



**European Metal Recycling Ltd. (EMR)**

**Dust & Emissions Management Plan  
(DEMP)**

**EMR Silvertown**

Unit 6 Standard Industrial Estate  
Factory Road, Silvertown  
London, E16 2EJ

**VERSION NUMBER: 2**

**DATE: OCTOBER 2024**

## Issue and Revision Record

Revision	Date	Originator	Checker	Company Approver	Description of Changes
DEMP V1	09 May 2023	Nick White	Laura Garofalo		N/A
DEMP V2	17 Oct 2024	Nick White	Ajibola Bankole		Amended in line with permit variation Schedule 5 questions (October 2024)

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## **1. Introduction**

A Dust and Emissions Management Plan (DEMP) has been produced for the EMR Silvertown site following a request by the Environment Agency after the application for the bespoke permit for the site. The DEMP will form part of the Environmental Management Plan or EMP (formerly Working Plan) for the site, which in turn will form part of the site's wider environmental management system (EMS).

### ***Purpose and Scope***

EMR Ltd recognise that the Silvertown site's operations can potentially generate dust. When any dust produced it will combine with local emissions from nearby roads, other neighbouring industrial, commercial and transport facilities etc. and therefore the site will have the potential to impact on the environment, and local amenity.

This Dust and Emissions Management Plan (DEMP) is intended to produce a reproducible and consistent approach to dust management at the facility, with the aim of continually reducing the levels of fugitive and point source emissions and dusts generated by the site's activities. This DEMP describes the management initiatives that EMR have implemented to manage, reduce and mitigate against the generation of dust (and other emissions) from the EMR Silvertown facility.

Specifically the DEMP addresses the following:

- The process for the DEMP development and production
- Site based risk assessment
- The UK framework and dust/air quality targets and quality guidelines
- Measures and practices to minimise and reduce the generation of emissions and dust

### ***Background - Air Quality and Emissions***

Emissions of pollutants to the atmosphere occur from a range of sources. The sources from which emissions arise determine their chemical composition and this together with subsequent chemical reactions in the atmosphere, determines the potential to cause harm to human health and the environment. Certain pollutants can combine together synergistically to cause more harm to a receptor than the individual sum pollutants would (e.g. photochemical smog). In the East London area, emissions sources primarily emanate

from transport (road and rail traffic) and Industrial sources, along with a smaller amounts from domestic and natural sources (e.g. tidal river Thames).

The emissions from fossil fuels burning in combustion engines (petrol and diesel) and emissions from industrial sources (including on site mobile plant), may in combination (chemically), produce nitrogen oxides ( $\text{NO}_x$ ), volatile organic compounds (VOCs), hydrocarbons (HCs), carbon monoxide (CO), ozone ( $\text{O}_3$ ), sulphur dioxide ( $\text{SO}_2$ ) and particulate dust (including  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ ) with trace amounts of metals (e.g. iron, cadmium, lead) and other pollutants. These can also combine synergistically to produce additional, more harmful substances under certain weather conditions (e.g. Peroxyacetylnitrate or PAN, present in photochemical smog).

The primary pollutant generated by metal recycling facilities though, normally comprises of (largely) depositional, coarse (and visible) particulate and grit, with much smaller concentrations of finer particulate such as  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ , in addition to the transport pollutants such as  $\text{NO}_x$ , CO and HCs (generated by vehicles, LGVs and mobile plant).

Environmental legislation which governs air quality in the UK is the Clean Air Act 1993 and the Air Quality Standards Regulations 2010. Part IV of the Environment Act 1995 (as amended in 2021) requires that local authorities periodically review air quality within their individual areas. The Air Quality Strategy (AQS) for England, (AQS) contains national air quality standards and objectives established by the Government to protect human health (see Table 1 below). The Silvertown site is also located in an Air Quality Management Area (AQMA).

The AQS set out the Government's strategy for the improvement of air quality in the UK. The standards are set at concentrations below which effects are unlikely to occur even in sensitive population groups, or risk to public health would be exceedingly small. Standards are based purely upon the scientific and medical evidence relating to the effects of a particular pollutant, as determined through the Government's Expert Panel on Air Quality Standards.

### ***Operations and activities.***

The activities conducted at the EMR Silvertown metal recycling facility will include the sorting, separation, grading, shearing, compacting, crushing, and cutting of ferrous metals

or alloys and non-ferrous metals for recovery. The site will receive a range of ferrous and non-ferrous metals from a variety of industries, the majority from long-standing customers. Once processed, recycled materials will be transferred for export or to an EMR shredder (fragmentiser) site for further processing (ferrous metals) or other sites for further processing / recovery. The site will also accept ELVs for depollution and dismantling and a range of WEEE, namely non-hazardous and hazardous cables, Small Mixed WEEE (SMW) and Large Domestic Appliances (LDA).

European Metal Recycling (EMR) has acquired a metal recycling facility at Standard Industrial Estate, Factory Road, London, E16 2EJ, formally operated by LCM Scrap Company Ltd (LCM).

As EMR relatively recently assumed the waste operations at the site, EMR has applied to the Environment Agency (EA) to grant a new bespoke waste operation permit for metal recycling (mixed metals), an End-of-Life Vehicle (ELV) Authorised Treatment Facility (ATF), and a Waste Electrical and Electronic Equipment (WEEE) ATF, to replace the existing Standard Rules (SR) Permit, providing a long term replacement to SR permit EPR/WE1242AA which was transferred from LCM Ltd to EMR Ltd as a short-term solution.

The site's recycling and recovery operations can potentially contribute to dust and particulate matter levels within the site vicinity and potentially to the local environment if the site is not operated to the company's defined processes and procedures.

In order to reduce the emissions of dust and particulates, dust abatement equipment and practices have been installed and implemented on site and the mitigation measures for preventing or reducing dust emissions have evolved over time as the business has developed. These mitigation methods include water hoses (located at the start of the steel wall that's the current walkway to the shear), road sweeper normally twice per week and manual cleaning/sweeping operations (see relevant section for details).

The purpose of this document is to ensure that the potential for airborne dust and particulate matter generated on the site is minimised to its fullest extent and any possible nuisance caused to nearby receptors is kept to a minimum. Its aim is to ensure that any agreed dust and particulate emission strategy for operational working practices is implemented and controlled by site management who are also responsible for its effective application.

This document forms part of the wider Environmental Management System (EMS). The Operations Manager is responsible for ensuring compliance with all its requirements.

### **1.1 Sensitive Receptors**

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

There are no SSSI or RAMSAR sites within 1km of the EMR Silvertown site but the site is located less than 200m (approx. 65m) north of the River Thames at its nearest point. The site is located within an industrial area but the closest residential area is to the North of the site within 1km (approx. 100m due North).

The location of the site and its relationship with the surrounding environment and sensitive receptors is shown in *Appendix 1: Sensitive Receptors*. It presents the identified areas and places which may be considered to be sensitive receptors within 1 km of the site. They have been considered as sensitive due to increased risk of experiencing adverse effects of exposure to high levels of dust by their occupants.

The *Appendix 4: Windrose* demonstrated a predominantly South Westerly wind.

### **Other sources of emission**

The site is located within an area comprising mainly of industrial facilities with some residential and other commercial premises interspersed. Transport sources include local and main roads, the Elizabeth Line railway (which is above surface 60m to the north of the site), Docklands Light Railway (DLR Woolwich line) nearby and London City Airport, (with associated car park, amenities and busy roads), located to the north-west of the site and a bus garage located immediately to the east of the site.

These activities (combined with vehicles accessing and egressing the sites) could also



contribute to the generation of particulate matter and gaseous emissions, affecting local air quality.

