

Project No: 314107

Dust & Emissions Management Plan

Prepared for:

Cooks Waste Kare Limited

Raeburn Road South
Ipswich
Suffolk
IP3 0ET

Contents Amendment Record

This report has been issued and amended as follows:

Revision	Description	Date	Signed
1.0	Final	September 2024	Graeme Kennett



Acknowledgement

This report has been prepared for the sole and exclusive use of Cooks Waste Kare Limited (t/a Sun Skips) in accordance with the scope of work presented in Mabbett & Associates Ltd (Mabbett) Letter Agreement (314107/LA/GK), dated 26 October 2023. This report is based on information and data collected by Mabbett. Should any of the information be incorrect, incomplete or subject to change, Mabbett may wish to revise the report accordingly.

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Table 1-1 Version and revision history.

Version	Date	Originator	Checked by	Approved by	Amendments
1	2021	Westbury Environmental			Original
2	2022				Updated in response to EA Schedule 5 notice.
3	2023				Response to schedule 5.
4	2023				
5	2024	Mabbett & Associates Ltd			Updated to reflect changes to site infrastructure.

Section 1.0: Introduction

This Dust & Emissions Management Plan (DEMP) has been for the permitted site at:

COOKS WASTE KARE RECYCLING SITE

Raeburn Road South

Ipswich

Suffolk

IP3 0ET

Cooks Waste Kare Limited (t/a Sun Skips), 'the operator' operate an Environmental Management System (EMS) to ensure that their operations meet high environmental standards and comply with the legislative requirements applicable to the site. The DEMP is adopted into the site EMS to ensure that operations do not impact significantly upon the environment.

The operation has the potential to cause air quality impacts because of fugitive dust emissions associated with the operation of the facility, as well as road traffic exhaust emissions from vehicles travelling to and from the site. The potential effects and control measures are contained in this DEMP and the site-specific risk assessment.

This DEMP has been produced in accordance with EA Dust & Particulate Emission Management Plan Guidance 'Control and Monitor emissions for your environmental permit' (published 1st February 2016)¹ and version 10 (October 2018) of the Dust & Emission Management Plan (DEMP) template, and relates to waste materials accepted, stored and treated at the site which have the potential to produce fugitive emissions.

The plan is a living document subject to on-going review and updating, with its intended audience being the staff at the site whose working practices can affect the emissions from the site.

1.1 Site background

The Site is located within an area used for a variety of industrial processes. Nearby industrial land uses include Anglian Water's Cliff Quay Sewage Treatment Works which is located approximately 150m west of the Site and Indipave Depot which is located just north of the Site on the opposite side of Raeburn Road South. Other businesses in the vicinity include manufacturing, recycling and transport / haulage.

The site is located within Ipswich Borough Council and is not located within an Air Quality Management Area (AQMA).

¹ [Control and monitor emissions for your environmental permit - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit)

1.2 Sensitive receptors

A sensitive receptor is defined as any location which may be affected by air quality impacts because of the operation. All receptors that are potentially at risk from the site have been identified in table 1-1 and Appendix B. The DEMP focuses on the main receptors that are at risk from a dust and emissions perspective. It is considered that receptors located east-northeast of the Site are likely to be more susceptible to dust due to the predominant wind direction and their bearing to the Site than receptors at other directions.

Residential dwellings, which make up the Gainsborough suburb of Ipswich, surround the Site from the northwest to the southeast and are located approximately 220m and 250m from the Site respectively. Three schools are located within 1km of the Site, the closest of which is Piper's Vale Primary School which is located approximately 280m northeast of the Site. There are a number of allotments located approximately 200m east of the Site. It is considered that the mitigation measures implemented on the Site will be effective in minimising dust emissions from the Site that could be of nuisance to these receptors.

In accordance with TGN M17 – *monitoring of particulate matter in ambient air around waste facilities*², larger dust particles deposit almost immediately and fairly close to the source (and quite possibly within the site boundary). It is therefore considered that dust is likely to be deposited no more than 100m of the source, should dust emissions leave the Site. Therefore, dust has the potential to reach sensitive receptors ref. 1-5. The mitigation measures discussed in Section 5 of this Dust Management Plan should limit the likelihood of dust emissions reaching these sensitive receptors.

Table 1-1 Identified sensitive receptors.

Ref	Receptor	Description	Direction from site	Distance from boundary (m)
1	Pipers Vale (LNR)	Protected Habitat- Deciduous Woodland	Southeast	0
2	Raeburn Road South	Nearest public highway	North	30
3	Indipave	Industry	Northeast	60
4	Greenshoots Print	Business	Northeast	70
5	BBS Stone/ Granite Concepts	Industry	North	75
6	D&M Forwarding & Warehousing	Industry	Northwest	130
7	Anglian Water WWTW	Sewage treatment plant and composting facility	West	150
8	The Five Castles Press Ltd	Industry	Northeast	150
9	Morland Road Allotments	Recreational	East	200
10	East Coast Driver Training	Industry	North	220
11	Gainsborough Town	Area of residential dwellings and associated infrastructure	Southeast	220
12	Sandyhill Lane	Road	North	225

² [M17 monitoring of particulate matter in ambient air around waste facilities - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/m17-monitoring-of-particulate-matter-in-ambient-air-around-waste-facilities)

13	Orwell Country Park	Recreational	Southeast	250
14	Gainsborough Town	Area of residential dwellings and associated infrastructure	Northwest	250
15	Orwell Estuary Site of Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar	Protected habitat	Southwest	270
16	Piper's Vale Primary Academy	School	Northeast	280
17	Newmarket Plant Hire Ltd	Industry	Northwest	320
18	Hamiltons Driver Training	Business	Northwest	400
19	Deciduous woodland	Protected habitat	Northwest	430
20	Landseer Road	Road	North	480
21	Cliff Quay Substation	Industry	Northwest	505
22	ISG offices	Business	Northwest	560
23	Morland Church of England Primary school	School	Southeast	560
24	Landseer Park- Wildflower Meadow	Protected Habitat	North / Northeast	585
25	A14	Road	South	595
26	Bauder Flat Roofs	Business	Northeast	640
27	Tarmac Ipswich Asphalt Plant	Industry	East	650
28	ABP Sentinel Terminal	Industry	Southwest	735
29	Ipswich BMX Club	Recreational	North	740
30	Gainsborough Community Library	Recreational	Northeast	770
31	BMC Cakery	Business	Northeast	770
32	Deciduous woodland	Protected Habitat	Southeast	800
33	Southern Cement	Industry	West	820
34	Deciduous Woodland	Protected Habitat	Northwest	870

1.3 Other local sources of dust emissions

The assessment also takes in to account the principal existing dust sources such as the adjacent waste facilities and any arboreal activities. The scale and nature of the works taking place at a scheme determines the level of residual dust emissions from fugitive sources. The following activities on inert processing sites are likely to have the greatest potential for dust emissions:

- Material handling;
- On-site transportation;
- Material processing;
- Stockpiling/exposed surfaces; and,
- Off-site transportation.

Table 1-2 Sources of dust and/or other emissions

Company	Address	Business type	Distance (m)	Direction
Anglian Water Ltd	Raeburn Road South Ipswich Suffolk	Wastewater Treatment Works	150	E
		Open windrow compost site	150	E
Tarmac Ipswich	Cliff Quay, Cliff Road The Docks, Ipswich IP3 0BS	Asphalt plant	650	E

1.4 Meteorology

Contrasting many other atmospheric pollutants, the generation of dust is principally conditional upon the prevailing weather conditions. Clearly the most significant meteorological factor is the predominant wind direction and wind speeds, and consequently data has been collected regarding the predominant wind speeds and directions appropriate to the Site.

