APPENDIX 5

Dust Management Plan

Woodside Depot

Revision:	2.0	**Approved by:**	James Bailey
Date Revised:	June 2021	**Authored by:**	Luke Bridges

Contents

1.0 Introduction

1.1 Background

1.1.1 This document comprises a Dust & Particulate Management Plan (DMP) and has been written by MTS Environmental Ltd on behalf of the operator, Hailsham Roadways Construction Co. Ltd, Woodside Depot, Polegate Road, Hailsham, East Sussex, BN27 3PG. The site is located at Woodside Depot, Polegate Road, Hailsham, East Sussex, BN27 3PG and a variation to a Bespoke Installations Permit, reference EPR/ZP3992EW/V002, has been submitted, to allow the storage and recycling of Asphalt Waste Containing Coal Tar (AWCCT) and hazardous waste, alongside the existing highways operations treatment activities.

1.1.2 The site is not located within an Air Quality Management Area (AQMA) and there are no designated AQMA's within the district of Wealden. The nearest AQMA is located 14km away from an AQMA set by Lewes District Council in Newhaven Town Centre. The AQMA was declared for Nitrogen dioxide (NO_2) in 2014.

1.1.3 Without any abatement controls, the site has the potential for dust and particulates to be generated by the following sources:

- Dust raising from public, haul roads and operational surfaces through vehicle movements
- Dust raising from the mechanical loading/unloading of wastes
- Dust raising from the treatment operation such as crushing, screening and blending
- Dust raising from stockpiles

1.1.4 This DMP has been written in response to correspondence from the Environment Agency on 19th June 2019 requesting an Emissions Management Plan that is based on the following guidance:

- Guidance on the assessment of dust from demolition and construction (Institute of Air Quality Management) (2014) (version 02)
- TGN M8 Monitoring ambient air, Version 02 (2011)
- TGN M17 Monitoring particulate matter in ambient air around waste facilities, Version 02 (2013)
- Good practice guide: control and measurement of nuisance dust and PM10 from the extractive industries (AEAT/ENV/R3140 Issue 1, February 2011)

1.1.5 This document outlines the potential sources of dust at Woodside Depot, what receptors this may affect and how this will be managed by implementing mitigation strategies and infrastructure. All dust management plans align with the Hailsham Roadways site-specific Environmental Management System.

1.2 Sensitive Receptors

1.2.1 A site location map (Figure. 1.1) shows all the receptors identified by an initial assessment, undertaken by MTS Environmental Ltd, within a 1000m range from the site, the red circle indicates the threshold area.

1.2.2 Thirty-nine receptors are listed on the map, six of which are sensitive receptors: receptors 1, 2, 8, 10, 11, and 12 (receptors 11 and 12 being ecological receptors). The remaining receptors are low sensitivity receptors, all have been added to Figure 1.1 and the relative distances to the site detailed

in Table 1.1.

1.2.3 Activities listed in 1.1.3 could emit dust and particulate which could impair the view of the road users on the A22 or Summer Hill lane, however no visible pollutants should leave the boundary of the site.

1.2.4 Receptor 11 and 12 have been classed as sensitive ecological receptors as they are dedicated ancient woodland located within 1000m of the site. Dust and particulates have the potential to cause ecological stress within the plant community in this area. However, damage will be mitigated by the distance between the site and the woodland and the trees between the two which act as a buffer for the dust and particulates. Any dust from the site will not be blown in their direction by the north easterly prevailing winds as the ancient woodland are located to the south west and south east of the site and SINCs are not covered by the Institute of Air Quality Management (IAQM) guidance.

1.2.4 The properties at Tudor Close (receptor 1) are located approximately 175m north of the site. This is considered as a sensitive receptor as the property is in close proximity to the site and so is susceptible to the adverse effects of exposure to increased levels of dust and particulates. However, the distance between the site and the residence forms a potential buffer zone and allows time for dust and particulate to disperse before it could reach the receptor. The trees surrounding the site and those to be planted on the bunds on the site perimeter will also act as a buffer to screen dust and particulates from the property. Adding to this no visible pollutants should leave the boundary of the site.

1.2.5 The properties at the Coach House (receptor 2) are located approximately 225m south of the site. This is considered a sensitive receptor as the property is located in close proximity to the site and so may be susceptible to exposure of increased level of dust and particulates. However, the distance between the site and the residence forms a potential buffer zone and allows time for dust and particulate to disperse before it could reach the receptor. The trees surrounding the site and those to be planted on the bunds on the site perimeter will also act as a buffer to screen dust and particulates from the property. Additionally, no visible pollutants should leave the boundary of the site. The prevailing wind moves to the north east from the site (Figure 1.2) and so is unlikely to carry dust and particulate towards this receptor which is located south of the site.

1.2.5 The properties on Summer Hill lane (receptor 3) and the Coppards (receptor 4) are located within 300m of the site to the north-east. This means they may be susceptible to exposure of increased dust and particulates and are in the direction of the prevailing winds. However, the mitigation procedures outlined in this management plan will successfully reduce the risk of dust reaching these receptors.

