



**AN APPLICATION TO VARY ENVIRONMENTAL
PERMIT NUMBER EPR/CB3738AC FOR THE DEPOSIT
OF WASTE ON LAND AS A RECOVERY ACTIVITY TO
DEVELOP THE HARESHILL FARM SITE FOR HIGHWAY
AND EMPLOYMENT USE AS PART OF THE WIDER
SOUTH HEYWOOD DEVELOPMENT, ROCHDALE**

**DUST EMISSIONS MANAGEMENT PLAN
VERSION 1.0**

Report reference: PCE/HA/AKM/5640/DEMP
June 2021



Baddesley Colliery Offices, Main Road, Baxterley, Atherstone, Warwickshire, CV9 2LE
Tel. (01827) 717891 Fax. (01827) 718507

CONTENTS

1.	Introduction	1
2.	Site details and description of site operations	5
3.	Particulate matter management techniques	7
4.	Particulate matter monitoring programme	9
5.	Engagement with the community	11
6.	Particulate matter management and monitoring action plan	12

FIGURES

Figure ESSD1 The site location (drawing reference PCE/HA/03-21/22305)

Figure ESSD2A The site and surrounding area (drawing reference PCE/HA/03-21/22306)

APPENDICES

Appendix DEMP A Site Specific Wind Rose modelled for coordinates 53.58°N, 2.22°W

Appendix DEMP B Particulate matter monitoring and management action plan record form

This report has been prepared by MJCA with all reasonable skill, care and diligence, and taking account of the Services and the Terms agreed between MJCA and the Client. This report is confidential to the client and MJCA accepts no responsibility whatsoever to third parties to whom this report, or any part thereof, is made known, unless formally agreed by MJCA beforehand. Any such party relies upon the report at their own risk.

1. Introduction

- 1.1 MJCA is commissioned by P Casey Enviro Limited (PCE) to prepare and submit an application to vary Environmental Permit number EPR/CB3738AC (the permit) for the deposit of waste on land as a recovery activity to develop the Hareshill Farm Site for highway and employment use as part of the wider South Heywood development in Rochdale, Lancashire. This document comprises a Dust Emissions Management Plan (DEMP) prepared to support the variation application.
- 1.2 The permit was issued to PCE on 8 March 2012 for the creation of a platform for the construction of an equestrian facility. Prior to the issue of the permit the site was the subject of exemptions from the need for an Environmental Permit which were in place at the time. It is understood that the deposition of waste at the site commenced in 2009 and had substantially ceased by mid-2015.
- 1.3 On 31 March 2020 planning permission reference 16/01399/HYBR¹ (the planning permission) was granted by Rochdale Borough Council for inter alia:-

‘...the development of land at South Heywood...for the construction of a new link road between Junction 19 of the M62 and Pilsworth Road...a major mixed-use development comprising... employment uses...together with associated landscaping...drainage...cycleway and footpath linkages, infrastructure and other works ancillary thereto...’

- 1.4 To facilitate the construction of the components of the development the subject of the planning permission within the boundary of the site it is necessary to vary the permit to provide for the revisions to the ground levels compared with those currently the subject of the permit. It is also necessary to increase the permit boundary to provide for the deposit of waste materials in the areas of the site to the north west and south east of the area currently the subject of the permit. These areas are referred to as the north west and south east repositories. The waste which will be deposited in the north west and south east repositories will be placed on top of waste which was deposited historically under the exemptions from the need for an Environmental

¹ Planning permission reference 16/01399/HYBR is the subject of a non-material amendment reference 20/00454/ANM which was issued by Rochdale Borough Council on 27 July 2020. Both the planning permission and the non-material amendment are presented at Appendix ESSD A to the ESSD report.

Permit. Whilst it is necessary to vary the permit to include the north west and south east repositories it is proposed only to permit the newly deposited waste and not the underlying waste. It is estimated that it will be necessary to deposit approximately 195,600m³ of inert waste materials in the repositories.