Wind speed and direction data have been obtained from the Orwell Bridge weather station for the period from 2011 to present. This observing station is the closest wind station to the Site according to [River Orwell - Orwell Bridge Wind Forecast, Suffolk - WillyWeather](#)

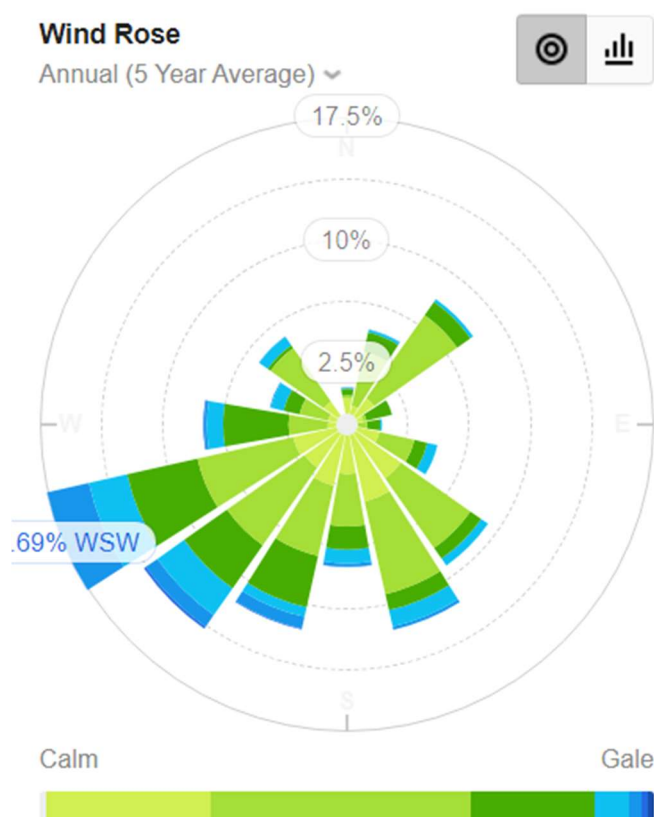


Figure 1-1: Wind rose (Orwell Bridge)

Section 2.0: Operations at the Ipswich Recycling Facility

2.1 Waste Deliveries to the Site

Waste will be delivered to the site by;

- 32t LGV tippers
- Hi Ab LGV (grab lorry)
- Skip wagons (hook and chain and ro-ro)
- Articulated large goods vehicles (LGVs)

All LGVs operated by the operator will have a Euro 6 emission rating. It is likely that 3rd party hauliers will be at least Euro 5 emission rating.

All 8-wheel tipper vehicles will be fitted with a fly sheet and 44t articulated LGVs fitted with an easy sheet. Skip wagons/grab lorries will also be sheeted.

2.2 Overview of waste processing, dust and other emission controls

Operations at the facility, as well as mitigation measures to limit dust generation, are as follows:

2.2.1 Delivery and unloading

- All waste will be delivered to the site in covered skips through the existing site entrance.
- Once on the site and after being weighed, skips will be unloaded under cover of the recycling building. The waste materials will then be sorted and stored in the internal storage bays pending removal.
- Mixed skips that are predominantly inert will be deposited in the upper level external mixed storage bay pending processing through the screen and picking line.
- Soil and rubble skips will be unloaded directly into the designated storage bays on the southern level.

2.2.2 Sorting and storage inside the recycling building

- Once deposited inside the recycling building the waste will be sorted with the aid of mechanical mobile plant, including a wheeled loading shovel, a wheeled dump truck and 360 excavator with grab.
- Excluding soils and rubble, sorted materials will be stored inside the recycling building in designated storage bays pending removal from site for reuse, recycling, composting or disposal.
- The storage bays will be constructed using concrete panels and will allow for:
 - green waste,
 - wood,
 - metal,
 - plasterboard and
 - residual waste that cannot be recycled.

2.2.3 Static recycling plant (picking line and screen)

- Soils and rubble that arrive on site mixed with other wastes will be separated as much as possible within the recycling building.
- Whilst mechanically sorting is effective at removing larger items additional methods are required to efficiently separate smaller items.
- Once manually sorted these materials will therefore be removed from the recycling building to the designated upper-level external mixed storage bay pending processing through the static recycling plant.
- As the mixed waste is loaded into the feed hopper it passes through/over the screen for mechanical sorting to separate the soil fraction from the mixed materials.
- The soil falls beneath the screen into the underlying bay, from where it will be removed and placed into the designated external soil storage bay.
- As the remaining screened material is passed through the picking line it will be manually sorted into other recyclable fractions (wood, metal and rubble/hardcore) with the remaining residual waste collected for onward disposal. These will be collected beneath the picking line.

2.2.4 Additional measures

- All waste inputs will be delivered to site in netted/sheeted Large Goods Vehicles (LGVs).
- Deliveries will be undertaken only between the hours of 7am and 6pm Monday to Friday and 7am to 5pm on Saturdays.
- Recycled aggregates will be removed by an excavator and stored in designated concrete storage bays up to 4m in height.
- In order to maintain capacity within the designated bays, regular shipment of the product off-site will be undertaken.
- The site will operate in accordance with an Environmental Permit regulated by the Environment Agency (EA). The permit will include a requirement for use of dust minimisation throughout the operational life of the plant.
- Mobile dust control suppression units will be utilised across the site. These can dampen down areas of potential dust generation across the whole site area.
- Regular dampening down of all on-site vehicle routes will be undertaken.
- Dampening down of stockpiles will be undertaken during loading periods, if required.
- Fencing is maintained to provide a barrier between dust emissions and sensitive receptors.
- Thick vegetation and tree line to the west, east and south of the site boundary.
- The movement of vehicles on Site has the potential to cause dust emissions, particularly in dry and windy conditions. A 5mph speed limit and the minimisation of vehicle movements will be enforced on the Site to help reduce the amount of dust generated by vehicle wheels.
- All vehicles entering the Site will be visually inspected prior to unloading to ensure that excessively dusty loads are not accepted. Excessively dusty loads will be rejected from the Site in accordance with the Waste Rejection Procedure in the EMS.

Reference	Item
1	Recycling building (27.00m x 18.00m x 6.00m)
2	Static inert recycling plant
3	Product storage bays (6 off) (4m x 5.8m x 6.8m)

Nitrogen Dioxide (NO₂) gas and Particulate Matter (PM) are common pollutants released by diesel-fuelled internal combustion engines and the site uses several items of plant with internal combustion engines. The following table lists the type, mobile and emission ratings³ for the mobile plant and equipment used on site.

Cooks Waste Kare Ltd: Dust & Emissions Management Plan (Sept 24, 1.0)
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2.3.1 Plant and Equipment

The following equipment will be used on the Site for the waste operations:

- Picking line and trommel
- Teleporter
- Loading shovel
- 2 x 13-tonne 360 excavators
- 1 x 8-tonne 360 excavator

The following equipment will be used on the Site for dust suppression:

- PowerJet dust control system
- 25 and 40m hoses

The specification for the PowerJet dust control system is as follows:

- Spray head with two nozzles
- 30m spray range
- 3 hours running time
- Max 6 bar inlet pressure
- 45 / 50 l/min water consumption

All machines are operated on a leased basis and are serviced on a regular basis by manufacturer supported dealerships as required by the manufacturer. Failure to adhere to the recommended service intervals invalidates the manufacturer 5-year warranty. Daily defect reporting is done via a software reporting system by all operators.

When due for replacement, machines are replaced by equipment that has the lowest emission standard possible at the time of the contractual arrangement.

Fuel use is monitored to reduce costs. All machines are switched off when not in use and there is a no-idling policy on site so that machines are not left idling for long periods of time, which will also reduce pollutant emissions.