*Table 1.1 Local Sources of Dust and/or other Emissions.*

Company / source	Address	Type of Business / source	Distance from Silvertown site boundary (m)
London City Airport	Hartmann Road, London E16 2PX	Airport	700m
Bus garage (TFL)	Factory Road	Bus garage	0m – immediately adjacent to the site (eastern boundary)
Albert Road, Factory road	A117	Transport - Busy Roads with access to Woolwich Ferry – North Terminal	100 m and 10m
Other industries e.g. Tate & Lyle, LCM Scrap Metal Ltd.	In vicinity of site (various)	Various	<250m
Docklands Light Railway (DLR Woolwich line)	n/a - North	Transport	230m
Elizabeth Line (TFL underground railway).	n/a - North	Transport	53m
River Thames (tidal) (natural dust).	South of site	Tidal river (silt exposed when tide is out)	200m

**Note:** The off-site dust sources shown are not comprehensive.

## 2. Operations at Silvertown

### 2.1 Waste Deliveries to Silvertown

Waste materials delivered to the EMR Silvertown site for processing typically comprise of ferrous and non-ferrous metals, post-consumer scrap metal, depolluted end-of-life vehicles (ELVs), Large Domestic Appliances (non-hazardous WEEE such as washing machines, dish washers, other white goods etc. but not fridges) and other mixed metal materials, sourced

from local authority civic amenity sites, auto breakers, merchants, factories or inter-group depots. EMR has a very good understanding of these materials, with 85% of scrap metal materials received from regular, longstanding customers or inter-group depots.

Many different types of vehicle (LGVs, cars, vans, flatbeds etc.), of different sizes and capacities with incoming scrap metal of various types arrive on site (potentially contaminated with material) and may generate high levels of mud or dust. There are robust waste acceptance and rejection materials for all incoming wastes to control this (see Appendix 5 EPP index).

All incoming waste materials strictly follows are subject to EMR Waste Acceptance, Inspection and Rejection Environmental Protection Procedures (Appendix 5). Incoming scrap metal waste loads are weighed in on the weighbridge, and in accordance with the Scrap Metal Dealers Act 2013, the driver ID is checked. A visual check of the material, aided by CCTV, is carried out whilst the vehicle is still on the weighbridge. Where duty of care paperwork (waste transfer notes) or hazardous waste consignment notes are provided with the load (including EMR's own vehicles collecting from a customer's premises), EMR ensures that the description on the paperwork matches the visual appearance of the material before booking in the load. The vehicle is then directed to the appropriate tipping area, and a trained member of EMR staff inspects the load as it is tipped. Training will include waste acceptance, inspection and rejection procedures and mud and dust control procedures (see EPPs with questions and also Tool Box Talks as refresher training); in addition it is the responsibility of the Operations Manager to remind staff of these procedures and to discuss any issues during the regular huddles with all staff (held at least 1-2 times per week).

If the load has been identified as having a potentially significant quantity of dust or risk of dust being generated (e.g. the load contains dust generating materials such as building rubble or soil contamination etc.), the load will be rejected or if contamination is small enough it will be accepted (and customer 'knocked' i.e. fined) and the material will be dampened down with water spray hoses before being allowed to tip.

A similar process is conducted for small loads of non-ferrous metals which are weighed on the platform or 'small' scales located in the Non-Ferrous building. Access to this area is via a different entrance (for normally smaller vehicles such as cars and vans).

The acceptance of waste material with low quantities of (dust producing) contaminants helps to ensure quality management compliance but also contributes to keeping levels of dust on site to a minimum, which may cause an environmental impact.

#### **2.1.1 Quality of Metal 'Product' Materials**

The quality of materials accepted on to the site is key in obtaining a high quality product which will meet customer's requirements. Therefore quality requirements (for example the absence of dust forming contaminants) are an additional driver, supporting environmental improvements. Quality improvements are facilitated by a QMS (Quality Management System) certified to the ISO 9001 standard. For example many ferrous products meet EoW (End of Waste) specification requirements and are regularly sampled as part of the QMS EoW protocol and dependant on the product, levels of contaminants must be below a given threshold to meet these quality requirements (e.g. for ferrous 3b, non-ferrous metal contaminants and non-metallic contaminants must be <2% by weight).

### **2.2 Overview of Waste Processing, Dust, and Emission Controls**

The site's operational surface area is 11,709m<sup>3</sup>. The site layout is present in the site plan. The yard is surrounded by a combination of steel and brick wall at a height of 5m.

The maximum height of combustible stockpiles (e.g. light iron / frag feed, tyres) stored in the open will not exceed 4 metres.

The main yard is used primarily for shearing of ferrous metals e.g. light iron /frag feed in addition to the storage of heavier grades of ferrous metals such as OA and No.1 and 2. , the storage of WEEE and some non-ferrous grades.

The site employs a contracted mobile (drivable), vacuum sweeper, equipped with mechanical rotary brushes which sweeps the yard on a twice (or sometimes three) a weekly basis (frequency dependent on weather conditions, and which is increased during warm and dry periods). The dust and debris is removed from site with the mobile sweeper.

All operational areas are accessible by mobile sweeper.

The yard is kept clean to ensure that the concrete surface is free of dust and debris and will only generate a minimal amount of dust. The company used is listed as an EMR approved contractor, which meets minimum health, safety and environmental requirements as stipulated by the company's approved contractor policy.

Dust suppression primarily comprises of water hoses (applied by operational staff) connected to either or both water tanks located on site (total capacity: 50,000L).

The contractor guarantees fully maintained vehicles including brush repairs, addressing blockages and keeps the road sweepers running efficiently. The vehicles are fitted with reversing cameras, a water spray system and a water purging system (enables the discharge of water from the sweeper system to avoid damage to equipment in freezing conditions).

The yard also has its own internal drainage system and underground interceptor tanks for collecting surface rainwater run-off. The interceptor outfall discharges to sewer (regulated by Thames Water).

The site's infrastructure comprises of an impermeable concrete surface across the whole site with boundary walls, a water hoses is located at the start of the steel wall that's the current walkway to the shear to reduce the dust on site.

### ***Management Controls***

'SMART' (operational) Practices will be used at all times by operators of mobile plant (those applicable to dust control). SMART practices will include:

- Ensuring waste acceptance / rejection procedures are strictly adhered to, to ensure loads containing excessive dust or dust producing materials is minimised.
- Take care in the movement and loading of scrap / material containing dust, debris or dust producing materials (e.g. soils).
- Speed limits are kept below 5mph.
- Avoid using steel girders to scrape the ground (with grab cranes), using wire or rubber conveyors instead (reducing the generation of dust and noise).
- Better positioning of the material handlers to reduce handling distances.
- Minimise drop heights (when releasing scrap metal from grabs, i.e. < 1m in height); ensure that drop heights are within a maximum of 1 metres (i.e. scrap must not be

dropped greater than this height).

- Position grab crane correctly so that distance material travels will be minimised, reducing the production of airborne dust (swinging of grab is sometimes inevitable in managing heaps effectively).
- Lorries to be parked as close to specific material stockpile as safely possible to be loaded efficiently and reducing double handling. If required to locations, material stockpiles will be moved to facilitate effective loading and unloading of vehicles, to reduce double handling.
- No idling of vehicles is permitted on site; all LGVs and other vehicles are expected to turn their engines off whilst queueing at the weighbridge, waiting be loaded etc. thus reducing exhaust emissions (particulate and gases).
- Dust suppression is used, when scrap containing excessive amounts of dust or dust producing materials are moved / handled (visually assessed by Operations Manager or measurements from site dust monitor).
- Housekeeping will be carried out during the course of work activities to ensure workstations and access routes remain safe, clean and tidy. All major cleaning / housekeeping activities will be recorded in the site diary; any incidents noted (such as spillages etc.) during cleaning will be recorded on an electronic SHE (Safety, Health and Environment) Evotix Event log.

SMART working practices (e.g. drop heights must be < 1m) will be reinforced / monitored on a daily basis by site management (as part of operations manager's / supervisor's daily walk round / site inspection) and recorded on the site log. Disciplinary action may ultimately be taken if these practices are consistently not used.

