



**Starling
Environmental
Limited**

67 Chorley Old Road, Bolton, Greater Manchester, BL1 3AJ

www: starlingenvironmental.co.uk

Tel: 07989 73122

**DUST EMISSIONS MANAGEMENT PLAN
for
GREEN FUTURE RECYCLING LIMITED
PEEL ROAD, BLACKPOOL**

Report No 122/2

March 2025

For

**Green Future Recycling Limited
The Old Brickworks
Anna's Road
Blackpool
FY4 5JX**

DOCUMENT CONTROL

DOCUMENT TITLE	Dust Management Plan
REPORT NO	122/2
DATE ISSUED	27/3/2025
PREPARED BY	C Gettinby
REVISIONS	

CONTENTS

1.	INTRODUCTION	4
1.1	Report Context.....	4
1.2	Site Location and Surrounding Area	4
1.3	Layout.....	5
1.4	Background Air Quality	6
1.5	Climate Details.....	6
2.	ASSESSMENT OF RECEPTORS.....	8
2.1	Receptors	8
2.2	Receptor Sensitivity Assessment.....	8
3.	CONTROL OF EMISSIONS	12
3.1	Waste Deliveries.....	12
3.2	Processing	12
3.3	Avoidance and Containment.....	15
3.4	Minimisation of Drop Heights.....	15
3.5	Speed Restrictions.....	15
3.6	Material Handling	15
3.7	Storage	16
3.8	Dust Suppression Equipment	17
3.9	Water Supply	19
3.10	Mobile Plant and Equipment.....	19
3.11	Housekeeping.....	20
4.	DUST AND PARTICULATE MANAGEMENT	22
4.1	Responsibility for Implementation of Plan	22
4.2	Sources and Control of Dust/ Particulates	22
4.3	Monitoring and Inspections	26
4.4	Contingency Action Plan.....	26
5.	REPORTING AND COMPLAINTS PROCEDURES	30
5.1	Reporting of Complaints	30
5.2	Management Responsibilities	30
5.3	Community Liaison	30
6.	SUMMARY AND CONCLUSIONS	31

APPENDICES

Appendix A	- Drawings
Appendix B	- Assessment Method
Appendix C	- Complaints Form
Appendix D	- Monitoring Checklist

DRAWINGS

Drawing No 122/01 – Site Location Plan
Drawing No 122/02 – Site Layout Plan
Drawing No 122/03 – Receptors 1 Km

1. INTRODUCTION

1.1 Report Context

- 1.1.1 Starling Environmental Limited has been commissioned by Green Future Recycling Limited (GFRL) to prepare a Dust Emissions Management Plan (DEMP) in support of a bespoke permit application for their glass recycling operation in Peel, near Blackpool, Lancashire (herein referred to as 'the site').
- 1.1.2 GFRL conduct glass recycling at the site which consists of processing waste glass by washing, dry screening and crushing.
- 1.1.3 The aim of the DEMP is to identify the potential risks of fugitive dust emissions from recycling operations at the site, consider the impact to identified receptors and set out the required mitigation measures for the management of any dust emissions arising.
- 1.1.4 The DEMP has been prepared using the following guidance:
- Environment Agency Risk Assessment for Environmental Permits¹
 - Institute of Air Quality Management (IAQM)²
 - Control & Monitor Emissions for your Environmental Permit³
- 1.1.5 All drawings referenced are contained in Appendix A.

1.2 Site Location and Surrounding Area

- 1.2.1 The site is located approximately 200 m to the south of Peel, a small hamlet approximately 2 km to the east of Lytham St Annes, Lancashire.
- 1.2.2 The centre of the site is at approximate National Grid Reference (NGR) SD 35652 31153 and the location of the site is shown on Drawing No 122/01.
- 1.2.3 The site is located on a former brick works site which was associated with a number of clay pits in the area.
- 1.2.4 The site is bound by Anna's Road to the south, then south of Anna's Road is the Westby (South) landfill which is currently being infilled. Adjacent to the site to the west, north and east is the fully restored Westby (North) landfill which rises approximately 3 - 4 m above the site providing screening to the surrounding area.

¹ <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit>

² IAQM Guidance on the assessment of dust from demolition and construction, January 2014. Whilst this guidance is specifically for 'construction dust', in the absence of separate guidance for dust from waste or mineral sites, the IAQM guidance provides an appropriate basis for waste dust assessment..

³ <https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit>

- 1.2.5 Within the Westby (North) landfill, there are a few small ponds to the west (former clay pits), and some woodland to the north-west. These features are shown on the Receptors Plan Drawing No 122/03.
- 1.2.6 The site lies in a rural setting and the surrounding area is predominantly agricultural land with associated farm ditches. Farmland to the west and south are designated as part of the Lytham Moss Biological Heritage Site (BHS).
- 1.2.7 The Peel Hall Business Park is located approximately 210 m to the north-east of the site and includes a small number of light industrial businesses including a car dealership and a motor repair garage and commercial businesses including a florist. The closest residential properties are 211 m north-east of the permit boundary.
- 1.2.8 The relevant local authority is Fylde Borough Council.
- 1.3 Layout**
- 1.3.1 The site layout is shown on the Site Layout Plan (Drawing No 122/02) and described below.
- 1.3.2 The site is rectangular in shape and covers an area of 10,633 m². Access to the site is off Anna's Road on the southern boundary.
- 1.3.3 The site is bound by palisade fencing and lockable gates at the entrance off Anna's Road. There is thick hedgerow on all boundaries of the site and some mature trees along Anna's Road.
- 1.3.4 There is one main processing building at the site where waste glass is processed by drying, crushing and screening to produce recycled products. Two silos are located on the eastern side of the building for storage of recycled products.
- 1.3.5 The building is fitted with a dust extraction system with three dust extraction points showed on the site layout plan. This is a pulse jet bag filter system.
- 1.3.6 The proposed wash plant will be located in the yard in the south-east corner where waste glass will be washed and screened to produce different size fractions. A smaller product storage building and bagging plant will be located adjacent to the wash plant.
- 1.3.7 There is a brick building adjacent to the southern boundary of the site which houses office and welfare facilities with an adjacent staff parking area.
- 1.3.8 A weighbridge is located in the west of the site in line with the HGV access.
- 1.3.9 A gas storage compound with tanks storing LPG is located adjacent to the southern boundary.

- 1.3.10 The majority of the site is hardstanding. The wash plant will be located over concrete and there is a concrete pad at the entrance to the main processing building. Site surfacing is shown on the Site Layout Plan (Drawing No 122/02).

1.4 Background Air Quality

- 1.4.1 Reference to the interactive DEFRA Air Quality Management Area (AQMA) mapping tool⁴ identifies that the site is not located within an AQMA.
- 1.4.2 The UK Ambient Air Quality Interactive Map⁵ shows background concentrations of pollutants for the area and is presented in Table 1 along with air quality standards. Background concentrations of all pollutants are below the limit values for protection of human health.

Pollutant	2022 Background concentration µg/m ³	Air Quality Standard Limit value / objective µg/m ³
Nitrogen Dioxide (NO ₂)	5.13	40*
Fine Particulate Matter (PM ₁₀)	9.93	40*
Very Fine Particulate Matter (PM _{2.5})	5.83	10**

Table 1: Background Air Quality 2022

Notes

* The Air Quality Standards Regulations 2010 (amended in 2016)

** The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

1.5 Climate Details

- 1.5.1 Reference has been made to data for Blackpool Squires Gate monitoring station⁶ which is the nearest Met Office climate station to the site and provides monthly mean wind speeds values for the period 1991 to 2020. The average wind speed ranges from 9.75 knots in June (gentle breeze) to 12.05 in January (moderate breeze). The annual average wind speed between 1991 and 2020 was 10.73 knots (moderate breeze).
- 1.5.2 Based on the wind rose data presented in Figure 1, the prevailing wind direction is from the west.

