ENVIRONMENTAL MANAGEMENT SYSTEM

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0.1	30/06/2021	First draft
0.2	30/06/2021	WRM review
0.3	30/06/2021	Cupral review
0.4	02/07/2021	WRM review
0.5	02/07/2021	WRM update to section 4.3 – Site Operational Area and section 4.4 – Drainage and Containment System
1.0	05/07/2021	First Issue
1.1	10/06/2022	Address and drainage system updates
1.2	30/01/2024	Update following infrastructure upgrades
1.3	03/05/2024	Update with EMR business name after acquisition

CONTENTS

INTRODUCTION

This Management System has been prepared in accordance with the Environmental Permitting Regulations (EPR) 2016, setting out the considerations and operational details that are relevant to the operation of the waste cable and metal treatment facility operated by European Metal Recycling Limited (hereon referred to as EMR) in Middlesbrough, Teesside. It details the nature of the site, relevant site and infrastructure works, methods of operation and environmental controls.

Permitted Activities

EMR is permitted to process and recycle cables and other metals and plastics by shredding, separation of metal types and plastics (see EMR flow diagram) at the Middlesbrough facility under a bespoke installation permit. Permitted activities are classed under the following EPR 2016 Schedule 1 activity codes:

- Section 5.4 Part A (1) – Disposal, recovery or a mix of disposal and recovery of non-hazardous waste:
    - Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) involving one or more of the following activities:
    - (iv) treatment in shredders of metal waste including electrical and electronic equipment and end-of-life vehicles and their components.
- Section 5.3 Part A (1) (a) – Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving:
    - Physio-chemical treatment.

We understand that to accept, store and treat non-WEEE waste electrical and electrical telecommunications cable, they must be correspond to EWC codes 16 01 22 or 17 04 11. Codes 16 01 21* and 17 04 10* must also be assigned under RPS 276 in the interim.

Exempt Activities

EMR do not undertake any exempt activities on the site.

SITE DETAILS

Site Address

EMR Middlesbrough Granulation 1 Gould Avenue
Tees Advance Manufacturing Park Riverside Park West Middlesbrough
TS2 1EQ

Operational Location

NGR - NZ 48006 20273

Site Description

The site is situated on Gould Avenue on the Tees AMP business park, which is itself located off the A66 in Middlesbrough. The site is located immediately east of the River Tees, approximately 1.5km west of Middlesbrough town centre. The site measures approximately 160 metres by 45 metres.

The waste cable and metal processing facility consists of a large building in which the majority of the waste processing takes place, a loading bay, waste storage bays, a weighbridge and a portacabin gatehouse. There are also 27 car parking spaces located immediately east of the processing building. There is a dust extraction system located in the processing building for the removal of dust generated during the processing of waste which exhausts through a stack on the north west side of the building..

The site is situated within a mixed-use industrial area. Immediately north and east of the site are several industrial units. To the immediate west of the site is the River Tees and to the south of the site is a small patch of green land with bushes with a railway line and a residential area beyond. The nearest residential properties are approximately 550m to the south and south east of the site boundary. There are a number of sensitive receptors within 250m of the site boundary.

Plans

Site Location Plan – CUP_001
Site Layout Plan (External) – CUP_002_External_Site_Layout_Plan_v1.0
Site Layout Plan (Internal) – CUP_002_Internal_Site_Layout_Plan_v1.0

Permits and Licenses

EMR possess a bespoke installation permit to operate the facility.

Directly Associated Activities

The associated activities with the waste cable and metal treatment processes are: shredding, material separation by hand, magnets and eddy current machines for metal type separation, granulation, density separation and finally bagging of material ready for storage and dispatch.

OPERATIONAL OVERVIEW

Waste Management Operations

Prior to feedstock arrival, all relevant documentation is checked by EMR trained staff and a visual inspection is made prior to unloading of the vehicle. The material is then placed in one of the 16 concrete storage bays on site where it receives a further visual inspection. Waste loads are processed by batch. This process allows for quarantine of material if needed, feedback to supplier and returning of material as required.

The feedstock is shredded, and a manual picking line takes any non-conforming material from further processing. Remaining material goes forward for further size reduction shredding at the Rasper and Granulators before arrival at plant separation tables where density sorting takes place before bagging of finished materials.

Further details on the method of operation can be found in CUP-OP03.

Permitted Waste

Waste loads shall only be accepted if they are a type and quantity specified in the permitted list of wastes, and the load conforms to the description in the documentation supplied by the producer and holder. OP02 – Waste Acceptance shows a full list of wastes to be accepted on site.
Any wastes that are not categorised as permitted materials are considered as non- conforming and dealt with appropriately.