- 1.5** As explained in the Application Report the ground levels in the area currently the subject of the permit exceed those the subject of the permit and generally exceed the proposed ground levels which will be developed pursuant to the planning permission² and some of the waste materials deposited are inconsistent with the waste types which were authorised for deposit. Extensive site investigation works have been carried out at the site and remedial measures have been proposed. In the area of the new link road where it encroaches on the eastern part of the existing permit area the waste materials have been excavated and removed from site consistent with an Operational Management Plan³ which was agreed with the Environment Agency (EA). An application will be submitted to partially surrender the permit for the area of the link road.
- 1.6** The implementation of the remedial measures for the remaining waste in the area of the site which is the subject of the permit will be the subject of Action Plans and subsequent Operational Management Plans which will be agreed with the EA. In addition to delivering ground levels pursuant to the development at the site the subject of the planning permission, the remedial measures which will be the subject of the Action Plans are designed to remediate the waste which will remain at the site such that it is consistent with the definition of inert waste specified in Section 2.1.2 of the Annex to the Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC⁴. The remediation of the waste at the site will be the subject of a mobile plant Environmental Permit. It is anticipated that it will not be feasible to remediate all of the waste to the appropriate standard and some waste will be removed from site for management at a suitably authorised facility without being treated under the mobile plant Environmental Permit.

² Note that the general cut and fill balance at the site is cut within the area the subject of the current permit and fill within the repositories outside the current permit. There are small areas of the site where this is not the case to ensure the delivery of the development platform levels. In these small areas the cut and fill balance is the opposite.

³ Operational Management Plan for the Excavation and Export off Site of excavated waste material from within the Link Road Area. Final rev2-19th March 2021. Approved by the Environment Agency on 22 March 2021.

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003D0033&from=EN>

- 1.7** It is proposed that the materials which will be deposited in the north west and south east repositories will comprise waste materials excavated from elsewhere on site. The waste materials will be subject to rigorous Waste Deposition Procedures (WDP) to ensure that only inert waste materials are deposited. The waste materials have, in effect, already been accepted at the site although they will be subject, as necessary, to remediation such that they are inert. Accordingly, no changes to the waste codes listed in Schedule 2, Table 2.1 of the permit are proposed. In the unlikely event that it is necessary to import additional waste materials to the repositories or the currently permitted site to facilitate construction of the development platform the imported wastes will also comprise inert waste materials only and will be subject to the WDP.
- 1.8** In preparing the DEMP it is necessary to recognise that the deposit of waste at the site already has been authorised by the EA and the operations which will be subject to this variation to the permit will not include the remediation of the waste levels or the waste types previously deposited. As explained above the remediation of the waste levels and the waste types previously deposited will be the subject of Action Plans which have been or will be agreed with the EA and do not form part of this variation to the permit. The only activity which is the subject of this DEMP is the deposit of inert waste at the site to facilitate the formation of the restored surface or development platform for the employment use.
- 1.9** This DEMP has been prepared based on the EA guidance: Control and monitor emissions for your environmental permit⁵ with reference to the section of the guidance entitled “What to include in your dust management plan”.
- 1.10** This document presents the management techniques that will be used at the site to minimise the potential for particulate matter emissions from the site, the monitoring proposed to confirm the effectiveness of the management techniques and an action plan which will be implemented in the unlikely event that there is a significant emission of particulate matter from the site.
- 1.11** An assessment of the likelihood of particulate matter nuisance associated with the operation of the site is presented in the nuisance and amenity Environmental Risk

⁵<https://www.gov.uk/guidance/control-and-monitor-emissions-for-your-environmental-permit#dust-mud-and-litter>

Assessment (ERA) which is presented at Appendix H of the Application Report. In the ERA it is concluded that the residual risk in respect of fugitive emissions of particulate matter is 'low to very low'.

- 1.12** The management and monitoring proposals in this document are based on a review of the ERA. The DEMP will be reviewed annually. The review will include consideration of the results of particulate matter monitoring and progress with any improvements identified. A review of the effectiveness of dust monitoring techniques will be undertaken and changes made to monitoring techniques as necessary.
- 1.13** There is no history associated with an unacceptable impact of dust from the operations at the site. The deposit of inert waste in the currently permitted area and in the north west and south east repositories is consistent with the principles of the deposition of waste materials at the site pursuant to the registration of exemptions from the need for an Environmental Permit and the issue of the permit for the site.

