DUST MANAGEMENT PLAN

Holroyd Aggregates, Stockfield Road, Oldham, OL9 9LL

Holroyd Skip Hire Limited

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Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants

Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ
Tel: 01606 558833 | Fax: 01606 861183 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk
REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

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1.0	07/07/2022	TH	--	Internal Draft
1.1	05/09/2022	CP	HSH	Application copy
1.2	11/04/2023	CP	HSH	EA comments; update to site plan in Appendix I.

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1 Introduction

1.1 Site history / background

1.1.1 Oaktree Environmental Ltd have been instructed by Holroyd Skip Hire Limited to prepare a Dust Management Plan (DMP) for their site situated at Holroyd Aggregates, Stockfield Road, Oldham, OL9 9LL.

1.1.2 All references to the site in this DMP shall mean the permitted boundary extracted from the EP.

1.1.3 This DMP will allow Holroyd Skip Hire Limited to implement an action plan should the site operatives detect the presence of airbourne dust escaping beyond the site boundary, receive complaints from local business or residents and should the EA suspect dust emissions from the site during an inspection.

1.1.4 This DMP has been prepared to meet the requirements of The Environmental Permitting (England and Wales) Regulations 2016 and the Environment Agency's Guidance: "*Develop a management system: environmental permits*" published 01/02/2016 (updated 04/08/2021 and "*Control and monitor emissions for your environmental permit*" published 01/02/2016, updated 17/05/2021. Reference has also been made to "*Non-hazardous and inert waste: appropriate measures for permitted facilities*" published 12/07/2021.

1.1.5 All references to the site in this DMP shall mean the permitted boundary extracted from the EP. The following references which shown throughout this DMP are defined as the following:

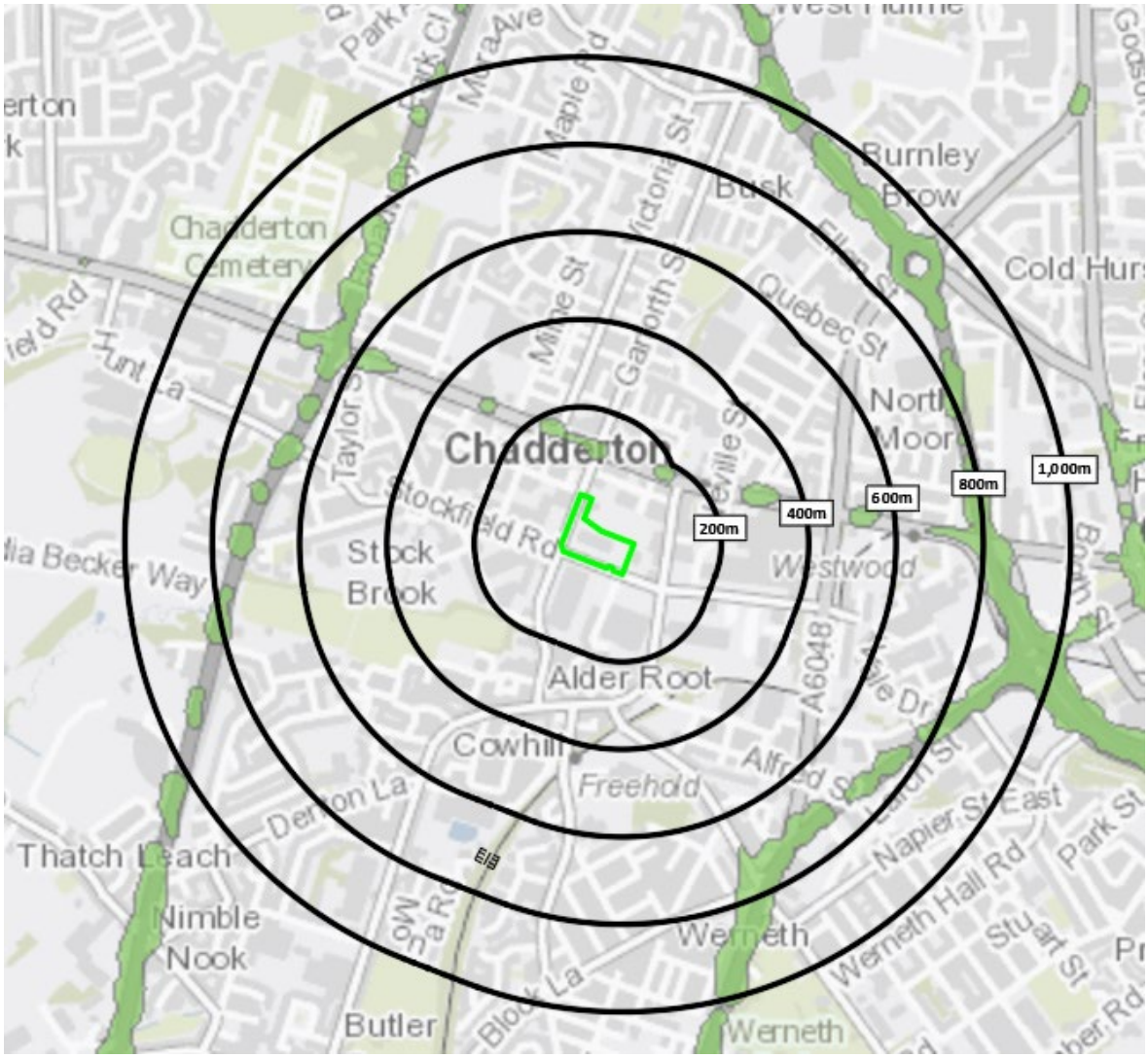
- **Prolonged rainfall** = 1 in 100-year flood event or 3 more wet days
- **High winds** = Weather forecast predicting winds over 45mph / gale force or if dust is being emitted beyond the site boundary
- **Dry weather** = three dry days or weather conditions exceeding 75^0F for more than one day.
- **Severe weather conditions** = The above and including dense fog, hail or snow.

- **Significant levels of dust** = Activities with the potential to emit dust beyond the site boundary.

1.2 Site location

1.2.1 The site is located at Holroyd Aggregates, Stockfield Road, Oldham, OL9 9LL as shown on Drawing No. STO/2985/03.

1.2.2 **AQMA** – The site is not located within an AQMA area, however, there are AQMA's (shown in **green**) located within close proximity to the site with the nearest being approximately 110m from the northern boundary of the site on Middleton Road. Other AQMA boundaries are shown in the image below. The declared pollutants of the AQMA are NO_x (as NO2).



1.2.3 The nearest AQMA monitoring point is located at NGR SD938091 and approximately 5km north-east of the site. The monitoring point is Shaw Crompton Way.

1.2.4 The measures in this DMP detail how the emissions from the site will be reduced to a minimum to avoid any further impact to the surrounding AQMA's.

1.3 Facility overview

1.3.1 Holroyd Skip Hire Limited will operate HCI waste transfer station with treatment which will primarily involve:

- Acceptance, tipping and sorting (by hand or excavator) of mixed HCI waste for bulking prior to being sent off site for further treatment; and,
- Mechanical treatment of inert soil and stones by screening and crushing

1.3.2 The main issue of dust could arise from, but not limited to the following:

i) Waste reception and tipping areas (internal and external);
ii) Manoeuvring of vehicles tracking dust
iii) Operation of mechanical treatment plant in external areas of the site
iv) Storage and loading areas comprising potentially 'dusty' wastes.

1.3.3 In addition to this document, the site will also operate in accordance with a number of site-specific documents; namely an Environmental Management System (EMS) which will make reference to this DMP.

1.3.4 All relevant operational staff will be suitably trained to ensure they understand the purpose of this DMP and understand what actions need to be taken in event of a complaint. Training will be taken by the site manager, technically competent manager/s (TCM/s) or third-party Dust / Air Monitoring Consultant.

2 Sensitive Receptors

2.1 Receptor Plan

2.1.1 A sensitive receptors plan (SRP) has been produced to accompany this DMP and is shown in Appendix I referenced as on Drawing No. STO/2985/04.

2.2 List of receptors

2.2.1 The receptors listed from the SRP are also shown in the table below with approximate distances to these properties.

