



ENVIRONMENTAL PERMIT NUMBER EPR/DB3502TZ

**PHYSICAL TREATMENT FACILITY OPERATED BY
RECYCLED MATERIAL SUPPLIES LIMITED AT PERRY
ROAD, DAGENHAM, LONDON**

**DUST AND PARTICULATE MATTER MANAGEMENT
PLAN
VERSION V5**

March 2024

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RMS-DAG-INF-01 dated March 2023

RMS-DAG-HAZ-01 dated March 2023

RMS-DAG-MON-01 dated March 2023

1. INTRODUCTION

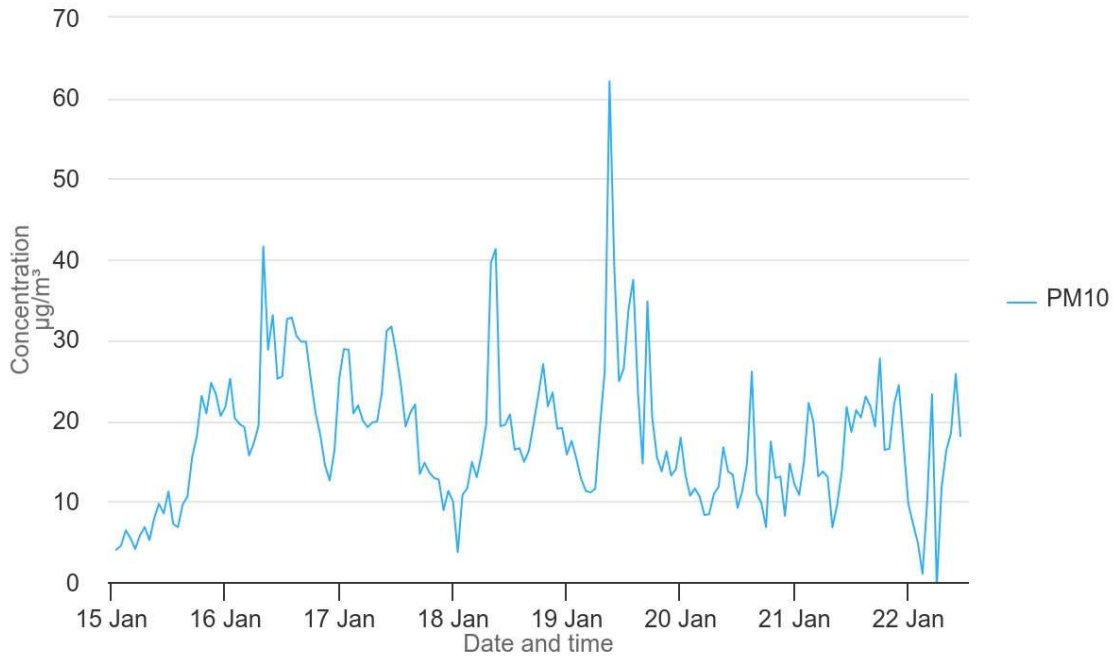
- 1.1 Recycled Material Supplies Ltd (RMS) operate a waste management facility at Perry Road, Dagenham, RM9 6QD. This is a Physical Treatment Facility for managing Construction, Demolition and Excavation waste (CD&E).
- 1.2 RMS operate a fleet of HGVs used to transport waste and aggregates to and from construction projects in London. The waste is delivered to the site and is screened and crushed to produce aggregates.
- 1.3 There is also a wash plant that is used to separate soils, sands, stones and ballast to provide higher quality aggregates.
- 1.4 A building provides a covered working area for crushing and screening. The wash plant is a bespoke plant, purposely designed for RMS.
- 1.5 There are storage bays around the site for storing waste and aggregates.
- 1.6 The site is surrounded by a 6m high concrete wall.
- 1.7 Perry Road Recycling Facility is the subject of Environmental Permit Number EPR/DB3502TZ (the permit) issued to Recycled Material Supplies Limited (RMS) on 31 March 2016. In January 2019, the permit was varied to include a new aggregate washing activity, extend the site boundary, permit the external storage of waste and update the drainage plan which was a pre-operational condition.
- 1.8 In June 2021, the permit was varied to include the following waste codes:
 - 010102 waste from mineral non-metalliferous excavation
 - 101208 waste ceramics, bricks, tiles and construction products
 - 150107 Glass packaging
 - 170202 Glass
 - 170904 mixed construction and demolition waste (restricted to mixed soils, concrete and bricks only)
 - 191205 Glass
 - 191302 solid wastes from soil remediation other than those containing dangerous substances.
 - 200102 Glass
- 1.9 The location and boundary of the site are shown on Figure 2.
- 1.10 Report reference RMS/DA/AW/5590/01/DMP/V3 dated November 2018 is listed in Table S1.2 of Environmental Permit number EPR/DB3502TZ/V002 as an Operating Technique. This is the current approved Dust and Emissions Management Plan (DEMP).

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- 1.11 This version of the DEMP includes the acceptance and treatment of hazardous waste and has been updated to follow the Environment Agency's Example Dust Emissions Management Plan Version 10.
 - 1.12 The site is located within the Barking and Dagenham Air Quality Management Area (AQMA) declared for Particulate Matter (PM₁₀) and nitrogen dioxide (NO₂) by the London Borough of Barking and Dagenham.
 - 1.13 Without implementation of appropriate measures for the control of particulate matter the site has the potential to generate and release particulate matter. The proposed site infrastructure has been designed and operational procedures have been developed to minimise the potential for the generation and release of particulate matter from the site.
 - 1.14 The purpose of this document is to identify the operations at the site which may have the potential to have an impact on air quality as a result of emissions of particulate matter, to present the details of the operational controls which will be implemented to minimise emissions and describe the monitoring which will be carried out to confirm the effectiveness of the management controls.
 - 1.15 The DEMP forms part of the management system under which the facility will be operated as a condition of the Environmental Permit. A copy of the DEMP will be kept in the site office.
 - 1.16 The activities with the potential to generate and/or release particulate matter are identified in section 2 of this document. The locations of receptors are identified in Table 4 and shown on Figure 2. The potential pathways for linkage of the sources and receptors are considered.
 - 1.17 In sections 3 and 4 of this document, the management techniques are presented that will be used to minimise the potential for particulate matter emissions from the site and the monitoring proposed to confirm the effectiveness of the management techniques. An action plan which will be implemented in the unlikely event that there is a significant emission of particulate matter from the site is presented at Appendix A.
 - 1.18 The DEMP comprises a living document and will be reviewed on an annual basis or as required by the action plan. The review will include consideration of the results of particulate matter monitoring and progress with any improvements identified. A review of the effectiveness of particulate matter monitoring techniques will be undertaken and changes will be made to monitoring techniques as necessary.
 - 1.19 As the site is located within the Barking and Dagenham (AQMA) declared for Particulate Matter (PM₁₀) the AQMA is a receptor for PM₁₀. The closest PM₁₀ monitoring station with publicly available data is Scrattons Farm located approximately 1.67km to the north west of the site. A plot showing a weekly measured data set recorded at the Scrattons Farm monitoring station extracted from the London Air Quality Network website¹ is presented below.