⁴ <https://uk-air.defra.gov.uk/aqma/maps>

⁵ Data obtained using interactive background maps <https://uk-air.defra.gov.uk/data/gis-mapping/>

⁶ <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/>

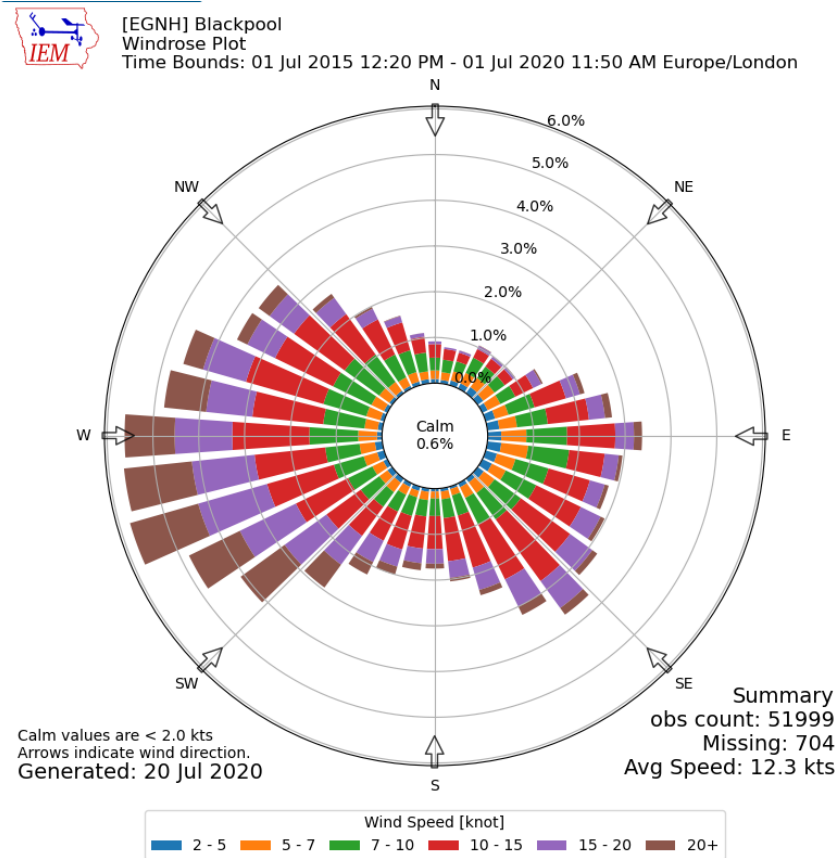


Figure 1: Wind Rose

Rainfall

- 1.5.3 Reference has been made to the Met Office data for Blackpool Squires Gate monitoring station⁷, the nearest climate station to the site which records rainfall. Total average annual rainfall during the period 1991 to 2020 was 886 mm.
- 1.5.4 The number of days of rainfall greater than or equal to 1 mm was 147 days on average each year, therefore providing natural dampening approximately 40% of the year.

⁷ <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-climate-averages/>

2. ASSESSMENT OF RECEPTORS

2.1 Receptors

- 2.1.1 Guidance requires that the area of consideration for receptors is 1 km from the site with respect to the potential impact by dust, and that a further assessment is made to identify which of these are likely to be sensitive to dust. Potentially sensitive sites include: environmental habitat sites; hospitals; schools; protected species sites; childcare facilities; elderly housing; and convalescent facilities.
- 2.1.2 Potential receptors within 1 km are identified in Table 2 and shown on Drawing No 122/03. The sensitivity of each receptor has been considered based on its location relative to the dust source which has been assumed to be the permit boundary.

2.2 Receptor Sensitivity Assessment

- 2.2.1 The sensitivity assessment follows the IAQM guidance and is based on number of receptors and distance from the source. For example, residential properties are considered to be highly sensitive to dust but the sensitivity reduces with distance from site. The assessment method is contained in Appendix B.
- 2.2.2 The sensitivity of each receptor to dust soiling effects to people or property, human health effects of PM₁₀ and the ecological effects of dust deposition has been assessed using the IAQM guidance.
- 2.2.3 The sensitivity of surrounding receptors to human health effects has been assessed based on 2022 background annual mean PM₁₀ concentration at 9.93 µg/m³.

Drawing Ref	Receptor	Direction from site	Distance from Boundary (m)	No of Receptors	Receptor Sensitivity		
					Dust Soiling	Human Health	Ecological
Residential							
1	Archers Farm	NE	211	1-10	Low	Low	-
	Ridgeway Cottages	NNE	370	1-10	Low	Low	-
	Ridgeway Farm	N	533	1-10	Low	Low	-
	Lawnes Farm	SE	480	1-10	Low	Low	-
	Coppice Farm	SW	720	1-10	Low	Low	-
	Fir Tree Farm / Whitehouse Farm	E	800	1-10	Low	Low	-
	Bridge Farm / Oaks Farm	SSE	930	1-10	Low	Low	-
Industrial/ Commercial Premises							
2	Westby Landfill	S	22	1-10	Low	Low	-
	Peel Hall Business Park	NE	210	1-10	Low	Low	-
	Courtyard Cottage Stables	SSE	650	1-10	Low	Low	-
	West Moss Stables	SSW	500	1-10	Low	Low	-
	St Annes Radar Station	SW	920	1-10	Low	Low	-
Public Rights Of Way							
3	Surrounding Footpaths	W, SW	500 – 1 km	-	Low	Low	-
Controlled Waters							
4	Farm Ditches	N,E,S,W	110 – 1 km	-	-	-	Low
	Branch Drain	S	513	-	-	-	Low
Ecological Receptors							
5	Deciduous Woodland Priority Habitat (Westby Clay Pits)	S	18	-	-	-	Low
	Lytham Moss BHS	S,W	18 m – 1 km	-	-	-	Low
	Lawnes Wood Priority Habitat	SE	543	-	-	-	Low
	Kite Hall Wood	SW	380	-	-	-	Low
Highway/Major Road or Transport Link							
6	Anna's Road	S	Adjacent	-	Low	Low	-
	Peel Road	E	147	-	Low	Low	-

Table 2: Potential Receptors Within 1 km

Notes: Receptor sensitivity has been determined using the IAQM guidance 'Define the Sensitivity of the Area'.

Residential Receptors

- 2.2.4 Housing is considered to be a high sensitivity receptor for dust soiling effects due to the expected high level of amenity. The closest residential receptors are all small farmsteads, with the closest being approximately 211 m to the north-east (Archers Farm).
- 2.2.5 Due to the distance of the site, all the surrounding residential receptors are considered as being low risk to both dust soiling and human health impacts.

Commercial/Industrial Receptors

- 2.2.6 For the purposes of this assessment industrial and commercial receptors are considered to be places of work and therefore a medium sensitivity receptor if no other mitigating factors are identified (based on IAQM guidance).
- 2.2.7 The closest industrial/commercial receptors are the employees at Westby landfill approximately 22 m to the south on Anna's Road. As there are low employee numbers and the distance is >20 m, these receptors are classed as having low sensitivity to dust soiling in accordance with IAQM guidance. In addition, the site is a landfill which is a dust generating activity and so would be less sensitive to dust.
- 2.2.8 Other industrial/commercial premises in the surrounding area include those located at Peel Hall Business Park which is located approximately 210 m to the north-east, stables located 500 to 650 m to the south-west, and St Annes Radar Station, 920 m to the west. These receptors are considered as having low risk to dust soiling due to distance from potential dust source.
- 2.2.9 All industrial and commercial receptors have been assessed as low sensitivity receptors for human health effects arising from dust due to: the distance from source (> 20 m); the number of potential receptors (< 100); and the low mean background concentration of 9.93 µg/m³.

Public Rights of Way

- 2.2.10 The designated footpaths within the vicinity of the site have been assessed as low sensitivity to dust soiling and human health due to transient exposure, ie users are likely to be present for limited periods of time only. Based on IAQM guidance, receptor sensitivity is also mitigated by distance if the potential dust source is > 20 m which is the case for the footpaths' routes in this area.

Highway/Major Road or Transport Link

- 2.2.11 The surrounding roads of Annas Road and Peel Road are local unclassified roads. There are no major roads or transport links within 1 km of the site.