1.2.6 The Brownings property (receptor 10) is located 40m to the south west of the site so is classed as a sensitive receptor. However, the property is located to the south west of the site so not in the direction of the prevailing winds so any fugitive dust emissions will not be blown in the direction of this receptor. Following the mitigation measures set out in this document, no dust will leave the permitted site boundary. Alongside this, the owners of the property also own the depot so have an understanding of the dust production and sources.

1.2.7 The remaining residential receptors (receptors 5, 6, and 7) that are within 1000m of the site are situated over 500m away from the site. Dust and particulates emitted from the site are unlikely to

spread to these receptors.

1.2.8 There are two nursing homes (receptors 8 and 9) located within 1000m of the site. Woodside Hall Nursing Home is considered to be a sensitive receptor due it's proximity to the site, 350m to the north. Ersham House Nursing Home (receptor 9) is not considered to be sensitive as it is located 1000m from the site, so dust is unlikely to reach this receptor. Dust and particulates are unlikely to spread to these receptors on the north easterly prevailing winds as they are located to the north and east of the site. The vegetation bund on the northern and eastern boundaries of the site will also act as a screening bund to prevent dust exiting this side of the site.

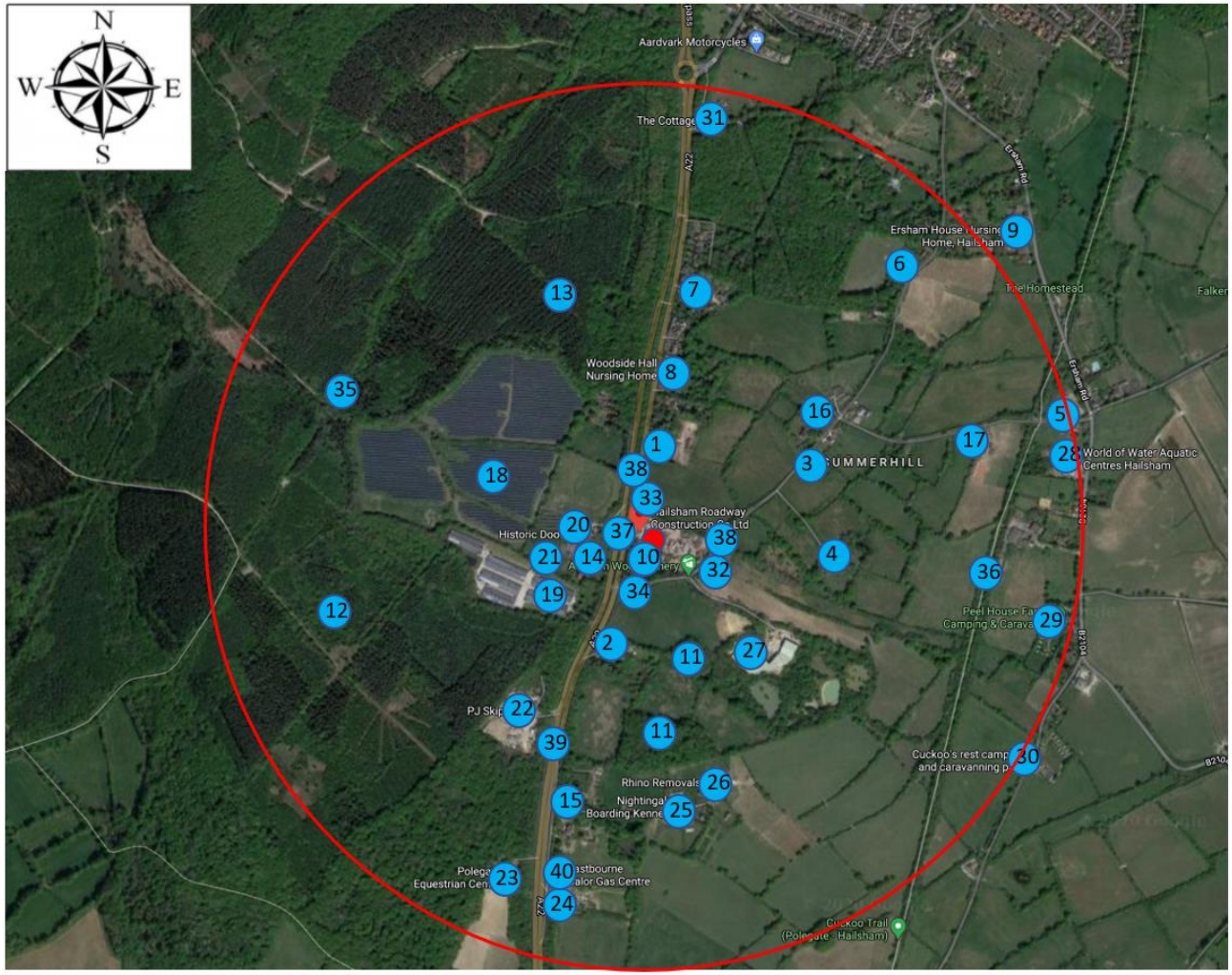
1.2.9 The Natewood Solar Farm (receptor 18) is located 250m from the activity on site and is at medium risk as dust could affect the efficiency of the solar panels at producing energy. However, the site is well situated so that any dust will not be carried in this direction.