¹ <http://www.londonair.org.uk/london/>

Barking and Dagenham - Scrattons Farm

Measured data from 15/01/2024 to 22/01/2024

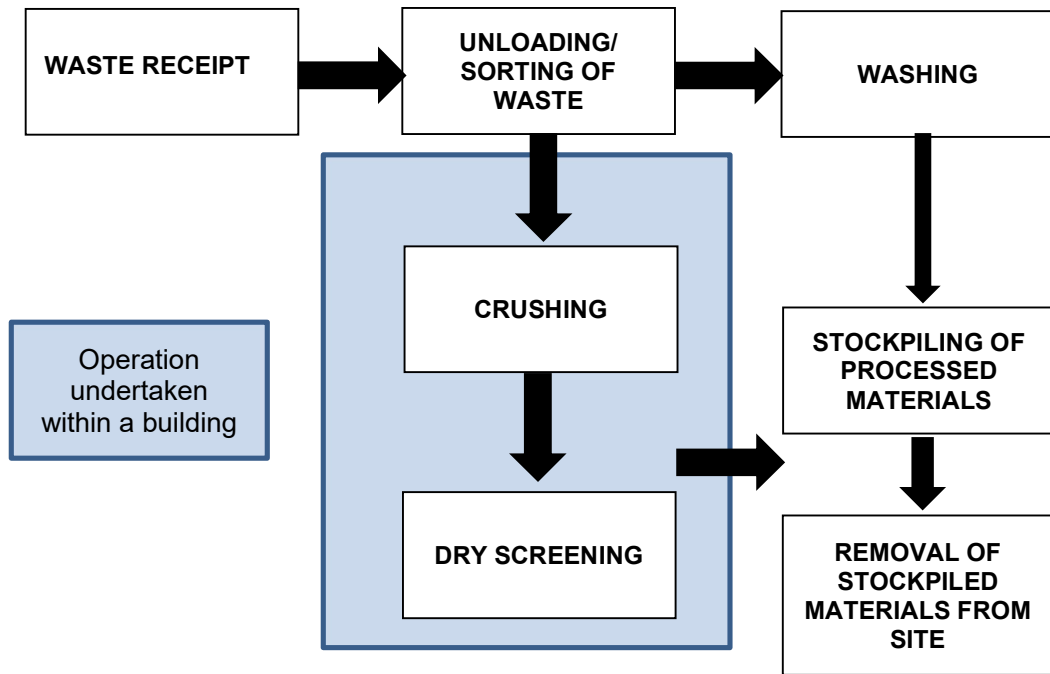


- 1.20 The monitoring data at Scrattons Farm can be used to provide background conditions in the wider area.
- 1.21 A PM10 monitor has been installed at the RMS. The data is sent to the Agency on a quarterly basis.

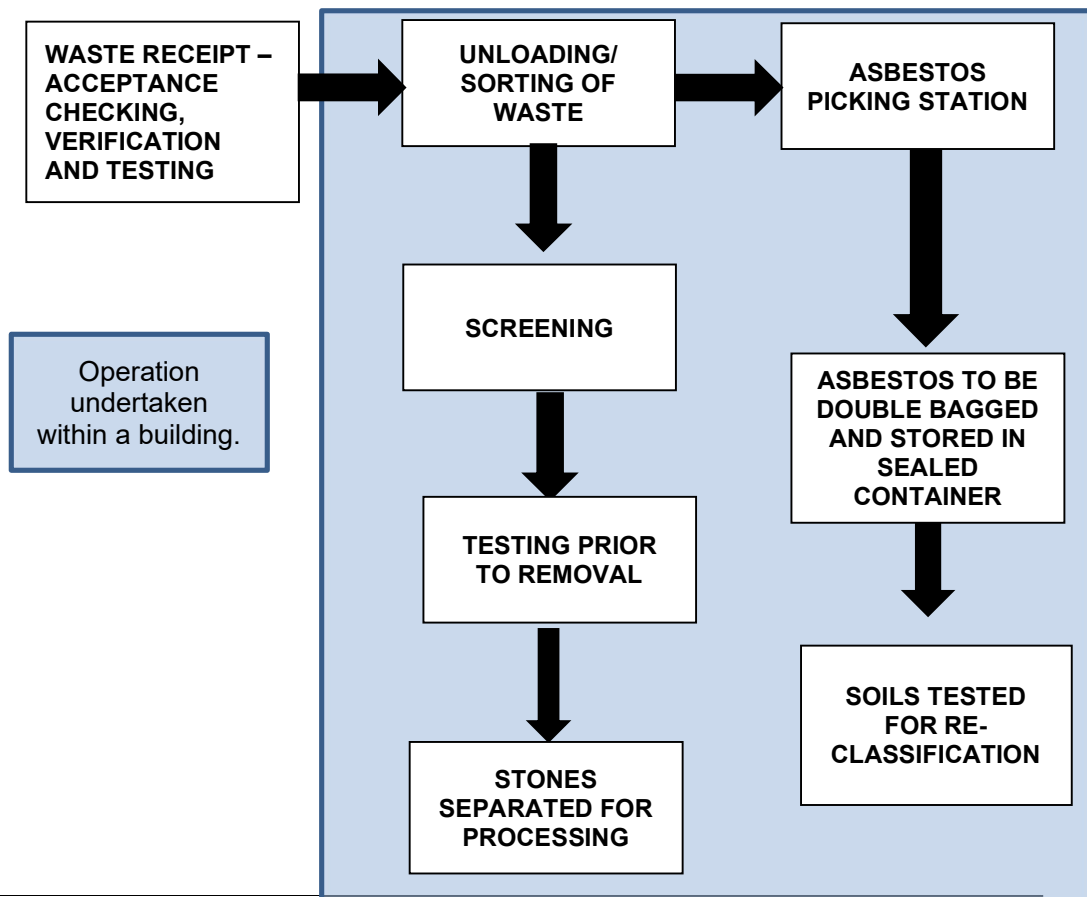
2. OPERATIONS

Overview of Waste Operations

- 2.1 The permit for the site authorises an aggregates recycling facility accepting up to 350,000 tonnes per annum of general construction, demolition and excavation (CD&E) type waste. Waste is delivered to the site on road vehicles. The waste types accepted at the site is provided in Table 1. The waste types all are included in the list of wastes specified in Standard Rules SR2010No12 'Treatment of waste to produce soil, soil substitutes and aggregate', plus also include a range of mirror entry hazardous waste codes.
- 2.2 Wastes comprising solely or mainly dusts, powders or loose fibres will not be accepted at the site.
- 2.3 The non-hazardous waste materials will be processed to produce a variety of construction materials including recycled and secondary aggregates and soil and soil substitutes. Treating includes crushing, screening and washing. There is a bespoke wash plant on site which is used to further separate aggregates.
- 2.4 The hazardous waste operations will involve treating hazardous construction and demolition waste. Two types of operation will take place. One involves the manual removal of visible asbestos from soil. The second involves screening soils to remove the stone content. Both activities will take place within the existing building.
- 2.5 All drivers of vehicles delivering waste to the site will be instructed to sheet or otherwise contain their loads. Signage will be displayed at the site entrance reminding drivers of the need to un-sheet vehicles after arrival at the site and to sheet vehicles before leaving the site. Compliance in respect of the Company policy on the sheeting of vehicles is taken into consideration when awarding bonuses to drivers. CCTV cameras have been installed at the site and will be used to review compliance with the requirements in respect of the sheeting of vehicles.
- 2.6 Waste acceptance at the site is controlled by the waste acceptance and rejection procedures included in the Management System (MS) for the site. Pre-acceptance checks of information provided by the producer or holder of the waste will be undertaken by the technically competent manager (TCM) or a suitably trained person instructed or managed by the TCM. The pre-acceptance checks will be used to identify waste that is suitable for acceptance at the facility. Waste acceptance checks will be carried out for all waste loads delivered to the facility to confirm that the load is consistent with the pre-acceptance information. The acceptance checks undertaken by suitably trained site personnel will include the requirement for all delivery drivers to report to reception or a member of site personnel, inspection of the duty of care documentation and a visual inspection of the load prior to acceptance to confirm that the load is consistent with the duty of care documentation. A secondary inspection will be undertaken during unloading of the waste within the site to confirm the findings of the inspections undertaken upon arrival of the load. Key staff including the weighbridge operator will hold a qualification under the approved CIWM/WAMITAB competence scheme appropriate to the waste operations conducted at the site.
- 2.7 A schematic diagram identifying the key activities involving non-hazardous waste is presented below.