Figure 2-2: Idle-Free Zone sign

Section 3.0: Dust and Particulate (PM₁₀) Management

3.1 Responsibility for implementation of the DEMP

Cooks Waste Kare Limited (t/a Sun Skips) Compliance Manager (CM) is responsible for the DEMP and to ensure that it is used. The Site Manager (SM) is the deputy in this case as they are perfectly positioned with their attendance at the site to continually monitor and enforce the DEMP requirements. Operational staff training is delivered via toolbox talks and there is a direct line of contact between operatives and the CM. Should any issues arise, the CM has a direct line of communication to Sun Skips management.

The DEMP will be reviewed on a bi-annual basis as a minimum. However, should this frequency be inadequate it will be reviewed annually. Due to the nature and location of the operation, along with the control measures in place, it is not thought that this frequency will need to be reduced further. Operational experience at the current site further confirms that the process can continue without receiving complaints.

3.2 Sources and control of fugitive dust/particulate emissions

Measures to control emissions have been considered in the context of the operational setting and the operations that are undertaken. Identified operations which have the potential to produce and release particulates at the site are described below.

- i. Vehicles entering/leaving site with mud on wheels.
- ii. Vehicles and plant moving around the site kicking up dust.
- iii. Material falling from vehicles.
- iv. Discharging of waste materials
- v. Site surfaces
- vi. Loading materials
- vii. Particulate emissions from the exhaust of vehicles/plant/machinery on site.
- viii. Material shredding
- ix. Material screening
- x. Stockpiling materials
- xi. Wind-whip from stockpiles.

The pathway for most of the releases is atmospheric dispersion; either primary, from the dust/particulate source (e.g., shredding and/or screening of materials) or secondary, where dust is stirred up by vehicle movements.

The Ipswich Recycling Facility is in a semi-industrial setting, with a distance of at least 220m to the nearest residential receptor. Due to the nature of the materials being handled on the site the DEMP assessed that the particle size of the dust emitted is of intermediate to large particles. It therefore considered that dust is likely to be deposited no more than 100m of the source, should dust emissions leave the site, with little to no deposition beyond the 100m radius.

3.2.1 Source-Pathway-Receptor routes

Table 3-1: Source-Pathway-Receptor routes

Source	Pathway	Receptor	Impact	Control
Vehicles entering or leaving site with debris on wheels	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Local highways	Visual soiling, also consequent resuspension as airborne particulates	- Vehicles unlikely to have come in to contact with mud prior to accessing the site. - Concrete surface ensures debris is not deposited on the public highway.
Vehicles and plant moving around the site kicking up dust	Atmospheric dispersion	Neighbouring businesses	Airborne particles	- Regular dampening down of all vehicle routes will be undertaken. - Implementation of a 5mph speed limit - Implementation of a 'no-idling' policy - Limiting the double-handling of material - Dampening surfaces to limit resuspension of dust. - Regular cleaning of site/spills in accordance with EMS.
Material falling from vehicles	Material falling from vehicle bodies	Local highways	Visual soiling, also consequent resuspension as airborne particulates	- Sides/lips of tipping bodies swept before departure to remove any accumulated materials. - Vehicles delivering waste are sheeted. - Skips that are not immediately sorted will be sheeted to contain any light fractions and dust which could be blown out. - Where debris is identified as an ongoing issue a road sweeper is deployed. - All areas are subject to regular housekeeping.
Site surfaces	Contamination of trafficked areas.	Neighbouring businesses	Visual soiling, also consequent resuspension as airborne particulates	- Site surfaces used by traffic will be regularly cleaned along with the measures described above. - Regular dampening down of all vehicle routes will be undertaken.

Tipping of wastes in the open	Atmospheric dispersion	Neighbouring businesses	Airborne particles	- Accepted waste materials are generally not inherently dusty due to moisture content. - Use of the minimum drop heights. - Storing waste in bays with a minimum of 0.5m freeboard to prevent 'wind whip'. - Storage of plasterboard in covered container. - Use of mist sprays on known dust-generating activities as standard - Increase use of water sprays on stored waste
Tipping, storage and sorting of waste inside the process building	Escape from buildings and subsequent atmospheric dispersion	Neighbouring businesses	Airborne particles	- Direct doors away from most sensitive receptors. - Minimise source strength by misting/water/barrier techniques.
Operation of treatment plant (Trommel screen, picking line, conveyor belts)	Atmospheric dispersion	Neighbouring businesses	Airborne particles	- Use of water sprays on the trommel and material being loaded. The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction. - Operating plant (e.g., conveyor belts) using minimum drop heights. - Enclosed picking line
Particulate emissions from machinery exhausts	Atmospheric dispersion	Neighbouring businesses	Airborne particles	Anti-idling policy in place.
Stockpiling materials	Atmospheric dispersion	Neighbouring businesses	Airborne particles	The finer processed materials have a limited potential to generate airborne particles during loading.

				▪ Loading shovel dump heights will be kept as low as possible. Material will be tipped on to stockpiles in a controlled manner to reduce the potential for particulates to be propelled from the trailer. ▪ Shovel buckets will be kept as low as possible to the ground to reduce spillage. ▪ Dampening down of stockpiles will be undertaken during loading periods, if required.
Wind-whip from stockpiles	Atmospheric dispersion	Neighbouring businesses	Airborne particles	Dampening down of stockpiles will be undertaken if required.

3.2.2 Measures used to control dust/particulates (PM₁₀) and other emissions.

Table 3-2: Measures that will be used on site to control dust/particulates (PM₁₀) and other emissions.

Abatement measure	Description/effect	Overall consideration and implementation	Trigger for implementation
Enclosure within the process 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.	▪ Procedures in place to manage the building and its integrity. ▪ Inputs are processed rapidly. ▪ Building is open fronted but orientated away from sensitive receptors to prevent dust migration from the operation. ▪ External inert recycling is also partially enclosed comprising: feed hopper, screen, magnets, blowers, enclosed picking station & conveyors.	▪ 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.

		Used primarily to further sort loads mixed with soils to extract more recyclables. 	
Site layout in relation to receptors	Crushing and screening activities that emit dust particles are located at the maximum potential distance from down-wind receptors without impacting upwind receptors. Adjacent forestry belt offers protection from the wind. 3m and 2.5m fencing to the south side of the site.	Dust control has been considered by the operator through good process and site design, as well as identification of good housekeeping procedures. The control methods are based on: ▪ Good operating and management practices to avoid emissions arising from activities; ▪ Good process design to minimise emissions; ▪ Abatement or control to reduce dust emissions; and, ▪ Disrupting the emission pathway to sensitive receptors	▪ All processing equipment is fitted with dust suppression equipment to prevent emissions. ▪ Standard Operating Procedure (SOP) and training of staff with respect to correct operation of the equipment. ▪ This lessens the likelihood of dust from the operations causing a nuisance to others. ▪ The western, southern, and eastern boundaries of the Site are made up of a mixture of different “barriers”, comprising walls, corrugated-iron fencing, and wooden fencing to various heights ▪ However, the objective is to reduce dust at source and not to let dust leave the site boundary.
Site speed limit, ‘no idling’ policy and	Reducing vehicle movements and idling will reduce emissions from vehicles.	▪ Straightforward to implement as part of good practice.	If significant volumes of dust are noted during routine visual monitoring the following actions will be taken:

minimisation of vehicle movements on site	Procurement policy to only purchase clean burn road vehicles and non-road going mobile machinery. Enforcement of the mandatory 10mph speed limit will limit re-suspension of particulates by vehicle wheels.	- Measures are identified clearly in the site management system. 5 mph speed limit is identified clearly in the site management system and on site and implemented as appropriate measures.	- Observations undertaken to ensure that vehicles are obeying speed limits; and, - Additional road sweeping. - Staff training. - Site signage.
Minimising drop heights for waste.	Minimising the height at which waste is handled will reduce the distance over which debris, dust and particulates could be blown and dispersed by winds.	- Measure in place and form part of toolbox talks. - Steps are identified clearly in the site management system and implemented as appropriate measures. - Plant operatives lowering the grabs, shovels, conveyors on equipment being used to move or treat potentially dusty materials.	Control measure always in place during site operations and will form a part of toolbox talks on an ongoing basis.
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.	- SM will monitor weather forecasts and ensure the necessary on-site precautionary measures are in place to prevent emissions. - All personnel employed on site will undertake visual monitoring for dust throughout the working day. Any observed problems will be reported to the SM who will investigate the cause and implement any necessary remedial action.	If significant volumes of dust are noted during routine visual monitoring the following action will be taken: - All dust suppression equipment is operating correctly - Action taken to ensure that vehicles are obeying speed limits; and, - Additional dampening down of all vehicle routes. - Dust netting (of at least 1.5m high) fitted around the top of the fencing along the western and southern boundaries.

Easy to clean concrete impermeable surfaces	Creating an easy to clean impermeable surface, using concrete as opposed to hard core, reduces the amount of dust and particulate generated at ground level by vehicles and site activities. Enforcement of the mandatory 10mph speed limit will limit re-suspension of particulates by vehicle wheels.	- Entire site has a concrete surface; - Site has a 5mph speed limit.	Roadways in normal use and any other area where there is regular movement of vehicles have a concrete surface capable of being cleaned and are kept clean to prevent or minimise dust emissions and kept in good repair.
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.	This abatement measure is not likely to have a significant impact on dust emission levels.	At all times when waste is being stored.
Reduction in operations (waste throughput,	Reducing the amount of activity on site, including no tipping or screening of high-risk loads during windy	The site has procedures in place to reduce activity on site if required through complaints or known issues, or adverse weather conditions.	Screening equipment is fitted with suppression equipment to reduce dust emission potential.

vehicle size, operational hours)	weather as well as associated traffic movements, should result in reduced emissions and re-suspension of dust and particulates from a site.	This includes a weather station to monitor weather so that working procedures can be modified if required.	Material with inherent moisture greater than 3%, e.g., sand or gravel, would not be expected to give rise to emissions of dust.
Good housekeeping	A consistent, regular housekeeping regime, supported by management, is in place that ensures the site is regularly checked and issues remedied to prevent and remove dust and particulate build up.	- Currently in place and requires minimal equipment. - Encourages a sense of pride and satisfaction amongst the staff which promotes vigilance and a positive culture. - Staff target the areas not caught by the road sweeper and other cleaning apparatus.	- Completion of inspection checklist and - Housekeeping procedure.
Remedial measures			
On-site sweeping	Sweeping can 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	Easy to apply but less effective than other measures. Covered in the management system procedures and implemented thoroughly. Operation covered by regular toolbox talks along with the triggers for operation of the sweeper. Sweeper maintained to ensure that its operation is effective. Manufacturer maintenance schedules are adhered to detailing when consumable items on road sweepers are replaced (filters, brushes etc).	- Roadways in normal use and any other area where there is regular movement of vehicles have a surface capable of being cleaned. - Working surfaces kept clean to prevent or minimise dust emissions and kept in good repair.

	surface, particularly at the kerbside. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.		
Water suppression with hoses & water jets	Damping down of site areas can reduce dust and particulate re-suspension and may assist in the cleaning of the site if combined with sweeping.	Can be water intensive, so only to be used in adverse weather conditions.	▪ Mobile dust control suppression units will be utilised across the site. ▪ The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction;
Water suppression with mist sprays	Installation of mist sprays at point source emissions can assist in the damping down of dust and particulates, therefore, reducing emissions from site.	Very effective at controlling point source emissions of dust and particulates. Can be installed to conveyors and areas where waste is dropped. 'Halo' rings can be fitted to conveyor drops on screeners to minimise dispersion.	▪ Mobile dust control suppression units will be utilised across the site. ▪ The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction;
Material storage heights	Staff training.	Implemented via Waste Storage and Handling Procedure in EMS.	A mark showing the required freeboard height, will be added to all storage areas to allow the easy identification by Site Operatives. Waste storage areas will be checked regularly as part of the Inspection Checklist.

3.2.3 Measures used to prevent dust.

Table 3-3 Measures used to prevent dust and/or particulates (PM) and other emissions.

Abatement measure	Description/effect	Overall consideration and implementation	Implementation control measure
5 mph site speed limit for all vehicles	Minimisation of fugitive emissions from site surfacing/ vehicle wheels/ loads by keeping vehicle speed low	- All drivers delivering waste are reminded of the speed limit - Operator's primary control is the site induction and toolbox talks.	If non-compliance is observed, a strike will be given, which when tallied up to 3 strikes for repeat offenders, the haulier will be contacted, and driver banned from site.
Vehicles are sheeted upon arrival and exit	Vehicles are sheeted upon arrival and departure. Vehicles uncover and unload at waste reception area and sheet up once loaded when removing waste or recovered material from site.	- All drivers delivering waste and collecting waste/recovered materials are reminded to keep vehicles sheeted. - Driver's under the Operator's primary control will be subject to a site induction and toolbox talks.	If non-compliance is observed, a strike will be given, which when tallied up to 3 strikes for repeat offenders, the haulier will be contacted, and driver banned from site.
Visual monitoring inspection & checklist	Daily visual monitoring is required to be completed daily by the Site Supervisor or nominated site operative, where wind direction, airborne dust, dust soiling and weather conditions is to be recorded at external and internal locations.	The number of visual inspections is increased in accordance with the weather conditions and following an emissions incident or complaint. The inspections are undertaken during normal operating conditions and not during breaks. The inspection will include a check of surface condition, waste acceptance, tipping/loading activities, waste and material storage, use and effectiveness of dust suppression systems and condition of process structures.	A minimum of 1 visual inspection will be undertaken per day. During dry / windy conditions, four inspections will be undertaken per day.

	This will inform the need to use any additional preventative measures.		
Air emissions awareness training	All staff receive internal air emissions awareness training at site induction and via regular toolbox talks to foster awareness on emissions reduction.	All staff receive internal air emissions awareness training at site induction and through regular toolbox talks.	- All staff receive internal air emissions awareness training at site induction and through regular toolbox talks. - Training/ enforcement as required following investigation of an excessive dust emission event.
Plant complies with current emission standards	New and replacement items of plant to be specified to meet the relevant emission standards.	New and replacement items of plant to be specified to meet the relevant emission standards. In the event of breakdown, replacement plant will be to Tier 4 standards wherever possible. In the event that this is not possible, plant meeting Tier 2 or 3 may be used for short periods whilst alternatives are sourced.	Procurement specification.
Routine servicing of plant and equipment.	All items of plant and equipment are serviced in line with manufacturers' guidance to reduce NO₂ and particulate emissions. A preventative maintenance regime is in place to make sure that equipment is maintained in good condition.	Good maintenance ensures plant is working satisfactorily and is efficient in fuel burn and emission control. Scheduled maintenance of abatement plant such as dust suppression systems and sprays on process equipment reduces the risk of failure and potential release of emissions.	Frequency of servicing is undertaken in line with manufacturer's guidance, or as faults or excessive emissions are identified.
Plant and equipment	No idling policy in place.	The importance of this measure is reinforced during the regularly held toolbox talks, site	During site walkovers by the SM and/or supervisors, operatives and drivers will be reminded to switch off