Controlled Waters

- 2.2.12 The site is situated within a predominantly rural area, surrounded by fields, the only controlled waters in the area are farm ditches. There are a number of small ponds to the west and south.
- 2.2.13 Based on IAQM guidance, watercourses are assessed as having low sensitivity to the ecological impacts from dust.

Designated Sites/Ecological Receptors

- 2.2.14 There is a small area of Priority Habitat woodland located to the south-west within the Westby (South) landfill which is also designated locally as part of the Lytham Moss BHS.
- 2.2.15 In addition, there are two small Priority Habitat woodlands in the surrounding area; Lawnes Wood is 543 m to the south-east and Kite Hall Wood is located approximately 380 m to the south-west. The Lytham Moss BHS, which surrounds the site to the south and west, is an area of farmland which is an important feeding ground for wildfowl.
- 2.2.16 Ecological receptors with local designations (eg Biological Heritage Sites or Priority Habitats) are considered as being low sensitive receptors under IAQM guidance.

Schools/Colleges, Care Homes and Hospitals

- 2.2.17 No schools, elderly housing, care homes or hospitals have been identified within 1 km of the site.

3. CONTROL OF EMISSIONS

3.1 Waste Deliveries

- 3.1.1 Waste glass is delivered by road in bulk by HGVs. These will enter the site via the gated entrance. Haulage operators are instructed that all loads should be covered prior to entering site.
- 3.1.2 Waste acceptance procedures are detailed in the EMS which include;
- Ensuring that all HGVs transporting waste into or out of the site will be covered;
 - If a load is deposited at the site and then found to be excessively dusty, it will be dampened down before and during tipping.

3.2 Waste Operations

- 3.2.1 Green Future Recycling Limited are an accredited glass reprocessor. Storage and processing of waste glass includes the following EWC codes:

150107 glass packaging
170202 glass from construction and demolition
191205 glass from mechanical waste treatment
200102 glass separately collected fraction from municipal waste

- 3.2.2 Operations at the site will consist of:
- dry processing consisting of crushing and drying glass inside a building
 - glass washing in a dedicated wash plant outside in the yard
- 3.2.3 The site also accepts End of Waste glass for further processing into products.

Dry Processing

- 3.2.4 Material is deposited outside in the 'incoming waste storage area' shown on the site layout plan and is fed into a hopper which transports the material inside the processing building. It is first conveyed through a dryer then into a crusher. From the crusher it passes through a classifier and then onto a number of shaker decks which screen the material into different sizes.
- 3.2.5 The different fraction sizes are stored in silos before being packaged into product bags by an automated bagging plant. The finished products are stored inside the building and then dispatched to customers.

- 3.2.6 The incoming waste stockpile will not be in a bay, this will be freestanding. It will be maintained at a maximum height of 4 m and will be situated to the north of the processing building. This area is contained by the perimeter bund and shielded by the elevated profile outside the bund which forms the restored landfill

Washing

- 3.2.7 Incoming waste will be deposited in a bay next to the washplant and loaded into a hopper which feeds the 'wash bath', which is the main wash box. Lightweight material (eg. plastic and paper) floats off in the wash bath. In the case of EWC 19 12 05 this is generally bottle tops and labels that are mixed in with the waste glass. This is then dewatered before being stored inside a concrete block bay with concrete pavement. This material is a waste product and will be classified as EWC 19 12 12 removed from site to a permitted facility.
- 3.2.8 The heavier glass is screened into separate stockpiles of various sizes. Sand is also separated through a cyclone. The fractions will be stored in 4 m high concrete block bays around the wash plant as they are produced.
- 3.2.9 Wash water will be returned into a flocculation tank where it is separated into water/sludge by flocculation. Sludge will be sent for filtration and water is returned to the water feed tank for reuse. The plant will be a closed loop system, there will be no discharge of water. Water is lost as moisture in the filtercake and the system will be topped up with clean water. The water source will be harvested roof water and mains water.
- 3.2.10 The sludge will be filtered through a plate and frame filter press to produce a filtercake. This will be stored below the press in a covered housing.
- 3.2.11 Recycled products will meet end of waste requirements required by the PRN accreditation. This requires that products produced require no further processing to be fit for purpose and undergo quality control testing to show they are fit for purpose.
- 3.2.12 The annual permitted throughput for the site will be 75,000 tonnes per annum.
- 3.2.13 Table 3 below details the waste types that will be brought to site.

Waste Type	Dust Risk	Process and Storage location	Control Measures
15 01 07 Packaging (including separately collected municipal packaging waste): Glass packaging	Low: large particle sizes with minimal dust	Concrete walled bay, covered, on sealed drainage area (unless clean packaging then will be stored in yard for dry processing)	<ul style="list-style-type: none"> • Dry processing carried out inside a building with dust extraction • Incoming waste stored in free standing stockpiles outside – larger particle size, not easily windblown. • Final product of small particle size stored in silos, bagged inside to prevent product being windblown • Municipal glass and MRF glass stored in covered bay for control of run-off • Washed stockpiles stored in 3 sided bays with 0.5 m freeboard • Bunds around the site provide screening
17 02 02 Construction and demolition waste: Glass		Free standing stockpiles in yard next to building or next to wash plant	
19 12 05 Waste from mechanical treatment of waste: Glass		Concrete walled bay, covered, on sealed drainage area	
20 01 02 Municipal waste – separately collected fractions: Glass			

Table 3: Typical Waste Types brought to Site

3.3 Avoidance and Containment

- 3.3.1 The site will operate with a number of conveyors; both within the processing building and for the wash plant as shown on the Site Layout Plan (Drawing No 122/02).
- 3.3.2 The dry processing in-feed conveyor is located outside the main processing building. This external conveyor is not covered but it has protective sides to prevent material from falling off or being windblown.
- 3.3.3 Within the building, waste is fed firstly into the dryer, then conveyed to the crusher. It is then fed into the classifier, before being directed through screen decks to screeners.
- 3.3.4 From the screen decks the material is fed out of the building in a covered conveyor into two storage silos. From the silos, the material will be conveyed to the bagging plant in a covered conveyor and then once bagged, stored in the product storage building.
- 3.3.5 The wash plant conveyors will be open but constructed with protective sides to prevent material from falling off or being windblown, the same as the input conveyor to the dry processing building. The conveyors carrying material out of the wash plant are used to convey wet products, so the material will not raise dust, and the conveyors will not be enclosed.
- 3.3.6 The site is surrounded by a vegetated clay bund on all sides and the Westby landfill (south) rises above the site on all sides, providing adequate screening protection.

3.4 Minimisation of Drop Heights

- 3.4.1 Minimum drop heights for conveyors will be set as the minimum height required to clear the belt and allow a reasonable stockpile to accumulate beneath the conveyor. Material will not be unnecessarily thrown up into the air. The height of the conveyors will be checked as part of the daily start up checks and adjusted downwards if they are at an angle that is more than necessary. The precise drop heights are not yet known as the plant has not been constructed.

3.5 Speed Restrictions

- 3.5.1 A site speed limit of 5 mph is in place to prevent raising dust.

3.6 Material Handling

- 3.6.1 Movement of material at the site will be conducted by trained operators who are aware of the requirement for careful movement and avoidance of double handling.

3.7 Storage and Screening

- 3.7.1 Incoming material for dry processing is stored in the yard in free standing stockpiles. These will be maintained below 4 m in height. The stockpiles will be located between the building and the perimeter bund which will provide screening.
- 3.7.2 MRF glass will be stored in a covered concrete block bay with sealed drainage. Filtercake will be stored beneath the press housing on an impermeable surface with sealed drainage. Lights (trash) will be stored in a concrete block bay on sealed drainage.
- 3.7.3 The site is surrounded by a clay bund which is well vegetated and prevents dust from blowing off-site. In addition, beyond the bund the land to the north and east rises up by 3-4 m as it forms the dome of the restored landfill site, further enclosing the site.