2.8 A schematic diagram identifying the key activities involving hazardous waste is presented below.



2.9 For the hazardous waste, there will be a separate process for pre-acceptance and on-site acceptance. In summary the procedures include:

- Pre-Acceptance
 - Waste classification
 - Characterisation (nature of process producing waste)
 - Sampling and Analysis
 - Composition
 - Handling requirements
 - Hazard properties
 - EWC code
 - Define treatment and disposal route
 - Creation of unique tracking reference
- On site Acceptance
 - Booked Arrival Time
 - Chemist on site to oversee delivery
 - Capacity checks on site
 - Vehicle waiting, load inspection, checking/sampling
 - Traffic control
 - Checking paper
 - Compliance checking/testing
 - Failure of sample meeting compliance checks – quarantine procedure
 - Waste Transfer/Consignment Note
 - Update Waste Tracking Record

2.10 The waste acceptance will be overseen by a chemist. There will be a laboratory on site for characterisation and compliance checking.

2.11 The proposed site layout showing the location of the treatment building and approximate location of the external storage bays is shown on Drawing Number RMS-DAG-INF-01. The waste activities within the treatment building have been set out on Drawing No. RMS-DAG-HAZ-01.

2.12 Incoming non hazardous waste will be set down in external storage bays in the yard prior to transfer to the treatment building. Where incoming waste types are consistent with those being processed in the building at the time of receipt they may be set down directly within the treatment building to minimise double handling of material to minimise particulate matter generation and release. Material stocks will be located and managed operationally to promote segregation where appropriate of different waste types and to minimise double handling of material.

- 2.13 RMS work with customers to carry out separation at the source. For example, loads of concrete will be kept separate from soils. This is not always possible due to limited space at the point of production.
- 2.14 Once produced, aggregates will be stored in the external yard pending transfer off-site.
- 2.15 There are storage bays around the site. The rear wall is 6m high. There is a red line painted on the wall to delineate 3.3m. The contents of any bay will be limited to 3.3m against the rear wall, increasing in height to a maximum height of 5.5m.
- 2.16 The building has been designed and orientated to offer the maximum protection against the prevailing south westerly wind. The building is 12m high at the rear, increasing to 15m at the front. The front elevation is open, this faces a northerly direction into the site. The sides and rear elevation comprise 6m high concrete walls, topped with steel cladding.
- 2.17 Suppression is provided throughout the site and is discussed in Chapter 3.

Sources

- 2.18 The following waste types will be accepted at the site and have the potential to generate dust.

Table 1 –Wastes Typically Accepted at the Site that could generate dust

EWG Code	Description	Area in Site	Treatment Activities
17 01 01	Concrete	Main Building	Crushed and screened
17 01 02	Bricks	Main Building	Crushed and screened
17 01 06*	mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances	Main Building	Screened and separated
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Main Building	Crushed and screened
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01	Main Building	Crushed and screened
17 05 03*	Soil and stones containing hazardous substances	Main Building	Crushed and screened
17 05 04	Soils and Stones	Main Building	Crushed and screened
17 06 05*	Soil based Construction materials containing asbestos	Main Building	Manually sorted in enclosed picking station to double bag asbestos and place in sealed container.
17 09 03*	Soil containing hazardous substances	Main Building	Screened to remove stone content.
17 09 04	Mixed construction and demolition wastes other than those mentioned in 170901, 170902 and 170903	Main Building / Wash Plant	Crushed and screened prior to wash plant. Or direct to wash plant.

2.19 Other operations in the locality may also contribute to dust emissions. These are set out in Table 2.

Table 2 Sources of Dust and/or other Emissions

Company	Address	Type of Business	Distance from site boundary (m)
Hanson	Perry Road	Aggregates / Waste storage and processing. Large stockpiles of aggregates including sand.	Immediate adjoining (see photographs Appendix C)
HKS Metal Company	Perry Road	Waste – open storage	85m south west of RMS
Edwards Recycling	Perry Road	Waste Paper recycling. Within open fronted building.	Immediate adjoining
Eurovia Roadstone	Perry Road	Open Storage of aggregates.	170m South west of RMS site
R White Waste Management	Chequer's Lane	Waste Management with some external, open storage of waste.	180m North West of RMS Site
Neptune Waste	Thunderer Road	Waste Management with external, open storage and processing of waste soils, concrete and hardcore.	700m West of RMS site
Gill Aggregates / Cemex	Choats Road	Aggregates / Waste storage and processing. Large stockpiles of aggregates including sand.	970m North West of RMS Site

Mobile Plant

2.20 Nitrogen Dioxide gas is a by-product of internal combustion engines and the site uses several items of plant with internal combustion engines. The process equipment will be powered by 3-phase electric.

2.21 The following plant and machinery are used on site. Wherever possible the operator will provide modern plant and machinery and replace older models with new.

Table 3 – Mobile Plant

Description	Make	Model	Emission Rating
Excavators	Hyundai	HX220	Stage V
Excavators	Lui Gong	924E-DM	Stage IV
Excavators	Lui Gong	EDM917	Stage IV
Excavators	Hyundai	HX220	Stage V
Loading shovel	Volvo	L150H	Stage V
Crusher	Powerscreen	R400	Stage IV
Crusher	Rubble master	RM90	Stage v
Dumper	JCB	3Ton	Stage V
Screener	McCloskey	R105	Stage IIIB
Screener	Sandvik	QE241	Stage IIIB
Wash Plant	Tyrone	Bespoke	
Loading shovel	Volvo	L150H	Stage V

- 2.22 RMS has a team of mechanics, and workshops at other locations. This allows RMS to carry out routine maintenance of all equipment. They also have equipment at other sites that can be redeployed as a contingency measure, as well as hiring equipment if required.
- 2.23 New equipment will be subject to service agreements.
- 2.24 All RMS vehicles will meet Euro VI engines.
- 2.25 RMS has achieved Gold standard for FORS and adopt a high standard of vehicle maintenance and safety equipment. Drivers receive regular training to comply with FORS. As well as safety and compliance checks, drivers receive training to make sure that all vehicles are appropriately sheeted, engines are switched off when not being used and to drive sensitively in accordance with site rules.
- 2.26 The activities with the potential to generate and/or release particulate matter include the following:
- Vehicles entering and/or leaving the site with mud on their wheels.
 - The release of particulate matter and debris from waste loads as they are delivered to the site.
 - The resuspension of particulate matter on roads and site surfacing by vehicles.
 - The release of particulate matter when waste loads are deposited or set down prior to treatment.
 - Sorting of waste using an excavator prior to feeding the waste material into the crusher unit.

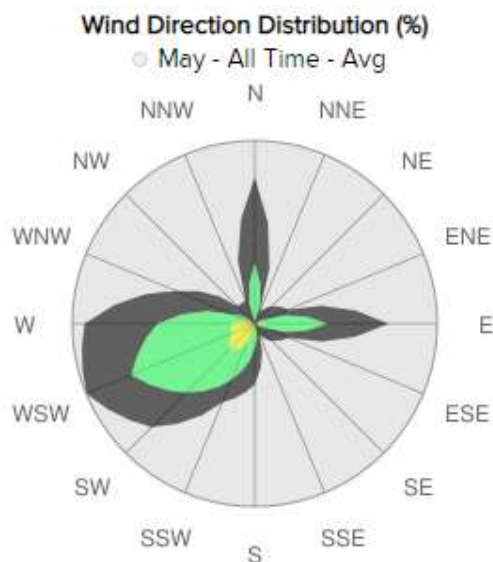
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- Loading of waste material into the crusher feed hopper.
 - The release of particulate matter from the crusher chamber during the physical crushing activity.
 - The release of particulate matter from the material conveyors associated with the crusher and screen.
 - The release of particulate matter from material transfer.
 - Loading of waste material onto the wet screening sieve associated with the washing plant.
 - Wind whipping of waste and materials stockpiled in the external bays at the site.
 - Loading of stockpiled materials onto vehicles for transfer off site.
 - Particulate emissions from the exhaust of vehicles and plant on site.
 - Release of particulates associated with handling soils containing asbestos.