Table 2.1 – Distances to Selected, Representative Sensitive Locations

Boundary	Receptor	Approximate distance from boundary of site (m)
All	Residential properties	165 – 1,000
All	Surrounding waste, industrial and commercial sites on Lansdowne Rd, Middleton Road, Crompton St, Ward St, Peel St and Stockfield Rd	0 - 250
North-west	Woodlands Medical Practice	410
South-east	Dr Sidhus Medical Practice	480
South-east	Werneth Medical Practice	540
West	Saint Luke's Church of England Primary School	480
North-west	St Herbert's RC Primary School	675
North-west	The Radcliffe School	1,000
South-west	Sunshine Nursery and Christ Church of England	675
North-east	St Patricks RC Primary School	945
East	Westwood High	525
North	Burnley Brow Community School	820
North-west	Bare Trees Primary	800
North-east	Northmoor Academy	990
North-east	Westwood Academy	515
East	Richmond Academy	675
South	Freehold Community Academy	575
South-east	Darul Hadis Latifiah Northwest	805
West	Stockbrook Children's Centre	500
North-west	Springbank Hotel	450
All	AQMA boundaries shown in Section 1.2.2	110 – 1,000
All	Various small retail, public houses and other leisure facilities	225 – 1,000

2.2.2 Other receptors not shown in the above table are illustrated on Drawing No. STO/2985/04.

2.3 Other dust and emission sources

2.3.1 Other dust/particulate emitting operators are tabulated below in the table below.

Table 2.2 – Other Dust/Particulate Emitting Operators

Company	Address	Type of Business	Distance & location from site boundary (m)	Possible Dust Issue
V A G Breakers Ltd	Unit 3, Stockfield Road, Chadderton, Oldham, Lancashire, OL9 9HD	E*LV facility*	20 – 50 / east	Visual soiling and airborne particulates including TSP High levels of nitrogen dioxide (NO2)
Oldham Salvage (U K) Ltd	4, Lansdowne Road, Chadderton, Oldham, Lancashire, OL9 9EF	E*LV facility*	20 – 50 / north-east	As above
S U E Z Recycling and Recovery U K Ltd	Arkwright Street Resource Recovery Centre, Arkwright Street, Chadderton, Oldham, Lancashire, OL9 9LZ	Household Waste Amenity Site	300 / south-east	As above
CEMEX Oldham Concrete Plant	Peel St, Chadderton, Manchester OL9 9LN	Concrete manufacturer	210 / south-west	As above
Hanson Ready-Mixed Concrete	Forge Mill, Peel St, Chadderton, Oldham OL9 9LN	Concrete manufacturer and supplier	230 / south-west	As above
Various	Various	Surrounding industry, commerce and business using HGVs on surrounding roads	0 – 1,000 / variable	High levels of nitrogen dioxide (NO_2)

3 Site Operations

3.1 Waste deliveries/removals

3.1.1 Waste will be delivered to the site via the existing access off Stockfield Road which is surfaced with concrete. Upon arrival into the site, an operative will direct the driver to the relevant area.

3.1.2 Waste will arrive and depart at/from the site primarily consisting of Holroyd Skip Hire Limited's own vehicles/contracts and all loads are either sheeted or contained upon delivery and removal.

3.1.3 Any third-party deliveries to the site will be advised that any potentially dusty loads be suitably sheeted. If the customer has the capability to wet down potentially dusty loads, they will be asked to do this. If a customer is unable to place a dust sheet on a vehicle or wet a load they will be prohibited from loading/unloading until suitable containment has been provided. In more extreme cases customers may be asked to leave the site immediately.

3.1.4 Following initial inspection of the load, if any loads are found to be containing high levels of powders, it will be rejected in accordance with the site's rejected waste procedure.

3.2 Site infrastructure

3.2.1 The site infrastructure is clearly detailed on Drawing No. STO/2985/03 which is shown in Appendix I of this DMP. The drawing illustrates the following areas on site:

i) Different surfaces i.e. concrete, tarmac etc.
ii) Location of buildings
iii) Height/type of perimeter fencing
iv) Reception and storage areas of waste
v) Location of fixed plant/equipment i.e. loading hoppers, screeners, crushers
vi) Existing dust mitigation techniques
vii) Locations of mains water points and vehicle wash-down areas

3.3 Accepted wastes with dust potential

3.3.1 The table below details the EWC codes for all potentially dusty wastes which could be accepted into the site and those highlighted in red are those which the site will accept on a daily basis and those in green are additional waste types proposed to be in the permit which the site could accept.

Table 2.1 – Accepted dusty wastes

EUROPEAN WASTE CATALOGUE - COMMISSION DECISION 2000/532/EC	
CODE	WASTE TYPE
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	wastes from mineral non-metalliferous excavation
01 03	wastes from physical and chemical processing of metalliferous minerals
01 03 09	red mud from alumina production other than the wastes mentioned in 01 03 07
01 04	wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
01 04 11	wastes from potash and rock salt processing other than those mentioned in 01 04 07
01 04 12	tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
01 04 13	wastes from stone cutting and sawing other than those mentioned in 01 04 07
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 02	wastes from the preparation and processing of meat, fish and other foods of animal origin
02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
02 02 03	materials unsuitable for consumption or processing
02 03	wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
02 03 04	materials unsuitable for consumption or processing
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beer
02 04 02	off-specification calcium carbonate
02 05	wastes from the dairy products industry
02 05 01	materials unsuitable for consumption or processing
02 06	wastes from the baking and confectionery industry
02 06 01	materials unsuitable for consumption or processing
02 07	wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
02 07 04	materials unsuitable for consumption or processing
03	WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE PULP, PAPER AND CARDBOARD
03 01	wastes from wood processing and the production of panels and furniture

EUROPEAN WASTE CATALOGUE - COMMISSION DECISION 2000/532/EC	
CODE	WASTE TYPE
03 01 05	sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04
03 03	wastes from pulp, paper and cardboard production and processing
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
06	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 09	wastes from the MFSU of phosphorous chemicals and phosphorus chemical processes
06 09 02	phosphorous slag
06 09 04	calcium-based reaction wastes other than those mentioned in 06 09 03
06 11	wastes from the manufacture of inorganic pigments and opacifiers
06 11 01	calcium-based reaction wastes from titanium dioxide production
10	WASTES FROM THERMAL PROCESSES
10 01	waste from power stations and other combustion plants
10 01 01	bottom ash and slag only
10 01 02	pulverised fuel ash only
10 01 05	gypsum (solid) only
10 01 07	gypsum (sludge) only
10 01 15	bottom ash and slag only from co-incineration other than those mentioned in 10 01 14
10 02	wastes from the iron and steel industry
10 02 01	wastes from the processing of slag
10 02 02	unprocessed slag
10 02 14	sludges and filter cakes from gas treatment other than those mentioned in 10 02 13
10 02 15	other sludges and filter cakes
10 08	wastes from other non-ferrous thermal metallurgy
10 08 18	sludges and filter cakes from flue-gas treatment other than those mentioned in 10 08 17
10 12	wastes from the manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 10	wastes from asbestos-cement manufacture other than those mentioned in 10 13 09
10 13 14	waste concrete and concrete sludge
11	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 10	sludges and filter cakes other than those mentioned in 11 01 09
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
17 08	gypsum-based construction materials
17 08 02	gypsum-based construction materials other than those mentioned in 17 08 01
17 09	other construction and demolition wastes

EUROPEAN WASTE CATALOGUE - COMMISSION DECISION 2000/532/EC	
CODE	WASTE TYPE
17 09 04	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 10	wastes from shredding of metal-containing wastes
19 10 04	fluff-light fraction and dust other than those mentioned in 19 10 03
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 07	wood other than that mentioned in 19 12 06
19 12 09	minerals (for example sands, stones)
19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
19 13	wastes from soil and groundwater remediation
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	separately collected fractions (except 15 01)
20 01 41	wastes from chimney sweeping
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones
20 03	other municipal wastes
20 03 03	street-cleaning residues

3.4 Stored wastes with dust potential

3.4.1 The table overleaf details a summary of the main wastes types which will be stored at the site, the rows highlighted in in red are considered to be those wastes which have the potential to cause dust. The waste types shown below are anticipated to be those accepted and stored on a daily basis.

3.4.2 The site will also store non-waste aggregates such as 6F5, MOT, TYPE 1 which could create dust, storage areas for these materials are shown on Drawing No. STO/2985/03.