Photograph 1: Looking to screening bund on northern boundary

- 3.7.4 Screened fractions produced by the wash plant will be stored in concrete block bays max 4 m high, with 0.5 m freeboard to prevent wind whipping. In addition, the bays are three sided and so will act as a windbreaker for the stockpiles when wind is blowing across the bays or from behind the bays. For wind blowing into the bays, the back wall of the bay will prevent material being blown out of the bay.
- 3.7.5 The majority of washed glass will be moved from the bays into the feed hopper for dry processing inside the building. The larger fraction size glass will have the option to be dispatched from site as cullet for remelt. If so, it will be transported in bulk in covered HGVs.

- 3.7.6 Products produced within the building are stored in silos prior to being transferred to the bagging plant, which is an automated process within an enclosed container. Bagged product will then be stored on pallets in the product storage building and removed from site for delivery direct to customers.

Waste type	Location	Form	Maximum Waste Pile Dimensions (m) ¹ L x W x H	Maximum Waste Pile Volume ² (approx m ³)
Incoming glass for dry processing	In yard	Bulk, unprocessed	8.5x8.5x4	142
Incoming glass for washing	In covered bay in yard	Bulk, unprocessed	9x9x3.5	189
Lights	In covered bay in yard	Bulk, processed	9x9x3.5	189
Washed products	In bays in yard	Bulk, processed	7.2x5.6x3.5	86
Washed products	In bays in yard	Bulk, processed	7.2x5.6x3.5	86
Washed products	In bays in yard	Bulk, processed	7.2x5.6x3.5	86
Washed products	In bays in yard	Bulk, processed	7.2x5.6x3.5	86
Filter cake	Under press housing in yard	Bulk, processed	15.2x6.7x4	407

Table 4: Waste Storage

3.8 Dust Suppression Equipment

- 3.8.1 The processing building is fitted with a dust extraction system with three dust filters shown on the site layout plan. The filters are pulse jet bag filters and are connected to extraction points within the building. The filter system alarms when the filter bags need changing, and a stock of replacement parts is maintained on site. Maintenance is carried out by the site operators.
- 3.8.2 A bowser will be housed on site for damping down external stockpiles and site roads and is moved around the site as required. The back valve of the bowser can be positioned downwards to spray the roads or upwards to spray an arc onto the stockpiles. The reach of the arc is 5m so it is sufficient to spray incoming stockpiles and screened glass.
- 3.8.3 Moisture content of the stockpile of incoming waste and processed products will be managed by damping down on dry days (ie. when not raining) using the mobile dust suppression unit described above. Damping will be recorded in the site diary to confirm it has been carried out. As it is mobile it can be moved around the site and positioned to any position on site. The bowser will be moved around throughout the day and placed in front of the various stockpiles and will be used to spray the stockpiles in a 5 m arc.

- 3.8.4 The operator will check that the material has been damped sufficiently before moving on to the next stockpile. Aggregate products will be considered adequately damp when they are visibly damp. If water is draining out of the stockpiles this is too much as the intention is for them to be damp, not wet and shedding water.
- 3.8.5 The locations where the suppression unit will be placed will be at strategic points around the site which include:
- next to the incoming waste stockpile
 - next to the product stockpiles (concrete bays)
 - next to the filtercake housing
- 3.8.6 The washing plant provides an inherent dampening effect. As the washed products and the filtercake are dampened by the washing activity, these should only require dampening during extended periods of warm and dry weather when these would dry out quickly. However the stockpiles will be checked daily and the mobile bowser will be available if/when required.
- 3.8.7 A road sweeper will be used to dampen and clean the access road. The sweeper has a washing attachment which sprays the surfaces as it sweeps so will serve as a dust suppression unit for the access road.
- 3.8.8 The Operations manager (OM) will conduct the daily checks and then instruct operators where to set up the mobile dust suppression unit if it is not raining. The OM will also instruct on whether to deploy the sweeper following the site inspection. The dust suppression units will be set up and operated by the site operatives. The road sweeper will be operated by the sweeper operative on instruction from the OM.
- 3.8.9 The triggers for the use of suppression will be:
- if it is not raining, has not rained overnight, and is not forecast to rain that day, all stockpiles will be damped by moving the mobile unit around the site during the day as detailed in 3.8.3
 - if incoming waste is flagged as dusty on first unsheeting and inspection
- 3.8.10 The suppression unit will be serviced and maintained in working order. Replacement parts and servicing will be provided by an approved supplier with established channels of communication so that the OM can arrange for repairs or replacements without delays.

- 3.8.11 The bowser will be refilled from the on site roof water storage tank at the end of each working day, ready for the next day. It will be parked/stored next to the water tank when not in use, as shown on the site layout plan. If the tank does not have sufficient supplies to fill the bowser it will be filled up from one of the mains supply points, which are located in the workshop and at the jet wash bay.
- 3.8.12 If no water was available on site water would be hired in by tanker as detailed in section 4.4 Contingency Actions, and if no water was available for hire, waste processing would be suspended as a backstop measure.
- 3.8.13 In the event of a power failure the dust suppression could still operate as it would not require mains electricity supply, it is operated hydraulically and using a diesel tractor unit.

3.9 Wheel Cleaning

- 3.9.1 The site does not operate with a fixed wheel wash but has a mobile jet wash that will be used to clean mud from vehicles. Vehicles will be checked by the banksman before leaving site and any muddy vehicles will be directed to the jet wash station for washing down before exit.
- 3.9.2 Mud on the road has not been an issue under the exempt operations as the site does not accept soil or general construction and demolition waste. It is not expected that this will become a problem once the site is permitted.

3.10 Water Supply

- 3.10.1 Water used for dust suppression is harvested roof water and mains water.
- 3.10.2 In the unlikely scenario that mains water is unavailable and the resulting site conditions gave rise to a high risk of dust emissions waste operations would be temporarily suspended.
- 3.10.3 If mains water is to be unavailable for an extended period, a water tanker will be brought in so that operations can continue.

3.11 Mobile Plant and Equipment

- 3.11.1 Waste treatment plant includes plant which will operate on diesel engines. Gaseous emissions will be produced by the internal combustion engines.
- 3.11.2 Mobile plant (eg loader, shovel) will be used at the site. The operator will ensure all mobile plant used at the site will be predominantly high tier⁹ emissions ratings plant.
- 3.11.3 IAQM guidance states that mobile plant are '*unlikely to make a significant impact on local air quality*', and would not need to be assessed as part of an Air Quality Assessment.

- 3.11.4 Regular servicing of plant, vehicles and machinery will be carried out according to applicable legislation. If replacement of plant/machine is required then the highest emission standard possible available will be purchased.
- 3.11.5 Daily checks on vehicles and plant are carried out by operatives before use and these are recorded on a check sheet.
- 3.11.6 All drivers of mobile plant and operators of stationary plant will be fully trained in the correct and safe use of the relevant machinery to ensure that the operating techniques are undertaken in line with the guidance within the manufacturers' instructions.
- 3.11.7 Staff will be trained on the use of mobile plant to reduce emissions where possible, including anti-idling.
- 3.11.8 Plant and machinery will be refuelled from the on-site bunded fuel tank.
- 3.11.9 Control of exhaust emissions from plant will be predominantly through use of high tier emissions standard⁸ plant/machinery and regular inspection and maintenance of machinery.

3.12 Housekeeping

- 3.12.1 Visual inspections will be conducted daily for mud on road, dust on surfaces and plant, and any actions required are recorded in the site diary.
- 3.12.2 If debris is building up anywhere at the site, shovelling and tidying will be conducted.
- 3.12.3 If mud is observed to be carried off site, a road sweeper will be deployed to clean the site entrance and access road.
- 3.12.4 Table 5 below details the housekeeping schedule that is in place.

Frequency	Action
Daily	Visual inspection for mud on road, dust on surfaces and plant – any actions required are recorded in the site diary Shovelling/tidying debris using loading shovel Call out of road sweeper if staining occurring

Table 5: Housekeeping Schedule

⁸ Emissions Standards are set out in the 'Non-Road Mobile Machinery (Emission of Gaseous and Particulate Pollutants) Regulations 1999' as amended.