switched off when not in use.		inductions and during site walkovers by the SM and the site operative nominated for visual dust monitoring. ▪ Good management control will minimise NO₂ and PM₁₀ emissions from exhaust fumes.	their engines if idling is observed. Repeat incidences will be recorded in the Site Diary.
On-site sweeping	Sweeping can 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. This may generate dust and particulate movement that may become a Health and Safety issue if the filters and spray bars on the sweepers are not maintained.	▪ Easy to apply but less effective than other measures. Covered in the management system procedures and implemented thoroughly. ▪ Operation covered by regular toolbox talks along with the triggers for operation of the sweeper. ▪ Sweeper maintained to ensure that its operation is effective. ▪ Manufacturer maintenance schedules are adhered to detailing when consumable items on road sweepers are replaced (filters, brushes etc).	▪ Roadways in normal use and any other area where there is regular movement of vehicles have a surface capable of being cleaned. ▪ They are kept clean to prevent or minimise dust emissions and are kept in good repair.
Water suppression	Damping down of site areas can reduce dust and particulate re-suspension and	Can be water intensive, so only to be used in adverse weather conditions.	▪ Mobile dust control suppression units will be utilised across the site.

with hoses & water jets	may assist in the cleaning of the site if combined with sweeping.		The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction;
Water suppression with mist sprays	Installation of mist sprays at point source emissions like conveyors, crusher etc. It can also assist in the damping down of dust and particulates, therefore, reducing emissions from site.	Very effective at controlling point source emissions of dust and particulates. Can be installed to conveyors and areas where waste is dropped. 'Halo' rings can be fitted to conveyor drops on concrete crushers and screeners to minimise dispersion.	- Mobile dust control suppression units will be utilised across the site. - The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction;

3.2.4 Contingency Measures

Table 3-4 Contingency measures

Potential emission source	Risk	Typical actions to reduce emissions	Trigger for contingency measure	Specific contingency measure (<i>Backstop</i>)	Monitoring trigger that will indicate a return to normal operations
Dusty feedstock received at the processing site	Crushed waste accepted at the site produces excessive dust	The mobile dust control suppression units will dampen down areas of dust generation.	Dust detected at the point of discharge. <i>[Dust detected at boundary]</i>	Increase wetting measures. <i>[Remove from site]</i>	Dust not detected at site boundary.
Stockpiled unprocessed feedstock becomes too dry in hot weather.	Waste stockpiles are held for excessive periods of time	Stockpiles on site are processed quickly.	Long periods of hot, dry weather reducing the moisture content of the material.	Ensure all material is processed as soon as possible and placed in stockpiles. <i>[Remove from site]</i>	Dust not detected at site boundary.

	without processing taking place.	Material deposited first is processed first. The mobile dust control suppression units will dampen down areas of dust generation.	<i>[Dust detected at boundary]</i>		
Sorting and screening of materials	Waste materials are sorted or screened when the wind direction is towards areas accessed, or inhabited, by sensitive receptors.	Mobile dust control suppression units will be utilised across the site. The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction.	Weather forecast is used to ascertain the effect of the wind speed/direction on the operation. <i>[Dust detected at boundary]</i>	Operations that may release excessive dust are programmed to take place only during favourable weather conditions. Careful monitoring of the conditions will ensure that the 'window' for processing is broad enough to allow flexibility to wait for suitable weather conditions. <i>[Cease processing and remove if excessively dusty]</i>	Dust not detected at site boundary.
Facility maintenance/equipment cleaning	Accumulations of waste material are allowed to degrade and become dry and produce dust.	Regular clean downs of machinery will prevent dust from accumulating. Areas will be swept/wetted when empty to prevent	When a stockpile is planned for removal, the area will be swept/tidied as the pile is reduced/removed.	Once a stockpile has been moved, it's footprint will be scraped with the loader bucket to prevent a build – up of material.	Dust not detected at site boundary.

		dust blowing. Regular dampening down of all vehicle routes will be undertaken;			
LGVs leaving site	Spilt accumulations of material are allowed to dry out become desiccated and produce emissions.	Brushing down of trailer sides and sheets in place before leaving will prevent material dropping from trailers and prevent dust being generated.	Long periods of hot, dry weather reducing the moisture content of the material.	All vehicles are checked and prevented from leaving site if not sheeted or clean.	Dust not detected at site boundary.

3.3 Other considerations

3.3.1 Water usage/ availability

The site has a dedicated water supply along with a 45m³ above-ground rainwater harvesting tank.

The dust prevention measures do not rely on general, non-specific, use of water. Water use is deliberately targeted to reduce wastage but also to ensure effective use and is not relied upon as the sole control measure.

3.3.2 Drought conditions

In the event of a drought dust emissions will remain abated and not cause pollution. Depending on the severity of the drought conditions, restrictions may be in place on the amount of water available for use on Site from the supplier (mains water supply). In this case, operations may be reduced or suspended in order to comply with any water usage restrictions. This decision will be made in accordance with the risk estimation process.

3.3.3 Enclosure of waste processing & storage areas

Due to the nature of the input materials and scale of the inert recovery operation it is not possible to enclose the entire processing operation or storage areas. The new recycling building will reduce dust emissions by providing an undercover environment, as opposed to the existing open-air conditions.

Table 3-5: Dust control improvements

Control measure	Improvement
Construction of the recycling building	All operations are currently carried out in the open. The building will enable waste sorting and recycle storage to take place under cover. The building will reduce the incidence of fugitive dust emissions, as it will have a roof and will be enclosed on three sides.
Storage of recycled inert materials in replacement 4m high external storage bays	These will provide permanent bays to replace the existing concrete A walls currently used. The material within the bays will be stored below the height of the bay walls to minimise wind swept.
Replacement of the existing recycling plant (hopper, trommel, screen, conveyors and enclosed picking line)	The new plant will be modern and efficient and fitted with inbuilt dust suppression.
Storage of mixed inert loads in replacement 3.5m high storage bay pending processing through the recycling plant	This will provide a permanent bay to replace the existing concrete A wall currently used. Will reduce the potential for windblown litter and fugitive dust emissions. The material within the bay will be stored below the height of the bay wall to minimise wind whip.

3.4 Visual dust monitoring

The SM will monitor weather forecasts and ensure the necessary on-site precautionary measures are in place to prevent emissions.

All personnel employed on site will undertake visual monitoring for dust throughout the working day as they are uniquely placed to observe and react to the effects of the operation they are carrying out at the time. Any observed problems will be reported to the SM who will investigate the cause and implement any necessary remedial action.

The set monitoring location is around the site perimeter as the weather conditions and position of operations within the site change, so that a fixed location may not always be representative.

Out of hours provision for dust monitoring is not considered necessary due to the location of the site and the absence of any mechanical operations that may increase the potential for dust emissions to be generated outside operational hours. The operational hours are specifically stated within the planning permission for the site and limit the hours for both movement of vehicles and operation of externally located machinery.

Should regular complaints be received outside of operational hours over a period of two weeks or more dust mitigation measures will be reviewed. This may include the potential for stockpiles to be dampened prior to the end of the operational day.

It is acknowledged that certain operations, i.e., loading, screening etc., increase the potential for heightened releases of dust and other emissions. Increased monitoring takes place during these operations, with checks taking wind strength, direction and operation underway into account.