1.2.10 Natewood Farm (receptor 14) is considered to be a sensitive receptor due to its proximity to the site; 110m to the west. However, the site will be screened by vegetation and the A22 lies between the receptor and the site to prevent any fugitive emissions escaping the site and reaching this receptor. There are other farms (receptors 15, 16 and 17) located further away from the site so are not considered sensitive.

1.2.11 There are multiple businesses located within 1000m from the site (receptors 19-31). These are at medium risk. The likelihood of dust and particulates being emitted from the site which would affect these businesses and the people involved is very low with the abatement measures identified within the environmental H1 risk assessment and this document.

1.2.12 There are three public footpaths and a bridleway located near the site. The bridleway is to the west of the A22 which acts as a barrier between the path and the site. No dust will escape from the site and effect these paths due to the vegetation bunds and the abatement controls according to this Dust Management Plan.

1.2.13 There are many local wildlife sites, farmland and open space within 1000m of the site that are not marked on Figure 1.1 that are considered as low risk or low sensitivity in accordance with IAQM guidance. These have not been added as receptors to Figure 1.1.



Key:
- Site Location
- 1 Receptor

ID	Receptor
Residential	
1	Properties at Tudor Close
2	Properties at the Coach House
3	Properties on SummerHill Lane
4	Properties at Coppards
5	Mulbrooks Cottages
6	Properties on Coldthorn Lane
7	Properties on Woodside Way
8	Woodside Hall Nursing Home
9	Ersham House Nursing Home
10	Brownings
Woodland	
11	Ancient and semi-natural woodland
12	Ancient, replanted woodland
13	Surrounding wooded areas
Sensitive Land Uses	
14	Natewood Farm
15	Rosebank Farm
16	Stockhall Farm
17	Little Mulbrooks Farm
Industrial/Commercial	
18	Natewood Solar Farm
19	Woodside Poultry Farm
20	Historic Doors
21	A.T.P Paintworks
22	PJ Skips
23	Polegate Equestrian Centre
24	K2 Indian Takeaway
25	Nightingale Boarding Kennels
26	Rhino Removals
27	Amazon Wood Fishery
28	World of Water Aquatic Centres
29	Peel House Farm Camping/Caravan Park
30	Cuckoo's Rest Camping/Caravan Park
31	The Cottage Takeaway
Public Rights of Way	
32	Public Footpath
33	Public Footpath
34	Public Footpath
35	Bridleway – Robin Post Lane
36	Cuckoo Trail Cycleway
Infrastructure/utilities	
37	A22 (Polegate Road)
38	Summer Hill Lane
39	Bus stop on A22
40	Eastbourne Calor Gas Centre

Figure 1.1 - Site Location Map showing Nearby Sensitive Receptors

Table 1.1 - Distances to Selected, Representative Sensitive Locations

Receptor	Distance from site (m)	Direction
Residential		
Properties at Tudor Close **(sensitive)**	175m	North East
Properties at the Coach House **(sensitive)**	225m	South
Properties on SummerHill Lane	280m	North East
Properties at Coppards	285m	East
Mulbrooks Cottages	855m	North East
Properties on Coldthorn Lane	760m	North East
Properties on Woodside Way	520m	North
Woodside Hall Nursing Home **(sensitive)**	350m	North
Ersham House Nursing Home	1000m	North East
Brownings	40m	South West
Woodland		
Ancient and semi-natural woodland **(sensitive)**	195m and 360m	South
Ancient, replanted woodland **(sensitive)**	680m	South West
Surrounding wooded areas	500m – 1000m radius of the site	All directions
Sensitive Land Uses		
Natewood Farm	110m	West
Rosebank Farm	485m	South
Stockhall Farm	385m	North East
Little Mulbrooks Farm	670m	North East
Industrial/Commercial		
Natewood Solar Farm	250m	West
Woodside Poultry Farm	170m	South West
Historic Doors	125m	West
A.T.P Paintworks	140m	West
PJ Skips	430m	South
Polegate Equestrian Centre	760m	South
K2 Indian Takeaway	750m	South
Nightingale Boarding Kennels	540m	South
Rhino Removals	510m	South
Amazon Wood Fishery	240m	South East
World of Water Aquatic Centres Hailsham	845m	East
Peel House Farm Camping & Caravan Park	815m	East
Cuckoo's Rest Camping and Caravanning	900m	South East
The Cottage Takeaway	950m	North
Public Rights of Way		
Public Footpath	30m	East
Public Footpath	25m	North
Public Footpath	30m	South
Bridleway – Robin Post Lane	775m	West
Cuckoo Trail Cycleway	645m	East
Infrastructure/utilities		
A22 (Polegate Road)	20m	West
Summer Hill Lane (into Coldthorn Lane)	10m	Eastern to Southern boundary
Bus stop on A22	200m and 405m	North and South

Eastbourne Calor Gas Centre	710m	South

1.3 Environmental Effects

1.3.1 Wind Direction

Winds with speeds exceeding >5m/s from the direction of the dust source that occur more than 20% of the time are considered to increase the likelihood of dust being raised and blown from the site. The data for Herstmonceux shows that winds with a speed of >5m/s occur on average for 4,096 hours per year (or 46% of the time). However, the data does not define the percentage of that period which is dry. The data does show that the average number of dry days per year at Herstmonceux is 213 (or 58% of the time). This assessment will therefore assume a worst-case scenario of all winds >5m/s occurring on dry days.