3.4.3 :

Table 3.2 - Waste storage table for stored dusty wastes

Waste Storage Area Details - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH												
Plan Ref	**Description**	**Storage type**	**Containment**	**Height / width of firewall (m)**	**Max Width (m)**	**Max Length (m)**	**Height (m)**	**Max area (m2)**	**Conversion factor used**	**Volume (m3)**	**Tonnage (approx.)**	**Maximum storage durations**
AREA 1	Waste reception (tipping), inspection and sorting area **(clear out-of-hours)**	Free-standing / unprocessed	N/A	N/A	10	10	1	100	0.333	33	11	<2 hours
AREA 2	Bulky Stone/concrete/hardcore	Free-standing / hand sorted from AREA 1	Free standing pile / concrete block wall to the north	6 / 0.4	25	15	5	325	0.75	1219	1463	<6 months
AREA 3	Tyre skips	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip / concrete block wall to the north	4 / 0.4	6.1	2.44	2.62	14.884	1	39	10	<4 weeks
AREA 4	Sorted recyclables i.e. wood, residual waste etc.. (contents in skip may vary	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip / concrete block wall to the north	N/A	6.1	2.44	2.62	14.884	1	39	10	<2 weeks
AREA 5	Wood	Free-standing / hand sorted from AREA 1	Free standing pile / concrete block wall to the north and east	4 / 0.4	13	10	3	130	0.75	293	146	<4 weeks
AREA 3, 4 & 5 TOTAL										370		
AREA 6	Soil skip	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip	4 / 0.4	6.1	2.44	2.62	14.884	1	39	40	<6 months
AREA 7	Mixed municipal waste	Free-standing / hand sorted from AREA 1	Free-standing inside two-sided concrete block wall to the east and south and inert skip to the north	4 / 0.4	15	6	3	90	0.75	203	67	<2 weeks
AREA 8	Bulky waste i.e. mattresses	As above	Free-standing inside a three-sided concrete block wall	4 / 0.4	5.5	5	3	27.5	0.75	62	20	<2 weeks
AREA 9	Green waste	Free-standing / hand sorted from AREA 1 or arrive in separate loads	Free-standing inside two-sided concrete block wall to the east and north	4 / 0.4	15	7	3	105	0.75	236	78	<2 weeks
AREA 10	Sorted recyclables i.e. wood, residual waste etc.. (contents in skip may vary	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip	N/A	6.1	2.44	2.62	14.884	1	39	10 - 20	<2 weeks
AREA 11	Soils and stone	Free-standing / hand sorted from AREA 1	Free-standing pile / concrete block wall to the north, east and south	4 / 0.18	5	5	2	25	1	50	60	<2 weeks
AREA 12	Bulky concrete, hardcore, stone for crushing	Free-standing	Free-standing pile / building walls to the south	N/A	25	9	4	225	0.5	450	540	<6 months
AREA 13	Residual waste and scrap metal arising from crushing process	Open topped 8 cubic yard skips	N/A	N/A	3.7	1.7	1.3	6.29	1	8	5 - 10	<2 weeks
AREA 14	Bulky concrete, hardcore, stone for crushing	Free-standing	Free-standing pile / building walls to the north	N/A	10	10	2	100	0.5	100	120	<3 months
AREA 15	Scrap metal arising from crushing process	Open topped 8 cubic yard skip	N/A	N/A	3.7	1.7	1.3	6.29	1	8	5 - 10	<2 weeks

3.4.4 Reference should be made to the Risk Assessment Tables outlined in Section 5.7 and the control measures outlined in Section 4 for details of the handling procedures and mitigation measures in place for wastes stored at the site.

3.5 Overview of site operations

3.5.1 All mixed loads received on site will be deposited in the mixed waste reception (**AREA 1**) and waste is subject to an initial sort either by hand or using a shovel/excavator. The sorted wastes are then stored in various storage bays or containers situated around the site.

3.5.2 All inert material which is delivered pre-segregated or sorted from **AREA 1** is stored pending mechanical treatment using screeners and the crusher to turn into a non-waste aggregate.

3.6 Processed waste types/product

3.6.1 All processed wastes arising from the mechanical treatment plant are stored as shown on STO/2985/03.

3.7 Mobile plant and equipment

3.7.1 Mobile plant and equipment along with their preventative maintenance are clearly detailed in the site's Fire Prevention Plan (FPP) and not considered necessary to duplicate as part of this DMP.

3.7.2 A no idling policy is in place which ensures that engines are switched off when vehicles or plant are not in use. This policy will ensure that tail pipe emissions are significantly reduced.

4 Dust Management & Control Measures

4.1 Responsibility for implementation of the DMP

4.1.1 The site manager and TCM (site management) will be responsible for the implementation of the DMP. Deputy site managers, senior plant operatives will also be identified in order to support the site manager. Full job roles at the site are clearly demonstrated in the operator's Fire Prevention Plan.

4.1.2 Site management will ensure the DMP is reviewed annually or sooner in the event of complaints/dust issues; whichever is the soonest, with any amendments or alterations put in place as soon as reasonably possible.

4.1.3 The above staff with the aid of Oaktree Environmental Ltd (if required) will be responsible in providing training to relevant operational staff to ensure they are deemed competent and understand the contents of this DMP. Staff will undergo re-fresher every 12 months or in the event of a dust complaint / issue or the implementation operational changes.

4.2 Sources of fugitive dust/ emissions

4.2.1 The main dust/emission sources which arise from site are detailed in the following table below:

Table 4.1 – Dust emission source table

Source/Plan Ref	Description
Loading Area	Dust / debris on site surfaces
Loading of waste into mechanical plant	Loading of waste into treatment plant inside the building and external areas
Various sources	Processing of waste as part of mechanical recycling facility comprising trommel and picking line
Various sources	Vehicles tipping into waste reception/storage areas in external areas of the site
Various sources	Use of screeners and crushers
Various sources (sorted waste bays)	Wastes dropping from conveyors into stockpiles
Various sources	Waste storage bays including internal and loose outside piles
Various sources	Prolonged periods of dry/warm or windy weather conditions
Various sources	Particulate emissions from the exhaust of vehicles / plant /generators and other non-road going machinery on site.

4.3 Control Measures (housekeeping/general/staff training/daily inspections)

4.3.1 Good housekeeping and site practices are vital to ensure that the impacts from fugitive dust and debris impacts are controlled. The site undertakes regular inspections throughout the day for the presence of dust/debris with corrective actions taking place upon discovery. Operational staff are suitably trained in procedures to keep the levels of dust /debris to a minimum including prevention and mitigation. The inspections will be once a day minimum and more frequent during dry/windy weather conditions. All inspections will be visual and are recorded on the Dust Monitoring Forms shown in Appendix III. The inspections points may vary on site so are therefore not included on the drawing.

4.3.2 The areas listed in table 4.1 above i.e. where dusts arise or build up will be continuously monitored throughout the working day and cleaned on a daily basis; paying special attention to the machines where dust is more likely to build up.

4.3.3 The site will rely on weather updates for wind speed/gusts using live information from the Met Office or other suitable weather website (Refer to Section 6.3 which details how the site will operate under periods of high winds).

4.3.4 The operator will avoid fugitive dust emissions by committing to the following housekeeping schedule:

HOUSEKEEPING SCHEDULE

- Maintain a clean, well-organised site
- Use suppression systems to dampen down potentially dusty wastes
- Jet spray and disinfect storage bays when emptied
- Clean equipment that has been in contact with dusty materials
- Carry out a deep clean of the reception / processing structure and external areas once a quarter and record this in the site diary
- Concrete floors designed with a slope towards drainage system and designed in a way that allows easy cleaning.
- Floors sealed to prevent absorption and adsorption of dust producing residues.

4.3.5 The operator has a maintenance team which carries out the cleaning and maintenance on a continual basis then a final check one hour at the end of each day or one hour before their shift ends.

4.3.6 In dry and/or windy weather conditions such as a high wind or a combination of dry weather and high winds where it is apparent dust escaping beyond the boundary, the site will have no other option than to shut the site and contact the Local Environment Officer.

4.4 Control measures (Boundary fencing /containment)

4.4.1 All waste storage areas for potentially dust wastes are either stored within the main processing building, dedicated storage bays with a suitable freeboard height of 1m to limit dust/debris escaping the bay or a free-standing pile which benefits from water suppression. Where storage bays are not present, there is suitable containment via the perimeter walls.

4.4.2 Boundary treatments have been detailed on Drawing No. STO/2985/03.

4.5 Control measures – site surfacing

4.5.1 The area of the site where potentially dusty wastes are stored consists of a concrete surface. This reduces the risk of airborne debris such as mud, stones being tracked around areas of the site from vehicle chassis. The majority of the site is concreted.

4.5.2 The operator will dampen down the concrete surface with hosepipes, a mobile water bowser and manually sweep the site daily with brushes.

4.5.3 The surface is relatively flat and any defects such as cracks, rivets will be repaired as soon as practically possible to ensure the site can be swept using a road-sweeper or similar.