2.27 The management techniques to be employed at the site to control particulate matter are discussed in section 3 of this document.

Pathways

2.28 Particulate matter is dispersed from the source to potential receptors by the wind. The wind rose for London City Airport for the period 2007 to 2023 is presented on Figure 1. London City Airport is located approximately 7km to the west south west of the site. Based on the wind rose the prevailing wind direction is from the west south west or south west and therefore areas to the east north east or north east are down prevailing wind of the site.

Figure 1 – Wind Rose for London City Airport²



- 2.29 Particle size is the key parameter when considering the transport of particulate matter in air. Coarse particles have much faster settling rates than finer particles and will therefore settle out as deposited dust generally close to the source, whereas fine particulate matter may remain airborne for longer periods and travel greater distances. Based on information published by DETR³ large particles (>30µm) mostly deposit within 100m of the source, intermediate-sized particles (10µm to 30µm) are likely to travel up to 200m to 500m and smaller particles (<10µm) can travel up to 1km from the source, although very small particles can travel much further. TGN M17⁴ states that:

'PM₁₀ emissions from industrial combustion processes and road transport are considered to contain more fine material (i.e. PM_{2.5}) than, for example, mechanically-generated particulates from quarries and construction sites'

'Waste management operations that involve mechanical generation of PM rather than combustion, are also likely to release predominantly coarse particles.'

- 2.30 As the operations to be undertaken at the site have the potential for mechanical generation of particulate matter the particle size fraction relevant to potential emissions from the site is at the upper end of the PM₁₀ fraction and coarse particles greater than

² <https://www.windalert.com/spot/15702>

³ Department of the Environment, Transport and the Regions (DETR) (2000a) Controlling and mitigating the environmental effects of minerals extraction in England. Mineral Planning Guidance Note 11, consultation paper. DETR, London. Cited in Technical Guidance Document (Monitoring) M17 – Environment Agency March 2004.

⁴ Technical Guidance Note (Monitoring) M17 Monitoring Particulate Matter in Ambient Air around Waste Facilities Environment Agency Version 2 July 2013.

PM₁₀. Based on this assessment an initial search radius of 1km has been specified when identifying receptors in the vicinity of the site.

Receptors

- 2.31 With reference to the Risk Assessment (RMS-DAG-ERA-V1), the potential human health receptors in the vicinity have been identified. These are shown on Figure 2. The receptor type, distance and direction of the receptor from the site are listed in Table 4.
- 2.32 In terms of the sensitivity to dust the following has been adopted:

Type of Receptor	Sensitivity
Residential, schools, hospitals, nursing homes, Statutory Designations (SSSI, SPA, SAC)	High
Industrial premises, recreational grounds, Non Statutory Designations (Local Wildlife Sites)	Medium
Roads, Industrial premises (waste)	Low

- 2.33 There may be other unique receptors that do not fall within any of the above categories. These have been considered separately depending on the nature of the business and use. People on footpaths are transient receptors.

Figure 2 – Receptors (blue represents 1km)



Table 4 - Receptors

Receptor	Label reference	Type	Distance and Direction from Permitted site
Thames Path	P1	Recreational	850m SW to SE
Hanson	IND1	Commercial	Adjoining N, E and S
Eurovia Roadstone	IND2	Commercial	100m SW
R Whites Waste Management	IND3	Commercial	165m NW
Barking Reach Power Station	IND4	Commercial	290m N
Ford Industrial Park	IND5	Commercial	400m SE
Manns Waste Management		Commercial	Adjoining NW
Edwards Recycling		Commercial	Adjoining SW
A13	H1	Road	860m N
Chequers Lane	H2	Road	120m W
Railway	R1	Rail	930 N
River Thames	SW1	Surface Water	150m SW

Notes:

There are no European Designations (SAC, SPA, Ramsar), SSSI's, Nature Reserves within 2km of the site.

The whole of the London Borough of Barking and Dagenham is an Air Quality Management Area

There are no Scheduled Monuments within the local area.

Crossness Nature Reserve is 1km south of the site. Scrattons Park Eco Park and Extension LNR is 1.5km north west of the site and Beam Valley LNR is 1.8km north east of the site.

The bedrock geology is a Secondary A aquifer

The superficial deposits are a secondary undifferentiated aquifer

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- 2.34 As shown on Figure 1, the site is in the southern part of Dagenham Dock to the north of the River Thames. Dagenham Dock is an industrial area that contains various industrial properties including sites that are undertaking similar activities to RMS.
- 2.35 Hanson Aggregates is a large operation adjacent to RMS. Hanson receive and treat primary aggregates and have large processing equipment and stockpiles. Photographs are provided in Appendix C. The land immediately north of RMS is used by Hanson for storing and processing asphalt/tarmac waste.
- 2.36 Other operations include the processing and storage of roadstone at the Eurovia Roadstone plant and the processing, storage and transfer of waste at the household, commercial and industrial waste transfer stations operated by Edwards Recycling Limited and Manns Waste Management adjacent to the RMS site.
- 2.37 The residential properties closest to the site are located to the south of the River Thames on Lytham Close in Thamesmead approximately 1.1km to the south west of the site. To the north of the site residential properties are located on Oval Road to the north of New Road (A1306) approximately 1.4km north-north east of the site and on Shaw Gardens approximately 1.6km to the north west of the site boundary. It is considered that if particulate matter is released from the site it is unlikely that it will be transported distances greater than 1km.
- 2.38 The recreational/amenity area closest to the site is a footpath running along the south shore of the River Thames located to the west, south west, south and south east of the site. The footpath is approximately 850m from the site at its closest point. Based on the transient use of the footpath and the distance from the site it is considered that the footpath is not a sensitive receptor to particulate matter from the site.
- 2.39 There is no public access to the site or surrounding area.
- 2.40 Six schools have been identified in the vicinity of the site based on data made available by the London Borough of Barking and Dagenham Council. The school closest to the site is Marsh Green Primary School located approximately 1.55km to the north of the site boundary. It is considered that if particulate matter is released from the site it is unlikely that it will be transported distances greater than 1km.

3 PARTICULATE MATTER MANAGEMENT TECHNIQUES

- 3.1 Particulate matter at the site will be controlled by a combination of measures relating to waste delivery and receipt at the site, site infrastructure design and operational techniques employed at the site. The techniques selected for use at the site are based on well-established techniques to control the emissions of particulate matter.
- 3.2 The technically competent site manager will be responsible for the management of particulate matter and site staff will be trained appropriately. Operational controls will inform the effective management of particulate matter.
- 3.3 Environment Agency guidance⁵ lists measures which may be appropriate for the control of emissions of particulate matter. The Agency also provides a template for DEMP's which provides advice on measures that can be used to control dust emissions.
- 3.4 The measures are listed in Table 6 together with comments on their relevance to the operations to be undertaken at the site. It is considered that a variety of techniques will be used at the site based on site specific circumstances. The principal particulate matter control measures are summarised below and the details of how these measures will disrupt the source pathway receptor linkage in respect of the source of particulate matter generation and release identified in section 2 of this document are presented in Table 5.

