

Draft Dust Management Plan

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Introduction

Protreat Ltd has prepared this Dust Management Plan to support a planning application for a Construction Materials Recycling Facility (CMRF) and claypit operation, on land north east of Loxwood. The site is located at National Grid Reference TQ 05090 32831, in a wooded setting, within the Low Weald Hills, on land north of Loxwood Road. It comprises an area of 8 hectares of woodland, 6 hectares of which would be progressively excavated for clay, then backfilled and restored.

The proposed lorry access route to the site from Loxwood road layby northwards, would follow the route of the existing woodland ride for timber extraction, which is an access track for lorries, from Loxwood Road via Caddick's Copse, to the development site, approximately 1.6km distant. This access road is currently a gravelled track.

This Dust Management Plan considers the potential impacts from both the waste recycling operations and the claypit mineral extraction operation on the site, and includes detailed information on the sources, risks and mitigation measures related to the potential production of dust from these operations.

It is important to note that the potential emissions of dust and particulates will come under the control of the environmental permit to be sought for the site operations. As such this document serves mainly to highlight the measures that will be taken to prevent dust becoming an issue on site for planning purposes – the actual management of dust emissions will come under the control of the Environment Agency through the environmental permit.

Legislation

Air Quality Strategy

The Air Quality Strategy (AQS) for England, Scotland, Wales and Northern Ireland fulfils the requirement under Part IV of the Environment Act 1995 for a national air quality strategy, setting out policies for improving ambient air quality and keeping policies these under review.

The first strategy, the National Air Quality Strategy (NAQS), was published in March 1997. In January 1999, proposals to amend the strategy were put out for consultation, following this consultation a revised version of the strategy was published in January 2000. This was further revised in July 2007 and has not been revised since.

The AQS provides a framework for air quality control through air quality management and air quality standards and objectives for different pollutants (including particulate matter). These air quality standards and objectives were transposed into English Law by the Air Quality (Standards) Regulations 2010.

The AQS was published on the gov.uk website in March 2011.

Air Quality Management Areas (AQMA)

The system of local air quality management (LAQM) was introduced under the Environment Act 1995. LAQM requires local authorities to periodically review and assess the current and future quality of air in their areas. Where it is determined that an air quality objective is not likely to be met within the relevant time period, the authority must designate an AQMA.

The site is not located within an AQMA, neither is it anywhere near any low emission zone or other similar air quality regulatory area.

Nuisance

General Nuisance Legislation was introduced as part of the Environmental Protection Act (EPA) 1990 (as amended by the Noise and Statutory Nuisance Act 1993), which contains the primary legislation on Statutory Nuisance. This legislation allows local authorities to enforce measures to prevent nuisance in relation to dust emissions. Section 79 of the EPA defines dust emitted from industrial, trade or business premises which is prejudicial to health or a nuisance, as a potential Statutory Nuisance. It also defines accumulation or deposit, which is prejudicial to health as a nuisance. There are no statutory limit values for dust deposition above which 'nuisance' is deemed to exist – 'nuisance' is subjective, and its perception is therefore dependent upon the change which has occurred.

Relevant Guidance

The main document of relevance to this application is The Institute of Air Quality Management's (IAQM) 2016 Guidance on the Assessment of Mineral Dust Impacts for Planning v1.1. Within that document, *Appendix 4: Determining residual source emissions* gives examples of what should be considered in relation to the residual source emissions magnitude for a number of activities. The examples illustrate the factors which may be considered when making a professional judgement of the potential for causing dust during a dust assessment exercise.

When undertaking the dust assessment the designed-in mitigation measures, such as the location of particular activities on the site and the landscaping at the site boundary, also need to be taken into account.

The factors relating to the potential for causing dust outlined in Appendix 4 of the IAQM are noted as follows, with comments on how the site has been assessed against these factors.

IAQM - Determining residual source emissions:

A: Site Preparation/Restoration

LARGE		SMALL
Large working area		Small working area
High bunds		Low bunds
High volume of material movement		Low volume of material movement
High no. heavy plant		Low no. heavy plant
Minimal seeding/sealing of bund surface		Bunds seeded/sealed immediately
Material of high dust potential		Material of low dust potential

An example of a large potential dust magnitude from site preparation/restoration may include factors such as a working area >10ha, bunds >8 m in height, >100,000 m³ material movement, >10 heavy plant simultaneously active, bunds un-seeded, fine grained and friable material. Conversely, a small potential dust magnitude may include a site with a working area <2.5ha, bunds <4 m in height, <20,000 m³ material movement, <5 heavy plant simultaneously active, all bunds seeded, material with a high moisture content.

Comment: the proposed site will have a working area that is less than 0.5ha; bunds will be < 4m in height; c. 6,500m³ material movements are anticipated; maximum of 2 heavy plant will be simultaneously active; all restored areas will be seeded immediately upon

completion of a cell; and the materials being excavated will have a high moisture content. Therefore – utilising the factors outlined in the guidance there is a **small dust magnitude potential** due to this source.

B: Mineral Extraction

LARGE	SMALL
Large working area	Small working area
High energy extraction methods	Low energy extraction methods
Material of high dust potential	Material of low dust
Potential high extraction rate	Low extraction rate

An example of a large potential dust magnitude from mineral extraction may include a working area >100 ha, drilling and blasting frequently used, dusty mineral of small particle size and/or low moisture content, 1,000,000 tpa extraction rate. A small potential magnitude may include working area <20 ha, hydraulic excavator, coarse material and/or high moisture content, <200,000 tpa extraction rate.

Comment: the proposed site will have a 0.5ha working area (6 hectares over 30 years); Extraction will take place using slow mechanical means such as a hydraulic excavator; The material being excavated is a coarse material with a high moisture content; and there will be a c. 12,500 tpa extraction rate.

Therefore – utilising the factors outlined in the guidance there is a **small dust magnitude potential** due to this source.

C: Materials Handling

LARGE	SMALL
High no. heavy plant	Low no. heavy plant
Unconsolidated/bare surface	Hard standing surface
Activities close to site boundary	Activities within quarry void
Material of high dust potential	Material of low dust potential

An example of a large potential dust magnitude from materials handling may include factors such as >10 loading plant within 50 m of a site boundary, transferring material of a high dust potential and/or low moisture content on dry, poorly surfaced ground. Conversely, a small potential dust magnitude may include <5 plant, more than 100 m of a site boundary, within the quarry void or clean hardstanding, transferring material of low dust potential and/or high moisture content.

Comment: the proposed site will have just 2 heavy plant and activities are within the quarry void - but they will take place within 100m of the site boundary; The handling involves transferring material of low dust potential and/or high moisture content. Therefore, whilst most of the factors in this section would lean toward an assessment of small potential, due to the proximity to the site boundary, predicting a **medium potential dust magnitude** for this factor errs on the side of caution.

D: On-Site Transportation

LARGE		SMALL
Use of unconsolidated haul roads.....	.....	Use of conveyors
Unpaved haul roads.....	.....	Paved haul roads
Road surface of high dust potential.....	.....	Road surface of low dust potential
High no. HDV movements.....	.....	Low no. HDV movements
High total length of haul roads.....	.....	Low total length of haul roads
Uncontrolled vehicle speed.....	.....	Controlled (low) vehicle speed

An example of a large potential dust magnitude from on-site transportation could include >250 movements in any one day on unpaved surfaces of potentially dusty material. A small potential magnitude may include the employment of covered conveyors used for the majority of the on-site transportation of material, <100 movements of vehicles per day, with surface materials of compacted aggregate, <500 m in length and a maximum speed of 15 mph.