**Table 2.1 Typical common metal waste types brought to EMR Silvertown\*.**

EWC code	Product description	Average tonnage/month	Destination within facility
120101	Ferrous metal filings and turnings	13.5	Ferrous Yard
160214	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13	1.3	Ferrous Yard
160601*	Lead Acid batteries	15	Non Ferrous Shed in battery boxes
170405	Iron and steel (Fe) (OA, no, 1 &2)	90	Ferrous Yard
170401	Copper (Cu)	[Non-ferrous metal	Non-ferrous building
170402	Aluminium (Al)	[Non-ferrous metal	Non-ferrous building
170401	Brass (alloy)	[Non-ferrous metal	Non-ferrous building
170401	Lead (Pb)	[Non-ferrous metal	Non-ferrous yard
170411	Cables other than those mentioned in 17 04 10	64	Ferrous Yard
191202	Ferrous metals (light iron, OA, no, 1 &2,) - metal from waste treatment.	3,192	Next to Shear
191203	Non-ferrous metals- metal from waste (total includes non-ferrous metals listed above)	244*	Non Ferrous Shed and external non-ferrous yard
200135*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components ( 6 )	75	SMW Bay
200136	Discarded electrical and electronic equipment	8	SMW Bay

\* Total Non-Ferrous metals (Cu, Al, Pb and brass)

## 2.3 Mobile Plant and Equipment.

Nitrogen Dioxide gas (and other NO<sub>x</sub> gases) is a by-product of internal combustion engines and the site uses several items of mobile plant with internal combustion engines (diesel engines). Only the 360 materials handlers (mobile grab cranes) are diesel powered, all other are electric powered or petrol (MEWP or Mobile Elevating Work Equipment).

The mobile plant used on site consists of 3 x grab cranes (360 material handlers) and 3 tele-truck, owned by EMR. The forklift truck / tele-handlers are all powered by electric propulsion. The following table lists the type, mobile and emission ratings for the mobile plant and equipment used on site:

Table 2.3

Description	Make	Emission rating
Mobile cranes 360 (x3)	Liebherr LH40	Tier IV
Tele-trucks (FLT's) (x3)	JCB	Electric
MEWP (petrol)	Genie	Tier IV

The fuel used for mobile plant is gas oil class A2 (low sulphur) that meets the requirements of British Standard for Industrial Fuel Oils (BS2689).

The internal maintenance schedule is arranged by the purchasing department in line with manufactures specification and relevant regulations (e.g. LOLER for cranes) which comprises daily pre-use inspections of all plants and scheduled Allianz (insurance) engineering inspections of relevant assets and plant. The CMS electronic maintenance management system has now been implemented for all EMR sites (including Silvertown) for all fixed and mobile plant. Additionally 500 hour services are conducted by Liebherr and JCB.

The priority system is used for any defects and necessary repairs (high, medium and low) based on what is entered on to the Action log in turn based on daily pre-use check sheets and scheduled Allianz inspections of all mobile plant. If the equipment needs to be replaced this is arranged with the servicing company/manufacturers of the equipment, e.g. Liebherr after sales maintenance service department.

EMR transport fleet uses Ad-blue, a non-flammable, high purity urea solution injected into the exhaust system just ahead of the catalytic converter to reduce Nitrogen Oxide (NO<sub>x</sub>)

emissions.

## **2.4 Training and Awareness**

All site personnel responsible for implementation of the Dust Emission Management Plan will include supervisors and operatives, who will be responsible for conducting daily visual inspections of the site for fugitive dust emissions and will all be trained to the same basic level.

Refresher training will be conducted regularly using Tool box Talks and 'huddles', if there are any changes made to the Dust Emission Management Plan or following a major environmental incident e.g. major dust pollution event or if a series of complaints from local community etc.

Training documentation can be found in each personal training folder present on site in hardcopy and also electronically.

Awareness of SHE matters and issues is communicated by Huddles, tool-box talks, noticeboard, e mailed communication bulletins and media in the form of rolling presentation slides on TVs in the mess room and training / meeting room (main site offices).

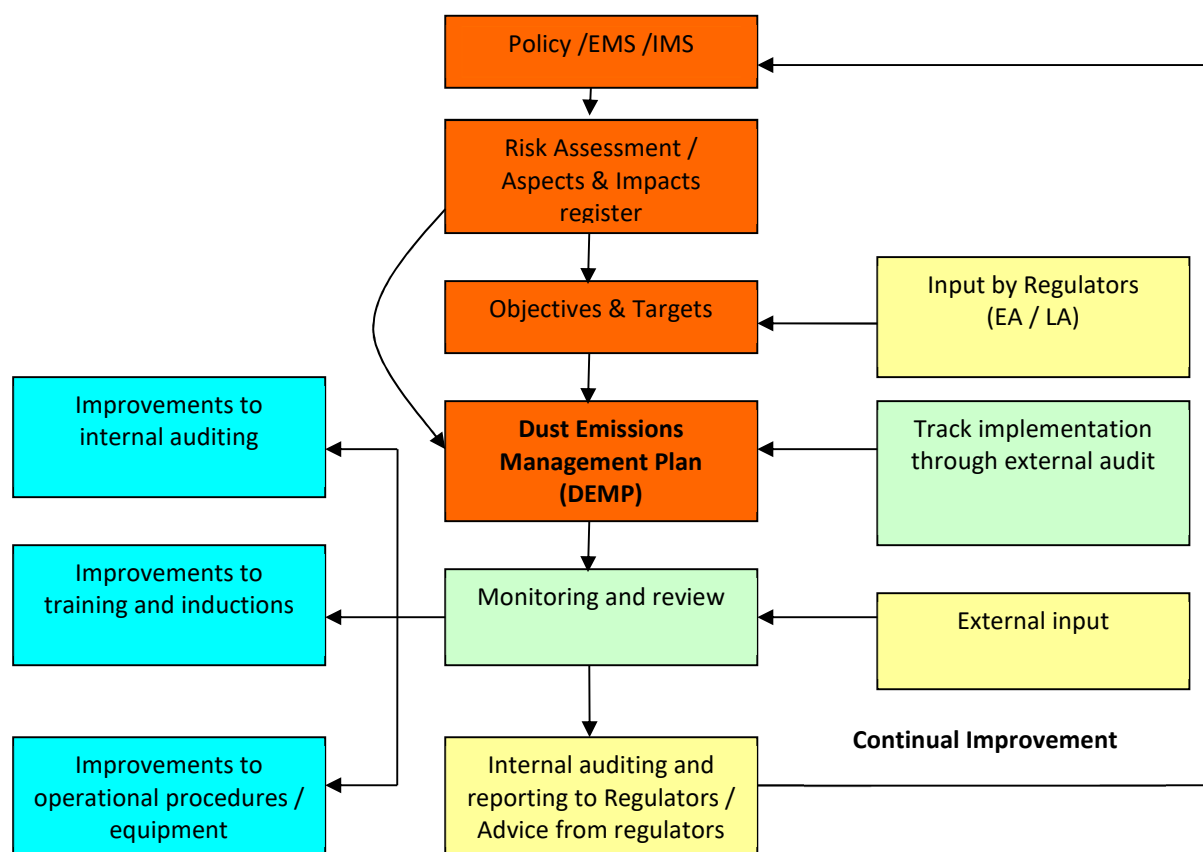
## **3. Dust and Particulate (PM<sub>10</sub>) Environmental Management Systems**

An electronic SHE (Safety, Health & Environmental) integrated management system is currently employed by all EMR depots, (Evotix). This electronic system incorporates the recording, reporting of Event logs and Action logs for any SHE related incidents or issues and supports the company's IMS / EMS.

The Dust Emissions Management Plan (DEMP) forms part of the site (and company's) Environmental Management System, a risk assessment and aspects and impacts register will inform the objectives and targets for the EMS and including the DEMP.

This document and associated appendices are available to all the relevant staff to the Environmental Folder, (saved electronically on the system and physically present on site) and on the notice board, accessible to anyone on site.