Hours of Operation

Site operational hours for the facility are typically as identified in Table 1 including maintenance activities:

Table 1 - Site Operational Hours

Weekday	Waste Acceptance	Waste Treatment
Monday to Friday	7am – 4pm	24 hours
Saturday	Closed	24 hours
Sunday	Closed	24 hours
Bank Holiday	Closed	24 hours

Staffing

EMR shall ensure that sufficient suitably trained and competent personnel are present to manage and operate the on-site activities safely and without adversely affecting the environment. Personnel are fully familiar with the requirements of the Permit as relevant to their specific duties. Staff numbers are below in Table 2.

Table 2 - Site Operational Staff

Personnel	Management	Administration	Operators	TOTAL
Number	8	3	27	41

Operational responsibilities for the site rest with the Site Manager. Staffing is maintained at a level sufficient to operate and supervise the site effectively, throughout periods of employee sickness and holidays.

Technical Competence

All site operational staff are trained in relevant areas of the permit and management system. This training is part of an ongoing training program which includes refreshers.

The designated person(s) holds a suitable qualification in order to operate the site compliantly (see Table 3 below). The suitably qualified person's actual attendance hours on site are recorded.

Table 3 - Technical Competence Qualifications

Name	Qualification
Carl Lerpiniere	CIWM (WAMITAB) Level 4 Medium Risk Operator Competence for Non- Hazardous Waste Treatment and Transfer *(Upgrade in progress)*

Site Identification Board

In conformance with the permitting regulations and the Management System, EMR will display a clear, all weather, easily readable Site Notice at the main entrance to the site. The site notice shall contain the following information:

Company Name
Permit Holder's Name
Emergency Contact Name and 24-hour contact number
Permit Holder's Telephone Number
Statement that the site is permitted by the Environment Agency
The Permit Number

The Identification Board shall be inspected weekly. In the event of damages or defects, the board shall be repaired or replaced as soon as possible.

Site Security

All visitors to site sign in (in the visitors book) upon arrival. If they are to enter the process area, an appropriate induction is also undertaken.

The site has CCTV, which includes a monitoring and service contract. Fencing and locked gates are inspected daily by EMR staff. The site is a 24-hours working site. If the site is not working, a local security company provides a 24 hour on site presence.

Maintenance of Financial Provision

EMR has the necessary capital and funding for this project and will meet the obligations of the permit.

Relevant Convictions

There are no relevant convictions.

Reporting to the Environment Agency

The following will be reported to the Environment Agency in line with the OP01 Environmental Permit Reporting document.

Reports	Contents (See above section for full contents of reports)	Conditions in Permit Satisfied by Reports	Deadline	Frequency
D&R Codes Materials to site & processed. EWC Codes	Permit Condition Schedule S4.2	4.2.2	30th April 31st July 30th September 31st January	Quarterly
D&R Codes Materials to site & processed. EWC Codes	Permit Condition Schedule S4.2	4.2.2	31st January of the following year	Yearly

EMR will also notify the EA of the following:

- Any significant changes to site conditions / process.
- Change of company name.
- Permit holders name change.
- Steps taken to prevent permit holder going into administration.
- Any relevant notifications.
- Above within 5 working days.
- Any changes to site construction and infrastructure and completion will be notified in writing to EA within 14 days.
- Cessation and / or re-commencement of treatment operations on the site will be notified to the EA in writing in advance of operational changes.

- Any reports requested by the EA
- Any monitoring or spot sampling requested by the EA.
- EMR will notify the EA without delay of any malfunction causing significant pollution within 24 hours.

SITE ENGINEERING

Access and Parking

The site has designated staff car parking which accommodates all staff requirements (Operations are split into 3 shifts so there is ample parking in accordance with the site rota). Access to the site is via Ferrous Road and Gould Avenue on the Tees AMP Business Park, which is located between the A66 and the River Tees.

Site Office

All site documentation is stored in a secure room within the main office, these include all core documents, including the EA permit, site management system, site inspection forms, Fire Prevention Plan, etc.

Site Operational Area

The internal and external layout of the site, including the respective dimensions of the facility's process and storage areas are shown on the site plans as referenced in section 2.4 of this document.

The facility consists of a large building in which the majority of the waste processing takes place. and a large Yard area equipped with site offices, a loading bay, 16 waste / feedstock storage bays, a welfare cabin, a weighbridge and a portacabin gatehouse.