4.6 Control Measures – site surfaces and vehicle movements

4.6.1 The control measures implemented by site management to minimise the risk of dust and debris emissions from dusty site surfaces and vehicle movements include:

- A permanent water supply will be made available on site during dry weather conditions to ensure that the dust suppression systems can function effectively.
- Vehicle speed on site is restricted to 5 miles per hour. Signs are erected at the relevant areas of the site. This reduces the re-suspension of dust and particulate matter.
- Exiting vehicles will leave the site and will avoid all areas where wastes are stored or stockpiled. All vehicles will be checked before they leave the site to ensure no mud/dust can stretch beyond the site access. All incoming/outgoing vehicle loads will be sheeted.
- Any mud/dust deposited onto the public highway will be treated as an emergency and cleaned by operatives or by way of a road sweeper. The road sweeper is readily available on site and is used twice a day to sweep the site surfaces and access haul road. It will be used to clear surrounding roads if it is deemed that the site operations have resulted in dust/mud being carried on to the road.
- Any dust/fluff cleared from mobile plant or other areas where dust/fluff could idle, the material will be deposited into one of various mobile wheelie bins which are located in several areas of the site.
- The operator will dampen down surfaces using a hose; paying special attention to the areas where dust/debris is likely to build-up i.e. under/near to treatment plant and stockpiles.
- The operator will shutdown plant/machinery and hose them down to remove any dust/fluff that may have accumulated beneath them.

4.7 Control Measures – site suppression

4.7.1 **Manual dust suppression system** - A manual hose suppression system (mains fed) is fixed to the top of boundary walls spanning the north-east – south-east boundary, the system can manually hose all dusty waste storage areas as shown on Drawing No. STO/2985/03 (**AREA 2 – AREA 11**) during periods of dry/windy weather or in the event dust is escaping off site following daily inspections.

4.7.2 As the above is manual, is does not rely on the use of electricity to function.

4.7.3 **Hosepipes** – There are hoses situated around the site which can be utilised to spray on bays and stockpiles; and for further dampening of the main ‘dusty’ stockpiles and the site surface.

4.7.4 **t**he hosepipes will be used daily to dampen down all wastes at the site to ensure dust does not escape beyond the boundary.

4.7.5 **Mobile bowser and pressure hoses** – The site benefits from a mobile bowser which stores approximately 2,000 litres of water. The bowser is fitted to a trailer which can be pulled manually to target dust areas. The bowser connects to a jet hose with a 20 – 30 l/m flow which can be used in all areas of the site. A picture of the bowser is shown below.

4.7.6 The bowser can be filled using a hose pipe and will be left open during wet conditions so it will fill naturally. The bowser will not be in use continually but only during the following circumstances where site management will inform staff to implement them:

- If the weather has been dry for three days and waste stockpiles/surface are dry.
- During warm conditions i.e. temperatures above 20^0C/70^0F.
- In conditions where the wind is exceeding 30mph and it is evident from inspections that dust is visibly blowing around the site.
- In the event of operational staff or site management are noticing dust plumes appearing during unloading or loading of waste.
- In the event the operator requires to load dusty waste which may cause airborne dust once being loaded.

4.7.7 The bowser may not run continuously during the above circumstances but will only stop if site management detect the issue of dust has minimised.

4.7.8 The bowser will be maintained to the same standard as the mobile plant in terms of cleaning for dust and fluff and daily maintenance checks.

4.8 Control measures – wheel wash / wash down area

4.8.1 No wheel wash is proposed at the site however the site benefits from a vehicle wash down area consisting of pressure washers, hosepipes, and brushes which all HGVs will be subject to prior to egressing the site.

4.8.2 Before exiting the site, all vehicles will be stopped and visually inspected by trained staff to reduce the risk of mud/debris being tracked off-site. If the member of staff inspecting the vehicle is satisfied, the vehicle is suitable to egress and will be directed off site.

4.8.3 If the vehicle is not suitable to egress, the staff member will instruct the driver to go to the wash down area to clean the wheels and bodies of vehicles. These steps will be repeated until the vehicle is clear and the potential of mud being tracked onto roads is eliminated. Following this, a final inspection will be carried out by the trained staff member before any vehicle can leave the site.

4.8.4 In the unlikely event that the material is deposited on the access road or public highway it will be treated as an emergency and will be cleared immediately by the operator using either a hose, brush and shovel or vacuum tanker/road sweeper.

4.8.5 In the unlikely event that the material is deposited onto the public highway, it will be treated as an emergency and cleared immediately by the operator using either a hose, brush and shovel or vacuum tanker/road sweeper.

4.9 Control measures – water supply

4.9.1 A permanent water supply will be made available on site during all weather conditions to ensure that the dust suppression can function effectively. All external water pipes will be lagged to prevent frost damage during winter months and the operator will set up a notification alert system with the Met Office in the event of a drought being imminent. This will enable the operator to source water in the short and long term and store in tanks prior to a potential water ban.

4.10 Control Measures – storage of wastes and non-waste aggregates

4.10.1 The control measures implemented by site management to minimise the risk of dust and debris emissions from the continuing storage of wastes and the loading/unloading of these include:

- All stockpiles of dusty wastes and non-waste aggregates will be stored 1m below the height of the bay or surrounding infrastructure walls
- Drop heights will be kept to a minimum to prevent dust emissions where adjustment permits.
- Suitably trained staff will continuously monitor the height of waste storage throughout the day with a minimum of twice a day reporting.
- To prevent stockpiles becoming friable in particular **AREAS 2 and 11**., during dry, windy weather conditions the material will be dampened down using the suppression methods shown above.

4.11 Control measures – vehicle movements and mobile plant

4.11.1 As discussed in Section 3.6.2, a no idling policy is in place which ensures that engines are switched off when vehicles or plant are not in use. This policy will ensure that tail pipe emissions are significantly reduced.

4.11.2 The site will follow the first in first our principle to reduce additional movements into the site. In summary, waste will be tipped from the HGV into waste reception areas, the oldest material will be extracted from the rear of the pile, sorted and the same HGV will collect the processed material and remove off site. It is unlikely that vehicles will access/egress the site unladen.

4.12 Control Measures - Loading and Unloading Vehicles

4.12.1 The operator of the loading plant will direct vehicles to a position and location which reduces wind whipping of loaded material.

4.12.2 During periods of dry or windy weather, including a combination of both, incoming and loads will be sprayed on arrival and before tipping to reduce dust particulates when tipping. The loads will be sprayed using the mobile bowser or hose pipes.

4.12.3 Drop heights will be kept to a minimum and tipped in a manner to ensure the pile does not exceed the heights shown in Section 4.10.1 and as shown on Drawing No. STO/2985/03.

4.13 Control measures – use of screeners externally and crusher internally

4.13.1 As discussed in Section 3.6.2, a no idling policy is in place which ensures that engines are switched off when vehicles or plant are not in use. This policy will ensure that tail pipe emissions are significantly reduced.

4.13.2 The screeners do not operate continually and may even be once or twice a week i.e. when there is enough material to process. The site will not use the screener in windy weather conditions or if no suppression is available.

4.13.3 The screeners are electrically powered meaning no emissions are discharged from it. The only time is uses emissions is when it needs be tracked away for maintenance where diesel is used. The trommel itself stores 10 litres of diesel on board in the event it does need to be moved. However, the movement of the screeners will be very infrequent.

4.13.4 In terms of the crusher, this is situated inside the building on site. The crusher is set underneath the base of the floor of the building. The building itself is constructed with concrete breeze block walls and roller shutters doors to the west and east for access. During any crushing activities, the roller shutters will be closed so it is considered that any dust would be contained within the confines of the building.

4.13.5 Manual water suppression points i.e. hoses are situated adjacent to all processing plants for active suppression.

5 DUST MANAGEMENT RISK ASSESSMENT MODEL

5.1 Fundamental considerations

5.1.1 **Source/Hazard:** A property or situation that in particular circumstances could lead to harm.

5.1.2 **Consequences:** The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.

5.1.3 **Risk:** A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

5.2 Pathway

5.2.1 Important in the assessment of a particular risk(s) and to inform the subsequent management of the risk(s) is the identification of the pathway(s) through which the risk may affect the identified receptor(s). The following are examples of pathways:

- Air
- Ground
- Water
- Direct contact / exposure

5.3 Consequences

5.3.1 The following table highlights the consequences of the hazard(s) identified and the abbreviations for each as used in the Risk Assessment Table 5.5 in Section 5.7.

Table 5.1 – Consequences

Abbreviation	Consequences
A	MINOR INJURY
B	MAJOR INJURY
C	DEATH
D	AIR POLLUTION
E	WATER POLLUTION
F	POLLUTION OF LAND

5.4 Effects of consequences

5.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

Table 5.2 – Potential effects

Abbreviation	Effect of Consequences	Management Required?
S	SEVERE	In all cases
Mo	MODERATE	In most cases
Mi	MILD	Occasionally
N	NEGLIGIBLE	No

5.4.2 Note: "Management" is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.

5.5 Risk estimation and evaluation (probability/frequency of occurrence of hazard)

5.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

Table 5.3 – Likelihood

	Probability	Evaluation
1	Very likely	Could occur during any working day
2	Likely	Could occur regularly
3	Possible	Event possible
4	Unlikely	Event very unlikely

5.6 Risk assessment outcome (combination of probability & consequence)

5.6.1 The following table shows the resultant risk of an identified hazard or potential situation. This uses the hierarchy of both probability and consequence to assess the level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

Table 5.4 – Risk assessment outcome

		Consequence			
		S	**Mo**	**Mi**	**N**
Probability	**1**	High	High	Medium	Low
	2	High	Medium	Low	Near-Zero
	3	Medium	Low	Near-Zero	N/A
	4	Low	Near-Zero	N/A	N/A

5.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. removal of hazard, implementation of major infrastructure/structural design measures to contain the risk/hazard and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks to ensure all site staff and users are made fully aware of the risk/hazard, all potential consequences and necessary management and contingency procedures.