Site infrastructure

- 3.5 The site infrastructure shown on Drawing Number RMS-DAG-MON-01 comprises a concrete surfaced site with a 6m high wall constructed along the north eastern and eastern boundary of the site as well as part of the western boundary of the site extending north eastwards from the site entrance towards the middle of the site. A 4m high wall will extend south-westwards along the north western site boundary. The concrete surface facilitates easy cleaning and will not itself comprise a source of particulate matter. The walls will provide a barrier to particulate emissions from the material storage bays and adjacent areas of the site.
- 3.6 A building enclosed on three sides and with a roof is provided adjacent to the south western boundary of the southern end of the site. The open side of the building will facilitate the movement of vehicles into and out of the building. The building has been orientated with the open side facing the north east such that the prevailing wind from the south west or west south west will not blow directly into the building. The southern enclosed side of the building is 12m high with the roof rising from the southern edge to the northern edge of the building to a height of 15m.
- 3.7 The building will provide a barrier to the wind blowing across the site particularly when the wind blows from the south west thereby reducing wind speeds across the site particularly towards the eastern materials storage bays. The operations with the highest potential for the generation and release of particulate matter comprising crushing and screening will be undertaken inside the building.
- 3.8 A suppression misting system has been installed inside the building to control particulate matter emissions at source and around the site. The suppression system is directed towards the operational areas with the greatest potential to generate and release particulate matter namely the deposition and unloading area, the crushing and screening

⁵ Control and monitor emissions for your environmental permit - GOV.UK (www.gov.uk)

operations, the material conveyors associated with the crusher and screen and the treated material stockpiles adjacent to the screen awaiting transfer to the external material storage area.

- 3.9 Incoming waste and processed materials following treatment will be stockpiled in storage bays located in the main yard as indicated on Drawing Number RMS-DAG-MON-01. The bays will be separated by partition walls which will provide protection from the wind. Bays along the eastern boundary are located downwind generally of the materials handling building. The bays will be interchangeable and can be readjusted according to market conditions.
- 3.10 However, the following controls will apply to all materials stockpiled in external storage bays:
- 3.11 Material will be stored against the rear concrete wall to a height of 3.3m as demarcated by a red height marker. The material will then be placed in a stockpile that is no more than 5.5m in the bay, graded from the red line at an angle of 45 degrees.
- 3.12 The suppression system around the yard comprises a rain gun type system designed to dampen the stockpiles and outside yard area minimising the release of particulate matter through the action of the wind. The system will be fully programmable so that it can be employed on a timed basis throughout the day or night and during weekends depending on the weather conditions or can be employed immediately as necessary. The site manager will determine the frequency and duration of employment of the particulate matter suppression system giving consideration to the daily operations to be undertaken at the site and the weather forecast. It is likely that the system will be employed more frequently during dry, windy conditions. The indicative layout of the rain guns is shown on Drawing RMS-DAG-MON-01.
- 3.13 The suppression system will be operated by suitably trained site staff under the supervision of the site manager or TCM.

Operational controls

- 3.14 All vehicles using the site will be instructed to sheet or otherwise contain their loads to prevent particulate emissions. Vehicle drivers will be instructed to de-sheet on site prior to unloading of the material at the site and drivers of vehicles transporting material from the site will be instructed to sheet or otherwise contain their load before they leave the site. Other than for visual inspection at site reception sheeting and de-sheeting of vehicles will be undertaken only in areas of the site which are covered by a dust suppression system.
- 3.15 Waste received at the site will be subject to pre-acceptance checks and acceptance screening comprising, where appropriate, visual inspection to confirm that the load is consistent with the waste types permitted for acceptance at the site. In the event that unsuitable materials are delivered to the site, including wastes comprising solely or mainly dusts, powders or loose fibres the load will be rejected. The receipt, handling and storage of materials are the subject of specified procedures detailed in the site management system.
- 3.16 In order to minimise the deposition of mud that may subsequently dry and generate particulate matter if disturbed such as when tracked over by vehicles, all vehicles delivering waste to the site will use the wheel cleaning facilities before leaving the site. The wheel cleaning facilities will be maintained in full working order throughout the life of

the site. The concrete site surface and the site access road will be swept with a road sweeper as necessary.

3.17 Vehicle speed limits will be imposed for safety reasons and to reduce the potential for significant particulate matter release. Insofar as it is practicable all site vehicle exhausts will be upward pointing to prevent the disturbance of particulate matter from the road surfaces.


3.18 It is considered that the combination of the site infrastructure designed specifically to minimise the generation and release of particulate matter together with installation and employment of the proven particulate matter suppression systems and operational controls employed at the site will provide effective control of particulate matter emissions at the site.

Table 5
Source, pathway, receptor linkages

Source	Pathway	Receptor	Type of impact	Control Measures
Unloading and processing waste	Tracking dust on wheels and vehicles	Local Roads	Visual soiling, also consequent resuspension as airborne particulates	All vehicles will leave the site using the wheel wash. This is purposely designed for washing HGVs at construction sites. It uses recycled water and cleans the sides and underside of the vehicle. As the unloading of vehicles is controlled by a banksman it is unlikely that vehicles will be directed in a manner that results in waste being tracked out. A road sweeper will be deployed to clean the yard and access road. The entire site is concreted. There is also a rain jet for the access area.
	Atmospheric dispersion	Nearby industrial premises (workers and pedestrians).	Visual soiling and airborne particulates	Vehicles will only be unsheeted when ready to discharge. The waste will be unloaded inside the building or within storage bays. There is a 6m high perimeter wall with defined storage limits. Drop heights will be kept to a minimum and dust suppression activated. Site is surrounded by similar operators.
	Atmospheric dispersion	Residential properties	Visual soiling and airborne particulates	As above, but also the distance and intervening topography between the site and these receptors will reduce any impact. There have been no complaints from residents about this operation.
Debris	Falling of lorries	Local Roads	Visual soiling, and resuspension as airborne particulates	All vehicles delivering and collecting waste will be sheeted. A road sweeper will be deployed to clean the access and yard area. Daily site checks.
Vehicle exhaust emissions	Atmospheric dispersion	All	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength
Non road going machinery exhaust emissions	Atmospheric dispersion	Local Environment	Airborne particulates	Regulatory controls and best-practice measures to minimise source strength.

Table 6 – Measures that will be used on site to control Dust

Abatement Measure	Description / Effect	Overall consideration and implementation
Enclosure within a building	Creating a solid barrier between the source of dust and particulates and receptors is likely to be the most effective method of control, provided that the building entrances and exits are well managed.	A building will be used to carry out crushing and screening of both hazardous and non-hazardous waste. The building has been designed and orientated to protect against prevailing wind. Open fronted building to facilitate constant access. Building has 6m high concrete wall and steel cladding on three sides, with a steel cladded roof.
Negative pressure extraction	Within enclosed buildings, controlled extraction can be undertaken to ensure a constant negative pressure relative to the outside air. This system should prevent the emission of particulates from any openings in the building. Extracted air should be treated through a suitable filtration system prior to discharge to atmosphere. This method is more frequently applied for odour control.	The building is open fronted and this measure is not appropriate or necessary.
Dust Extraction Systems	A large variety of abatement technologies exist for the removal of dust and particulates from a flowing gas and have typically been applied to combustion plants and other sites where controlled emissions of particulates occur. These include Electrostatic Precipitators (ESPs), wet scrubbers, baghouses (bag filters), viscous media (e.g. oil) filters and gravitational settling. Although not all of these may be appropriate for dust and particulate suppression at waste management sites, and they cannot be applied to controlling external fugitive emissions, they may be effective when coupled	The building is open fronted and this measure is not appropriate or necessary. There are no proposals to extract air from the building. Particulate matter released inside the building will be controlled by the misting system employed in the building and particulate matter will be controlled at source.