Wind rose data from Herstmonceux weather station show that the prevailing wind is on average only 3.5 m/s (7.9 mph) (a gentle breeze on the Beaufort Scale) to the North East where winds of >5m/s occur 9.7% of the time, which is considered moderately frequent (Figure 1.2). Moderately frequent winds also occur from the South South West at 7.2% of the time. Winds of >5m/s from all other directions are defined as 'infrequent' occurring less than 5% of the time.

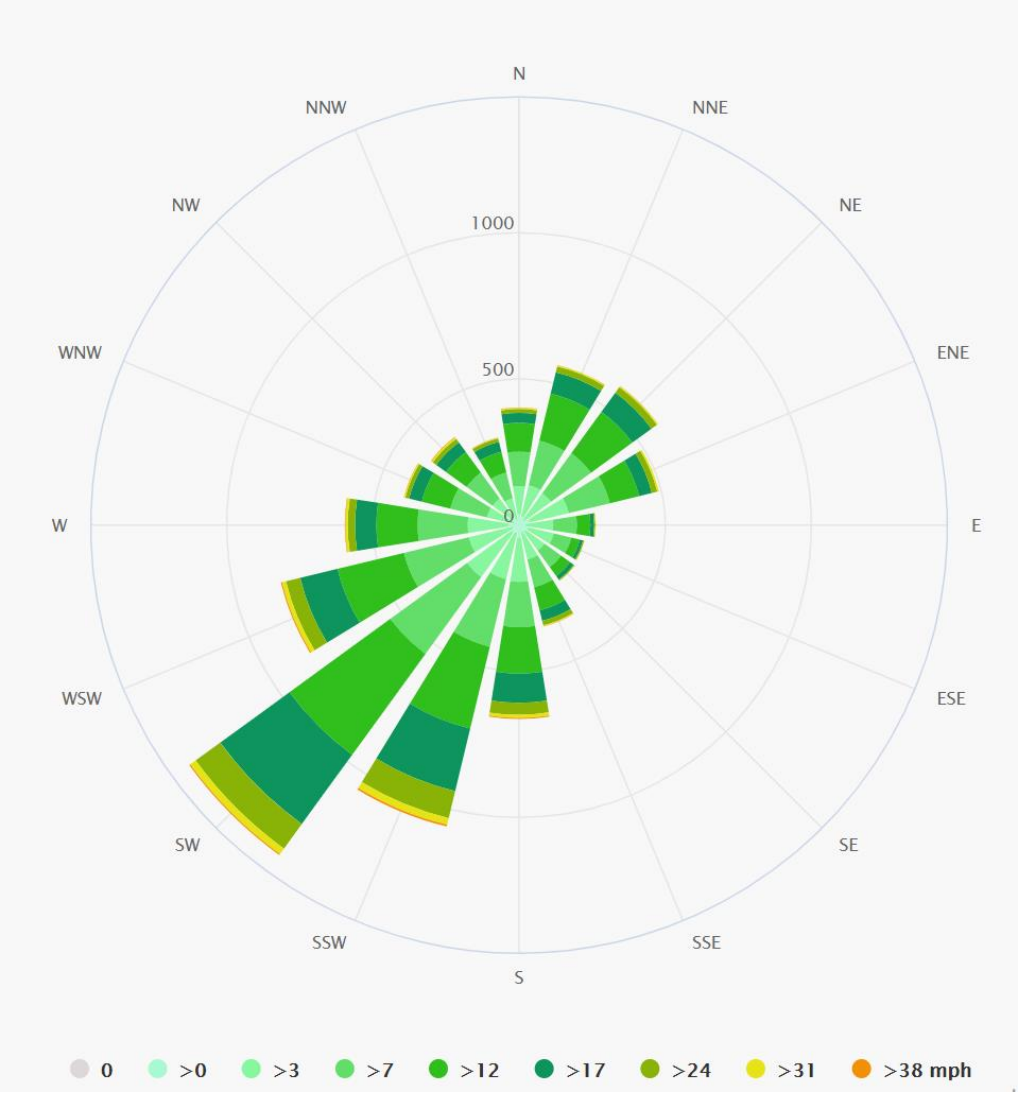


Figure 1.2 - Wind rose showing the average wind direction and strength at Herstmonceux Meteorological station (located 7.5 km from Woodside Depot)

1.3.2 Herstmonceux Meteorological weather station is considered an urban flat site. It has a similar topography and similar weather conditions to those at the Woodside Depot so this wind rose data is comparable to that of the site.

