution of waste motor vehicles and sorting, and separation of waste for the purpose of recovery. Wastes shall be stored for no longer than 1 year prior to disposal and 3 years prior to recovery. No more than 25 tonnes of intact waste vehicle tyres (waste code 16 01 03) shall be stored at the site. Buildings, covered areas or containers shall meet the following requirements: buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water; rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids; Containers containing waste (excluding uncontaminated metal waste) shall be stored on an impermeable surface with sealed drainage system. Uncontaminated plastic, glass and ferrous and nonferrous metal wastes (including depolluted waste motor vehicles) arising from the treatment of end-of life vehicles shall be stored on hard standing or an impermeable surface with sealed drainage system. Lead acid batteries shall be stored in containers with an impermeable, acid resistant base and a lid that prevents ingress of water.
		other than sorting and separating from other wastes, and repackaging for third party processing.

Table S1.1	activities	
A11 WEEE storage and treatment	A11 WEEE storage and treatment R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Treatment consisting only of sorting, separation and dismantling of waste into different components for recovery using manual & mechanical methods. Treatment of WEEE shall be carried out within a
		building provided with a weatherproof covering where appropriate.
operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced)	There shall be no treatment of hazardous waste other than for sorting and separation from other waste streams, repair or refurbishment, or manual dismantling only.	
	R3: Recycling/reclamation of organic substances which are not	Buildings, covered areas or containers shall meet the following requirements:
	used as solvents (including composting and other biological transformation processes R4: Becycling/reclamation of metals	 buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;
	and metal compounds R5: Recycling/reclamation of other inorganic compounds	 rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;
	 containers containing waste shall be stored on an impermeable surface with sealed drainage system. 	
		Waste types suitable for acceptance are limited to those specified in table S2.6.
A12 Metal Recycling	A12 Metal Recycling Recycling Recycling Recycling Recycling Recycling R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where	Treatment consisting only of sorting, separation, grading, shearing, bailing, compaction, crushing or cutting of non- hazardous waste into different components for recovery.
	It is produced) R4: Recycling/ reclamation of metals	Wastes shall be stored for no longer than 3 years prior to recovery.
	and metal compounds	Buildings, covered areas or containers shall meet the following requirements:
		 buildings, covered areas, or containers shall be designed, constructed and maintained to prevent ingress of rain and surface water;
		 rain and uncontaminated surface water shall be kept separate from contaminated water and other liquids;
	 containers containing waste (excluding uncontaminated metal waste) shall be stored on an impermeable surface with sealed drainage system. 	
		Uncontaminated ferrous metal wastes or alloys and uncontaminated non-ferrous metal wastes shall be stored on hard standing or an impermeable surface.
		There shall be no treatment of hazardous waste other than for sorting and separation from other waste streams only.
		Waste types suitable for acceptance are limited to those specified in table S2.7.

Table 1.1b – Gladstone Dock: Specified waste management operations permitted

Description of activities for waste operations	Limits of activities
R4: Recycling/reclamation of metals and metal compounds	Physical treatment including manual and mechanical sorting/ separation, screening, hot cutting of non-hazardous waste for recovery.
R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced)	Subject to any other requirements of this permit wastes shall be stored for no longer than 1 year prior to disposal or 3 years prior to recovery.
	Waste types as specified in Table S2.1

1.2 Site Plan

Operations will not extend beyond the permitted boundaries. See Site Plan in Appendix 1.

SECTION WP 2 SITE INFRASTRUCTURE

2.1 Provision of Site Identification Board

A site identification board will be provided at the site entrance detailing the following information:

- Site name & address
- Environmental Permit holder details
- Operator details
- EMR / Environment Agency emergency out of hours contact number
- Opening times
- Waste management licence number

2.2 Site security, access & other security measures

Roads: Access to the site is from the dock service road and all vehicle access routes are surfaced with concrete. Maintenance of this road is the responsibility of the Docks Authority.

Boundary Fencing & Security: Both depots are within the dock estate with secure fencing and 24 hour security. The sites also benefits from 24hour CCTV with thermal imaging activation.

Unauthorised access to the site is not permitted and all visitors are escorted whilst on site. Local site security is supplemented by the location within a controlled Port perimeter fencing allowing access through 24 hour manned police gates/check points.

2.2.1 Operational procedures

The site will be kept closed and secure at all times when unattended. CCTV cameras monitor the site when the site is closed.

2.2.2 Maintenance procedures

The security measures detailed above will be inspected at the commencement of each working day. Any defects shall be made secure by temporary repair by the end of the working day and shall be repaired within seven working days of the damage being detected.