	with local exhaust extraction, ventilation or negative pressure extraction systems from enclosed buildings to remove dust and particulates from the airstream.	
Site / process layout in relation to receptors	Locating particulate emitting activities at a greater distance and downwind from receptors.	There are few downwind sensitive receptors. The site has been designed to contain all operations using a 6m high concrete perimeter wall, storage bays and building.
Site speed limit, 'no idling' policy and minimisation of vehicle movements on site	Reducing vehicle movements and idling should reduce emissions from vehicles. Enforcement of a speed limit may reduce re-suspension of particulates by vehicle wheels.	<p>There is a speed limit on site, reinforced by signage.</p>  <p>All plant and vehicles to be switched off when not used. Drivers are informed about anti-idling and to switch off engines when stationary for longer than 10 minutes. Vehicle movements controlled at the weighbridge with the driver given clear instructions for where to unload or collect. A</p>
Minimising drop heights for waste. Use of enclosed chutes for waste drops/end of conveyor	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and	Crushing and screening inside the building. Drop heights to be minimised. Staff trained to minimise drop heights when moving materials. Wash plant is bespoke and is a damp process. Site designed with aggregate bays close to the building to minimise

transfers and covered skips / storage vessels.	dispersed by winds. Enclosing processes will further reduce dispersion.	transport distance. Where possible, outgoing products to be loaded directly on to lorries to avoid double handling.
Sheeting of vehicles	Prevents the escape of debris, dust and particulates from vehicles as they travel.	All vehicles delivery and collection waste / aggregates to be sheeted/unsheeted within the site. RMS operate modern vehicles with automatic sheeting.
Good Housekeeping	Having a consistent, regular housekeeping regime will ensure the site is regularly checked and issued remedied to prevent and remove dust and particulate build-up	Daily checks. Use of road sweeper daily to keep access and yard clean.
Hosing of vehicles on exit	May remove some dirt, dust and particulates from the lower parts of vehicles.	Not necessary. There is a fully installed wheel wash.
Install a wheel wash	Provides a high pressure wash of vehicle wheels and lower parts (including under body) using a series of jet sprays. More effective if vehicles drive through the wheel wash slowly in order that there is sufficient time for dirt to be removed	A wheel wash is operational at the site. All HGVs must leave via the wheel wash. This is an automatic system which activates when the vehicle enters. Water jets apply water to the base and sides of the vehicle.
Ceasing operation during high winds and/or prevailing wind direction	Mobilisation of dust and particulates is likely to be greater during periods of strong winds and hence ceasing operation at these times may reduce peak pollution events.	Daily checks for weather. At the start of each week, the site manager will check the weather forecast. If severe high winds are expected, the site manager will check all stockpiles and ensure that additional water is applied to keep the material damp. With all the controls in place and the site location, it is unlikely that the site will need to cease operations during high winds.
Easy to clean concrete impermeable surfaces	Creating an easy to clean impermeable surface, using materials such as concrete as opposed to unmade (rocky or muddy) ground within the site and on site haul roads. This should reduce the amount of dust and particulate generated at ground level by vehicles and site activities.	The entire site is concreted.

Minimisation of waste storage heights and volumes on site	Minimising the height at which waste is handled should reduce the distance over which debris, dust and particulates could be blown and dispersed by winds. Reducing storage volumes should reduce the surface area over which particulates can be mobilised.	The height of material stored directly against the concrete perimeter wall will not exceed 3.3 metres in height. Any material stored above 3.3 metres in height will be stored at a 45 degree angle away from the wall and will not exceed a height of 5.5 metres. The dust sensitive receptors downwind of the prevailing wind direction of the storage bays closest to the site are located more than 1km from the site.
Reduction in operations (waste throughput, vehicle size, operational hours)	Reducing the amount of activity on site, including no tipping, shredding, chipping or screening of high risk loads during windy weather as well as associated traffic movements should result in reduced emissions and re-suspension of dust and particulates from a site.	Daily checks for weather. At the start of each week, the site manager will check the weather forecast. If severe high winds are expected, the site manager will check all stockpiles and ensure that additional water is applied to keep the material damp. With all the controls in place and the site location, it is unlikely that the site will need to cease operations during high winds.
Remedial Measures		
Netting / micro netting around equipment	Erecting netting around equipment that could give rise to large amounts of dust and particulates may be effective within the site boundary and prevent their dispersion off-site / their re-suspension within the site.	The current controls in place do not require additional netting.
On-site sweeping	Sweeping could be effective in managing larger debris, dust and particulates but may also cause the mobilisation of smaller particles. Road sweeping vehicles damp down dust and particulates whilst brushing and collecting dust and particulates from the road surface, particularly at the kerbside.	A road sweeper is deployed daily at the site.

Site perimeter netting / micro netting	Erecting netting around the site perimeter may capture released debris and dust and particulates prior to it being dispersed off-site.	The perimeter wall is 6m high. The storage limits ensure there is a freeboard. In this case, the limit is 3.3m against the wall. No netting is necessary.
Water suppression with hoses & water jets	Damping down of site areas using hoses can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	The dust suppression involves the use of jets positioned around the site to apply water to stockpiles and operational areas. The jets have a range of at least 30m, which provides full coverage. The wash plant operation does not require suppression.
Water suppression with mist sprays	Installation of mist sprays around sites, at building entrances/exits and within buildings at point source emissions like conveyors, trommels etc. It can also assist in the damping down of dust and particulates, therefore, reducing emissions from site.	The building is fitted with mist spray system to dampen the material
Water suppression with bowser	Using bowzers is a quick method of damping down large areas of the site with large water jets. This method could also be used on easy-to-clean, impermeable concrete surfaces.	For contingency and any additional water needs, the operator will hire a water cannon.
Shaker grids	Similar to cattle grids, these are installed at a site entrance and exit. The movement of vehicles over the grids shakes dust and particulates from the wheels, thus removing them before vehicles enter the site.	Not necessary
Water Cannons	Water cannons provide a means for delivery of powerful water streams from a water truck. With variable nozzles, the spray pattern can be controlled and varied between jet and fog. Typical water flows are up to 5000 litres per minute. Water cannons are most often used for fire protection, mining operations, heavy	For contingency and any additional water needs, the operator will hire a water cannon

	machinery wash down, cleaning and dust and particulate abatement.	
Screening of buildings / reducing large apertures using plastic strips	Installing plastic strips to cover entrances/exits to buildings may reduce emissions of dust and particulates dispersing through doorways.	No suitable for this operation. The building requires constant access for unloading/loading lorries and for moving wastes/aggregates out of the building.
Application of CMA / chemical suppressant	Diluted Calcium Magnesium Acetate (CMA) or other chemical based dust suppressant is regularly applied by spraying using a back-pack applicator for small areas or by road sweeper to cover larger areas. CMA acts as a suppressant with the aim of reducing dust and particulate re-suspension and hence ambient concentrations.	There are no proposals to utilise CMA at the site. It is considered that the proposed dust suppression system will be sufficient to achieve adequate dust management.
Heavy Water	Heavy water is used to improve the compaction and stability and reduce dust and particulates on unsealed roads or areas of land. Ideally it is blended into the road construction material as the road is constructed, but where this is not possible it can be sprayed onto the top of the road. Heavy water combines fast acting wetting agents with polymer binders, to allow penetration deep into the material and to 'agglomerate' the dust and particles together.	There are no proposals to utilise heavy water at the site. It is considered that the proposed dust suppression system will be sufficient to achieve adequate dust management.
Foam Suppression	The aggregate and mining industries frequently use foam suppression for the control of dust and particulate emissions, mixing the foam with broken material to increase efficiency. Foaming agents can be added to increase the efficiency of dust and particulate reduction. Foam suppression has seen increased attention in recent years and has previously been applied to waste transfer facilities where crushing of waste occurs. If using foam suppression to control dust and particulates from waste drops, the foam must be entrained within the waste	There are no proposals to utilise foam suppression at the site. It is considered that the proposed dust suppression system will be sufficient to achieve adequate dust management.

	material and as such must be injected prior to dropping the waste rather than at the bottom of the drop.	
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Other considerations

Water usage/ availability:

3.19 Water for dust suppression will be stored in a 25,000l tank on site. This will be fed with rainwater from roof, topped up with water from the wash plant. There is 100,000l water tank available.