1.3.3 Rainfall

0.2 mm rainfall a day is considered sufficient to effectively suppress wind-blown emissions, however analysing days with greater than 1 mm rainfall is considered to be a more robust approach. As shown in Table 1.2, the average number of days per month with greater than 1mm rainfall is quite consistent throughout the year. Using this climatic rainfall data, it is likely that for 33.7% of the year dust will be suppressed due to meteorological conditions.

Month	Rainfall (mm)	Days of rainfall ≥1 mm (days)	Proportion of the month with days of ≥1mm rainfall (%)
January	84.5	13	41.9
February	54.6	10.2	36.4
March	57.8	10.4	33.5
April	52.1	9.2	30.7
May	50.7	8.3	26.8
June	53.7	7.7	25.7
July	53.8	7.6	24.5
August	61.1	8.5	27.4
September	65.3	10	33.3
October	107.7	12.5	40.3
November	101	12.5	41.7
December	90.3	13	41.9
Annual	832.5	122.9	33.7

Table 1.2 – Climatic rainfall Data from 1981 - 2010 at Herstmonceux Meteorological station (located 7.5 km from the Woodside Depot)

2.0 Operations at Woodside Depot

2.1 Waste Deliveries to Woodside Depot

2.1.1 Waste will arrive on site in HGVs entering off the A22.

2.1.2 Waste will be covered when transported in vehicles into and out of the site. When tipping, material will be dampened down when necessary.

2.1.3 Every waste movement coming onto site will be recorded by a Waste Transfer Note (WTN) or hazardous waste consignment note (HWCN) with the following information:

- A description of the waste, i.e. EWC code
- The Quantity of the waste
- The Origin of the waste
- Delivery data and the identity of the waste producer

2.1.4 The Operator shall keep a copy of the WTN on site. All waste received at the site shall be visually inspected to confirm that the description and composition conform to the written description and the European Waste Code on the relevant WTN and to the description as detailed in the permit, and any other accompanying documentation.

2.1.5 If a vehicle load, upon inspection, is non-compliant with the Environmental Permit, waste will be refused entry and the event shall be recorded into the site diary. The site diary shall be kept on site.

2.1.6 Waste types and EWC Codes accepted on site are outlined in the Environmental Management System and Table 1a.

2.1 Overview of Waste Processing, Dust and other Emission Controls

2.2.1 The site is split into different areas for safety reasons with clear safe working areas around all working plant. The site is split into the Contractors yard, waste operations area and hazardous waste storage and processing area.

2.2.2 The site extends to approximately 2.5 hectares and comprises an open yard with two principal site buildings utilised as a workshop and a store. A third building (to be used as a storage barn for topsoil and other mineral products) is proposed under the current planning application. An office and welfare facility adjoins the former residential property, Brownings, immediately adjacent to the southern edge of the open yard. The office accommodation for the Roadways business now extends into Brownings.

2.2.3 Within the northern and eastern boundary of the depot a screening bund has been constructed. The bund benefits from established vegetation. There are a number of mature trees that line the site boundary along the A22 and Summerhill Lane. The southern and western boundaries have established vegetation.

2.2.4 The ticket office is located next to the weighbridge ahead of the site entrance, loads are inspected from this point before being accepted on site. Once inspected wastes are tipped in the according bays. The storage bays face away from the prevailing wind direction to reduce wind-whipping of stockpiled material.

2.2.5 A barn structure will be used to store topsoil and other mineral products located on the northern side boundary; this will be 7m high. It is located on the edge of the site to ensure that any processing and operating activities on site do not disturb the stockpile and cause any unnecessary dust emissions.

2.2.6 Aggregates and stockpiles will be contained using push-walls and sleeper bays.

2.2.7 The drainage system comprises of three SUDS: the drainage pond is located on the southern boundary of the permitted site to accommodate the southern direction of the fall, the swale is in the contractors yard and the geocellular crates at the most southern point of the site.

2.2.8 The site will operate wheeled loading shovels, 360 material handlers, grading and screening plant, crushing machine, excavator and batching these would be located in the waste operations area away from the boundary. There is a minimum of 15m of existing and new planting which buffers the operational area which aids in containing dust on site.

2.2.9 Crushing will be done on small volumes frequently to ensure that stockpiles remain below 7m and do not affect the vegetation at the site boundary. A concrete crusher for larger volumes would not be based on site and would be hired in if a sufficient volume of material has accumulated.

2.2.10 The western part of the open yard is principally laid to tarmac, the eastern part comprises of hardstanding and the site entrance surfaced with asphalt. The hazardous waste storage and processing area comprises of a concrete pad. The internal site haul road along with the dedicated tipping and loading bays will have a stone surface reinforced with a geo-grid (e.g. cellweb or similar).

Water based dust suppression system

2.2.12 Water spray bars are fitted to the concrete crusher and other processing equipment wherever appropriate.

2.2.13 Sprinklers will be used in 'high activity' waste processing areas and along haul roads. The number of sprays on site doubled in 2020.

2.2.14 Dust suppression dust cannons will be used when undertaking crushing operations in very dry conditions. Stockpiles and crushing areas have water suppression sprinklers to control dust.

2.2.15 Mobile water bowsers will be used on site when required to minimise windblown dust escaping during dust producing activities. This will be filled using wastewater from the site. A portable hose pipe system will be used to pump out of the mobile bowser.