5.6.3 Where the risk assessment outcome is medium, the management of the risk should be tackled by management or delegates. If removal of the hazard is not possible, management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures/procedures.

5.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures/procedures.

5.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

5.7 Risk assessment table

5.7.1 The following pages contain the site-specific risk assessment for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant or situation.

5.7.2 The table also contains references to the appropriate section(s) of the site's EMS for additional management procedures.

5.7.3 As discussed in the section above, all situations which identify a risk from Low –High should be incorporated into the staff/visitor training schedule, where appropriate and acted on as required.

5.7.4 Table 5.1, overleaf details the relevant pathways and receptors for each individual dust/emission source and relevant measures required to break these linkages. The control measures outlined in Section 4 will be included within these tables as well as additional specific measures.

SEE TABLES OVERLEAF

Table 5.5 – Source, pathway, receptor, abatement tables

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Dust / debris on site surfaces	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	3	Low	Damp all external site surfaces down using a mixture of bowser and hose pipes. The operator will pay special attention to the areas where dust/debris is likely to build-up i.e. near to treatment plant and stockpiles. All site operatives will be trained in these procedures, and it will be the responsibility of site management to ensure the measures have been carried out. The site undergoes continuous housekeeping and has dedicated maintenance / housekeeping team who continue to inspect and clean the site daily. Vehicle speed on site is restricted to 5 miles per hour. Signs are erected at the relevant areas of the site, including the main access gates, to advise drivers of the speed limit. This will reduce the re-suspension of dust and particulate matter. Exiting vehicles leaving the site will avoid all areas where wastes are stored or stockpiled. All vehicles will be checked before they leave the site to ensure no mud/dust can stretch beyond the site access. All incoming/outgoing vehicle loads will be sheeted. Any mud/dust deposited onto the public highway i.e. Stockfield Road will be treated as an emergency and cleaned by operatives or by way of a road sweeper to clean the external yard and surrounding roadways. Continuous monitoring regime in place to identify any potential for dust leaving site boundary. Formal complaints procedure in place.	Very Low

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Vehicles tipping into waste reception/storage area including waste storage and processing building	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	2	Medium	Drop heights will be kept to a minimum to prevent dust emissions which will be no more than 1m – 2m above the plant. The loading of waste into the plant is undertaken by a 360^0 excavator which can deposit directly into the hoppers, this is considered better method than a loading shovel. The operator will avoid doubling handling of waste and may directly load from vehicle directly into the treatment plant if feasible. If operations permit, the site may be able to directly tip into the treatment plant and the use the bowser or hoses to continually spray the load in dry, hot weather conditions to dampen the waste. All waste is stored with a 1m freeboard height to ensure waste is contained within the bay. Staff continue to monitor the waste to ensure it does not escape the confines of the building or storage bays. The mobile water bowser and hose pipes can be targeted to a particular area in the event staff notice dust is escaping from the building or visible dust plumes on site. The site has not received any direct reports of dust for over 20 years which means suitable measures are taking place currently.	Low

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Loading of waste into crusher inside the building	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	2	Medium	Drop heights will be kept to a minimum to prevent dust emissions. The loading area is entirely enclosed within a building which will reduce dust emissions The onsite hosepipes can also offer additional suppression. The operator will avoid doubling handling of waste and may directly load from vehicle directly into the treatment plant if feasible. Staff continue to monitor the waste to ensure it does not escape the confines of the building. The mobile water bowser and hose pipes can be targeted to a particular area in the event staff notice dust is escaping from the building or visible dust plumes on site. The site has not received any direct reports of dust for over 20 years which means suitable measures are taking place currently.	Low

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Use of screeners externally	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	2	Medium	The site will not carry out any external treatment during windy weather conditions (>30mph) and operations will reduce or suspend if the site management detect large amounts of dust is arising from dry/hot weather conditions. The screeners are all situated on the floor and the presence of surrounding infrastructure walls to the south of the location will prevent dust escaping from the site. The site will not situate screeners on any stockpiles of waste. Drop heights will be kept to a minimum to prevent dust emissions which will be no more than 1m – 2m above the screeners. The loading of waste into the screeners is undertaken by a 360^0 excavator which can deposit directly into the hopper of the screener, this is considered better method than a loading shovel. Staff continue to monitor the waste to ensure it does not escape the confines of the site infrastructure. The mobile water bowser and hose pipes can be targeted to a particular area in the event staff notice dust is escaping from the building or visible dust plumes on site. The site has not received any direct reports of dust for over 20 years which means suitable measures are taking place currently.	Low

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Wastes dropping from conveyors into stockpiles	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	2	Medium	Suspension of operations during windy weather conditions. Any defects to sheltering / housing on the MRF conveyors will be repaired upon detection. Operations will reduce or suspend if the site management detect large amounts of dust. All drops from the conveyors are done so into dedicated storage areas or bays below meaning the waste is not dropped from height and therefore will not cause airborne dust. The stockpiles beneath the screeners and crushers bays can be sprayed using the bowsers and hoses during periods of dry/windy weather to prevent excessive drying and dust formation. The storage area bays are located to ensure that vehicles leaving the site do not track through wastes. All potentially dusty waste arising from conveyors from external treatment plants will be sprayed with water during dry/hot weather conditions and obviously the conveyors would not be in use during windy weather conditions.	Dust / Particulates

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Waste storage bays including internal and loose outside piles	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	3	Low	All internal and external stockpiles of waste and storage bays can be sprayed using the water bowser and hoses during periods of dry/windy weather to prevent excessive drying and dust formation. The storage area bays are located to ensure that vehicles leaving the site do not track through wastes. All stockpiles of dusty wastes 1 will be stored inside buildings, secure storage bays or secure containers. Where waste is stored inside concrete walls, the waste will be stored 1m below the height of the bay. This includes non-waste aggregates which are being stored at the site also. The presence of surrounding infrastructure walls beyond the storage bays will also prevent dust escaping from the site. The site undergoes continuous monitoring by operational staff who will continue to inspect and clean the site daily in addition to monitoring stockpile and freeboard heights. The site has not received any direct reports of dust for over 20 years which means suitable measures are taking place currently.	Very Low - Negligible

Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action & recommendation
Prolonged periods of dry/warm or windy weather conditions	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	2	Medium	Additional visual assessment / monitoring will be onsite and undertaken around the site perimeter in order to ensure dust is not escaping beyond the site. Drop heights will be kept to a minimum to prevent dust emissions. Site management will carry out the wetting down/suppression/ of all onsite stockpiles and access roads during these conditions. The processing and tipping/loading/unloading of waste will cease (only if dust complaints are received or monitoring shows dust escaping beyond the boundary) until conditions have been improved. The site manager is responsible for ensuring this. Additional visual assessment / monitoring will be onsite and undertaken around the site perimeter in order to ensure dust is not migrating offsite, this could be three times daily instead of one. Notification system set up with the Met Officer to prepare for any potential dry/windy weather conditions in advance.	Low
Particulate emissions from the exhaust of vehicles / plant /generators and other non-road going machinery on site.	Air	See Section 2.2	Air Pollution Water Pollution	Moderate	3	Low	All vehicles are serviced annually to ensure they are fit for purpose to ensure emissions are below the acceptable level. Mobile plant used is serviced annually to as part of preventative and legislative maintenance so ensure the plant is suitable. The screeners and crusher do not emit any source emissions to the atmosphere. All vehicles undergo daily inspections under the site's preventative maintenance schedule to ensure no visible faults are detected. Ongoing inspections will note any faults with machinery and if a fault detected, the site/compliance manager or TCM will decommission the plant/vehicle until it is fit for purpose. There is a workshop on site to aid in quick repair of any faulty plant/equipment creating excessive smoke.	Very Low - Negligible

6 Monitoring and contingency measures

6.1 Monitoring and recording

6.1.1 **Visual assessment** – Site management will make a visual inspection of dust emissions using the Dust Monitoring Form in Appendix II. This will enable the person carrying out the assessment to inspect the presence of dust and whether it is present on site with a risk of escaping off site. It is not considered necessary to have fixed monitoring points due to infrequent weather conditions. If there is an easterly or westerly wind, the staff member carrying out the monitoring will observe the area from the north or south so dust can be easily identified. The site staff member will complete the monitoring and form in Appendix II at least once every 12 hours or in the event of the circumstances shown in Section 4.7.6, additional monitoring i.e. every 3 hours. The monitoring will be carried out will while the site is operational and should it be observed if dust is being wind whipped or clouds of dust observed emanating from surfaces, the ground on site, stockpiles and activities on-site, the site will increase suppression methods. If the suppression methods are not suitable, operations will reduce or cease until the problem fully has been fully rectified. Site management will be responsible for investigating dust issues and provide additional training to staff to prevent any re-occurrences. Site management will record all findings in the dust monitoring form or site diary and also detail staff training using training forms provided in the EMS or the operator's own internal training records.