Drainage and Containment System

No liquid waste is accepted onto site and no liquids are used in the processing of the waste. All surface water generated is caused by rainfall only. All surface water that comes into contact with waste is captured via surface drains in the centre of the concreted areas. The concrete has been installed with an elevation to ensure that any surface water flows to these points. Water from these areas normally runs into the storm sewers, but can be contained by using a penstock valve, pumps and tanks. Regular sampling of this water takes place to ensure there are no adverse effects on the local environment.

The fuel tank area has its own drains to collect surface water. Surface water from this area is directed via an oil interceptor, to remove any oils or grease that may be present, to the foul sewer system.

Direct precipitation that lands on the roofs of the main processing building is collected via gullies, spouting and downpipes. The rainwater is then discharged directly to the business park's local surface water drainage network via underground pipes.

Foul water drains directly via dedicated drains into the foul water sewer. For further details of the drainage system on site, please see CUP-CO4 – Drainage Management Plan.

Weighbridge Facility

EMR have an 18-metre sunken design weighbridge with drainage into concrete. The weighbridge is subject to a 6 monthly service and an annual calibration by the manufacturer.

PROCESSING LINE

Material Process Flow:

Raw material is held in storage bays containing segregated and individually identified batches, prior to being released to the production process. Once released, batches are moved to the loading area, adjacent to the Super Chopper.

Super Chopper:

Raw material is loaded into the super chopper by waste handling equipment. The material enters the suer chopper which uses low speed, high torque rotating blades to reduce the size of the material input to 300-500mm lengths.

Over Band Magnet:

An electro-magnet removes any ferrous material.

Picking Station:

Material is transferred to a manned picking conveyor where any non-conforming material is removed and segregated for disposal.

Rasper:

Material feed into the Rasper is regulated according to motor loads. The Rasper re-sizes the material material size to 10-25mm. On exit from the Rasper on a conveyor material passes under another magnet to remove any residual ferrous material before passing over a stainless-steel separator to remove and lightly magnetic ferrous. Material is then transferred to Silo 1 by belt conveyors.

Fine Granulators:

Material is transferred from the silo to the granulator inlets by screw feed conveyors. The fine granulators further reduce the material in size to 4-5mm uniform material. At this size, metals are liberated from the plastics. Processed material is blown via a pneumatic transport system to Silo 2, which feeds the separation tables via regulated screw conveyors.

Separation Tables:

Material is transferred to the separation tables by regulated screw conveyors which automatic dose to ensure smooth and consistent material flow to the separation tables. Once material arrives on the separation tables it is segregated by density, separating the heavier metal fraction from the lighter insulating materials. The clean metal fraction is transferred from the tables to bulk bags where it is weighed, labeled and stored, ready for shipment into stock.

Classifiers:

Insulation materials travel via pneumatic transport to two classifier tables. Clean insulation material is transferred to a separate bagging station where it is moved into bulk bags. The bulk bags are weighed, labelled, sealed and stored ready for shipment to stock.

Turbomill:

The smaller fraction of materials from the classifiers is sent to a Turbo mill to recover any residual metals via pulverising and density separation.

Finished product storage:

All finished metal product is stored in a secure cage inside the main building for a period of no longer than 2 weeks. Processed plastics are stored in batch order with no stacking.

Lighting

The site has comprehensive LED lighting within the building and throughout the external yard area.

Plant and Equipment

Waste is handled using the appropriate plant and equipment on site. Additional plant may be hired in if required. Only trained operators are permitted to drive/operate machines on-site.

Table 4 - List of Mobile Plant and Machinery

Plant	Quantity	Function
360 material handler	2	Transferring and loading feedstock
Fork-lift truck	3	Moving finished product, unloading & loading bulk items
Super chopper	1	Chopping feedstock
Over-band magnet	2	Extracting ferrous metals
Stainless Steel Separator	1	Extraction of lightly magnetic ferrous material
Rasper	1	Size reduction of material
Granulators	2	Size reduction of material
Conveyors	11	Transfer of material
Pneumatic Material Transport (PMT)	6	Transfer of material
Separation tables	3	Density separation
Classifiers	2	Separation by size
Turbomill	1	Residual metal recovery

SITE PROCEDURES

Document Control

All site documentation records are retained and archived as specified in the relevant documentation. Records have the necessary security measures in place (locked storage, password protected etc). Electronic documents can only be accessed by authorized personnel.