3 Dust and Particulate (PM_{10}) Management

3.1 Responsibility for Implementation of this plan

3.1.1 The Technically Competent Manager (TCM) or the Nominated Competent Person/s (NCP) is responsible for the DMP.

3.1.2 The TCM/NCP will undertake daily visual checks on all plant and operational activities.

3.1.3 A designated member of staff would undertake regular inspections of the site and its boundary to check for any evidence of dust deposition. These checks and observations would be recorded in the site diary. The frequency of checks would be increased when activities with a high potential to produce dust are being carried out and/or during prolonged dry or windy conditions.

3.1.4 Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the plant and airborne emissions. Training will be given to all operatives on all aspects and impacts relating to the operation. All HSEQ (Health Safety Environment & Quality) training will be delivered in accordance with site RAMS (Risk Assessment & Method Statements) documentation.

3.1.5 The TCM/NCP should review the DMP during annual audits to make sure it complies with the Environment Agency (EA) guidance. The DMP will also be reviewed if any dust complaint is received.

3.2 Environmental Monitoring for Vulnerable Receptors

3.2.1 Environmental monitoring may be required where there are vulnerable receptors. No visible dust is permitted to leave the site boundary therefore it should not cause nuisance to any of the receptors identified.

3.2.2 Mitigation measures are listed in section 3.3 to minimise any adverse impact.

3.3 Sources and Control of Fugitive Dust/Particulate Emissions

Emission Limits

3.3.1 The following emissions limits shall apply:

Emissions	Sources	Limit	Monitoring
Dust	Dust raising from public, haul roads and operational surfaces through vehicle movements	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust raising from the mechanical loading/unloading of wastes, blending	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust and particulate raising from the treatment operation such as crushing, screening	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.
Dust	Dust and particulate raising from stockpiles	No visible airborne emission to cross the site boundary	Operator visual observations at site boundaries downwind of operations for dust emissions at least twice daily. Abnormal events causing dust to be recorded in site diary.

Table 3.1 - Emission Limits and Monitoring Requirements

3.3.2 The site Environmental H1 Risk Assessment includes a source – pathway – receptor model for the control of site environmental impacts.

3.3.3 The operator shall record observations and weather conditions on the dust monitoring sheet. Any abnormal dust observations will be recorded in the site diary. The records must include the time, location and result of the visual assessment. The record must be kept by the operator for at least two years and be made available to the regulator for examination, on request.

3.3.4 Any historical records kept off site should be made available to the regulator for inspection within one working week of a request.

Control Techniques

3.3.5 BPM (Best Practicable Means) will be met in terms of emission limits outlined in table 3.1 (table 3.11 of the Sector Guidance Note 5.06). The control techniques that shall be used are given below and further defined in the operators Environmental Management System document (Appendix A). Other techniques may be used providing Hailsham Roadways Construction Co. Ltd can demonstrate that an equivalent level of control will be achieved. Prior written approval must be obtained from the regulator prior to using any other technique.

Stockpiles and Ground Storage

3.3.6 Airborne emissions from stockpiles shall be controlled. Methods such as limiting the location of stockpiles, covering or damping down will be used. Consideration shall be given to prevailing winds and weather conditions, such as a change in wind speed or wind direction and dust suppression used or operations modified accordingly, for example suspension of operations at times of high winds and dry weather.

3.3.7 Transferring of all materials to and from stockpiles shall be carried out in such a manner as to minimise airborne emissions this may include damping down when required, minimising drop heights from all plant and machinery and covering tippers. Operational areas will be regularly swept and washed or dampened, as necessary.

3.3.8 All waste will be stored in the designated containers or stockpile areas.

3.3.9 Dusty wastes will be covered with sheeting during high winds or drought or when dust emissions can be seen during visual monitoring. Covering of waste and stockpiles will be recorded in the Site Diary.

Process Operations

3.3.10 Spray bars will be used on crushing and screening plants. Water spray directed in jaw of crusher alongside a dust cannon used during crushing activities. Small volumes of crushing will be done regularly using the on-site crusher. All operators will be trained and implement the necessary dust mitigation activities. If a load is overly dusty then operations will be ceased. Large volumes of crushing is undertaken by specialist crushing companies and the TCM/designated responsible person will brief the crushing specialist on this DMP to ensure dust impacts are mitigated. Crushing activities (permitted by local authority Part B installation Permits) are to be monitored by local environmental

health officers.

3.3.11 When depositing material into bays or for processing, drop heights shall be minimised.

3.3.12 Processing operations will be ceased in high winds.

3.3.13 Sprinklers will be used in 'high activity' processing areas and along haul roads.

Loading and Unloading

3.3.14 When loading vehicles, dust misters will be used to dampen materials if any dust is generated and the material will not be placed higher than the vehicle sides. Any spillage of material during loading will be removed as part of routine housekeeping measures. Vehicles shall be sheeted when entering or leaving or otherwise totally enclosed as soon as possible after loading where crushed material is smaller than 75mm. Any vehicles which have materials covering external surfaces will be cleaned (by jet washing) to prevent dust generation before leaving site.