6.1.2 The monitoring can also take place or during times when light is low as there is suitable flood lighting available covering all loading/unloading and processing areas. However, the site will not carry out any processing of waste when floodlighting is required.

6.1.3 In the event the site needs to shut down or is temporary closed, before closure, site management will ensure before the site closes that all dusty waste is stored internally, in secure containers or 1m below the height of containment walls. If weather conditions i.e. dry, hot, windy have led to an increased risk of dust escaping from the site, site management will ensure the site is wetted down prior to closure. Site management will be responsible for signing the site off prior to closing using inspections forms.

6.1.4 The results of monitoring exercises and any remedial action taken will be entered into the site's diary or logbook which is available for the EA to inspect upon request. The name of the inspector will be stated in the site's diary / inspection form for each day of operation.

6.1.5 The site supervisor will be suitably trained to carry out these duties. Further information regarding training and technical competence is provided within the site's EMS.

6.2 Monitoring

6.2.1 Site staff will continuously visually monitor dust emissions whilst external plant is in operation and will control dust emissions using the procedures shown throughout Sections 4.3 – 4.13 and asking the site manager, compliance manager, TCM or third party for advice as required. Work procedures will be stopped/adjusted should it be evident significant dust is being emitted which has the potential to migrate offsite.

6.2.2 Site management will also be required to make a note of any unavoidable events such as periods of dry and/or windy weather in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the local authority or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed (or, at least, in part) to the cause of the complaint.

6.3 Staff shortages/human error

6.3.1 In the event of unforeseen staff shortages arising from illness, suspension or no shows, the operator will make a judgement whether to reduce the number of incoming loads, thus reducing processing frequency and divert material to an alternative site. The operator will then seek further employment as soon as practicable to ensure the site can continue to operate at its required capacity.

6.3.2 All staff are trained and undergo toolbox talks every 6 months (or sooner if operations change) to reduce the impact of human error. In instances where a human error has caused to an on-site dust issue, the site may suspend operations until the issue has been rectified and the member of staff will be warned and re-trained accordingly.

6.4 Weather conditions

6.4.1 The site will subscribe to the Met Office to receive updated weather alerts for the following weather conditions which could cause a potential on or off-site dust complaint:

- High winds >30mph
- Dust escaping beyond the site boundary
- Droughts or periods of hot weather exceeding 3 major dry days which could lead to water shortages, hosepipe bans and excessive dust.

6.4.2 The site will install the following preventative measures to avoid serious dust pollution:

HIGH WINDS

- No sorting, processing or treatment of any wastes which are likely to be blown around during conditions of high winds; high winds would be where it is evident where dust is escaping beyond the site.
- Vehicles leaving the site will be sheeted to comply with the requirements of the Duty of Care legislation.
- Stockpiles will be reduced to a suitable height to prevent the material escaping beyond the site boundary i.e. below the heights of boundary walls. The height would vary and only when dust has been reduced.
- In the event of gale force winds, the site will d may be forced to close operations until conditions have improved.

DROUGHTS/WARM, DRY WEATHER

- In extreme cases such as a hosepipe ban or water shortage, the site will ensure there is additional water available i.e. tanks which can be used for filling the dust cannons to ensure suppression techniques can still function.
- The site will contact the water company in the event of an emergency to see if the water pressure can be increased.
- Where dust is becoming a major concern then the operator will stop processing the material a until conditions or dust suppression techniques are considered effective.

6.5 Operational/power failure

6.5.1 The site manager will be contacted by staff in the event of any operational failure such as the breakdown of plant, systems or equipment and will decide whether operations are to continue or be suspended prior to corrective action being taken. Serious operational failures will be recorded in the site diary and operations suspended if dust is apparent.

6.5.2 If there was a significant power failure or power cut, the site may need to close. The site has direct contact with engineers who can be called out and attend site within a 48-hour period; the engineers also carry specific parts for mobile plant or any electrical items on their vehicle. If repairs cannot be undertaken within 48 hours, the local EA officer or department will be notified in the event of any serious operational failures to agree a suitable course of action.

6.5.3 If the site is closed and it is still evident dust is escaping from site following site inspections or a complaint, the operator would source a back-up generator as soon as practicable and advise the complainant if required of the action taken.

6.5.4 All details of defects, problems and repairs carried out will be recorded on a daily inspection form. Detailed comments may also be recorded in the site diary. All repairs will be carried out as soon as practicable.

6.5.5 All repairs to site security will be made on the discovery of the damage and the site will be made secure until the repair has been carried out.

6.5.6 Any major defects found during the daily site inspection which are likely to lead to a breach of permit conditions will be repaired by the end of the working day in which they are found, where possible. If a repair is not possible by the end of the working day and a potential breach of permit conditions may occur, the EA will be contacted to agree a suitable timescale for repair.

6.5.7 All defects and problems likely to give rise to pollution will be recorded on the form HSH/RF/4 or the operators own recording procedures with repairs/solutions being carried out immediately.

6.5.8 The operator would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed to the cause of the complaint. If there are significant dust releases outside normal operations, the operator will cease operation, investigate and resolve the issue before continuing.

7 Actions when complaints are received

7.1 Complaints procedure

7.1.1 If any dust complaints are received, the relevant operator will complete a 'complaints and events log' and detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the EA. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum).

7.1.2 Dust complaints will be prioritised and investigated without delay or by end of working day only in extenuating circumstances. This will also apply to complaints received both directly and via other sources (e.g. EA or local authority). Where investigation substantiates the complaint, fully or partially, then remedial action should be taken immediately and if measures taken fail to stop the pollution then the activity must be stopped and not restarted unless and until additional measures have been implemented to prevent the emission causing pollution. The EA will be contacted in the event the complaint cannot be escalated. Following a complaint and if it is deemed correct following investigation, the appropriate action will be taken to prevent the issue from reoccurring i.e. evaluation of current abatement measures, site operations, additional abatement measures and re-training of staff via toolbox talks.

7.1.3 The operator would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator’s control would be able to be attributed to the cause of the complaint.

7.1.4 If the source cannot be ascertained with 100% confidence, the site manager, compliance manager or TCM will either suspend or reduce the likely dust/particulate generating activities.

7.1.5 If the source is within the site's control, the site manager, compliance manager or TCM will take appropriate action in terms of dust/particulate abatement, to ensure that the alarm is not re-activated. This may take the form of the following:

a) Investigating the source of the dust/particulates to prevent a re-occurrence.
b) Suspending operations which are giving rise to excessive dust due to potential plant malfunction or failure of suppression techniques.
c) Additional use of the dust abatement measures.
d) Logging findings of a – c in the site diary / complaints form and also in the reporting template within the EP.

7.1.6 The EA will be notified by email of any third-party dust complaints received by the end of the working day including the complainant and the outcome of the investigation. Where complaints are substantiated as causing or likely to cause significant pollution, then the EA will be notified without delay, as required by conditions in the EP.

7.2 Complaints recording

7.2.1 Any complaints received in relation to dust will be recorded on the form shown in Appendix II by the person in receipt of the complaint:

7.2.2 The following details as a minimum will be completed on the form.

a) The name, address and telephone number of the caller will be requested.
b) Each complaint will be given a reference number.
c) The caller will be asked to give details of:

- the nature of the complaint;
- the time;
- how long it lasted;
- how often it occurs;
- is this the first time the problem has been noticed; and,
- what prompted them to complain.

d) The person completing the form will then, if possible, make a note of:

- the weather conditions at the time of the problem (rain snow fog etc.)
- strength and direction of the wind; and,
- the activity on the installation at the time the noise, dust or odour was detected, particularly anything unusual.

e) The reason for the complaint will be investigated and a note of the findings added to the report.
f) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.
g) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be referred to the appropriate department of the EA or Local Council.
h) Following any complaint, the complaints procedure will be reviewed to see if any changes are required or if new procedures need to be put in place.