All vehicles and equipment will be maintained in line with manufacturer's specification. Maintenance works will include checking for any damage which could result in a leak / spillage. Site operatives are trained to operate vehicles in a manner which minimises risk of leaks / damage.

All inspections, defects, damage and repairs will be recorded.

2.3 Lighting

All operational areas of the site shall be illuminated by electric lighting while the site is accepting materials and processing during the hours of darkness.

The site lighting is fitted with automatic dusk / dawn sensors in order to ensure that lighting is adequate throughout the working day.

SECTION WP 3 SITE ENGINEERING FOR POLLUTION PREVENTION AND CONTROL

3.1 Engineered Site Containment and Drainage System

The entire Alexandra Dock site has undergone extensive concreting work and is fully surfaced with a minimum specification of 250mm depth of C50 type concrete laid down on a level surface which has been fully prepared.

3.1.1 Drainage & Protection of Water Systems

Alexandra Dock

The site has a sealed drainage system leading to a class 1 full retention Interceptor with a 22,500L capacity. There is a penstock valve prior to the final discharge point which can be closed in the event of an emergency. The drainage system connects to a foul sewer drain on Regent Road consented by United Utilities.

Gladstone Dock

Within a heavy ship traffic area, the dock itself is capable of hosting 2 cargo ships. The site is currently under development in design phases. During initial phases the site will benefit from a fully concreted and impermeable surface (200-300mm reinforced concrete), and a sealed drainage system including silt traps and a class 1 full retention interceptor. A sampling point and penstock valve is also provided. The drainage system connects to a foul sewer drain on Regent Road consented by United Utilities.

3.2 Operation of mobile plant and associated equipment

All operational mobile plant and fixed equipment will be located on an impermeable pavement. All mechanical equipment used on site for handling waste shall be maintained and inspected by a competent person and records of inspections and maintenance schedules shall be retained on site.

SECTION WP 4 SITE OPERATIONS AND MANAGEMENT - GENERAL

4.1 Operational Hours

Being an operational dock dealing with both the loading and unloading of vessels of all sizes, the site may be operated 24 hours per day, 7 days per week.

4.2 Energy Efficiency

Site activities will include appropriate measures to ensure energy is used efficiently, including annual reporting of energy use (MWh per tonne of metal processed).

This will also include using processing techniques that optimise the capability of the shredder, treating material at a steady efficient rate rather than overloading capacity.

Opportunities to improve energy efficiency will be reviewed and recorded at least every 4 years with any appropriate measures implemented as required.

4.3 Efficient use of raw materials

Site activities will include appropriate measures to ensure raw materials and water are used efficiently.

Use of the following raw materials will be monitored and reported annually:

- Diesel for Mobile Plant
- Hydraulic Oil
- Engine Oil
- Grease
- ODS Foam
- Water use (m3 per tonne of metal processed)

Opportunities to reduce usage / environmental impact will be reviewed and recorded at least every 4 years with any appropriate measures implemented as required.

4.4 Avoidance, recovery and disposal of wastes produced by the activities

The site will ensure that the waste hierarchy is applied to all operations.

Opportunities to improve application of the hierarchy reviewed and recorded at least every 4 years with any appropriate measures implemented as required.

SECTION WP 5 SITE OPERATIONS – WASTE ACCEPTANCE & STORAGE

A full list of Environmental Protection Procedures can be found in Appendix 2

5.1 Waste Acceptance

Vehicles arriving at the site enter the main gates and drive through the site's radiation detector (Exploranium detector fitted) onto the calibrated weighbridge located immediately inside the main entrance. At this point, the load is checked visually for its suitability for processing at the site and checked against the description of the load provided on the waste transfer note/weighbridge ticket. In the event that unacceptable wastes are discovered at this point, the vehicle shall be rejected from site.

If the materials are determined as acceptable by the initial inspection, the delivery vehicle is directed to a suitable area to discharge its load.

Once the load is tipped, the materials are again inspected by the off-load inspector to determine whether any unacceptable materials are present. Should unacceptable materials be observed at this point, contrary items are returned to the vehicle and rejected from site. The vehicle driver and customer are notified of the reasons for the rejection. Radio communications are maintained between weighbridge and yard inspectors during the acceptance of waste at the site.

Once a load has been tipped, inspected and deemed as acceptable, the vehicle is cleared to return to the weighbridge where the weight of the material tipped is determined.

Each load of waste arriving at the site is covered by a weighbridge ticket which also fulfils the requirements of the Duty of Care Transfer Note. The information is checked against the load on arrival at the weighbridge and again when the vehicle discharges its load.