Beaufort number	Wind Speed (mph)	Seaman's term		Effects on Land
0	Under 1	Calm		Calm; smoke rises vertically.
1	1-3	Light Air		Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light Breeze		Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle Breeze		Leaves, small twigs in constant motion; light flags extended.
4	13-18	Moderate Breeze		Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh Breeze		Small trees begin to sway.
6	25-31	Strong Breeze		Large branches of trees in motion; whistling heard in wires.
7	32-38	Moderate Gale		Whole trees in motion; resistance felt in walking against the wind.
8	39-46	Fresh Gale		Twigs and small branches broken off trees.
9	47-54	Strong Gale		Slight structural damage occurs; slate blown from roofs.
10	55-63	Whole Gale		Seldom experienced on land; trees broken; structural damage occurs.
11	64-72	Storm		Very rarely experienced on land; usually with widespread damage.
12	73 or higher	Hurricane Force		Violence and destruction.

Table 3-6: Beaufort Scale

Any formal monitoring undertaken will be recorded in the site diary.

Should a complaint be raised, the form in Appendix A will be completed to investigate and understand the potential issues. Where these are completed over a period a fuller picture will emerge as to the most successful strategies for deciding as to whether further controls are required.

Operating hours are defined, and conditioned, within the current planning permission as follows;

Externally located plant and equipment shall not be used, except during the following hours:

0730 to 1700 Monday to Friday; and

0730 to 1200 Saturday.

These times may be subject to small variations over time.

Section 4.0: Particulate Matter (PM) Monitoring

The site is in relatively open countryside at least 220m from the nearest sensitive residential receptor, so it is not considered likely that quantitative monitoring of particulate matter emissions is required.

Dust is a generic term for particulate matter and covers airborne particles in the size range of 1 to 75µm (micrometres) in diameter:

- Particles less than 10µm are 'small'
- 10µm to 30µm are termed 'intermediate'
- Particles above 30µm are termed 'large'

Large and intermediate dust particles are often referred to as nuisance dust, whilst small particles are associated with effects on human health.

Dust generated from the waste operations undertaken on this Site and the movement of plant and vehicles are commonly of larger particle size.

The larger particle fraction of dust can create a potential nuisance in the community or impact on the environment. It is normally perceived as an accumulated deposit on surfaces such as window ledges, paintwork, and other horizontal surfaces e.g., car roofs. When the rate of accumulation is sufficiently rapid to cause noticeable fouling, discolouration, or staining (and decreasing time between cleaning) then the dust is generally considered to be a nuisance. The visibility of dust clouds themselves may also give rise to such impacts.

The term 'excessively dusty material' is used within this DEMP to refer to material that contains a significant amount of dry fine particles such that when the material is handled it gives rise to dust clouds. Wastes comprising solely or mainly of dusts, powders or loose fibres are not permitted at the Site.

The term 'excessive', when referring to dust generation, is used to describe a significant dust emission that is anticipated to cause nuisance or adverse impacts to nearby receptors, be visible beyond the Site boundary, and /or reduce visibility in the immediate vicinity of the Site.

The term 'not effective' in relation to mitigation measures is used to describe the

If persistent dust emissions arise which necessitate PM monitoring, the scope, nature, location and frequency of monitoring will be discussed with a relevant monitoring specialist to establish the most suitable and effective method.

There are activities on-site that may create dust which could possibly drift off-site and cause an amenity nuisance. Such activities include:

- Vehicle input of wastes (vehicles may kick up dust during dry weather).
- The unloading and treatment of certain dry waste materials on the concrete pad.
- Screening operations of inert/soil type wastes during the treatment process.

Site staff supervising individual waste handling operations shall, during the undertaking out of those operations, undertake visual monitoring of aerial emissions. Where visible aerial emissions are detected,

either dust plumes or areas affected by the fallout of dust, that are likely to be transported beyond the site boundary, action will be taken immediately to stop/reduce the rising of the dust.

The incident and the remedial action taken in response to the incident shall be recorded in the site diary.

4.1 Monitoring location

The set monitoring location takes the form of a prescribed route around the site perimeter as the weather conditions and operations change, so that a fixed location may not always be representative. As the wind direction is most commonly from the southwest to the north-east, the monitoring route will be to the north and east of the site.

Before the staff member responsible for monitoring commences the route, they will observe the wind direction at the time and use it to inform the monitoring route taken.

It is not considered effective to stipulate a precise time for the routine monitoring to take place, it is far more appropriate for the routine dust monitoring to be a 'task' based inspection so that any dust impacts can be properly monitored as opposed to an arbitrary time when the operation with the most potential for dust generation may not be taking place. As such, routine dust monitoring would take place during crushing and/or screening operations, if required.

Should particulate matter monitoring be required, potential monitoring locations will be discussed with the relevant specialist to establish the most suitable and effective position. It is assumed that the location would usually be to the northeast of the site.

4.2 Operation of the PM monitoring equipment

The risk assessment has concluded that emissions of dust were able to be screened out as insignificant. However, it is acknowledged that should dust emissions be identified as an issue at the site and/or complaints are received as a result, the operator will review the mitigation measures and monitoring techniques detailed in this DEMP to improve detection and prevent emissions being discharged from the site proactively. The site diary and records of the visual inspections are reviewed by company senior management with the intention of identifying any trends in dust emissions and improving processes on site.

4.3 Quality assurance/quality control and record keeping.

The results of daily inspections and any remedial work will be recorded in the Site Diary as a minimum. Should any monitoring be carried out, the following will be recorded:

- The make and model of the monitoring equipment;
- The serial number of the monitoring equipment;
- When, how and by whom the data is checked;

- When the equipment is calibrated;
- How the equipment is calibrated;
- Copies of the qualifications and training records of who carries out the calibration;
- When and by whom the equipment is routinely inspected; and
- If the equipment is damaged and/or no longer able to collect reliable data.

4.4 Equipment and data management

Where dust emissions are identified as an issue at the site and complaints are received as a result, the operator will review the monitoring techniques detailed in this DEMP to improve detection and ensure that any emissions data is representative and enables measures to be undertaken to reduce emissions from being discharged from the site.

4.5 Additional detailed monthly reporting

Where dust emissions are continually identified as an issue at the site and complaints are received as a result, the operator will consider carrying out a more detailed investigation to work out the source of the pollution, whether it be from dust/particulate sources on site, sources of dust/particulates beyond the site boundary, background sources affecting the whole region, or more local sources.

4.6 Dust monitoring.

Visual dust monitoring at the site boundary will be carried out as part of routine daily site inspections with any observations recorded and retained onsite.

All plant is inspected daily and cleaned down after use to prevent the build-up of dust on machinery parts and hot exhausts.

Informal dust monitoring comprising of operational staff remaining vigilant for visual dust and particulate emissions will be carried out by operational staff members during the crushing and screening processes. Where dust emissions are identified during the treatment process, operations will pause, and the site boundary will be checked to ensure emissions are not leaving the site. Where dust emissions are seen to be leaving the site boundary material will be dampened down before the treatment process resumes.

No dust monitoring will be carried out outside operational hours. The stockpile and distance to receptors will afford screening for unprocessed and processed stockpiles. Where regular complaints are being received outside of operational hours over a period of two weeks or more dust mitigation measures will be reviewed with the potential for stockpiles to be dampened down prior to the end of shift.

All dust monitoring results will be recorded and retained in the site office along with dates, times, weather conditions, wind direction and the name of the individual carrying out the monitoring event. Records will also be kept in accordance with the site EMS.

Section 5.0: Actions When Alarm is Triggered

When the 'action level' is triggered, the following actions are taken:

1. The Site Manager (SM) assesses the activities underway and/or the nature of the waste materials being delivered immediately prior to the complaint being received, to work out what has caused the complaint.
2. If the source cannot be established confidently, the likely dust/particulate generating activities will be suspended, i.e., shredding, loading, screening.
3. Where the source originates from the site the SM will take appropriate action in terms of dust/particulate abatement, to ensure that the complaint is followed through. 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.
 - d) Logging findings of a – c in the site diary, and in the reporting template within the relevant appendix of the Environmental Permit.