Comment: the proposed site will have lidded containers for the movement of restoration materials out of the CMRF, and these materials remain in the containers until required; There are 42 movements of vehicles per day, with surface materials of compacted aggregate or asphalt; The haul roads are greater than 500m in length but will have a maximum speed of 5 mph. Therefore, it is assessed that there is a **small potential magnitude** of dust due to this factor.

E: Mineral Processing

LARGE		SMALL
Raw material of high dust potential.....	.....	Raw material of low dust potential
End product of high dust potential.....	.....	End product of low dust potential
Complex or combination of processes.....	.....	Single process
High volume material processed.....	.....	Low volume material processed

An example of a large potential dust magnitude from mineral processing may include factors such as a mobile crusher and screener with concrete batching plant on-site, processing >1,000,000 tpa of material with a high dust potential and/or low moisture content e.g. hard rock. Conversely, a small potential dust magnitude may include a site with a fixed screening plant with effective design in dust control, processing <200,000 tpa of material with a low dust potential and/or high moisture content e.g. wet sand and gravel.

Comment: the proposed CMRF will have a concrete crusher but this will be inside a building, so dust emissions from that source are unlikely; Any fixed screening plant operated outside for clay would be used in conjunction with the Mist-Air system for dust control; There will be 12,500tpa processing of low dust potential material and/or high moisture content weathered clay. Therefore, it is predicted that there is a **small potential dust magnitude** from this source.

F: Stockpiles/Exposed Surfaces

LARGE	SMALL
Long term stockpile.....	Short term stockpile
Frequent material transfers.....	Infrequent material transfers
Material of high dust potential.....	Material of low dust potential
Ground surface unconsolidated/un-kept.....	Ground surface hardstanding/clean
Stockpiles close to site boundary.....	Stockpiles well within quarry void
Large areas of exposed surfaces.....	Small areas of exposed surfaces
High wind speeds/low dust threshold.....	Low wind speeds/high dust threshold

An example of a large potential dust magnitude from stockpiles and exposed surfaces could include a stockpile with a total exposed area >10 ha in an area exposed to high wind speeds located <50 m of the site boundary. Daily transfer of material with a high dust potential and/or low moisture content. Stockpile duration >12 months and quarry production >1,000,000 tpa. A small potential magnitude may include stockpile duration of <1 month with a total area <2.5 ha in an area of low wind speeds, located >100 m from the site boundary. Weekly transfers of material with a low dust potential and/or high moisture content. Quarry production <200,000 tpa.

Comment: Whilst any stockpiles are likely to last more than the 1 month stated for a small impact, the proposed site will have a total stockpile area of < 0.5ha in a sheltered area with low wind speeds; the stockpiles are located 15 to 200m from the site boundary; with a clay quarry production of just 12,500 tpa. Therefore, overall it is assessed that there is **a small potential magnitude** of dust from this source.

G: Off-Site Transportation

LARGE	SMALL
High No. HDV Movements.....	Low No. HDV Movements
Unconsolidated Access Road.....	Paved Access Road
Limited/No Vehicle Cleaning Facilities.....	Extensive Vehicle Cleaning Facilities
Small Length of Access Road.....	Large Length of Access Road

An example of a large potential dust magnitude from off-site transportation could include total HDV >200 movements in any one day on unsurfaced site access road <20 m in length with no HDV cleaning facilities. No road sweeper available. A small potential magnitude may include <25 HDV movements per day, paved surfaced site access road >50 m in length, with effective HDV cleaning facilities and procedures, the employment of an effective road sweeper.

Comment: the proposed site will have just 42 HGV movements per day; with a paved site road > 50m in length; utilising effective cleaning facilities and procedures; and utilising an effective road sweeper when required. Therefore, it is assessed that there is **a small to medium potential magnitude** of dust from this source

Overall – utilising the guidance above – the potential for the site to cause dust issues is assessed to be small, particularly when the mitigating factors outlined elsewhere in this document, such as the Mist-air dust suppression systems, are taken into account.

For more details see - <https://www.mist-air.co.uk>

Site Location and Sensitive Receptors

The development site is approximately 1.6 km to the northeast of Loxwood, 1.5 km southeast of Alfold, 1.2 km east of Alfold Bars, 2.7 km west of Bucks Green, 1.5 km west of Tisman's Common, 3 km east of Rudgwick, and 6.4 km south of Cranleigh. The land is approximately 2 km north of the Wey and Arun Canal, which flows westwards, south of the site, through the village of Loxwood. The rural isolation of the site means that there are very few potentially sensitive receptors, see Figure 1 below:

Figure 1 – Site Location



The site lies due south of the County Boundary between Sussex and Surrey and of the Sussex Border Path. The County boundary thus lies quite close to the north of the site. The A281 is 1.3km north of the site.

Sensitive Receptors - Residences

As can be seen in Figure 1 above, there are no close-by residences to the development site. There are isolated farms to the west of the site including Old Songhurst Farm, which is set amidst a mosaic of farmland. Merry Hills and Songhurst farm are located to the south west of the site. To the east of the Pallinghurst Woods is Barnsfold Farm House, and Barnsfold, dotted along Barnsfold Lane towards Tisman's Common. These residences are all 400m+ distant from the nearest parts of site and are therefore unlikely to be affected by dusts from the operation.

In relation to the proximity of residences to the access track, Barnfold Farm is located on Loxwood Road beyond the southern boundary of Pallinghurst Woods, but it is at least 400m from the access track. Pephurst Farm further east on the south side of Loxwood Road and the house Ivyhurst just off the layby are closer to the track. These latter two

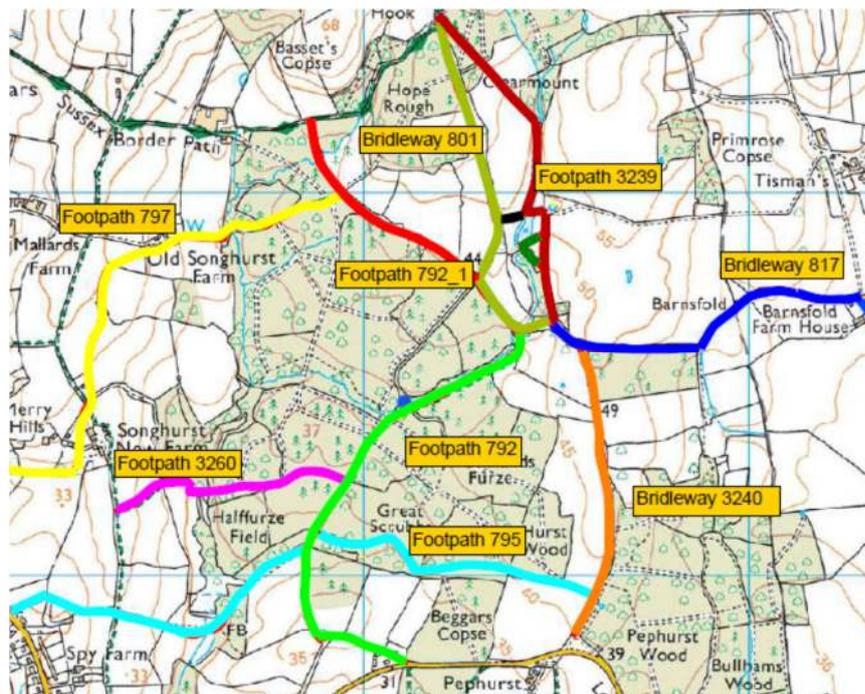
residences are within 200m of the access track, so are considered to be potentially sensitive receptors.