#### KEY

Planning	
Checking	
Consultation	
Implementation	

**Figure 1 Management Systems.**

As part of the EMR ISO/IMS roll out across the UK, a certified Environmental Management System (ISO14001) which in turn forms part of a certified IMS system (including ISO45001, ISO9001 and ISO50001) has been rolled out and implemented at the EMR Silvertown site (completed in October 2023). This DEMP will be fully integrated within this management system. The accreditation body and external auditor is LRQA (formerly Lloyds Register).

### **3.1 Responsibility for Implementation of the DEMP**

The EMR Silvertown Operations Manager is responsible for:

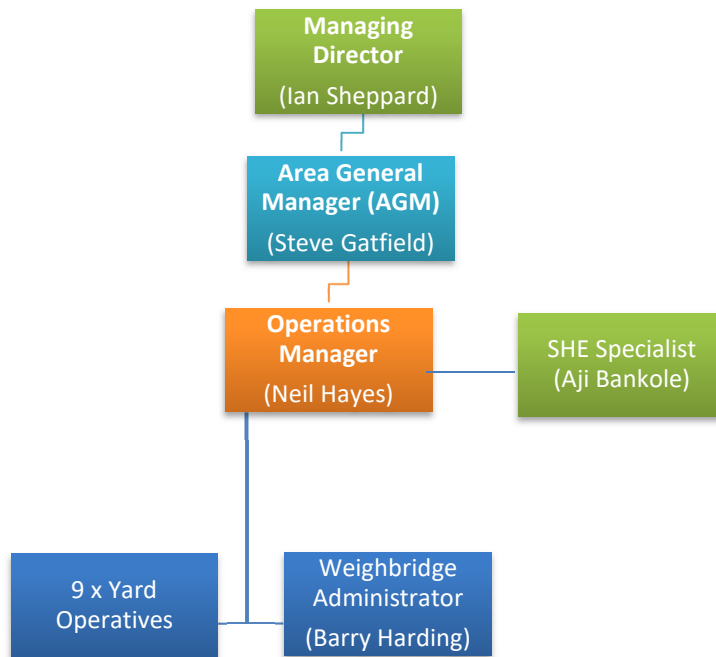
- The day-to-day delivery of the site's Dust and Particulate Emission Management Plan aims, objectives and requirements;
- Operational control of the site's dust/particulate control measures and infrastructure, including the use of the dust suppression system;
- Delivering operational staff training and awareness (including refresher training as required/deemed necessary);
- Maintenance of the site's dust control infrastructure;
- Recording and reporting of all dust emission incidents and complaints on an (Evotix) SHE Event log.
- Adjusting / amending management and control of dust emissions based on data received (e.g. monitoring, Event logs)

The SHE Specialist is responsible for:

- Ensuring that the Dust & Particulate Emission Management Plan has been fully implemented at the site;
- Reviewing the requirements of the Dust & Particulate Emission Monitoring Plan (in conjunction with the Operations Manager) every 3 years or if an operational or process change occurs;
- Ensuring provision of site training and continued awareness in conjunction with the Operations Manager as deemed necessary, to prevent complacency at the workplace or when the processes or emission levels change. This is a continuous process with regular 'Huddles', Tool Box Talks etc.
- Reviewing and tracking actions associated with any dust/particulate-related complaints or non-compliance on the Assure system.

In the event of the absence of Operations Manager, an appointed member of operational staff will be responsible for fulfilling the Dust Management Plan requirement with the support of the SHE Specialist.

**Figure 2. Organisational chart for EMR Silvertown:**



### **3.2 Sources and Control of Fugitive Dust/Particulate Emissions**

Potential dust emissions from the site might be generated from activities associated with:

- Waste loading, tipping, handling and movement operations in the open;
- Wind blowing across stockpiled materials.
- Tipping of scrap metal loads (ferrous metal loads) from LGVs (Large Goods Vehicles).
- Loading of LGVs (ferrous metals) – by Material Handlers (grab crane).
- Vehicle unloading and tipping: Movement and dropping of various (mainly) ferrous metals dislodging rust particles from the surface of metal fragments and disturbance of (non-metallic) contaminants.
- Vehicles moving around site: exhausts, accumulated waste (dirt).
- Moving, handling and storing scrap metal materials (by mobile plant, materials handlers e.g. grab crane); this includes dropping of scrap materials from material handlers.
- Stockpiles: Different grades of scrap (differing proportion of accumulated dust).
- Ground / roads and concrete abrasion: movement of vehicles, tipping, movement, (movement of scrap metals abrading concrete paving).

- 'Sweeping' ground using wire brush moved by grab crane

**Table 3.2 Pollution Linkage and Control Measures**

Source	Pathway	Receptor	Type of impact	Control Measures
Mud/debris	Tracking dust on wheels and vehicles; Mud/debris dropping of the wheels/vehicles.	<i>Spread on surrounding roads to nearest sensitive receptors / loss of amenity.</i>	Visible soiling; Consequent resuspension as of mud and debris as airborne particulates;	<ul style="list-style-type: none"> <li>• Site is concreted throughout with impermeable concrete surface with drainage system installed.</li> <li>• No sources of mud on site. No hard standing or compacted soil anywhere on site.</li> <li>• No current construction activities on site (now fully completed).</li> <li>• Manual sweeping the surface every time mud and debris are noted;</li> <li>• Use of a road sweeper on a scheduled, frequent basis (2-3 times per week) to clean the yard surface and the surroundings;</li> <li>• Use of hoses connected to tanks to dampen yard surfaces. The trigger is either the continuous dust monitor (TurnKey AQM) levels being breached and /or a visual assessment by the Operations Manager (recorded in site diary);</li> <li>• Vehicles' maintenance – wheels washing/cleaning;</li> <li>• Use of netting/cover on lorries /HGVs to prevent waste from escaping.</li> </ul>
Vehicle exhaust	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>• Speed limit on site (5 mph). A 'Stop Work Authority' is in place for use by EMR staff at the weighbridge for preventing, and reporting unsafe acts or conditions</li> <li>• Use of fuel (low-sulphur);</li> <li>• No idling: all vehicle engines are turned off (EMR, 3<sup>rd</sup> party and Customer vehicles) when not in</li> </ul>

		<i>increased affect on receptors to the North East of the site.</i>		<p>use and prohibition in leaving them running unnecessarily whilst on site (vehicles and mobile plant).</p> <ul style="list-style-type: none"> <li>• Site possesses certified EnMS (ISO50001) strict controls on vehicles e.g. no idling, fuel saving, greener vehicles and machines.</li> </ul>
Ferrous Metal Grades (all): handling – loading, tipping and movement operation in the open	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased effect on receptors to the North East of the site.</i>	Visible soiling; Airborne particulates;	<ul style="list-style-type: none"> <li>• Environmental Protection Procedures (EPPs) and Safe Working Procedures (SWPs) for lorry drivers, crane operators and other mobile plant users.</li> <li>• Use of SMART practices e.g. – minimise source strength by means of low drop heights (placing material on stockpiles);</li> <li>• Weather conditions considerations: temperature, wind speed and directions are measured daily.</li> <li>• Operations cease in in high speed winds.</li> <li>• The dust monitoring equipment constantly records the wind speed and the wind direction and the data are available online;</li> <li>• Dusty waste materials are damped down with water based suppression system.</li> <li>• The Operations manager will assess the condition visually to decide when activate the water dust management system;</li> <li>• Use of water hoses to keep the particulates down when handling.</li> <li>• Stockpiles height restrictions: &lt; 4m.</li> </ul>
Non-Ferrous Metal Grades (all)	Atmospheric dispersion;	<i>Contribution to overall dust pollution</i>	Visible soiling; Airborne particulates;	<ul style="list-style-type: none"> <li>• Non-ferrous metals by their nature are non-dusty (e.g. single items of copper and brass such as copper</li> </ul>