In the event of a drought:

3.20 In the unlikely event that there was a ban on the use of water, the operations would continue until such time as the water in the stored tanks had run dry. After which time, the operator will assess the conditions and if dust is observed to be leaving the building, the operations will cease until the water supply has been re-established.

Failure of Suppression System:

3.21 If the entire dust suppression system fails, the Site Manager will arrange for repair and decide on the best course of action depending on weather conditions. If the downtime is expected to be longer than 48 hours and the weather conditions are dry⁶, the Site Manager will have to provide interim dust suppression measures or cease operations until conditions improve, or the system has been repaired. Interim measures would include hiring mobile water cannons for a temporary period.

3.22 The system installed will be subject to a service agreement.

⁶ Dry conditions refer to no precipitation (rain, drizzle, sleet, snow)

4 PARTICULATE MATTER MONITORING PROGRAMME

- 4.1 Monitoring at the site will comprise a combination of qualitative visual assessment and quantitative monitoring using static monitoring equipment. In TGN M17 it is stated that despite the subjective nature of the visual assessment of dust emissions:

'This simple, cheap and easy to implement assessment approach has the significant advantage of providing instantaneous information on problems (e.g. it may be possible to directly observe the source of the dust emission, such as a particular stockpile) allowing rapid actions to be taken to deal with the problem. Visual assessments therefore complement well other, more-quantitative dust monitoring that may take several weeks to produce results.'

Visual Dust Monitoring

- 4.2 During all site operations visual monitoring for emissions of particulate matter will be undertaken by suitably trained site personnel. Visual monitoring by suitably trained site personnel is the most effective method of detecting as quickly as possible emissions of particulate matter throughout the working day thereby facilitating promptly the assessment of such emissions and the selection and implementation as quickly as practicable of control measures as necessary. The effectiveness of the measures taken in controlling emissions will be assessed during inspections undertaken at the site following implementation of the control measures. Any problem that is observed will be reported to the site manager who will be responsible for investigating the cause and implementing any remedial action as necessary. The results of inspections and remedial measures taken will be recorded in the site diary.
- 4.3 Site personnel will be provided with the necessary training and instruction in respect of their duties relating to control of the process and emissions to air. Particular emphasis will be given to control procedures and monitoring during start-up, shut down and abnormal conditions. Site personnel will be trained to be aware of and to identify visual releases of particulate matter so that with consideration of the location within the site of the release and the prevailing wind direction they know how to implement the appropriate control measures for example instructing a vehicle to unload material in a different area of the site or use additional dust suppression in that area. The training will be provided by staff who are experienced in the visual assessment of particulate matter emissions from waste and or mineral processing operations.
- 4.4 The results of qualitative particulate matter monitoring will be reviewed periodically to facilitate the review and assessment of operational activities as necessary. The review will be carried out in conjunction with a review of meteorological data that are available and the site operations that took place during the monitoring period together with any complaints regarding particulate matter emissions that have been received.
- 4.5 In the event that based on the visual site observations there is an unacceptable particulate matter emission from the site the particulate matter management and monitoring action plan will be implemented. The particulate matter management and monitoring action plan is presented at Appendix DMP A.

Particulate Matter Monitoring

- 4.6 An Osiris Airborne Particulate Monitor was installed at the site by Turnkey instruments Ltd on 3 February 2021. The approximate location of the instrument at the top of the six metre high site boundary wall is shown on Figure 1. Turnkey Instruments Ltd fitted an anemometer to the instrument on 10 March 2021 to enable wind speed and wind direction to be measured simultaneously with PM10 concentrations. Further details of the technical specifications of the instrument and a MCERTS Product Conformity Certificate are presented as Appendices to this procedure.
- 4.7 The instrument measures PM10 concentrations in units of ug/m3 over a 5 minute averaging time and uploads the data in realtime to the AirQWeb Real-time Air Quality Data Monitoring Software provided by Turnkey Instruments Ltd. Although the Environmental Permit does not specify an emission limit, the Agency guidance recommends that levels should be below 75ug/m3 over a 5 minute averaging period.
- 4.8 Background monitoring data has not been obtained for the site. The PM10 monitor was installed after the operations commenced. The building construction work was completed in the summer 2023.
- 4.9 The data continues to be sent to the Agency on a quarterly basis.
- 4.10 Any assessment of the data will take into account the proximity to other sources of dust. Hanson stockpile minerals and asphalt waste on the adjoining land. Crushing and screening activities takes place. Stockpiles of aggregates stored on Hanson land have exceeded the 6m high concrete wall.
- 4.11 Any review of the monitoring data will consider the effect that other sources have on the monitoring equipment.
- 4.12 A site specific action level will be specified for the PM₁₀ concentration recorded at the site. The purpose of the action level is to inform the operator that particulate matter concentrations at the site are at a level that may need action to control emissions to prevent an unacceptable release of particulate matter. In the event that the action level is exceeded the particulate matter management and monitoring action plan presented at Appendix A will be implemented.

Monitoring Location

- 4.13 The monitoring location was agreed with the Agency prior to installation. It is positioned on the northern boundary wall, which is downwind of the prevailing south westerly wind.
- 4.14 The location is shown on Drawing No. RMS-DAG-MON-01.
- 4.15 The monitor is located on top of the 6m high wall, providing an overall height of about 7m. The monitor is clear on all sides and is not shielded by any buildings.

Operation of the PM Monitoring Equipment

- 4.16 The Compliance Manager is responsible for the management of the monitor, in consultation with the Site Manager. The Site Manager will notify the Compliance Manager of any issues that may effect the readings.
- 4.17 The Compliance Manager has access to the software and is responsible for ensuring the monitor is calibrated.

4.18 The data is downloaded on to a spreadsheet and is interrogated to review any exceedances above the 75 ug/m³ limit, against the direction. This is to check the source of the dust.

4.19 The data will be reviewed every 3 months and for any site derived dust, the operator will review the directional data to try and establish the source. The activities will be assessed and improvements suggested to minimise further exceedances.

Additional Detailed Monthly Reporting

4.20 If the action level is exceeded for 5 consecutive days, the Compliance Manager will review the data, site activities and off-site conditions to determine the source of the PM₁₀. This will include downloading data that may indicated a wider issue in the locality.

Quality Assurance/Quality Control/Record Keeping

4.21 The following information is recorded:

- Make: Osiris
- Serial Number: TNO4500

4.22 The monitor is calibrated by Turnkey, Certificate attached to Appendix E. The monitor is calibrated every 2 years as per manufacturers recommendation.

4.23 The calibration certificate is kept in the site office.

4.24 If the equipment is damaged and data is no longer being received, the Compliance Manager will report to the Turnkey and wait for instructions. If required, Turnkey will provide a replacement monitor whilst repairs are being carried out.

Record keeping

4.25 Particulate matter monitoring equipment typically is provided as part of a contractual arrangement between the operator and equipment manufacturer where the equipment manufacturer will be retained to provide technical support including equipment maintenance, inspection and calibration. The instrument will be calibrated and inspected in accordance with the manufacturer's specifications and records of the calibration will be retained on site. The particulate matter monitoring data will be stored electronically using the software recommended by the equipment manufacturer. In the event that the action level for PM₁₀ is exceeded a record of the action taken as outlined in the action management plan will be made in the site diary and operational procedures will be reviewed and amended as necessary.