2. Site details and description of site operations

- 2.1** The Hareshill Site is located to the south of the junction of Hareshill Road and Pilsworth Road approximately 1.4km south west of the centre of Heywood. The site is centred approximately on National Grid Reference (NGR) SD 846 092 and covers an area of approximately 38 hectares. The site and the surrounding area together with the existing and proposed Environmental Permit boundary are shown on Figures ESSD 1 and ESSD 2A. Further information in respect of the development the subject of the planning permission at the site including the proposed ground levels and the layout of components of the development are presented in the Environmental Setting and Site Design Report (ESSD) included with this application to vary the permit.
- 2.2** Pilsworth Road runs in a generally north east to south west direction adjacent to the north western boundary of the Hareshill Site. Hareshill Road runs in a generally north west to south east direction adjacent to the north eastern boundary of the site. Access to the site is off of Hareshill Road in the southern part of the site. Hareshill Road is being improved currently and will comprise part of the new link road the subject of the planning permission.
- 2.3** To the east, north east, north and north west of the Hareshill site boundary and beyond Hareshill Road and Pilsworth Road are commercial and employment use areas. Stock Nook Farm is located approximately 150 south of the site and Siddal Moor Farm is located approximately 200m south east of the site. The majority of the land to the south east, south, south west and west is in agricultural use currently although the land adjacent to the northern part of the south western site boundary will be developed for employment use and the land to the south east will be developed based generally around a residential use as part of the development the subject of the planning permission. With the exception of the farm dwellings referred to above, currently the nearest residential properties to the site are located approximately 330m to the north, 370m to the north east and 470m to the east beyond a sewage treatment works.
- 2.4** In the south west of the site the site is dissected by water and gas mains which run in a generally north west to south east direction. There are 8 public rights of way within 500m of the site comprising six Footpath (FP) routes and two Bridlepath (BP) routes. Footpath FP72 which crosses the south eastern part of the site will be extinguished as part of the development the subject of the planning permission.

Source

- 2.5 The activities with the potential to generate and/or release particulate matter include the movement of particulate matter on vehicle bodies, the resuspension of particulate matter on haul roads by vehicles, the wind scouring of waste surfaces and the action of the wind on waste materials while they are being handled.

Pathway

- 2.6 Particulate matter is dispersed from the source to potential receptors by the wind. The location of sources of particulate matter at the site will vary depending on the location of waste deposit activities and temporary haul roads. A site-specific wind rose has been created based on the Numerical Weather Prediction data (NWP) modelled at coordinates 53.58°N, 02.22°W between 2016 and 2020. The wind rose is presented at Appendix DEMP A. The wind rose shows that although the prevailing wind direction is from the west, wind is frequently recorded from the south west. As a result areas to the east and north east of the site are considered to be down prevailing wind of the site.

Receptors

- 2.7 As explained above the land to the east and north east of the site boundary which is down prevailing wind of the site, beyond Harehill Road, comprises commercial and employment use. As shown on Figure ESSD 2A there are sensitive receptors⁶ within 500m down wind of the site comprising the residential areas located approximately 370m to the north east and 470m to the east of the site. Each of the residential areas is separated from the site by the areas of commercial and employment use. There are no other sensitive receptors including schools, colleges or hospitals located within 500m of the site.
- 2.8 The site is not located within an Air Quality Management Area declared for particulate matter PM₁₀ (AQMA).

⁶Sensitive receptors as defined in Environment Agency guidance Control and monitor emissions for your environmental permit – Emissions management plan for dust

3. Particulate matter management techniques

- 3.1** The management of particulate matter at the site will be achieved by a combination of controls on waste movement at the site and operational techniques employed at the site. The techniques selected for use at the site are based on well-established techniques to control the emissions of particulate matter. Reference has been made where relevant to the Environment Agency Technical Guidance Document (Monitoring) M17 entitled 'Monitoring of particulate matter in ambient air around waste facilities' (M17) and appropriate measures for control of dust and mud presented in Environment Agency Guidance Control and monitor emissions for your environmental permit. A variety of techniques will be used at the site based on site specific circumstances. The techniques are described below.

Responsibility for implementation of this plan

- 3.2** The Technically Competent Site Manager (TCM) shall be responsible for the management of particulate matter and site staff will be trained appropriately. The TCM will appoint a suitably trained deputy to oversee the management of particulate matter at the site during operational periods when the TCM is not present at the site. The TCM will provide the training for the deputy. The training will include refresher training where appropriate however during the course of operation of the site the experience of the site staff, including the deputy, will comprise on the job training which will complement the refresher training as necessary.