3.13 Rejection of Dusty Waste

- 3.13.1 Waste would not be rejected due to dust as material can easily become dry in the summer months. Each load is assessed as it is unsheeted and if it raises dust immediately then it is damped down both before and during tipping.
- 3.13.2 The waste producer will be contacted and asked to damp down material as it is loaded to prevent reoccurrence.
- 3.13.3 Whole loads of powders and dust will not be accepted and would be rejected after the visible inspection and before offloading.

4. DUST AND PARTICULATE MANAGEMENT

4.1 Responsibility for Implementation of Plan

4.1.1 The Operations Manager (OM) has overall responsibility for the control of the waste operations at the site and is responsible for ensuring that the procedures in the DEMP are followed. The OM will:

- Ensure that the DEMP is effectively communicated, and that staff are competent to undertake their roles;
- Ensure that operations and management procedures outlined in this document are implemented and complied with;
- Ensure that the DEMP is reviewed annually, or following:
 - Permit variation
 - Accident, complaint or breach of permit
 - Any major changes to site operations
- Completion and storage of all required records for the DEMP.

4.1.2 The OM may delegate some mitigation tasks to site representatives (eg dust monitoring, dust suppression, training of other staff).

4.1.3 The DEMP will be stored in the site office.

4.1.4 Staff will be trained on the DEMP on induction, and this will be topped up twice per year with tool box talks. A training record will be maintained in the site office.

4.2 Sources and Control of Dust/ Particulates

4.2.1 Potential emissions that may be generated from waste operations at the site include the following:

- Dust from HGV movements,
- Dust from tipping, movement, crushing and screening of wastes;
- Dust from stockpiled material;
- Exhaust emissions from plant; and
- Exhaust emissions from HGV movements.

4.2.2 Potential dust sources from outside the site include:

- The Westby landfill site to the south – from engineering, tipping and vehicle movements
- Surrounding agricultural land – from periods of bare soil in between crop harvesting and replanting

4.2.3 Tables 6 and 7 below detail the sources of emissions at the site and include the pathways to identified receptors. Proposed mitigation and control measures are provided for each source-pathway-receptor linkage, and an assessment of overall risk is provided for each emission source.

Source	Pathway	Receptor	Type of Impact	Mitigation and Control Measures	Overall Risk
Mud: HGV movements, or from uncovered vehicles Brought out on wheels of vehicles and deposited off-site	Wheels and vehicles tracking mud on and off-site and dropping off when dry, then resuspension as airborne particles	Residential and commercial neighbours	Dust deposition soiling surfaces Visible dust plumes Elevated PM ₁₀ and associated health impacts Ecological impacts	Avoidance/ Containment: Limit vehicle speeds to < 5 mph. Ensure all HGVs are covered on entering and exiting site. Bund surrounding the site Suppression: Use of water to dampen site surfaces. Use of road sweeper if staining being carried off site Wheel cleaning Management Control (EMS): Daily monitoring of site entrance and access road. Visual dust monitoring during daily checks. All vehicles will be covered before entering and leaving site.	Low
Dust /particulates: Generated from waste tipping, processing, movement and stockpiles storage	Atmospheric dispersion (wind-blown dust)	Residential and commercial neighbours	Dust deposition soiling surfaces Visible dust plumes Elevated PM ₁₀ and associated health impacts Ecological impacts	Avoidance/ Containment: Dust extraction system in place to extract dust generated during processing inside the building. Minimise drop heights during tipping and movement of material. Clean up any spillages that occur during material loading into vehicles. Careful placement of material onto the crusher/screener, into vehicles or stockpiles by trained operatives. Suppression: Use of water to dampen stockpiles if dust is being generated. Management Control (EMS): Visual dust monitoring during daily checks.	Low

Table 6: Assessment of Risks from Dust/Particulates

Source	Pathway	Receptor	Type of Impact	Mitigation and Control Measures	Overall Risk
Gaseous pollutants: HGV exhaust emissions	Atmospheric dispersion	Residential and commercial neighbours	Increase in airborne particles and in nitrogen dioxide, sulphur dioxide and associated human health impacts	Avoidance/ Containment: Regulatory controls and best practice measures are in place. Management Control (EMS): Ensure all vehicles switch off engines - no idling vehicles. Regular inspection and maintenance. Use of higher tier emission standard machinery/plant where available.	Very Low
Gaseous pollutants: Mobile plant exhaust emissions	Atmospheric dispersion	Residential and commercial neighbours	Increase in airborne particles and in nitrogen dioxide, sulphur dioxide and associated human health impacts	Avoidance/ Containment: Regulatory controls and best practice measures are in place. Use of higher tier emission standard machinery/ plant where available. Management Control (EMS): Ensure all vehicles switch off engines - no idling vehicles. Regular inspection and maintenance.	Very Low

Table 7: Assessment of Risks from Gaseous Pollutants

4.3 Monitoring and Inspections

- 4.3.1 The OM or delegated representative will undertake daily on and offsite inspections for dust soiling of surfaces to monitor effectiveness of the DEMP. Inspection results will be recorded on the check sheet contained in Appendix D, and weather conditions recorded.
- 4.3.2 The checks will be made at dust monitoring points around the site boundary shown on Drawing No 122/02.
- 4.3.3 If visible dust is observed offsite, this will trigger the deployment of the road sweeper and use of dust suppression after review of the likely source of dust. Operatives will be trained to be more aware of dust potential during periods of strong winds and waste processing may be temporarily suspended.
- 4.3.4 Quantitative monitoring of dust is not proposed at this time due to the avoidance, containment and suppression mitigation measures in place. In addition, the site is not in an AQMA for dust and the background dust concentrations are low.

4.4 Contingency Action Plan

- 4.4.1 In the event that dust/particulates or excessive vehicle emissions are perceived as a concern following monitoring or as the result of a complaint, the source will be investigated by the OM.
- 4.4.2 When investigating any such report, the following factors will be considered:
- Location of the source relative to receptors;
 - Prevailing wind directions on site; and
 - Dust/particulates and vehicle emissions from external source
- 4.4.3 Remedial actions will be undertaken on an escalating basis and include the following:
- Simple repairs or modifications to plant or machinery or switching off equipment.
 - Use of water suppression on stockpiles or site roads.
- 4.4.4 The OM will co-ordinate more complex responses, which could include: review of customers at the pre-acceptance stage if certain hauliers continue to bring in mainly dusty loads or have excessive exhaust emissions; implementing a local community engagement exercise; or liaising with regulators.
- 4.4.5 Any incidents, their outcomes and details of any remedial actions taken related to emissions will be recorded in the site diary. Actions are summarised in Table 8.

Event	Action
Dust soiling on surfaces within site	<ul style="list-style-type: none"> - check if surfaces and stockpiles have been damped down, repeat if dry - check drop heights on conveyors are as low as possible - check locations outside of site boundary for off-site dust - deploy road sweeper
Dust soiling outside the site	<ul style="list-style-type: none"> - check screening is effective along site boundary - check stockpiles are below bay walls and rectify if necessary - check suppression has been applied and repeat if necessary - deploy road sweeper
Staining or debris along access road	<ul style="list-style-type: none"> - as determined by site manager during daily inspection - deploy road sweeper
Visible dust plume being carried off site	<ul style="list-style-type: none"> - temporarily suspend operations to investigate source/cause of dust emission - repeat damping down of surfaces and stockpiles - suspension of treatment during strong winds if dust cannot be adequately contained (see definition of strong winds in paragraphs 4.4.7 and 4.4.8)
Complaints received from neighbours	<ul style="list-style-type: none"> - investigate the weather conditions on the day of complaint - check plant settings and identify any issues or errors - depending on cause of complaint carry out appropriate action listed above - report back investigation findings and action taken to complainant
Mud observed on vehicles	<ul style="list-style-type: none"> - vehicle will be instructed to the jet wash station for cleaning

Table 8: Contingency Actions

4.5 Unfavourable Conditions

4.5.1 Unfavourable conditions are those in which the site cannot operate under optimum conditions and include unfavourable operational circumstances as well as conditions due to adverse weather and other natural causes. These are listed in Table 9 below.