5 COMPLAINTS

- 5.1 Site Manager has the overall responsibility for this procedure.
- 5.2 The administration staff will all be responsible for handling complaints and recording on the correct form. All complaints must be referred to the Site Manager. In this context, a complaint may be received directly from a resident, customer or from a Regulator.
- 5.3 When the site receives a complaint, a record is summarised in the Site Diary. Full details will be provided on the complaints form, see Appendix B.
- 5.4 All staff based in the office will be trained on recording complaints and to make sure they notify the TCM immediately.
- 5.5 The TCM will review the activities that may have given rise to the complaint. If necessary, the CCTV footage will be reviewed to note any specific operational issues that may have given rise to the source of the complaint. Other actions will include:
- 5.6 Review of site diary and London Air Quality Network monitoring stations for any unusual regional weather events occurring during the day on which the complaint was made, for example Saharan dust storms.
- Review site diary and establish what site activities were taking place at the time the complaint even occurred.
 - Review waste types accepted that day.
 - Identify whether there were any other activities in the area taking place that could have generated dust e.g. road works or construction works.
 - If it is established that the emissions were attributable to activities being undertaken at the site, as necessary review the relevant operational procedures and implement improvements and provide additional training to site.
 - The action taken will be reported to the Environment Agency.
- 5.7 The Site Manager will report the findings to the complainant and implement appropriate corrective action in accordance with a specific management plan or the Operational Procedures.
- 5.8 The TCM will aim to provide feedback within 48 hours of receiving the complaint.
- 5.9 If the site receives several substantiated complaints, the operator will engage the services of an Air Quality specialist to review the site operations and update this DEMP accordingly. Interim measures will be sought to improve conditions until a more permanent solution has been assessed and implemented. If during the interim period, complaints continue to be received, the operator will cease operations until measures have been implemented to prevent dust emissions.

Engagement with the Community

- 5.10 The immediate neighbours will be contacted, and direct dial telephone details provided for the TCM and main officer number. Email contact details will also be provided.

APPENDIX A
PARTICULATE MATTER MANAGEMENT AND MONITORING ACTION PLAN

Appendix A

Particulate matter management and monitoring action plan

A1. Introduction

A1.1 The particulate matter management and monitoring action plan will be implemented in the event that

- i) there is an unacceptable visual emission of particulate matter from the site or
- ii) a complaint is received or
- iii) the PM₁₀ action level is exceeded.

The timescale for implementation of the action plan will vary depending on the circumstances under which it is implemented. If an unacceptable visual emission is observed by site personnel there will be no delay in implementing the action plan, whereas a complaint may be received by the operator a number of hours or even days after the activity that may have contributed to the complaint has ceased. In the latter case investigation of the complaint will be based on a review of the data and observations recorded at the site corresponding to the time at which the complainant observed the event.

A2. Action plan

A2.1 In the event that an unacceptable visual emission of particulate matter from the site is observed by site personnel the event will be investigated immediately to determine the source as follows:

- Identify whether there are any other activities being undertaken at locations other than the RMS site for example the neighbouring sites with the potential to release particulate matter identified in Table DMP2, and estimate the extent to which other activities may contribute to the visual emissions observed on the RMS site including circumstances where windblown dust may be transported across and/or over the RMS site from the external sources.
- If it is established that the emissions are attributable to activities being undertaken at the RMS site action will be taken to control the emissions including where relevant.
- Action to confirm that vehicles are obeying the speed limits.
- Organise additional road sweeping if necessary.
- If emissions are attributable to material stockpiled in the storage bays the dust suppression system will be employed immediately to dampen the stockpiles.
- If emissions are attributable to activities being undertaken in the building the output of the mist suppression system will be increased and re-directed as necessary to control the particulate matter emission and if necessary the activities being undertaken including crushing, screening, unloading and loading of material will be ceased.

A2.2 In the event of a complaint, substantiated by the Environment Agency or Environmental Health Officer, associated with particulate matter emitted from the site an investigation will be undertaken immediately to determine the source as follows:

- Identify from meteorological data available, including wind speed and wind direction recorded by the on-site particulate matter monitoring device, whether the emissions are potentially a result of the operations at the site.
- Identify from the site diary and London Air Quality Network website for monitoring stations in the region including Scrattons Farm whether there were any unusual

regional weather events occurring during the day on which the complaint was made such as Saharan dust storms.

- Identify from the site diary what activities were being undertaken at the time at which the complaint event occurred and in which location at the site and review the waste types that were accepted and handled at the site on that day.
- Giving consideration to the wind direction recorded by the on-site particulate matter monitoring device, identify from the site diary whether there were any other activities being undertaken at locations other than the RMS site for example the neighbouring sites with the potential to release particulate matter identified in Table DMP2.
- If it is established that the emissions were attributable to activities being undertaken at the site, as necessary review the relevant operational procedures and implement improvements and provide additional training to site personnel and third party contractors to improve the control of future emissions.
- The action taken will be communicated to the Environment Agency or Environmental Health Officer as appropriate. The nature of the complaint, the findings of the investigation and the action taken will be recorded using the form presented in Table A1.

A2.3 In the event that the PM₁₀ action level is exceeded an investigation will be undertaken immediately to determine the source as follows:

- Identify whether there are any visible emissions of particulate matter which are indicative of a release of particulate matter from operations at the site. Although PM₁₀ is not readily visible an elevated concentration of PM₁₀ will potentially form part of a particulate matter emission which includes a larger visible component.
- Identify from the meteorological data recorded by the PM₁₀ monitor the wind direction and speed during the monitoring period over which the exceedance was observed and determine whether the wind is blowing from the RMS site towards the PM₁₀ monitor or whether the wind is blowing towards the PM₁₀ monitor from off-site hence is potentially attributable to sources other than the RMS site. Identify based on visual observation and with reference to data available on the London Air Quality Network website for monitoring stations in the region including Scrattons Farm whether there are any

unusual regional weather events occurring during the monitoring period over which the exceedance was observed for example Saharan dust storms or foggy or misty weather which can generate high PM₁₀ readings if the instrument pre-heater inlet is not functioning correctly.

- If it is established that the emissions are attributable to activities being undertaken at the RMS site action will be taken to control the emissions including where relevant:
- Action to confirm that vehicles are obeying the speed limits.
- Organise additional road sweeping if necessary.
- If emissions are attributable to material stockpiled in the storage bays the particulate matter suppression system will be employed immediately to dampen the stockpiles and/or create a film barrier over the surface of the stockpile.
- If emissions are attributable to activities being undertaken in the building the output of the mist suppression system will be increased and re-directed as necessary to control the particulate matter emission.
- If following implementation of the actions above the PM₁₀ concentration does not fall below the action level for 6 consecutive 5 minute mean readings and it is clear that emissions of PM₁₀ are attributable to the RMS site consideration will be given to suspending the activities being undertaken including crushing, screening, washing, unloading and loading of material until the PM₁₀ concentration falls below the action level for 6 consecutive 5 minute mean readings.
- A record of the action taken in respect of the exceedance will be made in the site diary and operational procedures will be reviewed and amended as necessary.

APPENDIX B – COMPLAINT FORM

Notifier Details	
Name -	
Address -	
Postcode -	
Contact Details -	
Tel -	
Email -	
Date -	
Complaint Ref Number -	
Notifier 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	

PARTICULATE MATTER MANAGEMENT AND MONITORING ACTION PLAN

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 C – PHOTOGRAPHS OF ADJOINING SITE OPERATIONS

Photograph A – View showing northern boundary wall of RMS site and dust monitor. Hanson store and crush plantings on the other side of the wall. A compact crusher is visible in the photograph.



Photograph B – View showing stockpile of material on Hanson site, clearly exceeding height of RMS boundary wall.



Photograph C – View showing towards the south showing stockpiles of material at the Hanson site.