		<i>affecting receptors; due to SW prevailing wind direction potential increased effect on receptors to the North East of the site.</i>		<p>boilers, cable and pipes and brass taps, fittings are unloaded from vans and cars).</p> <ul style="list-style-type: none"> <li>• Most unloading, sorting, segregation and storage of non-ferrous metals occurs within the main non-ferrous building (only some grades are stored externally).</li> <li>• Any contaminated (e.g. containing dust producing construction waste) non-ferrous waste materials are normally rejected at the weighbridge or (if contamination is small), material is quarantined and the customer is 'knocked' (i.e. loses value of material bought).</li> <li>• Other control measures include control measures used for Ferrous Grades outlined above (e.g. use of SMART practices etc.), especially for non-ferrous metals stored externally.</li> </ul>
Other wastes e.g. general wastes, construction wastes, cardboard, paper, tyres, wooden pallets, fuels and oils.	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased effect on receptors to the North East of the site.</i>	Visible soiling; Airborne particulates;	<ul style="list-style-type: none"> <li>• No construction waste is currently stored on site (all construction has now been completed).</li> <li>• General waste (mixed non-metallic, site and office waste) is stored in either enclosed rollonoff skips or enclosed 1100L wheelie bins.</li> <li>• Tyres and wooden pallets are essentially 'non-dusty'.</li> <li>• Waste Fuels and oils (ELV depollution), although non-dusty produce VOCs (Volatile Organic Compounds) but these are stored in enclosed double skinned tanks.</li> </ul>

Plant sorting	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased affect on receptors to the North East of the site.</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>Working procedures for crane operators – minimise source strength by means of low drop heights (&lt; 1m);</li> <li>Use of water hoses to keep the particulates down when handling materials if visually it is possible to assess that the local environment is 'dusty'.</li> <li>Use the water hoses as a preventative measure, before carrying out potentially dusty activities, for example mechanically moving oversize ferrous material contaminated with concrete, rubble or are dusty due to lack of movement for some time / lengthy storage period.</li> </ul>
All metal grades (wastes) storage e.g. wind blowing across stockpiles etc., dust crossing boundary)	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased affect on receptors to the North East of the site.</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>Stockpiles height restrictions (&lt;4m);</li> <li>Profiling of stockpiles from wind whipping;</li> <li>Damping down the material when a dusty load has been identified or the weather conditions are particularly windy and dry.</li> <li>Boundary walls are in fact 5m high and there is</li> <li>Free-board space &gt; 0.5m between the top of the stockpile and the height of the fence (5m).</li> <li>Due to the nature of the wastes stored (scrap metal), little dust is generated.</li> <li>Particulate from scrap metal sites mostly comprises of coarse particulate (&gt; PM<sub>10</sub>) which rapidly settles when generated and not easily carried by the wind.</li> </ul>

Ground / roads and concrete abrasion	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased affect on receptors to the North East of the site.</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>• Use of a road sweeper on a scheduled, frequent basis to clean the yard surface and the surroundings;</li> <li>• Use of the yard water hoses to dampen surfaces. The trigger is either from the site dust monitor and / or visual assessment by the Operations Manager (recorded in site diary);</li> </ul>
'Sweeping' ground using wire brush moved by grab crane	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased affect on receptors to the North East of the site.</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>• Use or road sweeper on a scheduled, frequent basis to clean yard surface and surroundings;</li> <li>• Use of water hoses to dampen surfaces. The trigger is site monitor and /or visual assessment by the Operations Manager (recorded in site diary);</li> </ul>
Vehicle loading and tipping: movement and dropping of various (mainly) ferrous metals dislodges rust particles from	Atmospheric dispersion;	<i>Contribution to overall dust pollution affecting receptors; due to SW prevailing wind direction potential increased affect on</i>	Airborne particulates;	<ul style="list-style-type: none"> <li>• Use of a road sweeper on a frequent, scheduled basis to clean the yard surface and the surroundings;</li> <li>• Use of the water hoses to dampen surfaces. The trigger is site monitor and /or visual assessment by the Operations Manager (recorded in site diary);</li> </ul>



the surface of metal fragments.		<i>receptors to the North East of the site.</i>		
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Abatement measure	Description/effect	Trigger for implementation
Impermeable concrete surface	Creating an easy to clean surface; Reducing the amount of dust and particulate generated at ground level by vehicles and activities;	<ul style="list-style-type: none"> <li>Regular checking, inspection of the concrete and ensuring fit for purpose.</li> <li>Checking of condition of concrete forms part of scheduled, formal Operations manager audits / inspections; damage recorded in site diary. Major resurfacing planned and budgeted for.</li> </ul>
Good housekeeping	Reducing the dispersion of dust and particulates; Managing larger debris, dust and particulates; Contracted sweeper Formal & Tool Box Talk training provided.	<ul style="list-style-type: none"> <li>Housekeeping carried out during the course of work activities to ensure workstations and access routes remain safe, clean and tidy (and recorded in site diary).</li> <li>Additional housekeeping carried out at the end of the day / shift to ensure all work areas, equipment and pedestrian routes are kept clean and tidy.</li> <li>Wind-blown litter is cleared and prevented from building up and potentially crossing site boundaries.</li> <li>Good House Keeping Environmental Protection Procedure in place.</li> </ul>
Manual sweeping the surface	Managing larger debris, dust and particulates;	Daily sweeping of the surface in the non-ferrous shed and car park. Manual sweeping in the main yard every time the weather is windy and dry and when the surface appear to be dusty.
Use of a road sweeper regularly to clean the yard surface and the surroundings	Managing larger debris, dust and particulates;	Use of road sweeper twice per week - frequency dependent on weather conditions; the frequency of which is increased during warm and dry periods.

Use of water hoses to dampen surfaces as deemed necessary	Reducing re-suspension of particulates by vehicle wheels; Dampening down large areas of the site; Managing larger debris, dust and particulates;	<ul style="list-style-type: none"> <li>• if the dust is visible, it's possible to assess that the environment is dusty;</li> <li>• Alert from the dust monitor (amber or red alert triggers),</li> </ul>
Material dampen down with water hoses before tipping	Reducing the dispersion of dust and particulates using water	<ul style="list-style-type: none"> <li>• Trained staff will decide when to damp down the load during the acceptance of the material, as a preventative measure under the supervision of the Operations Manager.</li> <li>• If visible it's possible to assess that the environment is dusty;</li> <li>• Alert from the dust monitor (amber and red triggers)</li> </ul>
Vehicles' maintenance – wheels washing/cleaning	Removing dirt, dust and particulates from the lower parts of vehicles; Reducing re-suspension of particulates by vehicle wheels;	The drivers are responsible in keeping the vehicles clean and free from dust and mud. Drivers regularly (but infrequently) jet wash the vehicles in the yard.
Speed limit (5 mph)	Reducing vehicle movements and idling; Reducing re-suspension of particulates by vehicle wheels;	<ul style="list-style-type: none"> <li>• Enforced by installation of signage;</li> <li>• Stop Work Authority system in place for use by EMR staff at the weighbridge for preventing, and reporting unsafe acts or conditions</li> </ul>
Use of fuel (low-sulphur)	Minimising vehicles exhaust emissions;	Used at all times;
Turning the engines off when not in use and not leaving them running unnecessarily while on site (vehicles and mobile plant)	Reducing vehicles and mobile plant exhaust emissions;	Good practice and safe working procedure enforced at all times;
Working procedures for lorry drivers, crane operators – minimise source strength by means of low drop heights (<1 m).	Minimising the height at which waste is handled; Reducing the distance over which debris/dust/particulates could be blown and dispersed by winds;	Good practice and safe working procedure enforced at all times;
Sheeting of the vehicles	Prevent the escape of debris, dust and particulates;	All the lorries are fitted with covers/netting;

		In particular for transporting lighter fraction (e.g. trommel fines).
Weather conditions consideration (high speed winds)	Ceasing operations with dust generating material during high speed winds conditions; Reducing peak pollutions events;	The Operations manager checks the weather condition daily logging on to Met office website, printing out data and recording wind speed and wind direction in the site diary. If there is an indication of adverse weather conditions on the website (e.g. dry, warm and windy), dust suppression measures will be enacted throughout the day.
Stockpiles height restrictions (combustibles < 4m, non-combustibles < 8m); Profiling of stockpiles from wind whipping	Reducing the distance over which debris/dust/particulates could be blown and dispersed by winds; Reducing the surface area over which particulates can be mobilised;	Good practice, Environmental Management Plan, environmental protection procedures (EPPs) and safe working procedures are enforced at all times;
Dust and particulate monitor with trigger alarm	Alerts when concentration is above set limit (amber or red); Monitors environmental performance	Used at all times;

### 3.3 Other Considerations

#### Water usage/availability:

Water based dust suppression system currently includes hoses fed by two tanks at capacities of 30,000 and 20,000 Litres. The tanks are supplied by the mains, this guarantees that the tank is constantly full.