Event	Action
Staff shortage causing processing delays and backlog of material	<ul style="list-style-type: none"> - Bring in trained staff from other sites or hire in suitable agency staff - if storage area full, divert incoming material to alternative sites to prevent excessive build up of material on site - apply daily dust suppression to stockpiles whilst working to clear backlog
Over supply of incoming waste causing backlog and overfull storage areas	<ul style="list-style-type: none"> - divert incoming material to alternative sites to prevent excessive build up of material on site - inform logistics team so they can find alternative sites whilst the backlog is cleared - apply daily dust suppression to stockpiles whilst working to clear backlog
Breakdown/malfunction of dust suppression equipment	<ul style="list-style-type: none"> - Instigate repair immediately - If equipment cannot be repaired within 24 hours then hire in replacement equipment - suspend if conditions are dry and dust is being raised on site
Breakdown of processing plant causing backlog of material and increase in stockpile sizes	<ul style="list-style-type: none"> - on-site engineer to instigate repairs immediately - if storage area full, divert incoming material to alternative sites to prevent excessive build up of material on site - apply daily dust suppression to existing stockpiles whilst waiting to restart processing
Receipt of extra dusty waste	<ul style="list-style-type: none"> - damp down before tipping and during tipping - if waste is predominantly dust the load will be rejected and reloaded - contact customer liaison to prevent future import of this material
Generation of more dust than anticipated during processing	<ul style="list-style-type: none"> - if material generates more dust than anticipated during processing, suspend processing and review. - direct dust suppression equipment to the area before recommencing - resume processing in small batches to maximise control of dust, suspend processing if dust cannot be controlled - remove material from site as a backstop option if it cannot be processed without causing pollution off site - contact customer liaison to review future acceptance of such waste
High Winds	<ul style="list-style-type: none"> - suspend processing if dust is being carried across site by strong winds
Heavy rain causing ponding of surface water preventing access	<ul style="list-style-type: none"> - suspend processing and pump water out of the waterlogged area to allow access
Failure of water supply	<ul style="list-style-type: none"> - hire in water tanker - suspend operations in dry conditions and wait for water supply
Drought conditions causing restriction of mains water	<ul style="list-style-type: none"> - operations will be scaled back and water conserved for use in suppression as a priority - if water supply fails completely and material becomes dry and windblown, stockpiles will be covered to prevent escape of dust

Table 9: Unfavourable Conditions

- 4.5.2 The OM will ensure that the site is equipped with contingency provisions for replacement plant and parts relating to emissions management equipment. The aim will be to repair equipment within 24 hours of breakdown. If key suppression equipment cannot be repaired or replaced within 24 hours, or other failure occurs (eg freezing water), the OM will consider whether to suspend processing operations based on the potential for dust emissions as a result of the breakdown.

Adverse Weather

- 4.5.3 Approximation of wind strength is by the physical effects on site. A force 6 strong breeze on the Beaufort Scale is described as 'large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty'. This would be the conditions under which external operations would be suspended if dust was being carried across the site.
- 4.5.4 A force 7 near gale on Beaufort Scale is described as 'whole trees in motion; inconvenience felt when walking against the wind'. Under these conditions all external processing would be suspended.

Out of Hours Arrangements

- 4.5.5 The site operates Monday to Saturday and is closed on Sundays and Bank Holidays. In dry weather the stockpiles and surfaces will be damped on Saturdays before closing up for the weekend.
- 4.5.6 In prolonged dry spells the OM will visit the site and damp down on Sundays or bank holidays.

Failure of Water Supply

- 4.5.7 If the mains water supply fails then water tankers will be hired in for suppression.

Emergency Procedures

- 4.5.8 If dust control methods fail, including contingency actions, then site operations will be suspended and the Environment Agency will be contacted to discuss the way forward.

5. REPORTING AND COMPLAINTS PROCEDURES

5.1 Reporting of Complaints

- 5.1.1 Any complaints relating to the site will be recorded on the form in Appendix C.
- 5.1.2 All complaints received will be recorded and investigated by the OM. A response will be reported back to the complainant within 2 days.
- 5.1.3 A record of incidents, accidents or non-conformances will be kept including the following information:
- Date and time of incident
 - What happened
 - What caused it
 - Details of any contamination
 - Who was involved
 - What action was taken
 - Were external agencies involved
 - Any changes that have been made to the procedures/ EMS to ensure the incident does not reoccur
- 5.1.4 If numerous complaints are received operations will cease whilst an investigation is carried out and the issue is rectified.

5.2 Management Responsibilities

- 5.2.1 The responsibility of handling complaints is with the OM with support from a senior manager. Incidents are investigated by the OM whereby rectifying action is determined.

5.3 Community Liaison

- 5.3.1 Liaison with immediate neighbours is undertaken by phone call or by visiting in person.
- 5.3.2 A community liaison group will be established if liaison with the wider community is required.

6. SUMMARY AND CONCLUSIONS

- 6.1 Waste operations at the site will consist of processing waste glass to produce recycled products using dry processing inside a building and wet processing externally.
- 6.2 The sensitivity of receptors to adverse impacts from dust has been assessed in accordance with IAQM guidance. Identified receptors in the surrounding area were assessed as having low sensitivity to both dust soiling and human health impacts predominantly due to their distance from dust/PM sources at the site.
- 6.3 The closest places of work is Westby landfill to the south, which is also a possible dust source, and is assessed as being a low risk receptor. The Peel Hall Business Park is located 210 m to the north-east, and the closest residential properties are over 210 m from the site; all of which are considered as being low risk receptors due to distance from site.
- 6.4 Prevention of emissions will be through: dust extraction and capture in filter units from the main processing building, regular inspections of on and off-site roads, limiting vehicle speeds, and anti-idling policy. Suppression measures include the use of a water bowser to dampen surfaces and stockpiles. The overall risk of emissions following mitigation measures has been determined as low.
- 6.5 The site also benefits from a clay bund and vegetation screening around the site and the restored Westby landfill which surrounds the site to the west, north and east, providing natural dust screening to the surrounding receptors.
- 6.6 The DEMP will be reviewed annually as part of the annual review of the EMS, following any complaints received relating to emissions or following relevant variations to the waste operations.

APPENDIX A

Drawings



ORDNANCE SURVEY © CROWN COPYRIGHT 2023. ALL RIGHTS RESERVED. LICENCE NUMBER 100022432.

LEGEND — SITE LOCATION

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton,
Greater Manchester, BL1 3AJ
www: starlingenvironmental.co.uk
email: claire@starlingenvironmental.co.uk
Tel: 07989 673122

CLIENT
GREEN FUTURE RECYCLING LIMITED

JOB TITLE.
GREEN RECYCLING, THE OLD BRICKWORKS, BLACKPOOL

DRAWING TITLE.
SITE LOCATION PLAN

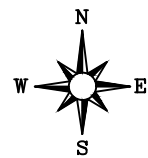
DRAWN BY.
M.Y.B

DATE.
26/08/24

SCALE © A4.
1:50,000

APPROVED BY.
C.G

DRAWING No.
122/01



LEGEND

PERMIT BOUNDARY	CONCRETE	MAINS WATER	FUEL STORAGE	PALLISADE FENCING	GATE	DUST MONITORING POINT	SPILL KIT	WATER HOSE	DUST FILTER	BUILDING ENTRANCE	WATER DISCHARGE POINT
-----------------	----------	-------------	--------------	-------------------	------	-----------------------	-----------	------------	-------------	-------------------	-----------------------

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton, Greater Manchester, BL1 3AJ
www: starlingenvironmental.co.uk
email: claire@starlingenvironmental.co.uk
Tel: 07989 673122