Operational controls

- 3.3** All HGVs visiting or leaving the site will be instructed to sheet or otherwise contain their loads to minimise the risk of particulate emissions. Loads arriving at the site will be sheeted or contained until such time as they are inspected and/or deposited.
- 3.4** In order to minimise the deposition of mud that may subsequently dry and generate particulate matter if disturbed, such as when tracked over by vehicles, all HGVs leaving the site must stop and check for debris between their wheels prior to leaving the site. An easy to clean surface of hard standing will be provided for HGVs entering and leaving the site which will be maintained and swept with a road sweeper as necessary. Visual monitoring will be undertaken regularly each day by the TCM.

- 3.5** The movement of mobile plant and site traffic will be restricted to defined haul routes which will be maintained. Vehicle speed limits will be imposed for safety reasons and to reduce the potential for significant particulate matter to be resuspended. Insofar as it is practicable all site vehicle exhausts will be upward pointing to prevent the disturbance of particulate matter from the road surfaces.
- 3.6** During dry weather conditions and if necessary a bowser will be used to spray water onto the haul roads and access roads together with areas of waste deposition as necessary to minimise the potential for particulate matter to be generated and become airborne.
- 3.7** Operations which may have the potential to generate particulate matter will cease if weather conditions and ground conditions preclude effective dust control. This decision will be made at the discretion of the TCM based on the site conditions (dry, damp, wet) giving consideration to the weather conditions (windy, calm, etc) and the type, quantity and particle size of the waste on site. Additional dust suppression will be employed as necessary to dampen waste materials during high winds particularly when the prevailing wind direction is towards potentially sensitive receptors in the vicinity of the site.
- 3.8** All relevant site personnel including contractors will be trained in working practices and mitigation measures to minimise the generation and release of particulate matter.
- 3.9** Visual monitoring for emissions of particulate matter will be undertaken by site personnel. Further details are provided in Section 4 of this document.

Action Plan

- 3.10** A particulate matter management and monitoring action plan is presented in Section 6. The particulate matter management and monitoring action plan will be implemented in the event that:
- i. there is an unacceptable visual emission of particulate matter from the site,
or
 - ii. a complaint is received

4. Particulate matter monitoring programme

4.1 In TGN M17 it is stated that despite the subjective nature of the visual assessment of dust emissions:

'this simple, cheap and easy to implement assessment approach has the significant advantage of providing instantaneous information on problems (e.g. it may be possible to directly observe the source of the dust emission, such as a particular stockpile) allowing rapid actions to be taken to deal with the problem.'

4.2 During all site operations visual monitoring for emissions of particulate matter will be undertaken by suitably trained site personnel. Visual monitoring by suitably trained site personnel is the most effective method of detecting as quickly as possible emissions of particulate matter throughout the working day thereby facilitating promptly the assessment of such emissions allowing the selection and implementation as quickly as practicable of control measures as necessary. The effectiveness of the measures taken in controlling emissions will be assessed during inspections undertaken at the site following implementation of the control measures. Any problem that is observed will be reported to the site manager who will be responsible for investigating the cause and implementing any necessary remedial action. The results of inspections and remedial measures taken will be recorded in the site diary.

4.3 The site manager will use the Meteorological Office (www.met-office.gov.uk) weather forecast or other forecast to predict weather conditions such as prolonged dry spells which may give rise to particulate matter emissions and will implement the appropriate precautionary and or management measures. A qualitative assessment of the on-site conditions will be undertaken as necessary and measures taken to control aerial emissions of particulate matter within the site boundary.

4.4 The records of the visual particulate matter monitoring will be reviewed periodically to facilitate the review and assessment of operational activities as necessary. The review will be carried out in conjunction with a review of meteorological data that are available and the site operations that took place during the monitoring period together with any complaints regarding particulate matter emissions that have been received.

- 4.5** In the event that based on the visual site observations there is an unacceptable particulate matter emission from the site the particulate matter management and monitoring action plan will be implemented. The particulate matter management and monitoring action plan is presented in Section 6.
- 4.6** As there are rigorous operating techniques in place to control emissions of particulate matter and as the site is not located within an AQMA declared for Particulate Matter PM₁₀ it is unnecessary to undertake quantitative dust monitoring at the site.

5. Engagement with the community

- 5.1** PCE are conscious of the potential impact on the environment of its activities and strive to manage and minimise those impacts. PCE recognises the importance of community engagement and strives to build a positive working relationship with local residents and businesses across all of its sites. Contact details for the site shall be displayed on the signage at the site entrance.