7.3 Liaison with Neighbours

7.3.1 In the extreme event of significant but temporary dust releases outside normal operations, neighbours will be contacted to advise them of the situation and the action being taken. The EA will also be notified.

7.3.2 An open-door policy will be encouraged by the operator to enable any complaints from neighbouring premises (if received) to be dealt with immediately. The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by the operator to reduce or ideally eradicate the likelihood of a subsequent complaint.

7.3.3 If any dust complaints are received, the complaint will be assigned to an operative familiar with the sites operation who will complete the form in Appendix II which will be kept for inspection on request by the LA and/or EA. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum). Dust complaints will be investigated and responded to within 24 hours and suitably reviewed by the site manager who is ultimately responsible.

7.3.4 The operator will also make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed to the cause of the complaint. If there are significant dust releases outside normal operations, the operator will cease operation, investigate and resolve the issue before continuing.

Appendix I

Drawings

Scale Bar (1:250)
0 m 10 m 20 m

Boundary comprising 5m high steel sheet fencing

Empty skip storage

Workshop

Boundary comprising mixture of 2m high post and wire and fixed heras fencing

FIRE HYDRANT

Roller shutter

Peel Street

Western boundary comprising 5m high steel sheet fencing

130.5m

Staff / customer parking

Recovered aggregates (non-waste)

Out-of-hours lorry parking

Recovered aggregates (non-waste)

Open for access

Recovered aggregates (non-waste)

Recycled aggregates (non-waste)

AREA 13

Crusher (fixed into the ground)

AREA 14

Screener

AREA 15

Screener

AREA 12

Recovered aggregates (non-waste)

General non-waste storage

Recovered aggregates (non-waste)

Recovered aggregates (non-waste)

North boundary comprising 6m high concrete block wall

Upper level and lower divide approx. 2m height difference)

AREA 2

North-eastern boundary comprising 4m high concrete block wall

AREA 3

Store & welfare

AREA 4

AREA 5

Catchment pit

Open for access

Screener

AREA 6 (also acting as firewall)

Fuel storage (above site office)

AdBlue storage

Site office

Recovered aggregates (non-waste)

AREA 1

Recovered aggregates (non-waste)

Screener

Recycled aggregates (non-waste)

Recovered aggregates (non-waste)

Underground sealed storage tank and silt trap

AREA 7

Manual mains fed suppression system consisting of hose spanning the top of the sheeted fence

AREA 10

Quarantine area = 140m² / >185m³

6m

AREA 8

Eastern boundary comprising 4m high concrete block wall and 2m high steel sheeted fencing above

AREA 9

Staff welfare

Vehicle check and wash down area prior to egress from the site

AREA 11

Saleable topsoil (non-waste)

Recovered aggregates (non-waste)

Site access & egress with lockable gates

Landscaped area

Eastern boundary comprising 4m high concrete block wall and 2m high steel sheeted fencing above

South-eastern boundary comprising 4m high concrete block wall and 2m high steel sheeted fencing above

Western boundary comprising 5m high steel sheet fencing

Recovered aggregates (non-waste)

Recovered aggregates (non-waste)

South-western boundary comprising 5m high steel sheeted fencing (3m high brick wall to the south of the fencing)

FIRE HYDRANT

ESS

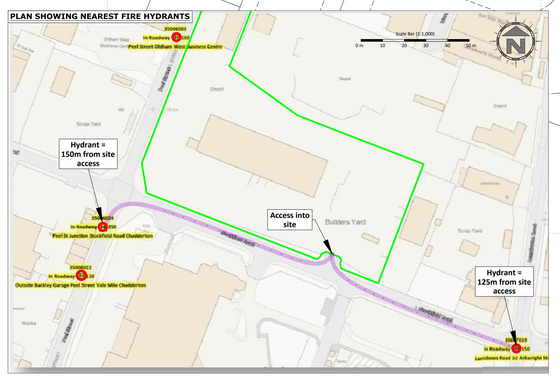
Stockfield Road

Recovered aggregates (non-waste)

Eastern boundary comprising 3m high concrete block wall and 2m high steel sheeted fencing above

Landscaped area

PLAN SHOWING NEAREST FIRE HYDRANTS



Waste Storage Area Details - PILE SIZES BASED ON AREA OF STOCKPILE ON SITE PLAN NOT LENGTH X WIDTH

Plan Ref	Description	Storage type	Containment	Height / width of firewall (m)	Max Width (m)	Max Length (m)	Height (m)	Max area (m2)	Conversion factor used	Volume (m3)	Tonnage (approx.)	Maximum storage durations
AREA 1	Waste reception (tipping), inspection and sorting area **(clear out-of-hours)**	Free-standing / unprocessed	N/A	N/A	10	10	1	100	0.333	33	11	<2 hours
AREA 2	Bulky Stone/concrete/hardcore	Free-standing / hand sorted from AREA 1	Free standing pile / concrete block wall to the north	6 / 0.4	25	15	5	325	0.75	1219	1463	<6 months
AREA 3	Tyre skips	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip / concrete block wall to the north	4 / 0.4	6.1	2.44	2.62	14.884	1	39	10	<4 weeks
AREA 4	Sorted recyclables i.e. wood, residual waste etc.. (contents in skip may vary	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip / concrete block wall to the north	N/A	6.1	2.44	2.62	14.884	1	39	10	<2 weeks
AREA 5	Wood	Free-standing / hand sorted from AREA 1	Free standing pile / concrete block wall to the north and east	4 / 0.4	13	10	3	130	0.75	293	146	<4 weeks
AREA 3, 4 & 5 TOTAL										**370**		
AREA 6	Soil skip	Open topped 40 cubic yard skips / handsorted from AREA 1	Skip	4 / 0.4	6.1	2.44	2.62	14.884	1	39	40	<6 months
AREA 7	Mixed municipal waste	Free-standing / hand sorted from AREA 1	Free-standing inside two sided concrete block wall to the east and south and inert skip to the north	4 / 0.4	15	6	3	90	0.75	203	67	<2 weeks
AREA 8	Bulky waste i.e. mattresses	As above	Free-standing inside a three-sided concrete block wall	4 / 0.4	5.5	5	3	27.5	0.75	62	20	<2 weeks
AREA 9	Green waste	Free-standing / hand sorted from AREA 1 or arrive in separate loads	Free-standing inside two sided concrete block wall to the east and north	4 / 0.4	15	7	3	105	0.75	236	78	<2 weeks
AREA 10	Sorted recyclables i.e. wood, residual waste etc.. (contents in skip may vary	Open topped 40 cubic yard skips / hand sorted from AREA 1	Skip	N/A	6.1	2.44	2.62	14.884	1	39	10 - 20 (depending on contents in skip)	<2 weeks
AREA 11	Soils and stone	Free-standing / hand sorted from AREA 1	Free-standing pile / concrete block wall to the north , east and south	4 / 0.18	5	5	2	25	1	50	60	<2 weeks
AREA 12	Bulky concrete, hardcore, stone for crushing	Free-standing	Free-standing pile / building walls to the south	N/A	25	9	4	225	0.5	450	540	<6 months
AREA 13	Residual waste and scrap metal arising from crushing process	Open topped 8 cubic yard skips	N/A	N/A	3.7	1.7	1.3	6.29	1	8	5 - 10 (depending on contents in	<2 weeks
AREA 14	Bulky concrete, hardcore, stone for crushing	Free-standing	Free-standing pile / building walls to the north	N/A	10	10	2	100	0.5	100	120	<3 months
AREA 15	Scrap metal arising from crushing process	Open topped 8 cubic yard skip	N/A	N/A	3.7	1.7	1.3	6.29	1	8	5 - 10 (depending on contents in	<2 weeks

NOTES

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	08.08.22	CP	Initial drawing
A	05.09.22	CP	Client comments
B	11.04.22	CP	EA & client comments

Key:

- Proposed permit boundary
- Waste storage areas
- Non-waste storage areas
- Hazardous waste storage areas
- Non-waste fuels, oils and other liquids storage
- Temporary waste storage areas (clear prior to shutdown)
- Waste recycling / storage buildings (impermeable concrete floor)
- Other buildings i.e. workshops/offices
- Covered storage areas
- Impermeable concrete surface / sealed drainage (upper level)
- Impermeable concrete surface / sealed drainage (lower level)
- Landscaped / vegetation / grassed areas
- Contaminated surface water drainage
- Surface water drainage fall direction
- Gully's
- Manholes
- Quarantine area (with 6m buffer zone) based on **AREA 13**
- Hose reels (indicative location)
- Fire fighting equipment / extinguishers (indicative locations)
- Plant shutoff (indicative location)
- Manual fire alarms (break glass / horns) - indicative location
- Spill kits (indicative location)
- Access route for emergency services
- Fire hydrants
- Fire assembly points
- Out-of-hours plant storage
- Pan, tilt and zone cameras with 360° 50m coverage