Roadways and Transportation

3.3.15 Road sweepers will be used during dry periods on the site haul road and entrance/access road as a dust suppression solution. Sweeping will also be carried out when dust from haul roads appears airborne during daily inspections. This sweeping will keep the site roadways clear of dust, mud and debris. If there are any build-up of deposits on site then manual scraping will be carried out to remove them prior to sweeping. Any sweeping or jet washing will be recorded in the site diary.

3.3.16 The site has been designed so no haulage vehicles will be in contact with mud from operational surfaces. This will keep the site haul road clear of any dust, mud or debris and manual sweeping will be used to maintain clearance on the site haul road.

3.3.17 The same procedures will be in place during autumn and winter as the haul road will be kept clean and no vehicle can leave the site before it has been inspected for dust/mud/debris. Therefore, mud tracking and staining off site will not occur.

3.3.18 There will be a speed limit of 5mph on site to prevent dust generation from surfaces.

3.3.19 The company has an informal 'Anti-Idling Policy' to ensure that any stationary vehicles switch off their engines which will be enforced on site.

Source	Pathway	Receptor	Type of impact	Where relationship can be interrupted
Dust and particulate raising from operational surfaces through vehicle movements;	Falling off lorries and atmospheric dispersion	Residential properties, business, woodland, solar farm	Visual soiling, also consequent resuspension as PM10	Outlined in 3.3.14-3.3.19
Dust and particulate raising from the mechanical loading/ unloading of wastes, blending	Atmospheric dispersion	Residential properties, businesses, woodland,	Visual soiling and airborne particulates	Outlined in 3.3.7, 3.3.11 and 3.3.14

		solar farm		
Dust and particulate raising from treatment operations such as crushing, screening;	Atmospheric dispersion	Residential properties, businesses, woodland, solar farm	Visual soiling and airborne particulates	Outlined in 3.3.9-3.3.13
Dust and particulate raising from stockpiles	Escape from stockpiles and subsequent atmospheric dispersion	Residential properties, businesses, woodland, solar farm	Airborne particulates	Outlined in 3.3.6-3.3.9
Mud	Mud dropping off vehicles and wheels when dry	A22	Visual soiling	Outlined in 3.3.9 and 3.3.14-3.3.19
Debris	Falling off lorries and escape from stockpiles	A22, A34 and Summer Hill Lane	Visual soiling, also consequent resuspension as airborne particulates	Outlined in 3.3.6-3.3.9 and 3.3.15-3.3.19

Table 3.2 - Source-Pathway-Receptor Routes

3.4 Enclosure of Waste Processing & Storage Areas

3.4.1 The site is enclosed by a combination of vegetated bunding and fencing with established boundary planting.

3.4.2 The vegetated bund (minimum 3m high) and established boundary plating and fencing will act as a windbreak against any prevailing winds and assist in preventing dust being blown off-site.

3.4.3 The topsoil storage barn will be enclosed to reduce fugitive dust emissions from the material stored inside and will aid in keeping the material dry.

3.4.4 Micro-netting and screening will not be installed due to the visual impacts these will have on the surrounding receptors and because they will not provide further mitigation against dust in comparison with the established bunding and boundary planting.

3.5 Visual Dust Monitoring

3.5.1 The operator shall monitor emissions and make visual inspections of plant, table 3.1 sets out the measures for visual dust:

Appropriate Measures for Reducing Emissions of Dust	
Daily visual monitoring of aerial emissions at site	TCM /NCP to monitor operations throughout day at the site boundary that is downwind of operations.

boundaries shall be carried out by staff supervising all waste handling operations.	Observations and weather conditions including wind direction will be recorded on the dust monitoring sheet.
	Complaints to be recorded in the Site Diary and complaint form.

Table 3.1 - Mitigation measures for visual dust emissions

3.5.2 Visual inspections should be carried out during daily operational hours, especially when carrying out activities that are dusty (i.e. point 1.1.3). Additional routine monitoring at the site boundary downwind of operations will be carried out when concrete crushing is in operation. Also, the Part B Mobile Plant Permit conditions supplied by any external crushing subcontractors who come on site will be reviewed and a site-specific risk assessment produced relating to the crushing activity.

3.5.3 The operator shall record any abnormal observations in the site diary and report to the on-site TCM/NCP at the time of recognition who will review the visual monitoring. The records must include the time, location, and result of the visual assessment. The records must be kept by the operator for at least two years and be made available to the regulator for examination, on request.

3.5.4 In an event that mitigation measures are not effective, and dust escapes out of the site boundaries, all dusty activities should be suspended until investigation takes place to identify cause(s) and appropriate mitigation measures.

3.5.5 The TCM/NCP shall suspend the operations if the weather is likely to trigger significant dust emissions that mitigation measures cannot prevent, for example high winds or drought.

3.5.6 Any historical records kept off-site should be made available to the regulator for inspection within one working week of a request.

3.5.7 All site operations and processing will only be carried out during operational hours in the day. Therefore, no dust is expected to be produced out of hours. The design of the storage bays and covering of stored material, will mitigate any dust emissions from stored materials.