Reporting of complaints and management responsibilities

- 5.2** Any complaints about the site operations and/or their impact on the environment made by third parties (including any complaints identified by the EA or Local Authority) will be brought to the attention of the TCM in the first instance who will identify and implement the measures needed to resolve the matter as set out in Section 6. They shall then make a note of the complaint and the actions taken to resolve it. A register of complaints will be maintained onsite in the site diary.
- 5.3** The particulate matter management and monitoring action plan which is implemented in the event that a complaint is received is presented in Section 6.

6. Particulate matter management and monitoring action plan

Context

6.1 The overriding management principle of the site with respect to the control of particulate matter shall be to operate the site in a manner which prevents or minimises the release of dust as set out in the DEMP. If it is considered that the site operations the subject of this DEMP have the potential to release a significant quantity of dust such that there is a potential for offsite dust emissions, additional dust suppression measures will be employed in a manner proportionate to the risk. These actions will be undertaken as part of the routine operation of the site. The action plan in this section of the report sets out the additional actions that will be taken in the event that conditions are identified whereby the routine measures need to be supplemented or improved.

Introduction

6.2 The action plan will be implemented in the event that:-

- i) there is an unacceptable visual emission of particulate matter from the site or
- ii) a complaint is received

6.3 An unacceptable visual emission of particulate matter from the site comprises a visual observation of dust or particulate matter crossing the site boundary. The initial observation will be made by the site operative who has identified the emission and will be verified by the TCM.

6.4 The timescale for implementation of the action plan will vary depending on the circumstances under which it is implemented. If an unacceptable visual emission is observed by site operatives there will be no delay in implementing the action plan, whereas a complaint may be received by PCE a number of hours or even days after the activity that may have contributed to the complaint has ceased. In the latter case investigation of the complaint will be based on a review of the data and observations recorded at the site corresponding to the time at which the complainant observed the event.