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
SITE LAYOUT & FIRE PLAN

CLIENT
Holroyd Skip Hire Ltd

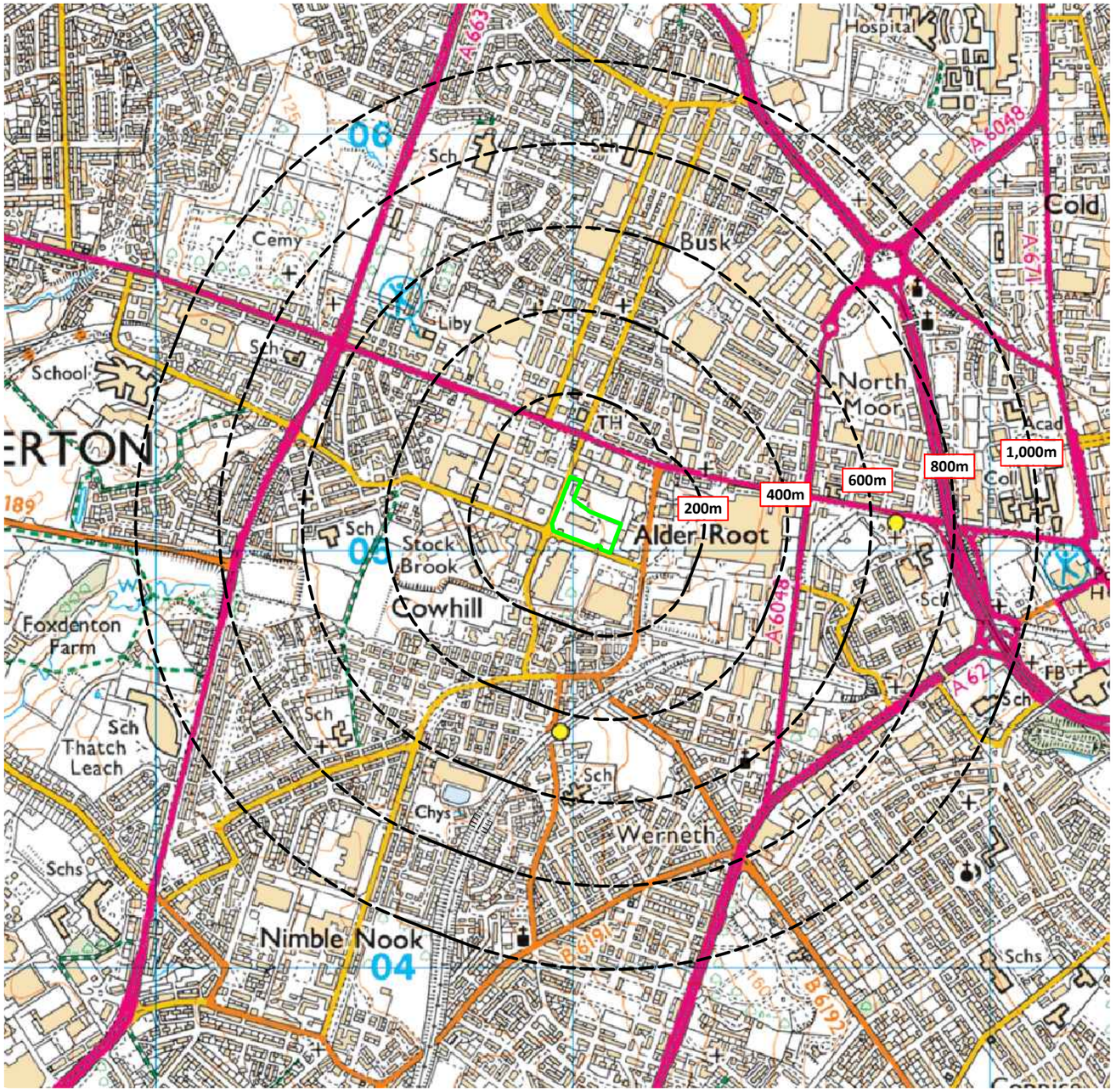
PROJECT/SITE
Holroyd Aggregates, Stockfield Road, Oldham OL9 9LL

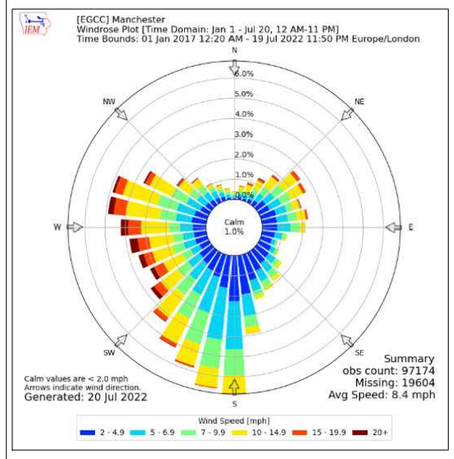
SCALE @ A0	CLIENT NO	JOB NO
1:250	2985	001
DRAWING NUMBER	**REV**	**STATUS**
STO/2985/03	B	Issued
DRAWN BY	**CHECKED**	**DATE**
CP	--	11.04.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk

KEY:

- Permit boundary
- Surface water body (pond / pool / lake)
- Stream, river, beck
- Buildings includes Agricultural, industry, commerce and retail - could also include small houses)
- Residential blocks
- Class A roads
- Class B roads
- Class C roads
- Places of worship
- Public footpath
- Sch Schools





Compass Wind Rose for Manchester (EGCC)
Period 2017-2022
- source: Iowa State University

Scale Bar (1:12,500)

0 km 500 m 1 km

NOTES

1. Boundaries are shown indicatively.
2. Wind rose data shows the prevailing wind direction to be blowing north & east from the south& west.

REVISION HISTORY

Rev:	Date:	Init:	Description:
-	05.09.22	CP	Initial drawing

Oaktree Environmental Ltd
Waste, Planning and Environmental Consultants

DRAWING TITLE
RECEPTOR PLAN

CLIENT
Holroyd Skip Hire Ltd

PROJECT/SITE
Holroyd Aggregates, Stockfield Road, Oldham OL9 9LL

SCALE @ A3	CLIENT NO	JOB NO
1:12,500	2985	001

DRAWING NUMBER	REV	STATUS
STO/2985/04	-	Issued

DRAWN BY	CHECKED	DATE
CP	--	05.09.22

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ
t: 01606 558833 | e: sales@oaktree-environmental.co.uk

Appendix II

Complaints recording form

Complaints Report Form	
Date Recorded	Reference Number
Name and address of caller	
Telephone number of caller	
Time and Date of call	
Nature of complaint (noise, odour, dust, other) (date, time, duration)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
Follow Up	
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
Recommendations	
Change in procedures	
Changes to Written Management System	
Date changes implemented	
Form completed by	
Signed	
Date completed	

Appendix III

Dust Monitoring Form

WEEK BEGINNING		**COMMENTS BELOW (AS MUCH DETAIL AS POSSIBLE); IF COMMENT IS NO – ADD FURTHER COMMENTS**
DAY/DATE/TIME OF INSPECTION		
SHEET 1 OF		

DAILY RECORDING INFORMATION	**WASTE RECEPTION AREAS**	**SITE SURFACES**	**WASTE LOADING / UNLOADING**	**WASTE STORAGE AREAS / BAYS**	**PROCESSING AREAS**	**MRF INCLUDING CONVEYORS**	**OTHER AREA OF SITE - SPECIFY**
WEATHER CONDITIONS							
WEATHER TEMPERATURE							
WIND SPEED							
WIND DIRECTION							
PERIMETER INFRASTRUCTURE SUITABLE							
MANUAL SUPPRESSION FUNCTIONING							
DUST CANNONS / HOSES FUNCTIONING							
IS WASTE STORAGE BELOW HEIGHT OF BAY							
DUSTY MATERIAL STORAGE VISIBLE FROM LOCATION							
ANY NOTICEABLE DUST / PARTICULATES ON THE GROUND NEAR THE LOCATION							
ANY DUST APPARENT OFF SITE							
EMISSIONS FROM PLANT/EQUIPMENT VISIBLE							
SMOKE FROM PLANT APPEAR TO BE SUITABLE							
HAS SITE MANAGEMENT BEEN INFORED OF THE INSPECTION							
DOES ACTION NEED TO BE TAKEN							
INSPECTION CARRIED OUT BY							
OTHER							

NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY):

CHECKED BY		**SIGNATURE**	
POSITION		**DATE**	