CLIENT
GREEN FUTURE RECYCLING LIMITED

JOB TITLE.
GREEN RECYCLING, THE OLD BRICKWORKS, BLACKPOOL

DRAWING TITLE.
SITE LAYOUT PLAN

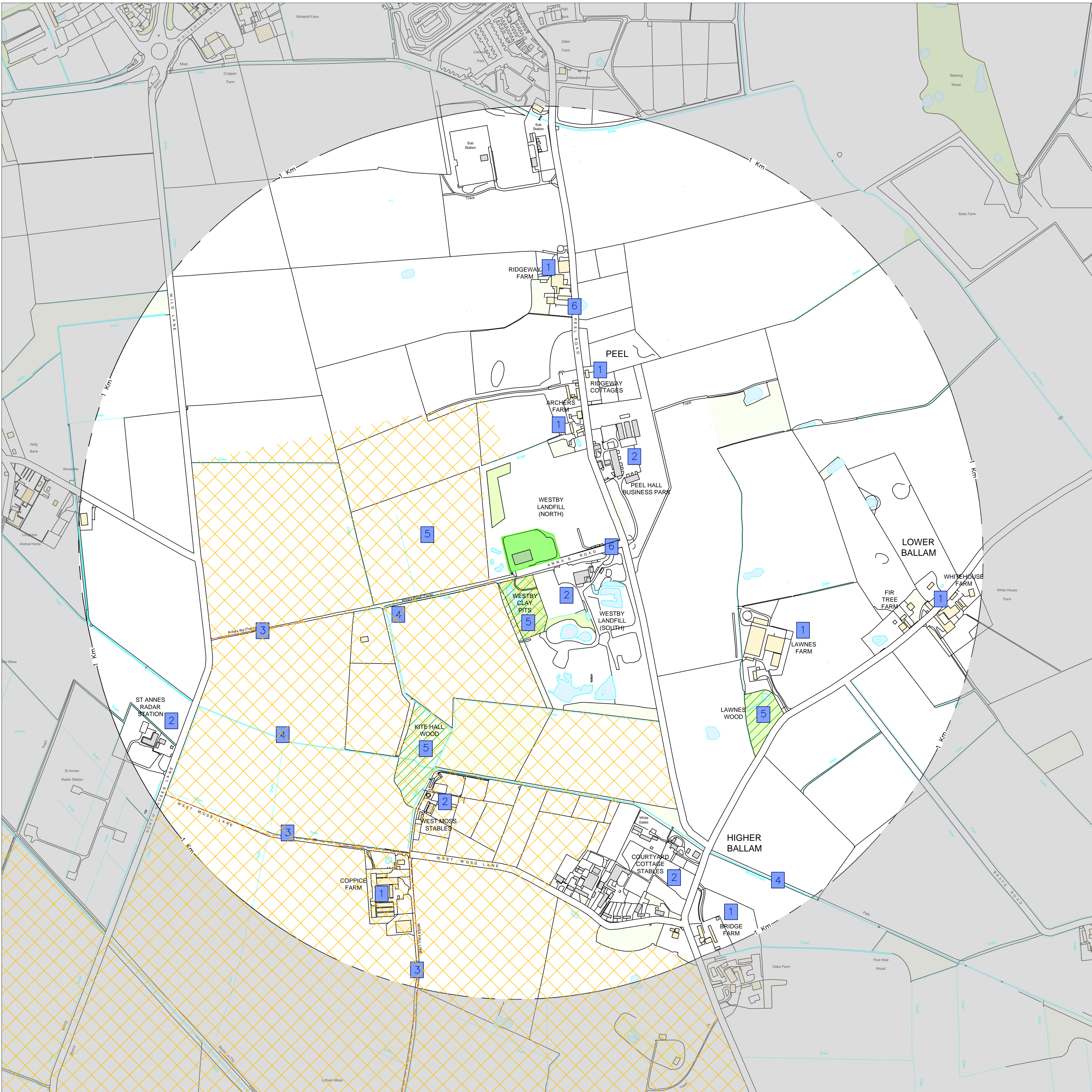
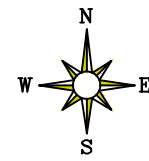
DRAWN BY.
M.Y.B

DATE.
26/08/24

SCALE @ A3.
1:1000

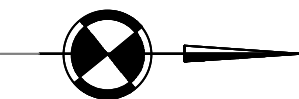
APPROVED BY.
C.G

DRAWING No.
122/02



LEGEND

- PERMIT AREA
- 1 KM RECEPTOR BOUNDARY
- FOOTPATHS
- RESIDENTIAL BUILDINGS
- INDUSTRIAL/COMMERCIAL
- WOODLAND
- PRIORITY HABITAT WOODLAND
- LYTHAM MOSS BIOLOGICAL HERITAGE SITE
- WATERBODIES/WATERWAYS
- RECEPTOR REFERENCE



PREVAILING WIND DIRECTION (FROM THE WEST)

REV.	DESCRIPTION	DATE	BY
------	-------------	------	----

STARLING ENVIRONMENTAL LIMITED
67 Chorley Old Road, Bolton,
Greater Manchester, BL1 3AJ
www: starlingenvironmental.co.uk
email: claire@starlingenvironmental.co.uk
Tel: 07989 673122

CLIENT:
**GREEN FUTURE
RECYCLING LIMITED**

JOB TITLE:
**GREEN RECYCLING
THE OLD BRICKWORKS**

DRAWING TITLE:
**RECEPTORS
WITHIN 1 KM**

DRAWN BY: M.Y.B	APPROVED BY: C.G	DRAWING No. 122/03
DATE: 12/08/24	SCALE @ A1: 1:4000	

APPENDIX B

Assessment Method

1 Assessment Method

1.1 The assessment proceeds stepwise as illustrated in Figure 2 below, reproduced from the IAQM Guidance on the assessment of dust from demolition and construction.

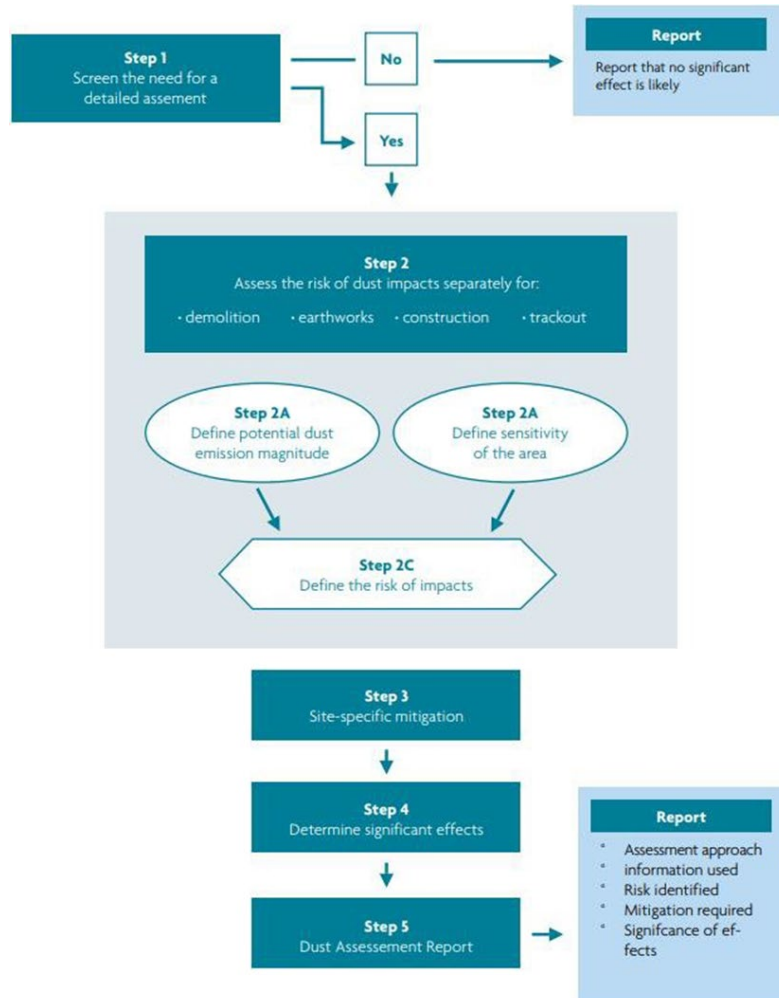


Figure A1: Assessment Procedure

2 Step 1: Screen the Need for a Detailed Assessment

- 2.1 An assessment is normally required when there is a human receptor within 350 m of the boundary of the site and 50 m of the route used by construction vehicles. This site fits within this location as it is surrounded by commercial operators which are considered human receptors and so will require an assessment.