The average consume usage for the water cannon is about 4 litres/hour, this means:  
 $50,000 / 4 = \mathbf{12,500 \text{ hours}}$  of continuous use of water that are guaranteed with the cannon, even if there is an interruption of water supply.

The site benefits from a fully enclosed drainage system (no runoff over site boundaries) and any surface water run-off will be discharged via interceptors to foul sewer. Water supplies and drainage capacity are sufficient to supply the demands of the dust mitigation measures described in this document.

#### In the event of a drought:

In the extreme event of a sustained drought, consideration will be to minimise the dust fugitive emissions using additional methods e.g. SMART focussed suppression measures, increased frequency of sweeper and even the suspension / cessation of some dust producing activities (e.g. loading of a vehicle with the bottom of a shearing pile using a 360 grab crane). Dusty operations and activities may cease altogether during drought conditions, as assessed by the operations manager; this would be recorded in the site diary and on an Evotix Event log. Other methods may also be considered during a severe drought to prevent dust becoming airborne again once wetted, reducing the amount of water required (e.g. hose left on at start of weighbridge so lorries and other vehicles track through water and spread along roads / yard).

#### Depositional Dust:

Most dust generated by scrap metal yards (including Silvertown) actually comprises of (visible) 'depositional dust' as opposed to finer, more airborne and 'respirable' dust and particulate such as PM<sub>10</sub> and PM<sub>2.5</sub>. Depositional dust fractions are typically associated with annoyance and therefore a possible degradation of local amenity but normally settles quickly and does not travel far (i.e. across site boundary). Depositional dust may be observable by the deposited residues or by the cloud of dust itself and settles again quite quickly on generation, unless there are very high winds.

Depositional dust (heavier fraction > PM<sub>10</sub>) generated on the Silvertown site from a number of operations activities, including:

- Tipping of scrap metal loads (ferrous metal loads) from LGVs.
- Loading of LGVs (ferrous metals) – by Material Handlers (grab crane).
- Vehicle unloading and tipping: movement and dropping of various (mainly) ferrous metals dislodges rust particles from the surface of metal fragments.
- Vehicles moving around site: exhausts, accumulated waste (dirt).
- Moving, handling and storing scrap metal materials (by mobile plant, materials handlers e.g. grab crane); this includes dropping of scrap materials from material handlers.

- Stockpiles: Different grades of scrap (differing proportion of accumulated dust).
- Ground / roads and concrete abrasion: movement of vehicles, tipping, movement, (movement of scrap metals abrading concrete paving.
- 'Sweeping' ground using wire brush moved by grab crane

These dust sources do not remain as separate entities but mix with other dusts (e.g. from concrete, nearby roads, local industry etc.) and contribute to the general dust emissions produced in the local area environment.

As depositional dust is courser than PM<sub>10</sub> and PM<sub>2.5</sub> dusts, depositional dusts are therefore visible and visual assessment is still an important part of monitoring and subsequent control measures. Visual assessment is an important part of the Operations Manager's monitoring duties.

### **3.3 Enclosure of Waste Processing & Storage Areas.**

Due to the nature of the operations, volumes of the material and the site coverage/size, EMR does not see the feasible possibility to fully enclose all site operations in a building in the near future, although a significant proportion of the site's activities are enclosed in a building (e.g. ELV depollution, non-ferrous metal processing and storage). However, EMR has implemented dust abatement measures to prevent or minimise dust crossing the site boundaries and this minimise the possibility of dust crossing the boundaries where the material is stored in the open.

### **3.4 Visual Dust Monitoring.**

Visual dust monitoring is a part of the Operations Manager's daily walk around as well checking the activities and operations on site. The monitoring locations have been considered to include the boundary walls and the dusty stockpiles (where a risk of fugitive emissions is present e.g. ferrous No 1 & 2 from construction waste). If the site is to be observed to create dust and/or cause nuisance and the source of emission is identified as coming from the site, it is Operations Manager's responsibility to take action and apply available control measures, e.g. dampen down the yard surface to prevent the re-suspension of particulates.

An investigation is carried out in the event of any dust producing incidents and the findings are then recorded in the site diary, in more severe cases an electronic (Evotix) Event log will be raised and actions agreed and logged. If significant dust emissions are observed the operations manager will inform the SHE Specialist, raise an Event log and follow up with a review of practices onsite and corrective actions. Should there be a concern in regard to dust emissions on site, the monitoring feedback would be discussed at the site meetings (Health and Safety and Environmental meeting) and the plan of action agreed.

The Operations Manager will assess if observed atmospheric dust constitutes a nuisance and / or is crossing the site boundary. If it is then the source will be identified and the activity will cease (if serious) or dust suppression will be applied (use of water hoses). If dust crosses the boundary and complaints are also received then this will be recorded on an Evotix Event log and this will be automatically flagged (escalated) to the Area General Manager (AGM) and any relevant actions agreed and applied (action log).

#### **4. Particulate Matter Monitoring.**

The location of the site in a local Air Quality Management Area (AQMA) sets the requirement for ambient air monitoring to be implemented and therefore the site will install a continuous dust monitor (TurnKey AQM Instruments).

The equipment along with the software and web server provides data (based on 5 minute average readings); this data is submitted to the Environment Agency on a monthly basis. The equipment conforms to MCERTs standards and is subject to regular service and calibration in line with environmental permit (6 monthly calibration provided by Turnkey Instruments Technical Support).

The parameters measured by the monitor are: Total Particulates, PM<sub>10</sub> (submitted monthly to EA), PM<sub>2.5</sub>, PM<sub>10</sub>, wind-speed and wind-direction.

#### **4.1 Monitoring Location.**

The dust monitor will be installed at the North East boundary to encompass whole site, taking into account South Westerly prevailing winds, to facilitate more prevalent and accurate measurement of dust levels on site.

#### **4.2 Operation of the PM Monitoring Equipment.**

Site operations in conjunction with the SHE team is responsible for management and operation of the system.

The data is available on the web server: AirQWeb, from where it can be downloaded on to an excel spreadsheet report format. The server also is set to send an alert when exceedances of the set limit occurs via email/text (depending on the settings), which facilitates speedy identification of the potential triggers and facilitates the application of requisite control measures.

#### **4.3 Quality Assurance/Quality Control and Record Keeping.**

The service and calibration is conducted by Turnkey, who also provides technical advice and support. If the equipment is damaged or no longer able to collect data TurnKey Instruments technical Support is contacted for repair/service, a replacement monitor may be provided until the issue is resolved.

#### **4.4 Equipment and Data Management.**

The Site Operations, composed of Regional General Manager, General Manager and Depot Manager, in conjunction with the SHE Team is responsible for the care and maintenance of the monitoring equipment. Data is easily accessible and downloaded when requires from the web server. Technical support is available from the equipment supplier.