Sensitive Receptors - Footpaths

There are 5 foot paths that pass through Pallinghurst Woods but only one of these is close to the proposed development site. Foot path 795 runs west / east just inside the southern boundary of Pallinghurst Woods and foot path 792 runs south / north crossing path 795 before joining bridleway 801 at the northern boundary of Pallinghurst Woods. Footpath 792 then becomes foot path 792_1 in a north-westerly direction, parallel to the boundary of the proposed development site, before joining the Sussex Border Path beyond the north western corner of Pallinghurst Woods. Foot path 797 runs from Old Songhurst Farm before joining foot path 792_1 at the north western corner of the development site. Bridleway 801 continues north from Pallinghurst Woods to join the Sussex Border Path north of Hope Rough. Foot path 3260 runs for a short distance from the west, before joining path 792 at the southern end of Pallinghurst Woods. Bridleway 3240 runs north from the layby on Loxwood Road to join bridleway 817, which then merges into bridleway 801 beyond the northern boundary of Pallinghurst Woods.

Several of these footpaths and bridleways could be considered sensitive receptors due to their proximity to the site or access track, so these are included in the table of sensitive receptors below.

Figure 2 ; Sensitive Receptors - Footpath Map



Sensitive Receptors – Statutory & Environmental

There are no Sites of Special Scientific Interest (SSSI) located within a 2km radius of the main development site. No locally designated non-statutory sites are located within a 1km radius of the development site. Pallinghurst Woods is a mixture of traditional orchard, deciduous woodland and ancient woodland, the nearest of which abuts the western edge

of site. The deciduous woodland surrounding parts of the site and access track are also classed as priority habitat.

The site is not located within a source protection zone and there are no groundwater source protection zones within 1km of the development site.

The surrounding area of Pallinghurst Woods is characterised by surface water drains and channels through the woodland. Whilst the major forest tracks have shallow drainage channels along the boundaries, there are no apparent discharge points from the site other than a culvert beneath the road to the south of the site and a second culvert on the western boundary. This western culvert discharges into a steep sided narrow man-made flat-bottomed channel.

Based on the Environment Agency's indicative Flood Map, the site is located within Flood Zone 1 and, therefore, classified as a low risk of flooding according to the National Planning Policy Guidance.

The site does not lie within close proximity to any rivers or other controlled surface waters.

The site and access track does however lie close to, or adjacent to, areas of ancient woodland and woodland designated as priority deciduous woodland habitat, these are therefore considered potentially sensitive receptors.

Whilst, over time, the trees in the centre of the site will be removed, some of the trees on the northern and eastern edges of the site will be retained as part of the development proposals. These remaining strips of trees are being maintained around the site for a number of ecological reasons, such as habitat retention and to act as woodland corridors. These retained strips of trees are also deciduous priority habitat and as such will also be potentially sensitive receptors.

Sensitive Receptor Locations

The vast majority of particles responsible for annoyance are deposited within 100m of the source¹, and hence it is in this zone that the risk of problems from dust is greatest.

To allow for the effect of distance, buffer zones are often defined by mineral and waste planning authorities around potentially dusty activities to ensure that sufficient protection is provided. The 1995 DoE Guidance² recommended a buffer distance of 100-200m from significant dust sources (excluding short-term sources), although it is recognised that these distances can be reduced if effective mitigation measures are identified and implemented.

The Institute of Air Quality Management's (IAQM) 2016 Guidance on the Assessment of Mineral Dust Impacts for Planning v1.1 states "*dust impacts will occur mainly within 400m of the operation, even in the dustiest of sites*".

Therefore, in keeping with the use of the precautionary principle, the map and table below shows the potential sensitive receptors within 400m of site and the access track. These locations are outlined in Table 1 below.

Table 1 – Potentially Sensitive Receptors within 400m

¹ 1 Arup & Ove Arup Environmental. Environment Effects of Surface Mineral Workings. DoE, October 1995

² Based upon research document - DETR, The Environmental Effects of Dust from Surface Mineral Workings (Dec 1995)

Receptor	Map Ref	Designation	Sensitivity	Direction from Site	Distance	Site location referred to
Pephurst Farm	1	Residence	High	South West	164m	Access Track entrance
Ivyhurst Cottage	2	Residence	High	East	60m	Access Track Entrance
Beggars Copse	3	Ancient Woodland	High	South	114m	Access Track
Pephurst Wood	4	Ancient Woodland	High	East	0m	Access Track Entrance
Great Scrubbs Wood	5	Ancient Woodland	High	South	0m	Access Track
Woodlands Furze	6	Ancient Woodland	High	North	0m	Access Track
Hurst Wood	7	Ancient Woodland	High	North	0m	Access Track
Songhurst Furze	8	Ancient Woodland	High	West	100 – 170m	Access Track
Songhurst Kiln Copse	9	Ancient Woodland	High	North West	0m	Site
Hope Rough	10	Ancient Woodland	High	North	140m	Site
Un-named Woodland	11	Ancient Woodland	High	North East	142m	Site
Great Birchfield Wood	12	Priority Habitat – deciduous woodland	Medium	South	60m	Access Track
Un-named Woodland	13	Priority Habitat – Deciduous Woodland	Medium	On Site	0m	Site
Bridleway 3240	14	Footpath Users	Low	West	0m	Access Track Entrance
Footpath 795	15	Footpath Users	Low	South	0m	Access track
Footpath 792	16	Footpath Users	Low	South & North	0m	Access Track
Footpath 792_1 & Northern boundary trees	17	Footpath Users & Priority Habitat – Deciduous Woodland	Low High	North	10m	Site
Footpath 797	18	Footpath Users	Low	West	80m	Site
Bridleway 801	19	Footpath Users	Low	East	10m	Site
Footpath 3239	20	Footpath Users	Low	East	180m	Site
Eastern Boundary Trees	21	Priority Habitat – Deciduous Woodland	High	East	10m	Site

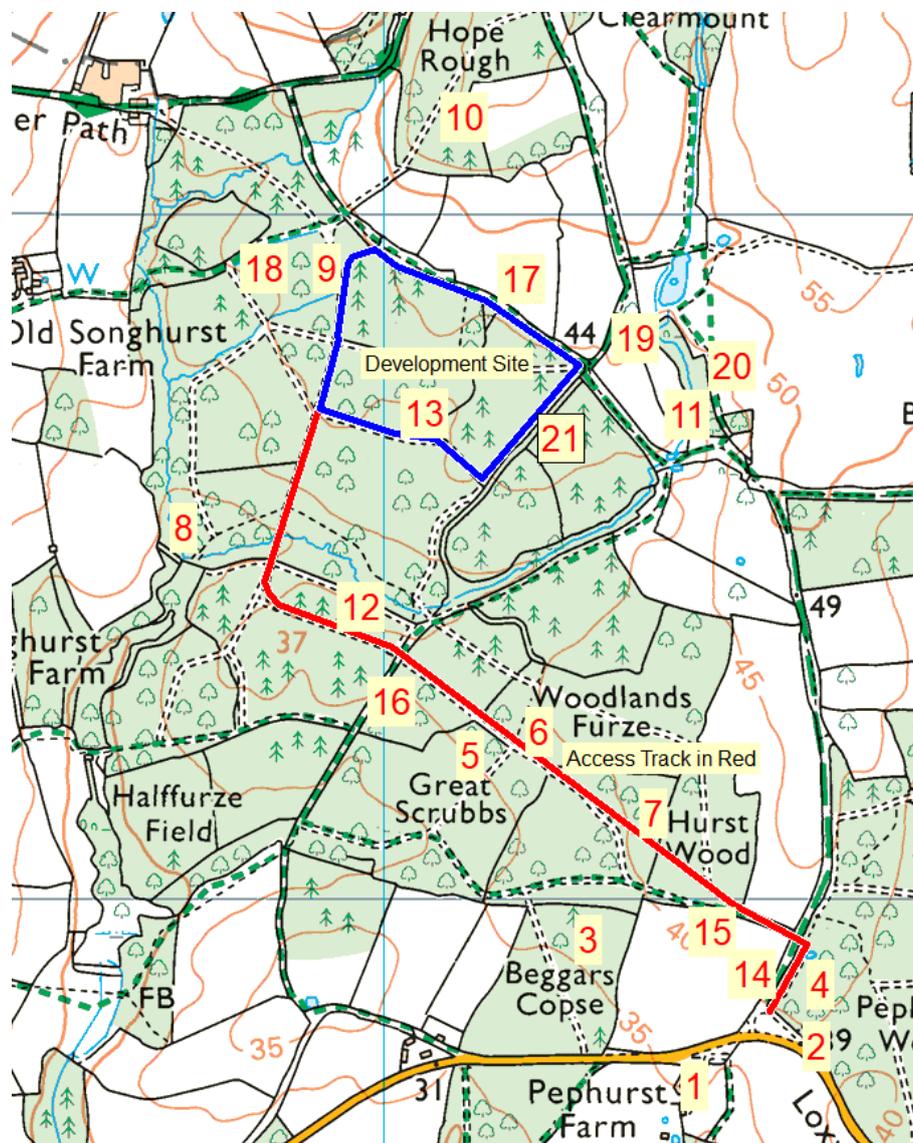
Residential receptors are considered to have high sensitivity as people in these dwellings could be affected by dust generation over an extended period of time. Similarly ancient woodland is considered high sensitivity due to its ecological content and designation. Much of the ancient woodland surrounding site is also designated as priority habitat, but they are only listed once in the table above in their highest risk category.