3 Step 2: Assess the Risk of Dust Impacts

- 3.1 This step is split into three sections as follows:

- 2A -define the potential dust emission magnitude;
- 2B - define the sensitivity of the area; and
- 2C - define the risk of impacts.

- 3.2 In Step 2A, each of the dust-generating activities is examined and a dust emission magnitude determined depending on the scale and nature of the works based on the criteria shown in Table 3 below.

Dust emission magnitude		
Small	Medium	Large
Demolition		
<ul style="list-style-type: none"> • total building volume <20,000m³ • construction material with low potential for dust release (e.g. metal cladding or timber) • demolition activities <10m above ground • demolition during wetter months 	<ul style="list-style-type: none"> • total building volume 20,000 - 50,000m³ • potentially dusty construction material • demolition activities 10 - 20m above ground level 	<ul style="list-style-type: none"> • total building volume >50,000m³ • potentially dusty construction material (e.g. concrete) • on-site crushing and screening • demolition activities >20m above ground level
Earthworks		
<ul style="list-style-type: none"> • total site area <2,500m² • soil type with large grain size (e.g. sand) • <5 heavy earth moving vehicles active at any one time • formation of bunds <4m in height • total material moved <10,000 tonnes • earthworks during wetter months 	<ul style="list-style-type: none"> • total site area 2,500m² - 10,000m² • moderately dusty soil type (e.g. silt) • 5 – 10 heavy earth moving vehicles active at any one time • formation of bunds 4 – 8m in height • total material moved 20,000 - 100,000 tonnes 	<ul style="list-style-type: none"> • total site area >10,000m² • potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size) • >10 heavy earth moving vehicles active at any one time • formation of bunds >8m in height • total material moved >100,000 tonnes

Table A1: Dust Emission Magnitude (continued over)

Appendix B: Assessment Methodology

Construction		
<ul style="list-style-type: none"> total building volume <25,000m³ construction material with low potential for dust release (e.g. metal cladding or timber) 	<ul style="list-style-type: none"> total building volume 25,000 - 100,000m³ potentially dusty construction material (e.g. concrete) on-site concrete batching 	<ul style="list-style-type: none"> total building volume >100,000m³ on-site concrete batching sandblasting
Trackout		
<ul style="list-style-type: none"> <10 HDV (>3.5t) outward movements in any one day surface material with low potential for dust release <ul style="list-style-type: none"> unpaved road length <50m 	<ul style="list-style-type: none"> 10 – 50 HDV (>3.5t) outward movements in any one day moderately dusty surface material (e.g. high clay content) <ul style="list-style-type: none"> unpaved road length 50 – 100m; 	<ul style="list-style-type: none"> >50 HDV (>3.5t) outward movements in any one day potentially dusty surface material (e.g. high clay content) <ul style="list-style-type: none"> unpaved road length >100m

Table A1 continued: Dust Emission Magnitude

3.7 Step 2B requires the sensitivity of the surrounding area to be determined for each activity, based on the proximity and number of receptors, their sensitivity to dust, the local PM₁₀ background concentrations and any other site-specific factors. Tables A2 to A4 show the criteria for defining the sensitivity of the area to different dust effects.

Receptor sensitivity	Number of receptors	Distance from the source (m)			
		< 20	< 50	< 100	< 350
High	> 100	High	High	Medium	Low
	10 – 100	High	Medium	Low	Low
	< 10	Medium	Low	Low	Low
Medium	> 1	Medium	Low	Low	Low
Low	> 1	Low	Low	Low	Low

Table A2: Sensitivity of the area to dust soiling effects

Background PM ₁₀ concentrations (annual mean)	Number of receptors	Distance from the source (m)				
		< 20	< 50	< 100	< 200	< 350
High receptor sensitivity						
> 32µg/m ³	> 100	High	High	High	Medium	Low
	10 – 100		Medium	Low		
	< 10		Medium	Low		
28 – 32µg/m ³	> 100	High	High	Medium	Low	Low
	10 – 100		Medium	Low		
	< 10					
24 – 28µg/m ³	> 100	High	Medium	Low	Low	Low
	10 – 100					
	< 10	Medium	Low			
< 24µg/m ³	> 100	Medium	Low	Low	Low	Low
	10 – 100	Low				
	< 10					
Medium receptor sensitivity						
> 32µg/m ³	> 10	High	Medium	Low	Low	Low
	< 10	Medium	Low			
28 – 32µg/m ³	> 10	Medium	Low	Low	Low	Low
	< 10	Low				
24 – 28µg/m ³	> 10	Low	Low	Low	Low	Low
	< 10					
< 24µg/m ³	> 10	Low	Low	Low	Low	Low
	< 10					
Low receptor sensitivity						
–	> 1	Low	Low	Low	Low	Low

Table A3: Sensitivity of the area to human health impacts

Receptor sensitivity	Distance from the source (m)	
	< 20	< 50
High	High	Medium
Medium	Medium	Low
Low	Low	Low

Table A4: Sensitivity of the area for ecological impacts

3.8

The overall risk of the impacts for each activity is then determined (step 2C) prior to the application of any mitigation measures and an overall risk for the site derived.

Sensitivity of area	Dust emission magnitude		
	Large	Medium	Small
Demolition			
High	High risk site	Medium risk site	Medium risk site
Medium	High risk site	Medium risk site	Low risk site
Low	Medium risk site	Low risk site	Negligible
Earthworks			
High	High risk site	Medium risk site	Low risk site
Medium	Medium risk site	Medium risk site	Low risk site
Low	Low risk site	Low risk site	Negligible
Construction			
High	High risk site	Medium risk site	Low risk site
Medium	Medium risk site	Medium risk site	Low risk site
Low	Low risk site	Low risk site	Negligible
Trackout			
High	High risk site	Medium risk site	Low risk site
Medium	Medium risk site	Low risk site	Negligible
Low	Low risk site	Low risk site	Negligible

Table A5: Risk of dust impacts

- 3.9 The receptor sensitivity assessment and determination of impacts includes assessment of receptors within 350 m of the site boundary and within 50 m of the access route up to 500 m from the site.

4 Step 3: Site Specific Mitigation

- 4.1 Once each of the activities is assigned a risk rating, appropriate mitigation measures are identified based on recommendations in the IAQM guidance. Where the risk is negligible, no mitigation measures beyond those required as best practice are necessary.

5 Step 4: Determine Any Significant Residual Effects

- 5.1 Once the risk of dust impacts has been determined and the appropriate dust mitigation measures identified, the final step is to determine whether there are any residual significant effects. The IAQM construction dust guidance notes that it is anticipated that with the implementation of effective site-specific mitigation measures, the environmental effect will not be significant in most cases.

6 Step 5: Prepare a Dust Assessment Report

- 6.1 The last step of the assessment is the preparation of a dust assessment.

APPENDIX C

Complaints Record

ENVIRONMENTAL COMPLAINT RECORD

DATE		TIME	
------	--	------	--

Details of the Complainant

Name	
Address	
Tel No	

Details of the Complaint

What is the complaint
Have you carried out an investigation as per the complaints procedure, briefly detail:
What action have you taken
Was there any SIGNIFICANT pollution or environmental impact YES / NO
If YES please detail below
If YES provide the information to the WAMITAB holder for notification to the Environment Agency
Date and Time Environment Agency informed
Name of Person Informed
Date and Time of report back to the Complainant
Details of any changes to procedures or the EMS

APPENDIX D

Monitoring Checklist

DEMP Checklist

Date:

Checked by:

Weather**example checksheet**

18/03/2025

site manager

rain

Item	Observations/Actions	Actions Completed
Check for dust at monitoring points as shown on site layout plan	No dust	
Check site entrance for staining.	Staining at entrance, sweeper dispatched.	
Check conveyor drop heights are set to minimum	Bay 1 conveyor too high, adjusted down	
Check stockpiles have been damped down if not raining/recently stopped raining	raining, dampening not required	

Version 1; March 2025



**Starling
Environmental
Limited**