#### Dust Monitoring Equipment specification and details:

- Dust monitoring equipment (continuous): TurnKey AQM (Osiris TNO3186)
- Location: North- east boundary
- Servicing and Calibrations schedule: 6 monthly.
- Data management: AirQWeb software system connected to monitor (e mails sent to selected responsible persons including Operations Manager and SHE Specialist).
- Trigger action levels: Amber: 75mg/m<sup>3</sup> and Red: 100mg/m<sup>3</sup>.

#### **4.5 Recording and reporting of Data.**

The data is available on the web server AirQWeb. Any exceedances will be recorded on an Evotix (electronic SHE/IMS) and relevant actions populated on an Event log. The data are submitted on monthly bases to the Environment Agency.

The Operations Manager is responsible for overseeing the on-site PM<sub>10</sub> (and coarse particulate) monitoring but the SHE Specialist is responsible for data management, recording and reporting and the interpretation of data.

#### **4.6 Additional Detailed Monthly Reporting**

The data is available on the web server – AirQWeb, from where it can be downloaded as an excel spreadsheet report. The server is also set to send alerts when exceedance occurs via email/text (depending on the settings), which facilitates site operational staff to identify the possible source of triggers and apply appropriate control measures.

#### **4.7 Actions when alarm is triggered.**

In the event of the PM<sub>10</sub> levels exceeding the 75µg/m<sup>3</sup> limit both the Operations Manager and Environmental Coordinator will receive an email alert with the exceedance value shown (>75 µg/m<sup>3</sup>).



The following actions will then be taken:

1. The Site Manager assesses yard activities and the nature of the waste handling and deliveries immediately prior to the alarm being activated, to determine the source which may have triggered the alarm to be activated (this may be onsite or offsite).
2. If the source is within the site's control, the Operations Manager takes appropriate action in terms of dust/particulate abatement, to ensure that the alarm is not re-activated. This may take the form of the following;
  - (a) Investigating the source of the dust/particulates to prevent a re-occurrence.
  - (b) Suspending operations which are not being conducted using best-practice controls.
  - (c) Additional use of the dust abatement measures (use of water based dust suppression system – Dust Bosses or additional hoses dampening the surface/material).
  - (d) Logging findings and uploading onto an Evotix Event log.
3. If the source cannot be ascertained with 100% confidence, the Operations Manager suspends the likely dust/particulate generating activities.

If an effective abatement technique cannot be identified and implemented, and observed PM<sub>10</sub> levels remain above the action level for 6 consecutive, 5-minute mean readings (i.e. 25 minutes) concurrent with recorded wind directions suggesting that the source of particulate could be from the site activities, then operations should be suspended until measured PM concentrations drop below the action level for 6 consecutive, 5-minute mean readings.

In all cases, any new “lessons learnt” from the Operations Manager's/ SHE Specialist investigations are considered by the company directors and implemented into dust & particulate emission management plan (if not already included), to prevent a re-occurrence of the alarm.

#### **4.8 Visual Monitoring**

The alarm is not the sole indicator of a dust event at the site; the continuous visual monitoring of potential dust sources and activities safeguard all play a very important part in managing dust and particulates.

#### **5. Recording and Reporting of Complaints**

Any dust complaints received are logged and recorded on the Dust Complaints form; following this an Event log (electronic SHE managements system) is raised, (the completed form is scanned and uploaded onto the relevant Event log) . Items recorded will include information which may be used as part of any investigation, to provide any feedback, inform any monitoring which may be required and also to provide data to show trends and facilitate any planned improvements.

All complaints are investigated by the Operations Manager / SHE Specialist and recorded through EMR's internal (electronic) SHE management systems (Event log). Details of the complaints are recorded and an investigation is completed to ascertain any immediate/root causes and actions that may be taken. All complaints are notified to the General Manager and the SHE Specialist.

A request will be made to the EA that with any complaints received via them, that they ask the complainant to give a *descriptive* detail of the complaint (nature, colour etc.) to facilitate identification of the location of the source, with times, dates and wind direction obtained and this will be recorded in an Event log / complaint log under 'description'.

On receiving a noise complaint EMR staff will inform the Operations manager immediately (if the Operations manager does not receive the complaint directly) and then:

1. If complaint is received directly from complainant, the Operations manager will note in site diary /log, complete complaints form and entry in Event log, inform SHE Specialist,

investigate complaint, identify source, describe activity (updating Event log if required) , apply any mitigation measures identified and inform EA (local officer) by e mail or phone.

2. If complaint is received via the EA the Operations manager will note in site diary/log, complete complaints form and complete entry in the incident Event log, inform SHE Specialist (who will raise Event log), investigate complaint, identify source, describe activity in Event log and apply any relevant mitigation measures identified and inform EA officer by e mail the outcome / mitigation measures applied.

### ***Complaints investigation***

As part of the investigation a dust assessment may be conducted as required to ascertain:

- What times did the dust event occur?
- At what locations around the area (of receptor) was dust identified?
- Material description of the dust (colour, fine / course, whether it leaves a stain)
- What activities may have resulted in dust event (e.g. vehicle loading, unloading, tipping)?
- Weather at time of event (wind direction, speed etc.)
- The type and number of plant or equipment being used at time of dust event?

Much of this information will be recorded / uploaded on the incident Event log as the investigation proceeds

Investigations recorded on the SHE Managements system (as an Event log) will also facilitate assessment and monitoring of the data, trends etc.

### ***Control measures.***

If the complaint is substantiated then the processes can then be brought back into control e.g. SMART practices employed / re-employed / dust suppression measures increased or targeted etc.

The Environment Agency (local EA officer) will then be informed (by e mail) of any control measures / contingency plans that have been taken or need to be taken and the outcome (e.g. monitoring results, cessation of complaints, description of mitigation measures applied, review of DEMP etc.).

Formal quantitative dust monitoring will be organised from time to time if deemed necessary (e.g. due to dramatic increase in number of complaints or significant change in site activities, generating additional dust) and also dependent on the right conditions – operational/weather/wind direction etc. This may entail the use of an approved external consultant and the use of appropriate dust monitoring equipment as required.

## **6. Complaints Response.**

### **6.1 Engagement with the Community.**

It is of a great importance to EMR to have positive relations with the neighbours and local community. The contact details are easily accessible (phone numbers and email address) on the signage at the site entrance and on EMR website, including the EMR Emergency out of hours telephone. Any issue/point raised is taken under consideration and response/feedback is provided. The site representatives when possible participates in the local council community meetings and forum.

### **6.2 Reporting of Complaints.**

Following the receipt of a complaint about the dust nuisance the Operations Manager shall investigate the issues raised and reviewed the controls onsite.

The details of the dust source and the control measures adopted will be recorded in the Appendix 3 *Dust Complaints Form* and feedback given to the complainant and Environment Agency if necessary. In the event that numerous complaints are received the issue would escalate to higher priority. If the source of nuisance can be identified at the time of the complaint the appropriate measures must be put in place to stop the nuisance (e.g. water

suppression, cease activities). The abatement measures must be then reviewed in line with Dust Management Plan to prevent reoccurrence of dust nuisance.

All dust complaints will be investigated, actions agreed and a response back to the complainant made within 24 hours.

### **6.3 Management Responsibilities.**

The Operations Manager shall be responsible for the control and management of dust at the site. Site management shall ensure that all personnel operating on site are adequately trained to implement the dust control measures and that they are strictly adhered to.

If the control measures stated are implemented at the site then dust generation should be kept to a minimum and nuisance to sensitive receptors should be avoided.

In the event that dust nuisance is caused to a nearby sensitive receptor, and a complaint is received by the site management, the investigation and the review of the activities will be carried out.

### **6.4. Summary.**

The main aim of the Dust Emission Management Plan (DEMP) is to minimise and where practicable eliminate dust being generated but also to prevent any dust produced migrating across the site boundaries. It also aims to ensure potential nuisance caused directly to nearby sensitive receptors from dust migration is kept to an absolute minimum (the target will be zero).

The developed dust minimisation strategy will be implemented by the site management assisted by the SHE team, both of whom will ensure that all operations and activities onsite have fully taken into consideration with regard to the potential for dust generation (and expected levels) from the activity in question.

