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MINSTER SURFACING LIMITED

VARIATION TO PERMIT EPR/CB3707SB

DUST MANAGEMENT PLAN

APRIL 2024

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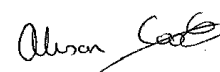
PREPARED BY:

Dominiqua Drakeford-Allen Associate Director



APPROVED BY:

Alison Cook Technical Director



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DRAWINGS	TITLE	SCALE
ST20615-001	Site Layout	1:500 @ A3 (approximate scale)
ST20615-002	Horncastle Lane Receptor Plan	1:10,000 @ A3

VERSION CONTROL

Version Number	Date	Changes made by	Changes made
1	April 2024	DDA – WA	N/A – original

1 INTRODUCTION

- 1.1.1 Minster Surfacing Limited have commissioned Wardell Armstrong LLP to prepare an environmental permit variation application to vary their existing permit (EPR/CB3707SB) at their site in Dunholme, Lincoln.
- 1.1.2 The site is located on Horncastle Lane, Dunholme, Lincoln, LN2 3QF. The National Grid Reference for the site is SK 9142 78283.
- 1.1.3 The site is located in a predominantly rural area, with the villages of Welton and Dunholme to the east. The site is located approximately 4.2km to the north of Lincoln.
- 1.1.4 The variation application is seeking to permit the acceptance of up to 15,000 tonnes of Asphalt Waste Containing Coal Tar (AWCCT) for storage and treatment via mobile cold foam mixing plant.
- 1.1.5 Additionally there will be an increase the overall annual throughput on site from 25,000 to 50,000 tonnes per annum, remove some waste codes from the extant permit so it aligns with the rest of the business.
- 1.1.6 The purpose of this Dust Management Plan (DMP) is to provide detailed mitigation measures to ensure that dust, mud and debris are controlled, remove and mitigated during operation of the site. The aim of the DMP is to ensure that there are no adverse dust releases during operation.
- 1.1.7 The DMP considers day-to-day operations and all foreseeable circumstances (e.g. adverse meteorological conditions) which may exacerbate dust conditions at the site.

The DMP includes:

- consideration and identification of all activities capable of generating dust at the site;
 - identification of sensitive receptors;
 - site and activity specific mitigation measures.
- 1.1.8 Mitigation measures are sourced from the following documentation:
- Environment Agency – Control and Monitor Emissions for your Environmental Permit;
 - Institute of Air Quality Management, 2014. Guidance on the Assessment of Dust from Demolition and Construction.

2 SENSITIVE RECEPTORS

2.1 Sensitive Receptors within 1km of the Site

2.1.1 Dust entrained into the atmosphere will often deposit within 100m of the source. The IAWM guidance document recognises that dust can deposit up to 350m (specified in the Construction Guidance) and 400m (specified in the Quarry Guidance). By reviewing receptors within 1km, this is a conservative assessment of the potential impact of dust.

2.1.2 Table 2.1 below lists the receptors within 1km of the site boundary, the receptor type and the direction and approximate distance from the site. Receptors are also shown on drawing ST20615-002.

Receptor	Receptor Type	Distance/Direction
ProAmpac Lincoln Limited, Packaging Manufacturing	Industrial	5m, east
Farm buildings	Industrial	80m, south
The Pawfect Finish, dog groomers	Commercial	600m, southwest
Westhall Farm	Residential	730m, north
Former RAF Dunholme Lodge	Historical Landmark	850m, east
Hood J S F Farm	Residential	985m, southwest

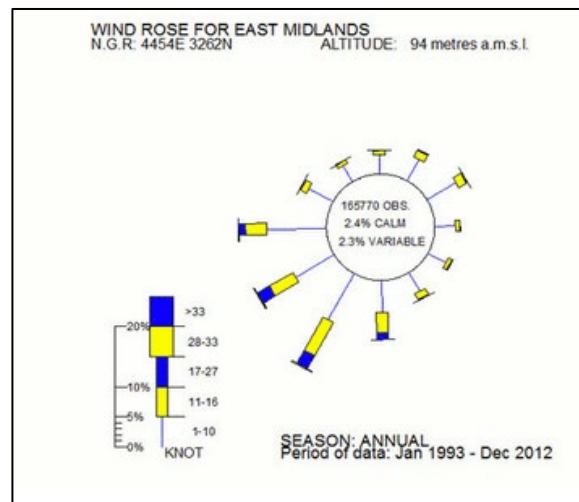
2.1.3 The packaging plant which is adjacent to the eastern boundary of the site comprises of large industrial buildings, and there is a tall wall which is the height of the tallest building between the two sites.

2.1.4 The site is not within an Air Quality Management Area (AQMA).

2.2 Prevailing Wind Direction

2.2.1 Average wind direction data from the Met Office Website¹ over a period from January 1993 to December 2012 for the nearest airfield, East Midlands, indicates the average wind direction is from the southwest.

¹ <https://www.metoffice.gov.uk/services/transport/aviation/regulated/airfield-climate-stats#EastMidlands>



2.2.2 Considering the prevailing wind direction is from the southwest, and there are no nearby sensitive receptors to the northeast of the site, the risk is considered to be low of dust impacting receptors. Nevertheless, meteorological conditions can change and site activities have potential to generate dust, as described in the following section.

3 POTENTIAL DUST SOURCES

3.1.1 The site will accept, store and treat wastes such as concrete, bricks, tiles, road planings and inert materials.

3.1.2 Emissions to air may arise from:

- vehicle movements – movement of inbound and outbound trucks;
- movement of mobile plant in and around the site;
- loading and unloading activities;
- filling the cement silo;
- storage and stockpiles;
- material handling – this may include unloading and loading but also day-to-day activities such as:
 - waste screening and stockpiling; and
 - processing of waste in the batching plant.

3.2 Source-Pathway Receptor Conceptual Model

3.2.1 A source-pathway-receptor conceptual model has identified the likely dust risk to sensitive receptors from on Site activities, as detailed in Table 3.1 below.

Table 3.1: Source-pathway-receptor Conceptual Site Model			
Source	Pathway	Receptor	Control Measure
Incoming deliveries of waste	Airbourne Wind whipping of dusty materials	Local businesses, residents and wildlife	Vehicles arriving at the Site to be sheeted/covered Reception bay with bay walls
Open air stockpiles of wastes including crushed materials prior to treatment	Airbourne Wind whipping of dusty materials	Local businesses, residents and wildlife	Minimising the stockpiling of material as far as possible Dampening of dry material with water Dedicated loading shovel to be used to transfer materials Minimising drop heights
Crushing, grinding and screening of AWCCT waste	Airbourne	Local businesses, residents and wildlife	Loading of crusher using minimum drop height Crushing plant has dust suppression installed
Vehicle Movements	Airborne Tracked out of the site by vehicles	Local businesses, residents and wildlife	Maintain clean surfaces Dampening or sweeping of site roads where necessary
Unloading/loading of materials	Airbourne Wind whipping of dusty materials	Local businesses, residents and wildlife	Mininising drop heights Dampening where necessary
Addition of PFA or cement into the batching plant	Airborne	Local businesses, residents and wildlife	Storage within an enclosed silo loading via enclosed pipework Breathing vents on silos will be fitted with dust filters
AWCCT Treatment	Airborne	Local businesses, residents and wildlife	Cold foam mixing processes carried out in a fully enclosed system Addition of materials is automatically controlled to release substances at a set rate Steam is contained within the plant
Storage of treated materials (HBM, CBGM or Foambase Asphalt)	Airborne	Local businesses, residents and wildlife	Stored within a bay with 0.5m freeboard or directly loaded into a vehicle and taken off site. Outgoing vehicles to be sheeted on site prior to exiting

4 DUST CONTROL MEASURES

4.1 Introduction

4.1.1 Due to the site location in relation to sensitive receptors and the prevailing wind patterns, it is considered that fugitive dust emissions from the site have a low risk of causing adverse effects to the surrounding environment. Nevertheless, Minster Surfacing have implemented a range of control measures to minimise the risk of dust as far as possible.

4.2 Site Management

4.2.1 The site will be managed to prevent all emissions of dust as far as practicable. Visual inspections will be undertaken to ensure visible emissions of dust are brought under control as soon as they are observed (for example, through water suppression).

4.2.2 The Technically Competent Manager is accountable for compliance of the Site. The Depot Supervisor is responsible for day-to-day operations.

4.2.3 The Depot Manager (or an appointed employee) shall carry out as a minimum one daily visual inspection of the working areas of the site and outside the entrance. The visual inspection shall consider, as a minimum, the following:

- current dust generating activities (upon identifying dust generation, additional mitigation will be employed as necessary);
- access route to ensure mud and debris is not being tracked out of the site onto Horncastle Lane and outside of the site itself;
- ensuring employees are carrying out the actions outlined in this DMP; and
- details of daily activities, schedules shall also be monitored.

4.2.4 The results of visual inspection shall be recorded in the daily site inspection form (EMS-FR-04). These records will be made available to the Environment Agency upon request.

4.2.5 The information recorded in the Daily Site Inspection Form will include quality assurance details (date, time, signature of completion and TCM details), meteorological conditions, observations and any remedial or preventative actions taken.

4.2.6 A site operative will be used to assist vehicle manoeuvring and to prevent vehicles from tracking over waste.

- 4.2.7 The weather forecast will be monitored throughout each working day. Depot Management will be cognisant of the local weather forecast and plan accordingly.
- 4.3 Waste Storage
- 4.3.1 The storage of waste and product material will be within bays.
- 4.3.2 Open storage areas will be surrounded by concrete push walls. The materials stored in this bay will be kept lower than the surrounding wall (typically 2.5m); providing a 1m minimum freeboard to contain emissions and prevent wind whipping.
- 4.4 Dust Suppression
- 4.4.1 Mobile water sprays will be deployed to dampen material during dry weather conditions.
- 4.5 Waste Processing
- 4.5.1 Only modern crushers will be used which are fitted with dust suppression bars on the exit conveyors.
- 4.5.2 The AWCCT waste will be treated in a fully enclosed system, which will prevent escape of material/particulate matter during processing.
- 4.5.3 The AWCCT treatment system is fully enclosed, preventing escape of dust and particulate matter during operation. Cement and PFA will be added to the processing plant as required and controlled via an automated system. Cement and PFA will be stored within enclosed silos, the transfer into the plant will be via enclosed pipework preventing the escape of material.
- 4.6 Water Suppression
- 4.6.1 The Site is supplied by a mains water supply.
- 4.6.2 Continuous water suppression across the whole site is not deemed necessary due to the low risk identified. Instead, a bowser will be deployed as required to manage dust emissions as required.
- 4.7 Plant and Equipment
- 4.7.1 The loading of plant and equipment will be undertaken using a loading shovel.
- 4.7.2 Only modern crushing plants will be deployed which are fitted with dust suppression bars on the exit conveyors.

4.8 Road Surfaces and Cleanliness

4.8.1 The Site surfaces shall be maintained and kept in good repair.

4.8.2 The access route shall be kept in a clean state and deposits of mud and dust shall be removed.

4.9 General Mitigation and Maintenance

4.9.1 An on-site speed restriction of 10mph will be implemented to prevent dust arising from vehicle movements.

4.9.2 Staff will be trained to recognise conditions that may generate dust, for example by minimising drop heights.

4.9.3 As part of the daily site checks, the Depot Supervisor will check the entire site for evidence of any debris and arrange cleaning as required.

4.9.4 Vehicle wheels will be inspected prior to leaving the site by a site operative and cleaned as necessary to avoid tracking material onto Horncastle Road. Vehicles existing the Site carrying loads of material will be sheeted.

5 COMPLAINTS

5.1 General

5.1.1 A complaint may be received directly from a local resident, customer or from the Environment Agency.

5.2 Complaint Procedure and Responsibility

5.2.1 The Technically Competent Manager has overarching responsibility for the complaint procedure, including complaints relating to dust emissions.

5.2.2 Administrative staff are responsible for handling complaints and recording complaints onto the correct form. All complaints must be referred to the Technically Competent Manager.

5.3 All office-based staff will be trained to record complaints and to ensure that they notify the Technically Competent Manager or Depot Supervisor immediately.

5.4 The Site Management Team will review the activities that may have given rise to the dust complaint and report their findings to the complainant and implement appropriate corrective action in accordance with this Dust Management Plan.

5.5 The Depot Supervisor provides the Site Management Team a monthly report which will include reporting of any specific complaints or compliance issues.

5.5.1 The results of the complaint investigation and the measures taken to resolve the complaint will be made available to the Environment Agency upon request.

5.6 Engagement with the Community

5.6.1 Emergency contact information is displayed at the Site entrance and members of the public will be able to contact Minster's Control Centre on the designated number.

5.6.2 Alternatively, members of the public can make contact via the Minster Group's website.

6 DISTRIBUTION AND TRAINING

6.1.1 A physical copy of the DMP will be kept on site at all times and made available to employees. A digital copy will also be held at the head office. The DMP shall be made available to the Environment Agency upon request.

6.1.2 The Site Manager will ensure each employee and subcontractor at or arriving at the site are familiar with the control measures and procedures outlined in this plan and will be made aware of their individual role in reducing dust emissions. Personal protective equipment shall be provided as necessary for employees and visitors.

6.1.3 All employees will be trained to carry out the mitigation actions required of their role. The training will make the employee aware of the wider dust management controls at the site. Suitable training may include a site-specific toolbox talk and annual refresher sessions.

7 REVIEW AND RESPONSIBILITY

7.1 Review Requirement and Timescale

7.1.1 While operations continue at the site that could give rise to the generation of dust, this Dust Management Plan will be formally reviewed at minimum bi-annual intervals to ensure it continues to reflect the ongoing site status and associated sensitivity/risk.

7.1.2 Any required changes to the conditions set out within this document will be formally agreed with the Environment Agency prior to their implementation.

7.1.3 A version control record will be made in the subsequent reissuing of the Dust Management Plan.

DRAWINGS

STOKE-ON-TRENT

Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM

Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON

41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL

Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS

Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF

Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE

Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH

Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW

24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS

36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON

Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE

City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO

Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY

29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310