Priority habitat is considered to be less sensitive than ancient woodland, but still of at least medium sensitivity to dust.

Footpath users are considered to have a low sensitivity to dust, as they are transient users of the footpath and will not be in any affected area for any length of time.

The nearest residential properties are to the west of site, namely Keepers Cottage and Old Songhurst Cottage, both of which are well outside the potential dust affected zones, being some 400m+ distant. They are not therefore considered to be potentially sensitive receptors to dust. Similarly the residences at Barnsfold Cottage (405m south of the access track) and New Songhurst Farm (520m east of the access track at its closest point) are not considered potentially sensitive receptors. None of these potential residential receptors are in any case in the direction of the predominant prevailing winds, and all are protected by dense woodland – two further mitigating factors.

Figure 3 - Sensitive Receptor Site Locations



[Effects of Climatic Conditions](#)

The most important climatological parameters which govern the atmospheric dispersion of dust are:

- Wind direction – which determines the broad direction of transport of the dust emission and the sector of the compass into which the dust might become dispersed; and
- Wind speed - which will affect ground level dust emissions by increasing the initial dilution of pollutants in the emission. It will also affect the potential for dust entrainment into the air.

Wind strength and directional data has therefore been sought to inform this plan, in order to ascertain which direction dust from the site is most likely to be carried if generated.

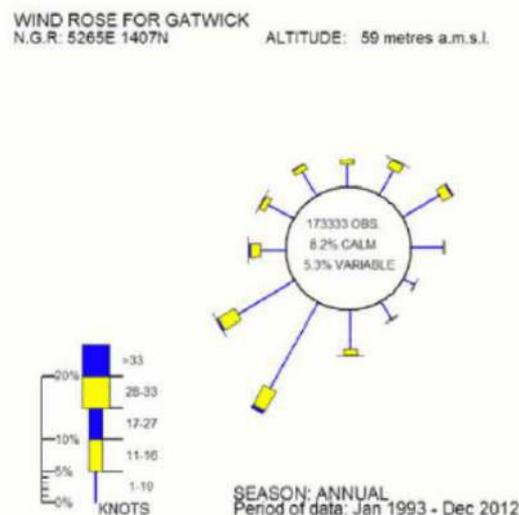
It is known that significant dust blow will not occur below wind speeds of 5m/s. The Gatwick wind data (appended) shows that wind speeds are below 5m/s for c. 185 days of the year. Due to the woodland and topographical screening, the actual number of days that wind speeds are below 5m/s is likely to be even lower³.

The Gatwick Airport wind rose in Figure 4 below is typical for this area.

Rainfall is also an important climatological parameter in the generation of dust, sufficient amounts of rainfall can suppress dust at the source and eliminate the pathway to the receptor. Rainfall of as little as 0.2mm per day is sufficient to suppress dust emissions⁴ but this is not considered further as a mitigating factor in this report, especially as the site also incorporates the proposed Mist-Air mitigation measures.

The annual wind rose for Gatwick shown below, is typical of open, level locations across the entire southeast region, with a prevailing south-westerly wind direction throughout the year.

Figure 4 – Representative Wind Rose for Site



³ See Appendix ES T to the Environmental Statement

⁴ Arup & Ove Arup Environmental. Environment Effects of Surface Mineral Workings. DoE, October 1995

This wind speed and directional information can be used to estimate the likelihood of dust dispersing into any area around the site and causing impacts at the various sensitive receptors identified, as shown in Table 2 below.

The table shows which sensitive receptors have the most potential to be affected by dust, given the prevailing wind direction, and what the residual impacts might be following the mitigation highlighted later in this report.

Table 2 – Likelihood of Dust Issues at Sensitive Receptors

Receptor	Map Ref	Sensitivity	Direction from Site	Potential for Dust Impacts	Potential Following Mitigation
Pephurst Farm	1	High	South West	Low	Negligible
Ivyhurst Cottage	2	High	East	Medium	Negligible
Beggars Copse	3	High	South	Low	Negligible
Pephurst Wood	4	High	East	Medium	Negligible
Great Scrubbs Wood	5	High	South	Low	Negligible
Woodlands Furze	6	High	North	Medium	Negligible
Hurst Wood	7	High	North	Medium	Negligible
Songhurst Furze	8	High	West	Low	Negligible
Songhurst Kiln Copse	9	High	North West	Medium	Negligible
Hope Rough	10	High	North	Medium	Negligible
Un-named Woodland	11	High	North East	Medium	Negligible
Great Birchfield Wood	12	Medium	South	Low	Negligible
Un-named Woodland	13	Medium	On Site	N/A trees to be removed	Negligible
Bridleway 3240	14	Low	West	Medium	Negligible
Footpath 795	15	Low	South	Medium	Negligible
Footpath 792	16	Low	South & North	Medium	Negligible
Footpath 792_1 Northern Edge Woodland	17	Low Medium	North	Medium	Negligible Low
Footpath 797	18	Low	West	Low	Negligible
Bridleway 801	19	Low	East	Medium	Negligible
Footpath 3239	20	Low	East	Medium	Negligible
Eastern Edge Woodland	21	Medium	East	Medium	Low

The potential for dust to cause impacts in those areas closest to the access track are only thought to be 'medium' due to the low number of vehicles which will be using the track, and the low dust specification for the gravelled nature of the track itself.

The potential for impacts on the bridleways and footpaths is considered 'low' due to the transient use of these facilities in the areas potentially impacted. The impacts at the only close residences are considered only to be 'low' or 'medium' due to their direction away from prevailing wind conditions for the majority of the time.

In all instances, following the mitigation measures such as the Mist-Air system which will be implemented as highlighted later in this report, all residual potential impacts relating to dust are considered to be low – for the trees immediately adjacent to site - or negligible for the remainder of the receptors.

Site Operations

In order to assess the potential impacts of dust on the surrounding area, and in particular the sensitive receptors, it is necessary to understand the nature of the proposed operation and the dust prevention measures proposed. The activities associated with the proposed development will involve soil removal, excavation, storage, processing, haulage and restoration works. These activities have the potential to generate potential dust emissions if not appropriately mitigated.