4.0 PM_{10} Monitoring

The UK Air Quality Standards seek to control the health implications of respirable PM_{10}. However, the majority of particles released from construction and related activities will be greater than this in size. PM10 is not monitored in Wealden District so the neighbouring districts have ben considered.

The operations at Woodside Depot may have the potential to elevate dust levels in the surrounding area, however, due to the size of the site and its distance from the nearest AQMA in Newhaven Town Centre (14km) and with mitigation measures, emissions should not affect PM_{10} concentrations. The PM_{10} impacts are classed as negligible. Further to this, nuisance dust deposition will be prevented by visual monitoring/mitigation measures identified in this plan.

The Newhaven AQMA

The AQMA was originally declared for NO_2, the designated area incorporates Newhaven Town Centre, Southway, Northway, and sections of the A259 Brighton Road, Lewes Road and the swing bridge. It was declared on the 16/07/2014 and the latest Air Quality assessment for Lewes District Council states:

Pollutant	Air Quality Objective of Wealden District Council	The Air Quality Standards Regulations 2010 Limit values	Measured as
	Concentration	Concentration	
Nitrogen dioxide (Provisional)	200µg/m^3 not to be exceeded more than 18 times a year	200µg/m^3 not to be exceeded more than 18 times a year	24-hour mean
	40µg/m^3	40µg/m^3	Annual mean
Particulate Matter (PM $_{10}$) (Gravimetric)	50µg/m^3 not to be exceeded more than 35 times a year	50µg/m^3 not to be exceeded more than 35 times a year	24-hour mean
	40µg/m^3	40µg/m^3	Annual mean

Woodside Depot is situated approximately 14km east of the AQMA and PM_{10} was not considered sensitive and external PM_{10} monitoring will not be carried out on site.

The health impacts associated with long term background PM_{10} exposure is covered under Section 5.2 of the IAQM Guidance on the Assessment of Mineral Dust Impacts for Planning. It states 'If the long term background PM_{10} concentration is less than 17µg/m^3 there is little risk that the Process Contribution (PC) would lead to an exceedance of the annual-mean objective and such a finding can be put forward qualitatively, without the need for further consideration.' The UK is required to comply with the annual-mean objective for PM_{10}. Defra have their own background monitoring for the UK for PM_{10}. Areas of the country are divided into sections. The Defra Background Maps show that this particular locations' PM_{10} background concentration is 13-17 µg/m^3 for 2019. This is below the 17 µg/m^3 stated in the guidance. The NO_2 background concentration is <10 µg/m^3 for 2019, this is below the 40 µg/m^3 statutory limit value. Therefore, activities at this site would unlikely give rise to an exceedance that would require monitoring.

4 Reporting and Complaints Response

4.1 Engagement with the Community

A complaint form will be available for those who are affected by the operations. If necessary, a meeting shall be carried out with complainants if dust is causing a serious impact.

4.2 Reporting of Complaints

4.2.1 In the event of a complaint, the TCM/NCP/site manager will immediately investigate the source of dust and whether it is originating from the site. Appropriate measures should be made, and action will be taken to prevent any further emissions leaving the site. Such actions may include suspending operations at site and applying water to the dust source.

4.2.2 The TCM should respond to a complaint within 2 working days.

4.2.3 A Corrective Action Report will be completed describing the incident and should include details as specified above. A record shall be made in the site diary.

4.2.4 The TCM or the designated responsible person will ensure that the Environment Agency (EA) is informed of these within 24 hours, ideally as soon as possible and as appropriate.

4.2.5 TCM will escalate investigations if successive complaints are received, operations will be suspended if 2 or more complaints are received within the same week. If complaints are found to be unsubstantiated, operations will continue at the discretion of the TCM.

4.3 Management Responsibilities

The TCM/NCP/designated responsible person/site manager shall take responsibility for any complaints. In the event of a complaint, the Site Manager should carry out procedures set out in section 4.2.

5.0 Summary

5.1 Treatment carried out at Woodside Depot may produce dust, but it will be limited by the nature of the operations and mitigation measures. In any event, dust can be controlled to prevent its escape and to minimise airborne dispersal.

5.2 The main causes of dust will be related to treatment activities, transportation, and stockpiling.

5.3 Dust from treatment activities will be controlled by effective site management with appropriate mitigation measures, this will include:

- Daily review of prevailing weather conditions and site operations
- Implementation of a vegetation bund and plantation of vegetation to act as a screen to prevent dust from leaving the site
- Use of spray bars on crushing and screening plant
- Damping down of stockpiles and site haul roads
- Appropriate location of stockpiles and processing areas to prevent windblown dust escaping
- Regular maintenance of all plant
- Keeping vehicles clean and dust free and roadways dust free
- Careful transfer of material on site
- Postponing operations if significant wind-blown dust is likely to occur

5.4 Daily monitoring of dust levels and an annual review of the DMP will be carried out to prevent any adverse dust impacts from the site.

5.5 The procedures outlined in this DMP apply to all activities carried out at the Hailsham Roadways Woodside Depot for both wastes and non-waste materials stored at the facility.