Waste acceptance checks should identify any non-conforming waste prior to acceptance. This includes (but is not limited to) any non-scrap waste that may cause issues during storage and processing. Therefore staff responsible for waste acceptance will check and ensure that loads are free from excessive levels of litter, any potentially fibrous / dusty / fine waste likely to emit any excessive dust or particles, prohibited items / flammable liquids or combustible materials that may present a fire risk.

Due to the risk of concealed items within baled waste EPP 1.14 includes a flow chart which is followed to ensure risk is managed. Before waste is sent to site for acceptance the supplier will be reviewed and if required a commercial contact will visit site to provide information on waste acceptance.

When bales arrive on site they will be subject to the normal waste acceptance procedures (checking waste matches description on paperwork, free from non-permitted items etc.). At this point if issues are found then the waste may be rejected. Bales are then tipped to a separate area and the contents of the load are reviewed by the crane operative, again if issues are noted offending items will be rejected.

If there are no issues noted then the load will be processed. The depot will monitor this batch and record to confirm that it has passed through the shredder without any adverse events, subsequently the client will therefore pass inspection. Details of procedures to be followed if an adverse event occurs are detailed in section 8.3 of this document.

5.2 Non-conforming wastes

In the event that non-conforming materials are not detected during the two initial inspections, these are segregated upon discovery and quarantined. The advice of the Environment Agency may be sought on the discovery of potentially hazardous wastes. Incompatible wastes shall be stored physically separate. The company will strive to remove any potentially harmful waste that has been quarantined as soon as possible.

The site is fitted with radiation detectors along with a handheld detector which can be used if any radioactive waste suspected to be present. Local rules are in place and staff are trained to respond appropriately to any potential radioactive alarms.

The site is equipped with a cylinder cage, quarantine bins and a radiation bunker in order to ensure proper storage of rouge or hazardous materials.

Written records of all rejections are maintained by weighbridge staff.

5.3 Pressurised Containers

Gas cylinders and pressurised containers are not knowingly accepted at the site, unless accompanied by a 'gas-free' certificate. Should such items be discovered during the inspection stages, these are rejected from site. Should these be later discovered among the material waiting processing, these are segregated and placed in a designated rogue cylinder cage prior to collection by an authorised contractor.

Records of the collection of gas cylinders shall be retained on site.

5.5 Specified waste treatment process – plant, equipment and procedures

Fragmentiser

The primary specified waste treatment process on-site is the fragmentation of scrap metal through the on-site fragmentiser. Once the scrap metal has been accepted and inspected as described in the relevant procedures listed in 5.1, it is fed by crane into the fragmentiser for processing.

LAP Line Processing (Landfill Avoidance Project)

Both the Light Fraction and Residue streams from the fragmentisation process are conveyed directly into this line from the shredder to be further processed to extract and recover metals, aggregates and plastics.

The light fraction material is initially sized using a triple deck vibratory screen and is then conveyed over 3 x DSRP separators which remove plastic rich material which is conveyed to the Dense Media Process. The material left behind is conveyed to a storage bunker.

The Residue material is similarly sized using a twin deck vibratory screen. The sized material then passes over Eddy current separators which throw non-ferrous metals forward. These metals are then conveyed to a storage bunker. The remaining Residue material then joins streams with the plastic rich Light Fraction material and is conveyed to the Dense Media Process.

The Dense Media Process separates recyclable plastics from a mix of non target plastics, metals and aggregates by flotation. The recyclable plastics float to the discharge point at one end of the floatation barrel and the other materials which sink are screwed back to discharge at the opposite end of the barrel and into a storage bunker.

The recyclable plastics are then conveyed to a vibratory screen which separates any oversize plastic material which is conveyed to a granulator for size reduction. The sized plastic is then conveyed to a storage bunker.

Hot Cutting

The site regularly processes oversized material by hot cutting, using oxygen and propane.

End of Life Vehicle Depollution

Although permitted to do so the site does not currently process polluted ELVs.

Screening of Cargo Bottoms

The site receives a mixed waste stream from other EMR Depots created as a result of metal stockpiles stored on site. This waste stream is screened to recover the metal content leaving a mid-cut and a fines waste stream for disposal off-site. This area is noted on the site plan.

5.6 Wastes Containing Liquids

The site does not accept tanks or drums unless it has been confirmed that these have been purged of their contents or undergone adequate cleaning with evidence from an authorised source.

5.7 Wastes Storage & Handling

The majority of materials received on site are non-hazardous and stored in stockpiles. The maximum height of these stockpiles shall be kept to that outlined in the respective Fire Prevention Plans.