In all cases, any new lessons learnt from the investigations are considered by company management and implemented into the dust & particulate emission management plan (if not already included), to prevent a re-occurrence of the complaint.

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

Section 6.0: Ceasing Operations for Dust Mitigation

The following section details the assessment process to be taken when determining if and which activities on Site should stop to prevent excessive dust emissions.

6.1 Estimating Magnitude of Risk

Table 6.1 provides a matrix for estimating the magnitude of risk from a potential hazard, considering both the probability and consequences of the hazard occurring.

The magnitude of risk determines the level of management required to reduce the probability of the hazard occurring.

In this DEMP, the hazard is the excessive emission of dust from the Site.

Table 6-1: Estimating the magnitude of risk

Probability	Magnitude of risk	Consequence			
		High	Medium	Low	Negligible
	High	Very high	High	Medium/low	Very low
	Medium	High	Medium	Low	Very low
	Low	High/medium	Medium/low	Low	Very low
	Negligible	Low/medium/high	Medium/low	Low	Negligible

6.2 Ceasing of operations

Table 6-2: Risk matrix for the ceasing of operations

Conditions	Probability	Consequence	Risk magnitude
Risk from waste treatment activities			
Dry, cool weather (<20deg)	M	L	L
Dry, hot weather (>20deg)	M	M	M
Dry, hot (>20deg), windy (>4 Beaufort)	M	M	M/H
Dry, windy weather (>4 Beaufort)	M	M	L/M
Wet, windy weather (>4 Beaufort)	H	L	L
Dry, little wind (<3 Beaufort)	L	L	L
Gale-force winds (>8 Beaufort)	M	H	M/H
Plant failure or breakdown (spray bars or other essential water suppression or water supply)	M	H	M/H
Preventative and remedial mitigation measures not effective	L	H	H
Risk from waste storage			
Dry, cool weather (<20deg)	M	L	L
Dry, hot weather (>20deg)	M	M	M
Dry, hot (>20deg), windy (>4 Beaufort)	M	M	M/H
Dry, windy weather (>4 Beaufort)	M	M	M/L

Wet, windy weather (>4 Beaufort)	H	N	L
Dry, little wind (<3 Beaufort)	L	M	L
Gale-force winds (>8 Beaufort)	M	M	M/L
Plant failure or breakdown (spray bars or other essential water suppression or water supply)	M	H	M/L
Preventative and remedial mitigation measures not effective	L	H	H
Risk from other site activities			
Mud tracked onto highway in dry conditions	L	M	M
Mud tracked onto highway in wet conditions	M	L	L
Debris on site surface in dry conditions and still conditions (<4 Beaufort)	M	L	M/L
Debris on site surface in dry conditions and windy conditions (>4 Beaufort)	M	M	M
Debris on site surface in wet conditions	M	L	L

Table 6-3 Action required per risk magnitude rating.

Risk magnitude	Action
Low	Continued implementation of preventative measures
Medium	Dust emissions are likely. Relevant activities* stop until additional remedial mitigation is implemented. Relevant waste activity may temporarily cease - can resume upon implementation of additional mitigation if measure is effective. Relevant waste activity must stop if excessive dust emissions are observed. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is implemented and there are no significant dust emissions
High	Relevant waste activity will stop. In the case of waste storage this will mean either removal or covering of the offending waste within 1 day if remedial mitigation is not effective. Relevant waste activity can resume when the conditions no longer apply/ additional remedial mitigation is effectively implemented and there are no excessive dust emissions.

6.3 Dynamic risk assessment

Any scenario for which the Magnitude of Risk has not already been assessed for in Table 6-1 can be undertaken by completion of a dynamic risk assessment using the Risk Matrix in Table 5-2.

The dynamic risk assessment will be completed by the Site Manager and recorded. If the scenario is likely to recur, it will be added to the Dust Management Plan at the earliest opportunity.

Section 7.0: Reporting and Complaints Response

7.1 Engagement with the Community

The site will respond to the complainant once an investigation has been completed. This will include details as to the source of the complaint and the measures taken to correct it. Where the source did not originate from the site, the complainant will be informed as such and will be given an explanation as to how this conclusion was determined.

Depending on the time the complaint was received the site will respond within 2 working days. Any Environmental Permit requirements will take precedence.

7.2 Engagement with the Community

Being a good neighbour is important to Sun Skips and is very beneficial to their business. Should the site cause an impact on local residents/businesses they will be kept abreast of what the operator is doing to deal with any issues.

7.3 Reporting of Complaints

All complaints will be dealt with according to the procedures identified in the site's Quality and Environmental Management Systems.

7.4 Management Responsibilities

Management responsibilities are detailed within the site's Quality and Environmental Management Systems.

7.5 Summary

Inert waste processing and soil manufacturing operations are capable of producing dust and particulate emissions, however the dust produced will be limited by the nature of the operations and mitigation measures. In any event emissions can be controlled to confine and prevent their escape and to minimise airborne dispersal. At the Ipswich Recycling Facility, the main emission causes relate to the screening operation and transportation of materials on and off the site.

Processing emissions will be controlled by using practical site management controls including careful movement by experienced operators, containment/screening to shelter other processing operations, limiting location of certain processing operations, operation of best practise in terms of housekeeping operations, and if necessary, with cessation of operations in certain weather conditions if dust blows beyond the site boundaries.

Successful site management ensures the control of air-borne emissions by including the following measures;

- Regular assessment of prevailing weather conditions and site operations,

- Use of sprays on processing equipment,
- Sheeting of all loads immediately after vehicle loading,
- Keeping hard surfaces damp in hot, dry, windy weather using water suppression,
- Regular maintenance of all plant including water sprays, hoods and screens,
- Keeping vehicles clean and dust free and site surfaces free from dust/material,
- Limiting the speed of vehicles at all times,
- Mobile dust control suppression units will be utilised across the site. The units spray a fine mist at the source of dust emissions and can be manoeuvred to accommodate wind direction;
- Regular dampening down of all vehicle routes will be undertaken;
- Dampening down of stockpiles will be undertaken during loading periods, if required;
- The screening plant will house spray bars to dampen down all areas of dust generation; and,
- Careful moving of material,
- Postponing operations if significant wind-blown dust is likely to result; and,
- Ceasing operations if significant wind-blown dust is caused.

Ongoing monitoring of dust levels and review of the operation of the DEMP, with appropriate updating, will ensure continuing effective dust management at the Ipswich Recycling Facility preventing adverse dust impacts off site.

This DEMP is formally reviewed by Sun Skips on a bi-annual basis as a minimum to ensure that the controls described are effective and reflect best available techniques. In addition, the DEMP will be reviewed following any relevant changes in site operations or procedures that are likely to have implications from an emissions generation/impact perspective.