CMRF Operation

The CMRF will be designed to handle the segregation and recycling of construction wastes such as bricks, wood, plastics and other aggregates inside a building. This operation will be subject to a permit from the Environment Agency for a throughput of 25,000t per annum of non-hazardous construction & demolition wastes and inert excavation wastes.

Construction wastes will be brought into site on standard 6 yard skip lorries (18t gross weight) at a maximum of 16 loads a day. This equates to an extra 32 HGV vehicle movements a day along Loxwood Road – this is not a significant change according to the traffic study appended in the Environmental Statement. The skip vehicles will reverse through the roller-shutter doors into the building where wastes will be tipped inside the building in a reception area. Larger (easily segregated) recyclable items can then be removed from the reception area to stockpiles within the building. Following this the materials will be loaded into a rotating trommel utilising a grab attachment on a JCB type vehicle.

The trommel will allow for the removal of fine aggregates from the incoming wastes, these fines being stored internally, before subsequently being transferred to sealed metal containers and then stored outside prior to use for restoration. These fines will be laboratory tested, under the requirements of the environmental permit, to ensure they are suitable for a waste recovery operation before being utilised to infill the clay-pit voids in the operation detailed below. The potential for dust from these fines is therefore minimal, as they remain covered at all times until discharged into the clay pit voids with dust emissions mitigated by the Mist Air system.

The waste exiting the trommel will pass onto a slow moving conveyor where materials capable of being recycled such as wood, plastics and cardboard will be removed and segregated by hand. At the exit of the conveyor metals will be removed via both ferrous and eddy-current metal detectors and stored in a separate area.

Following recycle removal, the remaining materials will be aggregates such as stones / bricks and concrete. Some of these materials – particularly the bricks – may be recycled without further treatment if they are whole and in good condition. The remainder of these hardcore materials will pass through a crusher inside the building in order to produce recycled aggregates. These recycled aggregates will be stored within the building until ready for despatch in 32t gross weight 4 axle vehicles.

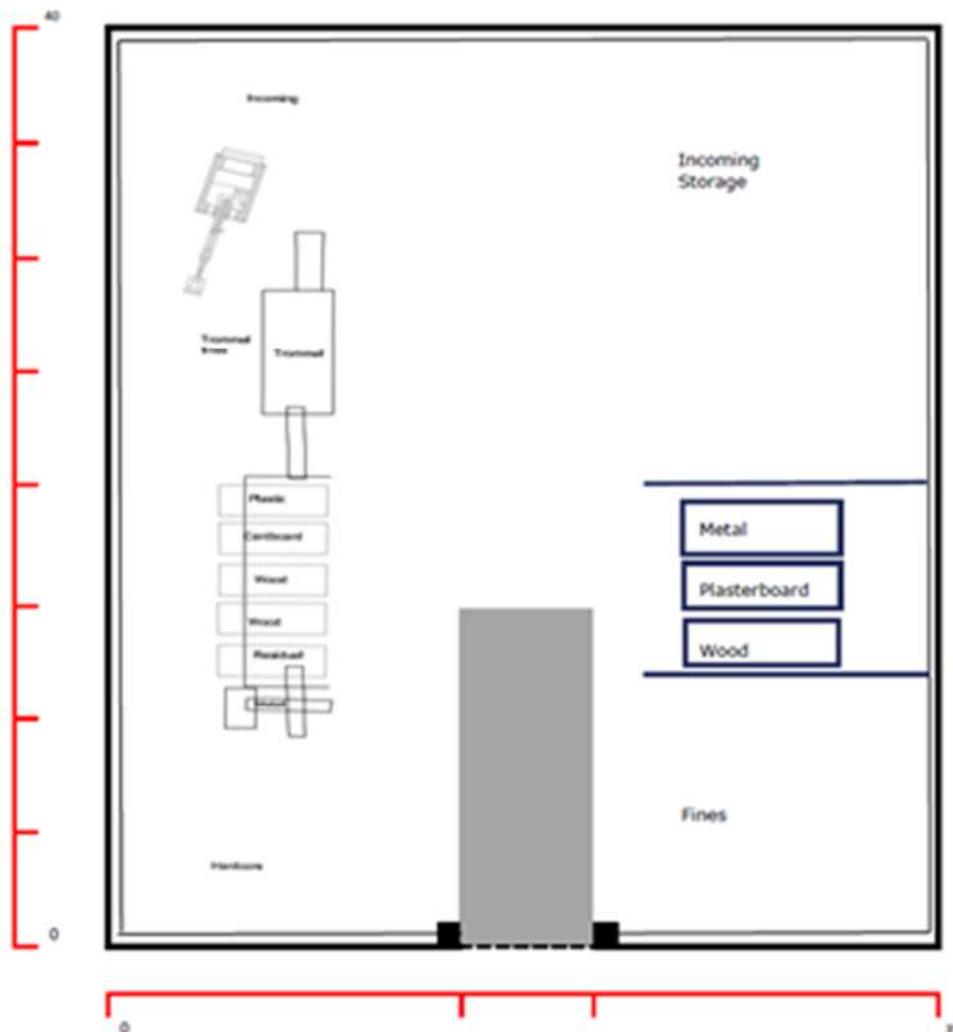
The Mist-Air system - <https://www.mist-air.co.uk> - will also operate throughout the CMRF building, and will be particularly concentrated over potentially dusty operations. This system emits micro particles of water in a fine mist – so fine that it does not cause wetness on surfaces that the mist touches.

Currently the Mist-Air system is used in a large number of manufacturing and recycling applications, suppressing dust from wood, brick, soil, cement, paper, gypsum, ash, glass, biomass, coal, etc. operations using only water. The extremely fine fog is blown by stainless steel fans into the air, suppressing rising dust and preventing it from becoming airborne. Dust particles are attracted to the fog, causing them to settle, and prevent them from staying airborne, so the system is ideal for stopping dust created during tipping, hopper loading, shredding, trommels, screens, air knives, conveyor transfer points, bulker loading and so on. Floors and machinery stay dry and personnel can work in the fog without becoming wet.

The Mist-air system will be operational within the building at all times that the CMRF is active.

Dusts captured as a result of the Mist-Air system will be collected and removed via normal cleaning and washing procedures.

Figure 5 - Internal Layout



Waste Deliveries

All waste deliveries will be accompanied by an appropriate Waste Transfer Note (WTN) which will be obtained from the load driver. The WTN will provide information on the driver, waste haulier name, permit number, description of waste and so on. Loads not accompanied by a WTN or that do not match the description on the WTN will be rejected.

Construction waste will be brought onto the site for recycling in the CMRF, and the non-recyclable residuals will be used in the restoration of the claypits. Infill materials will therefore either be received directly (such as excavation wastes) or indirectly (non-recyclable fines). Waste acceptance procedures will be applied as part of the Environmental Management System (EMS) to ensure that only suitable waste is accepted. Wastes consisting solely or mainly of dusts, powders or loose fibres will not be accepted on site.

Waste will be delivered onto the site by Heavy Goods Vehicles or, most often, 6 yard skip lorries. The movement of vehicles visiting the site and moving around within the site has the potential to cause dust emissions, particularly in dry and windy conditions. The site has therefore been designed to ensure that HGVs using the CMRF will not cross over any excavation roadways, thus preventing a potential carry over of materials from the claypit onto the HGV wheels.

All waste vehicles entering / exiting the site will be sheeted to minimise the likelihood of dust emissions being blown from the loads.