Waste storage and handling will minimise any potential for dust / litter emissions, in particular when processing through the fragmentiser.

Material is loaded from the initial tipped stockpile direct to fragmentiser (avoiding double handling) with the infeed mechanism operated by trained and authorised personnel.

Throughout the fragmentiser process controls are in place to minimise emissions from waste storage and handling including:

- Fully enclosed dirt conveyors.
- Conveyors fitted with side guards to minimise the risk of wind blown emissions.
- Spray system fitted on the exit belt from shredder to damp down materials.
- Staff responsible for hand picking any non-compliant material from the belt during processing.
- Foam injected into the mill during processing to reduce emissions.
- Mobile water tank available on site for damping down if required.
- Waste storage bays shielded (three sides with metal sheet walls).
- Frag & frag dirt/waste drop points fitted with drop chutes to control emissions when material falls from belts to main stockpile.
- Regular housekeeping.
- Monitoring of emissions by visual inspection carried out and recorded in site action log as required.

All scrap metals will be stored on an impermeable surface.

5.8 Waste Sampling and Testing

It is not normal for the company to sample and analyse waste supplies since these are limited to scrap metals only and the suppliers are generally well known. Where there is uncertainty over the content or contamination of deliveries (e.g. liquid residues in drums etc.) these would be rejected.

Despite this however all material removed from site will undergo a full assessment in order to ensure compliance with waste regulations and duty of care.

Once relevant EWC codes are identified the weighbridge will generate an appropriate weighbridge ticket which is also a fully compliant waste transfer note.

As part of the shredding process on-site automotive shredder residues are produced.

Associated disposal of this waste stream is conducted in accordance with the 'Environment Agency Statement on Shredder Residue'. Within this statement the EA accepts the classification of residues from shredding facilities as non-hazardous waste where:

- the residues have arisen exclusively from depolluted End-of-Life Vehicles (ELVs) and other non-hazardous feedstock; and
- this is demonstrated in a waste transfer note.

Currently the EA's guidance mentioned above is being reviewed in liaison with the BMRA (industry body representing the metal recycling sector). Following completion of this review appropriate action will be taken (as required) in relation to associated waste sampling / testing of shredder residues.

SECTION WP 6 CONTROL OF POTENTIALLY POLLUTING LEAKS AND SPILLAGES

6.1 Liquid storage

Fuel storage on site shall be in accordance with the requirements of the Control of Pollution (Oil storage) (England) Regulations.

The maximum storage capacity is shown below.

Hydraulic Oil Tank	19,000 litres
Gas Oil	80,000 litres

6.2 Procedures for control and remediation of leaks and spillages

Any minor spillage will be cleaned up utilising absorbent materials maintained on site.

Where a potentially polluting spillage has occurred, immediate action will be taken to prevent the spillage entering surface water drains, watercourses or contaminating unsurfaced ground. The spillage shall be cleaned up immediately using absorbent materials and placed in sealed containers, and the Agency shall be informed if any potential pollution has occurred.

Any potentially polluting incident will be recorded on site and there will be periodic monitoring every 5 years for groundwater and every 10 years for soil contamination.

6.3 Equipment and materials for cleaning up leaks and spillages

Absorbent materials are maintained on site and its location made known to all operatives. These are also identified on the site plan.

Any contaminated spill dry equipment will be disposed of at a suitably permitted facility.

SECTION WP 7 MANAGEMENT AND STAFFING OF OPERATIONAL SITE

7.1 General Management

The site will be managed in accordance with this management plan. This forms part of site's written management system which identifies and minimises risk of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention as a result of complaints.

7.2 Technically Competent Management

Waste materials shall only be accepted and processed when the site has sufficient resources and is supervised by sufficient competent persons familiar with the contents of the site's permit and management plan.

A technically competent manager (TCM) will be on site for the required 16 hours per week. All TCMs will sign in when attending site. The Environment Agency will be notified of any changes in TCM's within 5 days.

Regional environmental staff are always available for specialist advice.

A copy of the permit and management plan shall be available at all times while the site is operational.

7.3 Training requirements

The Site Manager has attended environmental awareness courses specific to the metal recycling industry.

At least one member of the site management will have completed the suitable WAMITAB qualification for metal recycling and ELV sites.

Other staff will be trained in Environmental Awareness as necessary.

Changes in regulatory requirements will be communicated to staff via Regional Environmental staff and Site Managers.

SECTION WP 8 FIRE & EXPLOSION PREVENTION AND CONTROL

8.1 Firefighting/suppression equipment (also refer to Fire Prevention Plans)

Alexandra Dock

Water tanks, hydrants and hoses are located throughout the site; refer to site plan. This includes a 50,000L tank located next to the hydrant closest to the weighbridges and a 25,000L tank at the hydrant to the right of the fragmentiser. There is also a 30,000L pressurised tank (located at the fragmentiser for the mill) and a tank for injecting water directly into the fragmentiser that holds 20,000L.

Fire hoses & ground monitors are located at each hydrant for the purpose of dowsing controlled fires. The fire hoses range from 60 to 80m in length (these can be supplemented depending on location of fire).

The site has access to 1 fire engine which are normally located at the front of the site between the offices and the infeed stockpile when not in use.

Alongside the FRS appliances, the fire hydrants and River Mersey are the main sources of water to be used in case of emergency.

Fire extinguishers are available throughout the site, notably in the offices, weighbridges, maintenance shed and ELV area. A map of all locations and types is available in the Site Manager's office.

The fragmentiser electric and hydraulic areas are fitted with an oxygen depletion system which can be activated in the case of emergency.

Designated staff have been trained to use the equipment detailed above and complete regular checks in order to ensure they are working as required.

Gladstone Dock

A 190,000 litre water tank is positioned centrally on the southern side of the site and has enough hoses housed within it, giving the ability to reach every corner of the site where it may be required. There are also 3 fire hydrants on the site.

The site has access to a high volume diesel engine pump with 5000 litres per minute capability which can be used to draw water from the River Mersey should this be required

EMR has possession of a fully working Fire Engine shared with EMR Alexandra Dock for immediate deployment if/where required.

8.2 Procedures for the prevention of fires

All loads entering the site are inspected in accordance with section 5.1 of the management plan. Unacceptable wastes discovered in loads are rejected from site or quarantined if immediate rejection is not possible. Operational staff (as part of their general duties) are mindful of any sign of fire or potential or sources of ignition. A fire check is formally conducted once per day on the fragmentiser, typically at the end of day. This is recorded on a daily 'Shredder Check Sheet'.

A Fire Watch will also be maintained for at least 30 minutes following the completion of any 'Hot works' (e.g. oxy-propane cutting), utilising an operative in the vicinity or CCTV cameras where appropriate.

8.3 Procedures to be followed on detection of fires / explosions

In the event of a fire, immediate action will be taken. The alarm will be raised and then (if safe to do so) site operatives will look isolate and segregate the burning material / source of the fire.

If it is safe to do so, personnel on site will attempt to extinguish the fire, if staff are unable to extinguish the fire, the affected areas shall be evacuated and the emergency services called.

In the Event of small fires there are sufficient and suitable procedures in place (Environmental Protection Procedures - EPPs and Safe Working Procedures - SWPs) to facilitate firefighting with the availability of fire extinguishers and fire engines (located strategically around the site).

EMR staff are trained in firefighting to various degrees and are experienced in moving and isolating fires. In addition to the procedures,

For medium and large fires the Emergency Services / Fire Rescue Service are always contacted. Emergency Services / Fire Rescue Service will have easy access to the main site via the large double gated main entrance.

The site emergency plan is given to the fire services upon their arrival which will detail hazardous substances on-site and other key site details (i.e. electrical isolations, gas supplies).

The Lead Fire Officer will be informed that the discharge has been stopped - If it is safe to do so, site operatives will use equipment on-site to close the penstock valve.

Outside of operating hours the site is monitored by our security contractor both on site and remotely. In the event of a fire, security raise the alarm and make a call to emergency services and site manager/key holders to instigate a quick response.

In the event that an adverse incident occurs during the processing of baled material then this will be recorded on the event log immediately. If this is the customer's first offence then they will be informed of the incident and sent a reminder of the waste acceptance criteria. If it is their second offence then they will receive a site audit involving senior commercial staff & the SHE team. If it is their third offence they will receive a financial penalty and the site will review acceptance of material from this customer.

Significant incidents will be notified to the Environment Agency, and any fire incident recorded on site.

Explosions:

The primary control related to deflagration incidents on-site is prevention. Signage is displayed at the site entrance and robust waste acceptance / rejection checks are implemented to ensure that there are no sealed cylinders within the fragmentiser feed.

These items will be rejected upon discovery however if they are found after acceptance they will be moved to the appropriate quarantine area.

EMR will always utilise CCTV systems on-site to try and identify the source of the prohibited item and if the customer is identified, a penalty of £250 per item will be charged without exception.

Any previously pressurised canisters will only be accepted with evidence of depressurising; this evidence will be kept on record with the associated ticket inwards in order to ensure traceability.