Section 8.0: Sources of information

Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf. v1.1 [June 2016]

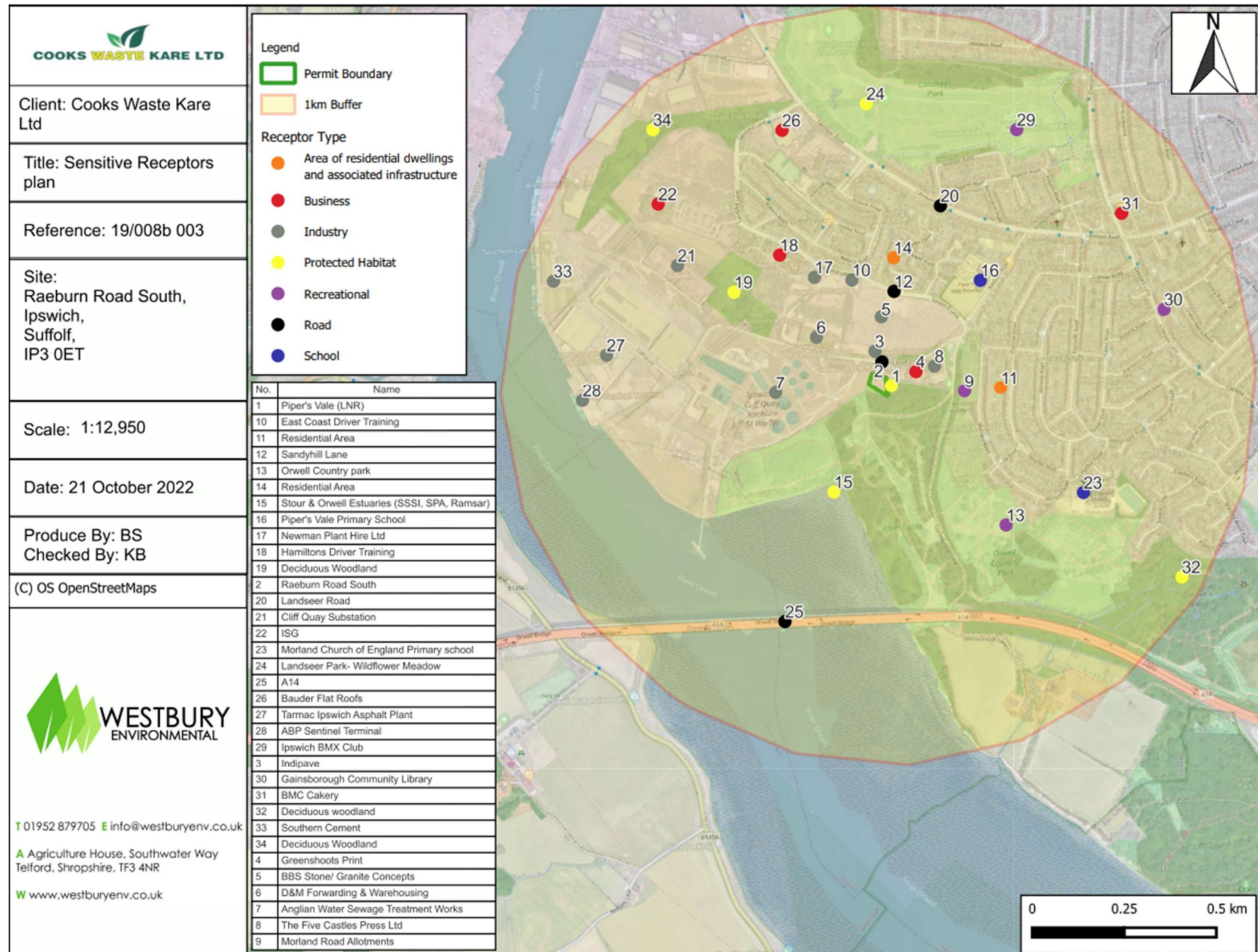
Process Guidance Note 3/16(12) Statutory guidance for mobile crushing and screening [September 2012]
Defra

IAQM Guidance on the assessment of dust from demolition and construction v1.1 [June 2016]

Appendix A: Dust Complaint Form

Complainant details	
Complainant name	
Address	
Postcode	
Tel	
Email	
Date of complaint	
Nature of complaint	
Complaint ref	
Investigation details	
Investigation carried out by	
Position	
Date & time investigation carried out	
Weather conditions	
Wind direction and speed	
Investigation findings	
Feedback given to EA	
Date feedback given	
Feedback given to public (with date)	
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 DEMP need to be updated	
Date that the DEMP was updated	
Closure	
Site manager review date	
Site manager signature to confirm no further action required	

Appendix B: Receptor locations



Appendix C: Site inspection forms

Item for visual inspection	Aspects for inspection	Checked Y/N	Remedial action required (Y/N, describe)
Weather	Absence of adverse weather conditions -wind >Beaufort scale 4 -prolonged dry and hot (25 degree) weather.		
Mud and Debris	Site surfaces clear of mud		
	Public highway clear of mud		
Plant/Equipment	Pre-use checks completed		
	Plant / equipment are free of for build-up of grease, oil, fuels, dust, and fluff.		
	Plant / equipment are shut down 1-hour before site closure.		
	Plant / equipment exhausts have cooled 15 mins prior to site close.		
Litter	None present in waste storage areas		
	None present in waste processing area		
	None present along site boundaries (fencing etc.)		
Odour	No odorous waste on site		
	Odour monitoring completed (see odour monitoring form)		

Fire	Fire Watch: Plant, equipment, vehicles and combustible waste areas are securely stored with no evidence of heating, smoke or fire. Morning/Midday 1hr before Site close		
	Soil available to aid in firefighting		
	Spill kits in place		
Site surfaces	Clear, no mud or dust generation		
Dust	No significant dust emissions at monitoring points.		
	No significant dust emissions are escaping the boundary of the site		
	Water supply dust suppression is adequate		
Fuel oil storage	Locks operational.		
	Check around the fuel tank container and where refuelling takes place for evidence of leakage.		
	Fuel tank checked for any sign of damage, corrosion, deterioration, incident, leakage, or spillage.		
Fugitive emissions to water	No visible contamination in runoff water i.e. no oily sheen visible.		
	No leaks from containers or the quarantine area that could cause contamination in runoff water.		

Date: _____

Completed by: _____

Signature: _____

Item for visual inspection	Aspects for inspection	Checked Y/N?	Remedial action required (Y/N, describe)
Oil storage	Storage secure (i.e. locks operational)		
	No evidence of oil storage leakage.		
	Oil storage container is free from damage, corrosion, deterioration, incident, leakage, or spillage.		
Site Security	CCTV system is operational		
	Floodlighting is operational		
	Fencing around site perimeter in good condition – no holes etc.		
	Lock on gated entrance working and no signs of corrosion		
Waste Storage	Stored waste is 1m below surrounding wall/fence.		
	Waste storage areas are not exceeding the dimensions included in the Fire Prevention Plan		
	Stock Rotation form is completed (see Stock Rotation Form)		
Fire Quarantine Area	There should be an available space on site measuring that is at least 6m away from combustible waste or fuel		
Site surfaces	Clear, swept and free from damage, defects, or ruts.		
Pests and vermin	No activity or damage caused by pests/vermin e.g. holes in fencing, chewed cables.		
Drainage	Drains are clear of debris, odour and are draining sufficiently.		

Date: _____

Completed by: _____

Signature: _____

Item for Visual Inspection	Aspects for Inspection	Checked Y/N	Remedial Action Required (Y/N, describe)
Impermeable surfacing	Surfaces free from cracks which may allow water to reach the ground below.		
Containers	Containers free from cracks which may result in loss of containment.		
Fire	Fire bell is in good working order		
	Hoses are present, in good condition and free from holes.		
Fuel tank	Integrity of the fuel tanks – there should be no cracks or leaks.		
Drains	Drains are free from blockages		
Electrics	Wires are not frayed / damaged.		
	Sockets are not overloaded.		
Waste storage	Waste storage containers have no holes or leakage.		
	No damage, corrosion, deterioration, of waste storage areas.		

Date: _____

Completed by: _____

Signature: _____

Item for visual inspection	Aspects for inspection	Checked Y/N	Remedial action required (Y/N, describe)
Electrics	Electrics to be inspected and certified by a qualified electrician.		
Fire extinguishers within vehicles	Fire extinguishers are serviceable.		
All site plant:	Service completed (if required) Emission abatement features working correctly (spray bars, enclosures) No leaks or cracks requiring repair Full working order		

Date: _____ Completed by: _____ Signature: _____