The DEMP will be periodically reviewed by the SHE (Safety, Health & Environmental) team in conjunction with operations (as site level and above) as required - at least annually or when the processes or emission levels changes (or following an incident, complaints etc.).

The material processing activities on site, although potentially significant with regards to dust emissions are deemed to be a lower risk at the Silvertown site than compared to other metal processing facilities (e.g. ferrous metal shredder sites).

If the control measures as prescribed in this document are fully implemented at the site, it is considered that the risk of dust migrating the site boundaries and the subsequent nuisance to nearby receptors will be either zero or very minimal.

## **Appendix 1 – Sensitive Receptors**

Provided separately.

**KEY**

- Painted Crossing Route
- Protected / Barrier Waterway
- Water pipe
- Lego block bay wall
- Site fencing
- Fire Hydrant
- ASSEMBLY POINT
- Fixed water cannons fed from 30,000L tank
- 30,000L tank
- Fire hose reel
- Fire extinguisher
- Smoking Shelter
- Rogue cylinder storage

HMS182 : Heavy melting steel  
 OSHE : Shearing (oversize)  
 OSOA : Oversize constructional (over 52")  
 OSHE : Shearing (oversize)  
 OA : Inside 52" constructional

**EUROPEAN METAL RECYCLING LIMITED**  
 SPIRUS HOUSE, DELTA CRESCENT  
 WESTBROOK, WARRINGTON WA5 7NS  
 TEL: 01925-715-495 FAX: 01925-715-435

**LOCATION**  
 EMR LTD, Factory Rd

**SCALE**  
 1:1000

**DATE**  
 03/11/2024

**TITLE**  
 Silverbrook Dust Management Plan

**Drawing No.**  
 STDMP07112024

**Revision**  
 A

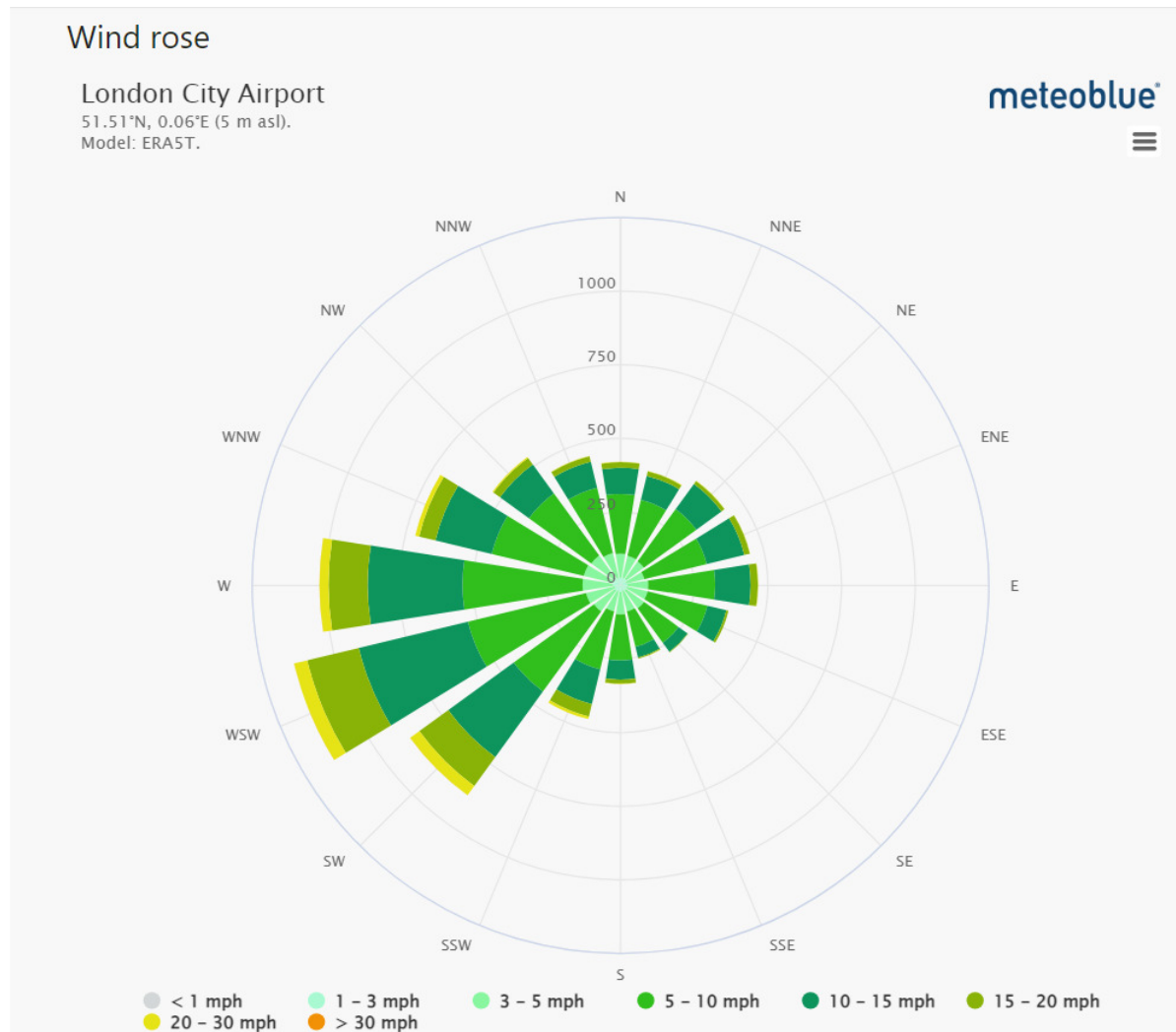


## Appendix 3- Dust Complaint Form

### Appendix B - Dust Complaint Form

Customer Details	
Customer Name -	
Address -	
Postcode -	
Customer Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Complaint Details -	
Investigation Details	
Investigation carried out by -	
Position -	
Date & time investigation carried out -	
Weather conditions -	
Wind direction and speed -	
Investigation findings -	
Feedback given to Environment Agency and/or local authority -	
Date feedback given -	
Feedback given to public -	
Date feedback given -	
Review and Improve	
Improvements needed to prevent a reoccurrence -	
Proposed date for completion of the improvements -	
Actual date for completion -	
If different insert reason for delay -	
Does the dust management plan need to be updated -	
Date that the dust management plan was updated -	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	

## Appendix 4 – Windrose



## Appendix 5 – Environmental Protection Procedures

Reference	Title
<b>Waste Acceptance</b>	
EPP 1.5	ELV Acceptance
EPP 1.10	Duty of Care - Waste Removals
EPP 1.14	Inspection of Baled Materials
EPP 1.15	Radioactive Item Disposal
EPP 1.17	Waste Acceptance and Rejection
<b>Storage of Potentially Polluting Materials</b>	
EPP 2.15	Storage of Wastes
<b>Infrastructure Requirements &amp; Maintenance</b>	
EPP 3.4	Taking Water Samples
EPP 3.5	Management & Control of drainage & surface water discharge
EPP 3.7	Infrastructure – Taking Soil Samples
EPP 3.8	Inspection and Maintenance of Interceptors, Bunds and Sumps
<b>Nuisance</b>	
EPP 4.12	Nuisance
<b>Environmental Incidents</b>	
EPP 5.3	Hazardous Substance Deliveries
<b>Operations</b>	
EPP 6.5	Weighbridge
EPP 6.6	Contractors
EPP 6.11	Drivers
EPP 6.14	Loading Steel Turnings for Export
EPP 6.15	Efficient Fixed Plant Operation
EPP 6.16	Efficient Mobile Plant Operation
<b>Other</b>	
EPP 7.3	Office Activities (YCEN)
<b>Fridge Plant</b>	
EPP 8.6	Refrigeration Unit Recycling (DARFDG)
EPP 8.7	Refrigeration Unit Recycling (WILFDG)