De-polluted ELVs will have had their fuel tanks fully depolluted (fuel removed from tank – it is recognised that there may be some residual contamination with fuel, de-tanking of the ELV will decrease the potential for any explosions/fire).

The shredder is fitted with robust steel guarding which contains potential debris from an explosion and explosion flaps which absorb the initial shock, reducing potential for damage. In addition to this, the site operates a mill suppression system which is designed to suppress explosive activity within the mill.

Pressure Release dampers are only relevant and considered for new or replacement installations, they are not required for the shredder as it is not enclosed within a building, meaning that pressure will be released into the air in the event of an explosion and there will be no build-up of pressure in the system. Furthermore, pre-shredders are not necessary as deflagrations are not deemed to be a significant issue on-site.

Should any material cause an explosion when processed, emergency procedures will be implemented and an investigation will be conducted in line with the following procedure:

- Details entered onto an event log which is maintained on site, including basic details of incident and type of material from which the explosion occurred. An attempt must be made to identify the supplier of the material.
- In the event of an explosion where the supplier can be identified, a letter is sent to them informing them that they have been identified and information relating to prohibited materials is included. A penalty of £250 per item will be also charged without exception.
- Further explosions from this supplier will result in further investigations by Depot Management and SHE Specialist into the possible causes of explosions from this supplier and ways in which improvements could be made. In addition, where possible, material from these suppliers shall be segregated on arrival and processed separately. If issues continue the customer will be banned from site.
- Lessons learned from all incidents are shared at the monthly Shredder Working Group meeting.

SECTION WP 9 EMISSIONS AND MONITORING

There will be no point source emissions to water, air or land except from the sources and emissions listed below:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Exhaust Stack 1	Cyclone extraction systems from metal shredder	Total suspended particulates	20 mg/m ³ or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	In accordance with BS EN 13284-1or as agreed in writing with the Environment Agency.
Exhaust Stack 2	Cyclone extraction systems from metal shredder	Total suspended particulates	20 mg/m ³ or other level agreed in writing with the Environment Agency	Hourly average	Quarterly or other frequency agreed in writing with the Environment Agency	In accordance with BS EN 13284-1or as agreed in writing with the Environment Agency.

Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site- emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
Foul sewer in Regent Road emission point on site plan in schedule 7	Roof and surface water collected in drainage gullies and drainage pipes passing through an interceptor.		No limit set			

Ambient monitoring will also be completed as listed below:

Table S3.3 Ambient monitoring requirements					
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications	
At a location or locations agreed in writing with the Environment Agency that will obtain reliable and representative data on particulate emissions from the waste management operations.	Total suspended particulates (TSP) unless otherwise agreed in writing with the Environment Agency.	Quarterly unless otherwise agreed in writing with the Environment Agency.	The equipment shall be operated to a procedure agreed in writing with the Environment Agency. The emissions management plan must include action levels and regular review cycles with an overriding aim to reduce particulate emissions from the facility.	Monitoring equipment shall meet the MCERTS Performance Standards for Indicative Ambient Particulate Monitors or similar standard agreed in writing with the Environment Agency. The equipment shall be calibrated in accordance with the manufacturer's recommendations or 6 monthly, whichever is first. The system must be managed and maintained by suitably trained personnel. The system must obtain representative data that must accurately reflect TSP levels produced by the site's activities.	

Limits assigned will not be exceeded and the site will have a formal monitoring plan in place including the retention of associated monitoring records (i.e. calibration of equipment and results).

The EA will be informed 14 days prior to any monitoring and results will be provided to within 28 days of the end of the reporting period.

9.1 Noise & Vibration Control

The site is within port facilities surrounded by similar businesses operating similar working hours. There are no domestic properties within a significant distance of the site that are likely to be affected by noise and vibration and the surrounding industries are not likely to be sensitive to any noise emanating from the site.

Despite the above, EMR look to minimise noise & vibration from the site, keeping emissions from activities below levels likely to cause pollution outside the site boundaries.

In order to achieve this plant & equipment is inspected on a daily basis and is maintained in accordance with manufacturer's specifications. Staff are instructed to minimise drop heights when moving scrap and to avoid unnecessary double handling of loads. Speed restrictions are also in place for vehicles entering and leaving the site.

Operating and waste acceptance hours are restricted in accordance with section 4.1 of this management plan.

In addition to 'normal' noise and vibration from operations, emissions from the shredder will be free from sudden noise and vibration likely to cause pollution outside the site boundaries. This is controlled by ensuring that all waste is inspected before acceptance, checking for explosive items such as gas bottles and LPG tanks.

Any noise & vibration complaints received will be recorded and investigated, with results being retained on site.

9.2 Mud & Debris

The site benefits from a substantial impermeable pavement, therefore mud and other debris are unlikely to be tracked onto the road from inside the site.

The access road to the site is visually inspected on a regular basis. In the event that mud or debris is observed which is likely to have arisen from the site, then action is taken as soon as possible by the site team to remove the source / clean the affected area.

The site has a skid steer which can be used to sweep the yard on a regular basis and an external contractor is also used to mechanically sweep the yard twice a week.

Vehicles removing waste from site are sheeted where necessary and inspected prior to leaving the site to ensure that the load is secure.

9.3 Litter

The site does not knowingly accept waste types that are likely to become airborne and escape from site. The boundaries of the site are inspected on a daily basis and any litter present is collected.

The site will report any incidents of litter escaping the site boundary and will take immediate action to prevent any further emissions.

9.4 Pests

The site does not knowingly accept waste types that are likely to attract or provide a habitat for pests.

A specialist pest control contractor attends site on a regular basis. The site is also inspected weekly by the Depot Manager and in the event that pests or signs of pests are discovered the contractor will be asked to attend site as soon as possible.

9.5 Odours

The type of material received and processed at the site is not likely to result in the production of odours. In the event that complaints are received, the potential cause shall be investigated with details being recorded on site.

9.6 Dust and fumes

Both depots have implemented dust management plans. Please refer to these for further detail of how dust will be managed.

The site will always look to minimise dust levels by minimising drop heights and only disturbing material when required. In addition to adherence to the speed limit across the site.

Potential problems may include unfavourable weather, such as windy, dry or sunny conditions and direction of prevailing winds which may result in the generation of dust. The sites have a mobile water bowser and a sprinkler system to aid in dust suppression.

During hot cutting operations on-site it is likely that smoke may be emitted. The burning supervisor and depot manager carries out checks on these activities regularly along with monitoring smoke levels on CCTV. If there are any materials causing significant levels of smoke, with the potential to cause nuisance outside our boundaries then works may be stopped until appropriate controls are in place or conditions on-site change (e.g. wind direction change meaning smoke is being emitted towards neighbouring business premises).

In the event that complaints are received, the potential cause shall be investigated with details being recorded on site.

SECTION WP 10 SITE RECORDS AND REPORTING

10.1 Security and availability of records

EMR will maintain site records at the location specified in section 10.2. These locations shall be deemed to meet the Agency's requirements in that they will be within easy daily access.

The site office and document storage facilities will be maintained in such a manner as to provide a location that will keep documents secure from loss, damage or deterioration for the statutory retention periods.

10.2 Records of waste movements

Site records of waste movement shall be maintained through the retention of hard copies of weighbridge tickets, hazardous waste consignment notes and transfer notes from servicing contractors removing wastes. The majority of this is also scanned and available electronically on the companies TCM system. This information will be retained at the following locations for the following time periods:

Table 10.1 - Retention and availability of records

Records	Location	Retention Time Period
Weighbridge tickets	On site	2 years
Incoming hazardous waste consignment notes	On site	3 years
Outgoing consignment notes and transfer notes from servicing contractors removing contaminated liquids, absorbents and waste oils	On site	3 years
Electronic Records	Head Office (Warrington) Server – with national access for any authorised site and user.	Electronic records commenced in 1999 long term retention time scales are yet to be established (anticipated to be a minimum of 10 years).

10.3 Notifications / Site Diary

All records referred to in this management plan will be maintained securely within the site office. These are kept electronically on the EMR's TCM system; however some records will still be retained in paper form.

These and all other relevant records will be available for inspection by the appointed Agency Officer at all reasonable times.

Notifications will be submitted (using the template provided within the permit) to the EA in the following circumstances:

- Operation of activities gives rise to an incident which significantly effects or may significantly affect the environment.
- Breach of any permit condition.

- Breach of permit condition that poses immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment.
- Any malfunction, breakdown or failure of equipment or techniques, accident or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution.
- Breach of a limit specified in the permit
- Any significant adverse effects

The above will be notified within 24 hours of detection and associated investigation into these events will be provided to the EA as soon as practicable.

In relation to the core business and operations, if there are any notable changes within EMR or to the activities taking place on-site the EA will be informed within 14 days.

10.4 Periodic Reporting of Environmental Performance

EMR will centrally manage tonnage returns to the Environment Agency detailing its inwards and outwards waste movement by EWC code in an electronic format as well as submitting annual waste returns to the EA.

Annual production & treatment data will also be provided to the EA detailing the following:

- Metal processed (tonnes)
- WEEE processed (tonnes)
- Fe metal recovered (tonnes)
- NFe metal recovered (tonnes)
- Other fractions recovered (tonnes)
- Non-metallic shredder residue (tonnes)

10.5 Additional Records, Safe Working Procedures, Risk Assessments and Emergency Procedures

Details of the following shall also be retained where applicable on-site either in paper or electronic format:

- Construction work
- Start and finish of daily waste management activities
- Maintenance / Breakdowns
- Emergencies
- Problems with waste received and action taken
- Site inspections and subsequent actions
- TCM attendance
- Complaints received and details of investigation.
- Environmental problems and remedial actions taken.

In addition to the statements and procedures detailed with this management plan the site may also implement and retain additional environmental protection procedures, safe working procedures, SHE risk assessments and emergency plans within the site files which are updated regularly.



APPENDIX 1 – Site plan Alexandra Dock



APPENDIX 1 – Site plan Gladstone Dock

APPENDIX 2

Waste Acceptance

EPP 1.1	The Duty of Care - Acceptance of incoming material			
EPP 1.2	Inspection of Incoming Materials			
EPP 1.3	Identification of Hazardous Waste			
EPP 1.4	Completion of hazardous waste consignment notes			
EPP 1.5	ELV Acceptance			
EPP 1.6	Identification of Radioactive Items			
EPP 1.7	Identification of Potential Explosive Items			
EPP 1.8	Rejection of Material			
EPP 1.9	WEEE & Refrigerator Acceptance			
EPP 1.10	Duty of Care - Waste Removals			
EPP 1.11	Battery Acceptance			
EPP 1.12	Steel Can Waste Acceptance			
EPP 1.13	Catalytic Converters			
EPP 1.14	Inspection of Baled Materials			
EPP 1.15	Radioactive Item Disposal			
EPP-1.16	Duty of Care – Disposal of Soil & Dirt			
Storage of Potentially Polluting Materials				
EPP 2.1	Storage of ELV			
EPP 2.2	Storage of Oils & Fuels			
EPP 2.3	Storage of Batteries			
EPP 2.4	Storage of Engines			
EPP 2.6	Storage of Gas Cylinders			
EPP 2.7	Storage of Scrap Metal			

EPP 2.8	Storage of Fragmentiser Waste			
EPP 2.9	Storage of Waste Tyres			
EPP 2.10	Storage of WEEE			
EPP 2.11	Storage of Putrescible Waste			
EPP 2.12	Storage of Radioactive Items			
Infrastructure Requirements & Maintenance				
EPP 3.1	Interceptor Inspection and Maintenance			
EPP 3.2	Bund Inspection and Maintenance			
EPP 3.4	Taking Water Samples			
EPP 3.5	Management & Control of drainage & surface water discharge			
EPP 3.7	Infrastructure – Taking Soil Samples			
Nuisance				
EPP 4.1	Pest Control			
EPP 4.2	Litter Control			
EPP 4.3	Noise Control			
EPP 4.4	Mud and Dust Control			
EPP 4.5	Odour Control			
EPP 4.6	Vibrations			
EPP 4.7	Explosions			
EPP 4.8	Fly control			
EPP 4.9	Light Pollution			
EPP 4.10	Management and Control of Invasive Species			
EPP 4.11	General Housekeeping			
Environmental Occurrences				
EPP 5.1	Fire Prevention & Response			

EPP 5.2	Spill Response
EPP 5.3	Hazardous Substance Deliveries
Operations	
EPP 6.1	ELV Depollution
EPP 6.2	Fragmentiser Operation
EPP 6.3	Production Burning
EPP 6.4	Shear and Baler Operation
EPP 6.5	Weighbridge
EPP 6.6	Contractors
EPP 6.7	Trommel Operation
EPP 6.8	Ship loading and Despatch
EPP 6.9	Plastics processing and storage
EPP 6.10	Train Loading and Dispatch
EPP 6.11	Drivers
Other	
EPP 7.1	Environmental Permit
EPP 7.2	Exporting of Material

Amendments to Plan

Page	Section	Comments	Changed
23	WP8	The site has access to	The site has access to 1
		2 fire engine which	fire engine which are
		are normally located	normally located at the
		at the front of the site	front of the site between
		between the offices	the offices and the infeed
		and the infeed	stockpile when not in use.
		stockpile when not in	
		use.	
4	Maximum quantities	Maximum quantities	25,000 tonnes per year
	per year	per year Hazardous	increased
		waste storage shall	
		not exceed 15,000	
5-11	Schedule 1 Operations	Updated new	New Operations table
		activates within the	S1.1 activities added to
		updated permit	management plan.