Waste Acceptance and Inspection

CUP-OP02-Waste Acceptance Procedure contains full details of the Waste Acceptance Criteria, which covers:

- Pre-acceptance
- Waste acceptance
- Waste rejection

Waste Treatment

CUP-OP03-Waste Treatment Procedure contains a full process description of the treatment for the following:

- Chopping
- Picking
- Granulation
- Separation

Corrective Action

EMR shall ensure that any necessary corrective action is carried out thoroughly and conscientiously.

Environmental Incidents

Any environmental incident will be brought to the attention of the Site Management team, who will investigate all incidents and report to the EA as required. All records will be retained as required with ongoing preventative action monitored.

Compliance Audit

EMR review management system and procedural documents annually, or sooner should one of the following situations arise:

- Environmental pollution event.
- Change in operation.

Management Review

Management review all Health, Safety and Environmental issues monthly on the HS&E Meeting. Minutes are published and displayed on employee notice boards.

POLLUTION CONTROL

Maintenance

Maintenance is controlled by the EMR Site based Maintenance Manager. All records are recorded on an in-house spreadsheet record which captures all Preventative Planned Maintenance, ad-hoc works, spares usage and stock control. See CUP-OP04-Maintenance_Procedure for further details.

Fugitive Emissions

CUP-C02 Fugitive Emissions Management Plan contains a full process description of the

Accident Management

CUP-C01 Accident Management Plan contains a full process description of the accident management plan.

Fire Prevention

The Fire Prevention Plan contains a full process description of the measures in place for fire prevention.

CONTINGENCY MEASURES

Measures to be enacted in the event of contingency will be done so in accordance with the EMR Business Continuity Plan (Annex A). This plan sets out what the site will do to should there be any reason to stop production i.e. fire, plant breakdown, floods, loss of power to site, etc. The plan aims to review continuity of operations, dependant on the incident / reason for the stoppage.

RECORDS

EMR will maintain all records on-site in line with OP06– Recording Procedure.

Monitoring

EMR shall undertake the monitoring as specified within OP05 – Monitoring Procedure and will maintain all monitoring records.

Site Diary

A Site Diary is maintained and retained in the site office. It records any non- routine activities and other incidents. The Site Diary is maintained by the Compliance Manager. The Site Diary is readily available for inspection. Examples of activities recorded in the site diary include:

- Names and times of technically competent managers on site,
- Any accidents resulting in injury,
- Any incident of fire,
- Any incident of spillage,
- Any incidents causing pollution to the environment, harm to human health or detriment to the amenities of the locality,
- Any machinery breakdown,
- Any deposit of unsuitable waste at the site,

Waste Records

Records of all materials entering and the leaving the site are recorded. All records are made as soon as reasonably practicable and retained securely for a minimum of three years. Records are clear, legible and available for viewing (on site). Records are kept of all incoming wastes, and all outgoing wastes. Examples of the records that are retained are;

- Waste Carriers Licences (where appropriate).
- Tickets/Documents – incoming wastes.
- Tickets/Documents – outgoing wastes.
- Destination of outgoing wastes.
- Reject Waste Forms.
- Environment Agency Inspection Reports.
- Quarterly Waste Returns.

Training Records

All employees are trained, instructed and supervised in accordance with their duties, to ensure that they are competent. Training records for personnel are maintained electronically.

Calibration

All monitoring equipment is regularly calibrated (annually) by an externally verified company. This calibration includes the torque wrenches, scales and the weighbridge. The weighbridge is also monitored for any anomalies by EMR staff.

Site Waste Returns

Quarterly returns are maintained and recorded at the site office in line with Environment Agency regulations.

Complaints

EMR shall decide and implement any necessary action in response to any complaints or concerns expressed by interested parties, including operatives, customers, clients and regulatory authorities.
EMR shall record the following:

- Name and contact details of the person who expressed concern or made a complaint,
- Specific subject(s) of the concern or complaint.
- The source / location the complaint.
- Date and time communicated to the producer and name of the person to whom it was communicated,
- Nature and date(s) of any actions and checks and who carried them out,
- Nature and date of any response to the person who expressed a concern or made the complaint; and,
- Name of the person who communicated the response.

Site Processing/Operations

EMR records and maintains any relevant information in relation to process steps including:

- Changes/updates to the process;
- Customer transactions;
- A record of vehicles and drivers to the site;
- Feedstock/material intake
- All processed and finished products.

Records are logged and maintained on the company's electronic management system (FRED)

ANNEX A – EMR BUSINESS CONTINUITY PLAN