Vehicles entering the site will be visually inspected prior to unloading to ensure that excessively dusty loads are not accepted. The waste acceptance procedure implemented through the site's EMS will not allow for the acceptance of dusts or powders. Therefore, overly dusty loads will be rejected from the site in accordance with the Waste Rejection Procedure in the EMS.

Mud could be tracked out of the site by vehicles, potentially causing dust emissions from the road surface after the mud dries. The site therefore has wheel washing facilities in place to help reduce the occurrence of significant mud carry-over onto the highway and subsequent dust emissions.

Vehicles will unload recycling wastes inside the CMRF, whilst excavation wastes may be temporarily stored in the waste storage areas on the site or input directly into the restoration works.

Claypit Operation

The clay pit operation is planned to be small scale in comparison to traditional clay pit sites, with extraction areas being no more than around 40m x 50m in size in any one year. Each phase of extraction will take place in cells, with each cell covering an area of c. 2,000m², with excavation of a cell in one year and restoration of that cell during the following year. Therefore, at any stage, only 0.4 hectares of the total 6 hectares will be work in progress.

It is planned to utilise one JCB type excavator within the pit to extract the clay, which will be loaded onto a dump-truck for delivery to an on-site stockpile, where another (or perhaps the same – to be finalised) standard JCB type vehicle will be used to shape and manage the pile.

Prior to extraction commencing, topsoil will be stripped from the cell to be excavated and translocated to receptor sites in the woodland. Remaining subsoils and overburden will then be placed into storage mounds next to the clay shale mounds.

Extraction will proceed by working through each of the remaining phases and be completed some 30 years from the date of commencement. Although not working continuously within each phase, once the clay shale has been extracted from each cell in the worked phase, the cell void will be progressively restored using material from the recovered fines and capped with overburden.

Restoration will be carried out utilising the fines produced by the CMRF. These fines have the potential to cause dust when removed from the containers and placed into the claypit void – mitigation for this activity is highlighted in the section below.

Stockpiles of clay are traditionally allowed to 'sour', a process of weathering over several months to increase plasticity and suitability for brick making. During dry conditions, the Mist Air system will be used.

In terms of vehicle movements, clay materials will be stored on-site until ready for despatch in 32t gross weight 4 axle vehicles at an average rate of 5 vehicle movements per day (2.5 in and 2.5 out). Total maximum vehicle movements for the whole operation are therefore 42 movements per day.

Mud and debris will be prevented from being taken onto the public highway through the use of a Wheel Washer to be installed close to the site entrance from the layby on Loxwood Road. The internal roadways will also be suitably maintained in order to alleviate any potential issues in this regard.

Dust Management and Mitigating Procedures

Responsibilities

The Site Manager will be responsible for the implementation of the Dust Management Plan and for ensuring that the mitigation measures are effectively implemented at the site. When the Site Manager is unavailable a suitably experienced Site Operative will be allocated responsibility.

The Dust Management Plan will be reviewed every four years or when a change in operations is deemed to have a potential effect on increasing dust emissions. The plan will also be reviewed in the event of a dust complaint or series of complaints indicating that the plan needs improving. The review process will amend any mitigation measures that have been identified as areas for improvement in reducing dust emissions on site. This review will be recorded.

All staff members will have appropriate training in the contents and measures detailed within the Dust Management Plan. All staff will also be given training on the EMS for the site, which includes the dust prevention procedures. Where new dust suppression measures are implemented refresher training will be provided to ensure staff remain competent. This training will normally be delivered by the Site Manager.

Overview

Restoration of the site using imported excavation waste or recovered fines will be progressive, and the materials will normally be placed directly into the restoration in batches. Materials will be placed into the void before being compacted and levelled. HGVs such as delivery lorries utilising the site are only allowed on the designated surfaced roads, and do not go into any areas where imported waste has been re-spread, or into the claypit areas, to ensure they do not track these materials around site.

Placement of restoration materials into the claypit voids would be intermittent, so in the absence of mitigation measures at the site there could be the potential for short term dust emissions as acknowledged in Table 3 below.

This potential for dust generation therefore necessitates control measures which need to be in place to mitigate dust emissions at the site, see Table 4 - Mitigation Measures. These measures will be implemented either full-time, or when appropriate, particularly in periods of dry weather or when dust is identified to be escaping the site boundary. The site boundary itself will be inspected regularly to identify any dust emissions leaving the site, and these inspections will be recorded as part of the EMS.

Stockpile heights of potentially dusty materials on site will be minimised at all times in order to reduce the risk of dust and particulates being blown and dispersed by winds. The stockpiles are proposed to be located close to the eastern side of the CMRF building in order for the building to act as a windbreak to prevent airbourne dispersion of dusts. The site itself is further surrounded by woodland which also acts as a useful windbreak in this regard.

Sources and Control of Dust Emissions

Table 3 below outlines the potential sources of dust on the site and records the control measures which will be implemented in order to break the source-pathway-receptor routes for dust emissions.

Table 3 - Source-Pathway-Receptor Routes and Controls

Source	Pathway	Receptor	Potential Impact	Controls Required
Clay storage in the clay stockpile	Atmospheric dispersion of any loose particles in high wind conditions if the clay is dry	Surrounding sensitive receptors	Potential dust emissions in periods of dry weather	A Mist-Air system will be installed in the clay storage area and used as required to suppress and remove any airborne dusts
Clay from the pit on internal excavator roads	Excavation plant movement leading to atmospheric dispersion	Surrounding sensitive receptors	Potential Dust emissions during dry weather	A 5mph speed limit will be implemented on site. Haul roads within the site will be dampened down during periods of dry weather or when dust is being caused with the potential for it to impact off site.

Source	Pathway	Receptor	Potential Impact	Controls Required
Clay from the claypit	Mud/clay on wheels of waste haulage vehicles	Public roads	Mud on surrounding highways. In dry conditions, the turning of mud to dust.	Site road design separates clay excavating plant from waste delivery vehicles, so eliminating clay cross contamination. Wheel washing facility before vehicles leave site will remove the mud from the wheels of vehicles exiting the site. This facility needs to be monitored and the water changed as appropriate to keep it effective. A road sweeping vehicle will be deployed when necessary to remove mud from the local highways.
Tipping of soils and clay on site	Atmospheric dispersion	Surrounding sensitive receptors	Potential dust emissions during dry weather	Potential dust emissions will be reduced by minimising drop heights when moving and tipping potentially dusty wastes. A Mist-Air system will be installed over the stockpile areas, in order to suppress any dusts which may be produced on tipping
Tipping of wastes inside CMRF	Atmospheric dispersion	Staff and surrounding sensitive receptors	Potential dust emissions from dusty wastes	Rapid roller shutter doors will prevent dusts exiting building via that route A Mist-Air system will be in operation at all times the CMRF is active, suppressing and removing all airborne dusts
Trommel activity generating dusts	Atmospheric dispersion	Staff and surrounding sensitive receptors	Potential for dust to be generated inside the trommel	A Mist-Air system will be in operation at all times the CMRF is active, suppressing and removing all airborne dusts
Movement of trommel fines within the CMRF	Atmospheric dispersion	Staff and surrounding sensitive receptors	Potential for dust to be generated while loading fines into sealed steel containers	A Mist-Air system will be in operation at all times the CMRF is active, suppressing and removing all airborne dusts Rapid roller shutter doors prevent dusts from exiting the building via that route

Source	Pathway	Receptor	Potential Impact	Controls Required
Stone Crusher	Atmospheric dispersion	Staff and surrounding sensitive receptors	Potential for dust to be generated during operation	A Mist-Air system will be in operation at all times the CMRF is active, suppressing and removing all airborne dusts Rapid roller shutter doors prevent dusts from exiting the building via that route
Movement and tipping of trommel fines into the claypit void	Atmospheric dispersion	Staff and surrounding sensitive receptors	Potential for dust to be created and dispersed during movement operation	No movement allowed during high wind events. Tipping height will be restricted to minimise dust creation. Fines will immediately be compacted to minimise potential for dusts to be formed. A Mist-Air system will be in operation at all times tipping is occurring, suppressing and removing all airborne dusts
Dust from vehicle movement on access track	Atmospheric dispersion	Surrounding sensitive receptors, particularly walkers on footpaths and plants in ancient woodland	Potential for dust emissions to affect walkers and nearby plants	Access roadway will be suitably maintained with DoT Type 1 aka MoT Type 1 40mm granite limestone, basalt or gritstone. In extremely dry conditions the access roadway could be wetted to prevent dust emissions.
Particulate emissions from diesel vehicles on access track	Atmospheric dispersion	Surrounding sensitive receptors, particularly plants (as footpath users are transitory)	None expected	Number of vehicle movements is very low and together with wind dispersion, not thought to be a significant issue. Emissions from nearby Loxwood Road would greatly outweigh any on site effects, and there is no evidence of this existing source causing harm in nearby woodland

Mitigation Measures

There will be site wide standard procedures in place in order to prevent the generation and dispersion of dusts. These procedures will be in place to ensure that dusts do not become an issue in the first instance, and monitoring procedures controlled through the EMS will ensure that the measures are effective.

These generic measures are highlighted in Table 4 below:

Table 4 - Mitigation Measures to be Implemented

Mitigation Measure	Action	Procedure	Action Level	Enforcement and Monitoring	Follow Up if Required
Site speed limit will be limited in order to help prevent the generation of dusts caused by vehicle movements	Enforcement of the speed limit will reduce the chance and amount of re-suspension of dust and particulates by vehicle wheels.	The EMS will have procedures for a 5mph speed limit.	No lower limit, these measures will be in place all the time	The site manager will ensure these procedures are adhered to; site staff will monitor	Water sprays will be used to dampen road surfaces to prevent particulate matter becoming airborne.
'No idling' policy	No idling policy prevents vehicles idling and reduces the potential amount of PM ₁₀ inside the CMRF	'No-idling' policy will be written into the site EMS	No lower limit, these measures will be in place all the time	The site manager will ensure these procedures are adhered to, site staff will monitor	If vehicle drivers refuse to comply they will be asked to leave site. Repeated infringements will lead to cessation of business with the company involved.
Minimising drop heights for potentially dusty materials	Minimising drop heights will greatly reduce the potential for dust clouds to form when materials are added to stockpiles	Procedure will be drafted into the EMS and all relevant staff appropriately trained	These measures will be in place at all times	The site manager will ensure these procedures are adhered to. Site operatives will lower grabs, shovels etc on the equipment being used to move / place potentially dusty materials in stockpiles or into the claypit void	If dust continues to be an issue, and potentially escaping from site, water sprays may be used to suppress the production of dust. Cessation of the operations will follow if dust continues to escape from site

Mitigation Measure	Action	Procedure	Action Level	Enforcement and Monitoring	Follow Up if Required
Wheel wash	A wheel wash will be located at the entrance to the site (layby entrance) and all outgoing vehicles will be required to use it to prevent the potential of mud getting dragged onto the highway	All outgoing HGV vehicles will be required to use the facility, under the watch of the site gatekeeper.	All outgoing HGV vehicles	Vehicles failing to use the facility will be reported to site management.	Repeated failure of vehicles to use the facility will lead to blacklisting of the company involved, or internal discipline if an employee of LCP. Emptying and cleaning of the facility will ensure it remains effective.
Covering or sheeting incoming and outgoing materials	Sheeting materials travelling to and from site prevents any potentially dusty materials from getting blown off the load	All vehicles carrying loads must be sheeted on entry and exit. Procedures will be in the EMS. Excessively dusty loads are not accepted for treatment on site.	Every vehicle carrying wastes into or out of site in addition to vehicles carrying recyclates and clay out. Sheets to be used as soon as is practicable after loading the vehicle.	The site manager will enforce these actions, with monitoring through site operatives. Unsheeted incoming loads will be rejected.	Companies repeatedly sending in unsheeted loads will be blacklisted. Staff found to be in breach of these procedures will be disciplined
Phased excavation of clay	A phased approach to the extraction of clay will restrict the area of exposed surfaces and thus the amount of dust available to become airborne	Only small areas of the development site will be excavated at any one time – 40mx50m max. Restoration works to follow extraction closely to limit the active period of each phase	Throughout site operation	The Site Manager will ensure that this operation is maintained	None required.

Mitigation Measure	Action	Procedure	Action Level	Enforcement and Monitoring	Follow Up if Required
Minimising stockpile heights on site	Keeping soil / waste stockpiles as low as practicable will help to prevent dusts being blown away from the top of the pile by high winds, and will reduce the distance these dusts could travel	The EMS will include a stockpile plan for the location and maximum height and volume allowed for the stockpiles on site in order to reduce the potential for excessive dust emissions. The stockpiles will be located close to the building in order for the building to provide a preventative windbreak	Stockpiling procedures will be in place whenever stockpiles exist	Monitoring and enforcement will be through the site manager. Records of checks will be made and kept as part of the EMS.	If dust emissions that could cause nuisance to local receptors occurs, further mitigation measures such as water sprays to dampen stockpiles or utilisation of the mist-air system can be used to prevent the formation of dusts. If the problem persists then there would be a cessation of operations and the stockpiles will be reduced / removed until the issue subsides.
Mist-Air dust suppression system	Within the CMRF a Mist-Air dust suppression system will be in place to remove dusts from activities within the building. Externally the system will be installed over the claypit void being filled and over the clay stockpile	The system must be functioning at all times during the operational hours of the CMRF and during void infilling operations. It's operation over the stockpile will be on an 'as-needs' basis The EMS will have procedures in place to cover the safe and effective operation of the system, such as cleaning, maintenance and monitoring of performance.	The system will operate at all times the CMRF is operating, or when fines are being tipped. In relation to the clay stockpile, if dusts are seen to be getting dispersed the system should be activated.	The site manager will enforce the operation of the system, which will be operated and maintained by site staff. Particulate air monitoring will regularly check the effectiveness of the operation and the cleanliness of the air inside the CMRF.	If the monitoring shows a failure in the cleanliness of the air then appropriate measures will be taken to bring the facility back into compliance. If these actions fail, then operations would cease until the issue is solved.

Mitigation Measure	Action	Procedure	Action Level	Enforcement and Monitoring	Follow Up if Required
Rapid Roller Shutter Doors	In order to prevent the potential for dusts to exit the building through the HGV entry doors, a rapid roller shutter door will be in place	HGV entry doors are to remain closed. The door is only to be opened to permit access or egress for a vehicle, then must be immediately closed. These procedures to be written into the EMS.	The door should only be opened temporarily to allow access/egress and should be closed at all other times	The site manager will enforce these measures, which will be carried out by site staff.	Repeated non-adherence to these procedures would result in disciplinary action to the staff concerned.

In addition to these site specific mitigation measures, the site will also adhere to as many of the good design practice measures outlined in Table 4 of the IAQM document '*Guidance on the Assessment of Mineral Dust Impacts for Planning*' as possible (Table 4. Good Practice Mitigation – Design Measures).

Whilst, due to the wooded site location and the re-use of the existing haul road (selected for other environmental benefits) not all design measures for dust prevention can practically be implemented, but many can. The design measures which can be implemented include –

- *Dust-generating activities should, where possible, be located where maximum protection can be obtained from topography, woodland or other sheltering features;*
- *Consideration should be given to the need for a zone adjacent to the perimeter within which works are not conducted (i.e. a buffer zone)*
- *Planning and design of the scheme should make provision for water supply to meet the site demand for mitigation and damping.*
- *A separate paved parking area for off-site vehicles, such as staff cars, with no access to the working areas, can help prevent track-out of mud onto the public highway.*
- *Existing woodland/hedgerows along site boundaries should be retained where possible.*
- *Advance planting of native trees/hedgerows should be considered.*

The IAQM document also recommends '*Basic Good Practice Mitigation – Operational Measures*' in Table 5. Again, many of these measures are planned for the site, some of which are already highlighted in the various sections of this document above.

- *Management*
 - *A DMP must be produced and adhered to.*
 - *Effective site management practices are critical to demonstrate the willingness of the operator to control dust emissions and provides a mechanism for auditing of site operations. Such management procedures should be outlined within the DMP.*
 - *Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken.*
- *Training*
 - *Provide training to the site personnel on dust mitigation. Training should also cover 'emergency preparedness plans' to react quickly in case of any failure of the planned dust mitigation.*
- *Monitoring*
 - *Implement an appropriate monitoring scheme. This can range from visual inspections, dust deposition/flux monitoring, to real-time PM10 continuous monitoring locations.*
 - *Undertake daily on-site and off-site inspections, audit the monitoring programme: carry out regular site inspections to monitor compliance with the DMP and adjust the frequency of site inspections according to dust risk (higher frequency in dry and windy conditions)*
- *Communication*
 - *Maintain good communication to help alleviate anxieties between the operators and the surrounding communities.*

- *Set up regular, accessible liaison arrangements and providing information as freely as possible*
- *Planning of Activities*
 - *Some activities should ideally be planned only during favourable weather conditions. Where possible, particularly dusty activities should be avoided during extended periods of dry and windy conditions.*
- *Vehicle Movements*
 - *Site traffic is often the greatest source of dust on minerals sites. Standard good practices for site haulage include:*
 - *avoiding abrupt changes in direction*
 - *regular clearing, grading and maintenance of haul routes*
 - *setting appropriate site speed limits.*
 - *evenly loading vehicles to avoid spillages*
 - *regular application of water, whether by bowser or by fixed sprays, in dry conditions*
 - *It is also important to avoid trackout from off-site transportation. Clean heavy duty vehicles used to transport minerals before they leave the site using an effective wheel- or vehicle-washer.*
- *Soil and Overburden Handling*
 - *Site stripping and reinstatement operations, and overburden handling activities should be avoided during dry and windy conditions. Overburden can usually be worked at higher moisture contents than soils which can reduce the risk of unacceptable dust emissions.*
 - *In case of sites with complex topography, use of bulldozers, loaders and dump trucks may be effective and practical to remove soils.*
 - *For all mineral handling it is appropriate to minimise handling and reduce drop heights.*
- *Mineral Extraction*
 - *Blasting may be avoided if appropriate alternatives can be employed, for example modern hydraulic excavators and breakers.*
- *Mineral Crushing and Screening*
 - *Wherever practicable, crushing and screening should take place within fully enclosed structures*
 - *use crushing and screening plant within its design capacity*
 - *maintain good standards of all plant and equipment.*
- *Materials Handling*
 - *Enclose transfer points and conveyor discharges where visible dust emissions may occur.*
 - *As a general provision, other potential impacts should be mitigated wherever practicable by:*
 - *Return belt cleaners, with arisings collected into a bin or cleaned up*
 - *Maintenance of the structures and rollers to minimise spillages*
 - *Shrouding of feed hoppers, transfer points and discharges;*
 - *Fixed sprays where required*
 - *Clearance of any spillages to minimise accumulations of loose dry material around the structures*
 - *Minimisation of drop heights at feed hoppers and discharges*

- *Control and restrict the duration of the site activities where practicable*
- *Storing material under cover, and protecting material from wind*
- *Screening material to remove dusty fractions prior to external storage*
- *Dampen material using sprays, mists, microfoam or foam;*
- *Vegetate exposed surfaces, e.g. overburden mounds, with quick growing plants*

Monitoring Procedures

Dust Monitoring

Dust emissions from site operations and stockpiles will be assessed primarily by visual observation. Assessments will be carried out and recorded daily or as required by the EMS. It will be the responsibility of every member of staff to continually monitor the potential emission of dust from the site and report it to management for action if required.

The monitoring procedures incorporate a daily site perimeter inspection to actively look for dust on tree leaves etc which may have come from site operations. This will pay particular attention to the trees on the northern and eastern edges which are those closest to site.

Monitoring of the effectiveness of the Mist Air system will be through an appropriate dust particulate monitoring instrument. This monitoring will take place periodically as required by the EMS.

Monitoring of dust concentrations within the CMRF will also be undertaken to ensure both the safety of the workforce and the prevention of potential nuisance to sensitive receptors.

In all these instances, if any remedial action is required this shall be swiftly undertaken and such measures will be recorded in the site log, or as required by the EMS.

Emergency contact numbers will be available to local people / businesses / residences on the Site Notice Board at the entrance to the site, so should dust be causing a nuisance, the company can be contacted for remedial action. This number will also be in use outside of operational hours.

If dust emissions likely to affect sensitive receptors are leaving the site boundary, then the Site Manager will investigate and take appropriate remedial action immediately. The results of the investigation and what action was taken will be recorded and retained as part of the EMS.

The records of any necessary remedial actions will be reviewed at least annually as part of the EMS quality review, in order to identify any trends and identify process improvements required to prevent repeated occurrences.

Reporting and Complaints Procedures

Should a complaint regarding dust be received by the site, the complaint will be recorded on the Complaints Form in the EMS and investigated in accordance with the Complaints Procedure within the EMS implemented on the site.

All complaints should be taken seriously and investigated thoroughly. The Complaint Form records who has made the complaint, what the complaint was about and the result of any subsequent investigation.

The prevailing weather conditions at the site, such as approximate wind strength, wind direction and rain will be recorded as part of the investigation.

The Site Manager will try to identify what might have caused the dust emission being complained about. If the complaint is deemed to be valid, the most effective corrective action must be carried out to prevent immediate dust emissions and the potential for repeated complaints. If the corrective action requires investment or more time to implement, the complainant should be kept informed of the estimated timescales for completion. If the investigation finds an existing procedure not being carried out properly, then staff will receive repeat EMS training on the relevant procedures and disciplinary action may be taken.

In all cases, complaints will be acknowledged courteously and investigated. Any complaints from the Environment Agency relating to dust emissions from the site will be dealt with as soon as is reasonably possible upon notification.

Should several complaints be received at the site regarding the same issue, or at the same time, the cause of the complaints will be investigated in accordance with the procedures within the EMS.

Environmental complaints will form part of the annual review process of the EMS in order to highlight the need for potential corrective remedial action.

Operations on the site will temporarily cease should dust emissions be seen leaving the boundary following the implementation of other mitigation measures or when instruction from the Environment Agency to cease operations has been received.

Summary

This report has identified the potential causes of dust generation on site and listed mitigation actions which will be taken in order to ensure that they do not cause nuisance or impact nearby sensitive receptors.

Potentially sensitive receptors have been identified and the likely impact of operations to cause dust issues at these locations has been estimated based on wind direction, wind speeds and other factors such as woodland shielding.

At all locations, without specific mitigation or dust controls, there is the potential for a negligible to a slight adverse effect of dust impact at some sensitive receptors. Following the mitigation techniques to be implemented, the risk of dust causing an issue at any of these locations is however thought to be negligible.

Good practice as set out in the IAQM 2016 Guidance and standard dust management controls will be implemented to minimise the potential for dust impacts.