Action plan

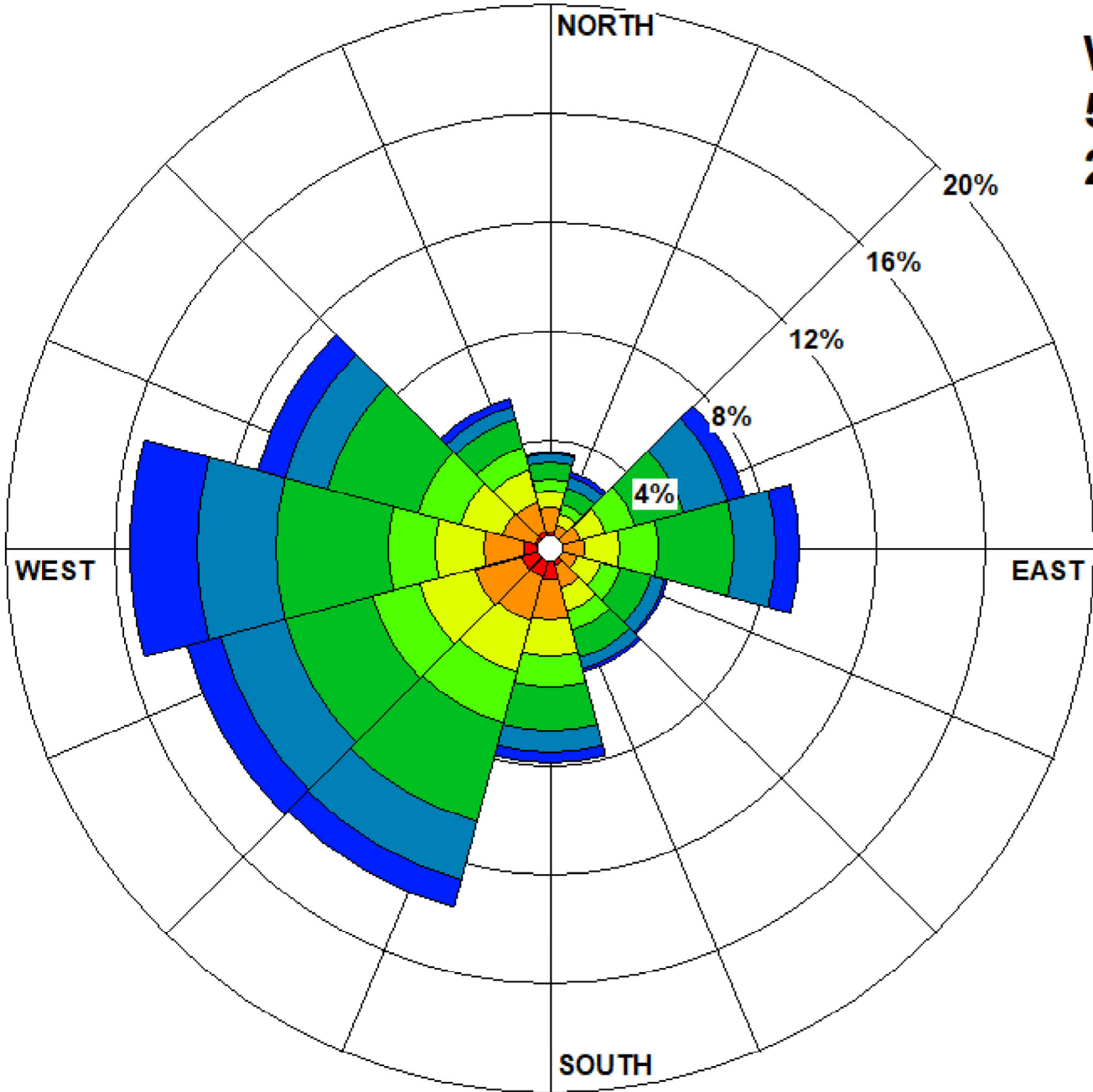
- 6.5** In the event that an unacceptable visual emission of particulate matter from the site is observed by site personnel or in the event of a complaint associated with particulate matter emitted from the site the event will be investigated immediately by the TCM to determine the source as follows:
- 6.6** If it is established that the emissions are attributable to activities the subject of this DEMP action will be taken to control the emissions including where relevant:
- Establish the cause of the emissions and take immediate action to control the emissions.
 - If emissions are attributable to unloading or depositing of waste dust suppression will be applied to control the particulate matter emission from the activity being undertaken. If necessary, the unloading and depositing of waste will temporarily cease.
 - Organise additional road sweeping and mobilise the bowser to spray the affected area if necessary.
 - Take action to ensure that vehicles are obeying the speed limits.
 - Identify whether there are any other activities being undertaken at the site which are not the subject of this DEMP or at off-site locations and estimate the extent to which other activities may contribute to the visual emissions observed on the site including circumstances where windblown dust may be transported across and/or over the site from the external sources.
 - In the unlikely event that the routine control measures employed at the site are not sufficient to control particulate matter emissions then consideration will be given to further measures to minimise and control emissions including consideration of erecting static water sprays in strategic locations.
- 6.7** Appropriate action will be taken which will include the cessation of the activity if necessary. In the case of a complaint action taken will be communicated to the complainant. The nature of the complaint, the findings of the investigation and the action taken will be recorded using the form presented at Appendix B. Consideration

will be given to the wind speed and direction, the site operations and observations. As necessary the relevant operational procedures will be reviewed and improvements implemented.

APPENDIX DEMP A

SITE SPECIFIC WIND ROSE MODELLED FOR COORDINATES 53.58°N,2.22°W

Winds at 53.58 N. / 2.22 W. 2016-2020



Wind Speed
(m/s)

- ≥ 9.0
- 7.0 - 9.0
- 5.0 - 7.0
- 4.0 - 5.0
- 3.0 - 4.0
- 2.0 - 3.0
- 0.5 - 2.0

Calms: 0.24%

APPENDIX DEMP B
PARTICULATE MATTER MONITORING AND MANAGEMENT ACTION PLAN RECORD
FORM

Particulate matter monitoring and management action plan record form

Particulate Matter Complaint Report Form		Sheet No
Date:	Site to which complaint relates	Grid Reference:
Name and address of complainant:		
Tel no. of complainant:		
Time and date of complaint:		
Date, time and duration of particulate matter emission:		
Location of particulate matter emission, if not at above address:		
Weather conditions (i.e., dry, rain, fog, snow):		
Cloud cover (0-8):		
Cloud height (low, high, very high):		
Wind strength - (light, steady, strong, gusting)	Or use Beaufort scale:	
Wind direction:		
Complainant's description of particulate matter emission :		
Has complainant any other comments about the particulate matter emission?		
Are there any other complaints relating to the site, or to that location? (either previously or relating to the same exposure)		
Any other relevant information:		
On-site activities at time the particulate matter emission occurred:		
Form completed by	Signed	

Particulate matter monitoring and management action plan record for

Actions taken (and outcome):

Completed by:

Date: