

**Worms Heath Restoration  
Limpsfield Road**

**DUST EMISSIONS MANAGEMENT PLAN**

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# 1 INTRODUCTION

## 1.1 Scope

This Dust Management Plan (DMP) has been produced for the importation of waste to restore the former landfill at Worms Heath, Limpsfield Road, Warlingham, Surrey CR6 9QL. It has been prepared in accordance with the Environment Agency's online guidance, 'Control and Monitor emissions for your environmental permit'.

The waste materials will be used to cap the existing unsuitable soils (former landfill) to create an improved soil profile for productive agricultural use, in the future.

This DMP identifies the potential sources of dust emissions, the possible impacts associated with dust emissions and details the measures required to prevent and minimise the dust and particulate emissions.

## 1.2 Dust Management Aims

The aim of the DMP is to:

- a) Minimise dust generation and migration from the site
- b) Ensure dust pollution at local sensitive receptors is minimal
- c) Establish a dust minimisation strategy which shall be implemented on site
- d) Ensure the site considers the potential dust generation of operations/activities

# 2 SITE

## 2.1 Site Setting

The site is located to the north of Limpsfield Road and is known as Worms Heath. It is part of a wider agricultural holding, however, the planning history for the site shows it is a former landfill. The land has since been returned to agriculture, but the poor quality of the land makes the site difficult to use and, in contrast to the surrounding agricultural land, it is now rough grassland inhabited by brambles, nettles and other weeds.

The site is approximately 9.5ha and includes 3.0ha of woodland, mainly along the southern boundary, but also along the other boundaries. The remainder of the site is an open field that gently slopes down towards the north-west. There is a public bridleway that runs east to west across the site.

The site is outside the AONB and the closest SSSI is the Woldingham and Oxted Downs which is 1.4km away. There are no significant environmental or landscape designations nearby; some of the nearby woodland is classified as 'Ancient', but the woodland within the site is not. The nearest ancient woodland is located beside the northeast boundary of the site. Refer to the maps provided (separately) in Appendix A of Risk Assessment (WH/008).

## 2.2 Wind Direction

Met Office records show that the prevailing wind direction, in this region of the UK, is from a south-westerly direction. This has been considered, in the following sections of this DMP, to assess the likelihood of potential receptors being affected by dust generated from the site.

# 3 SENSITIVE RECEPTORS

The following potentially sensitive receptors have been identified within 500m of the site:

- Ancient Woodland – southwest of the site (south of Limpsfield Road) and adjacent to the north-west boundary of the site

- Residential/Farm Properties – incl. Worm’s Heath Cottage, Nore Hill House, Shine Oak, Broombank Cottage, etc.

Given the prevailing wind direction, plus the fact that most of the sensitive receptors are located south of the site, the likelihood of dust affecting these receptors is low. Mitigation measures will predominately benefit the Ancient Woodland on the north-west boundary of the site.

The receptors are shown on the map below.

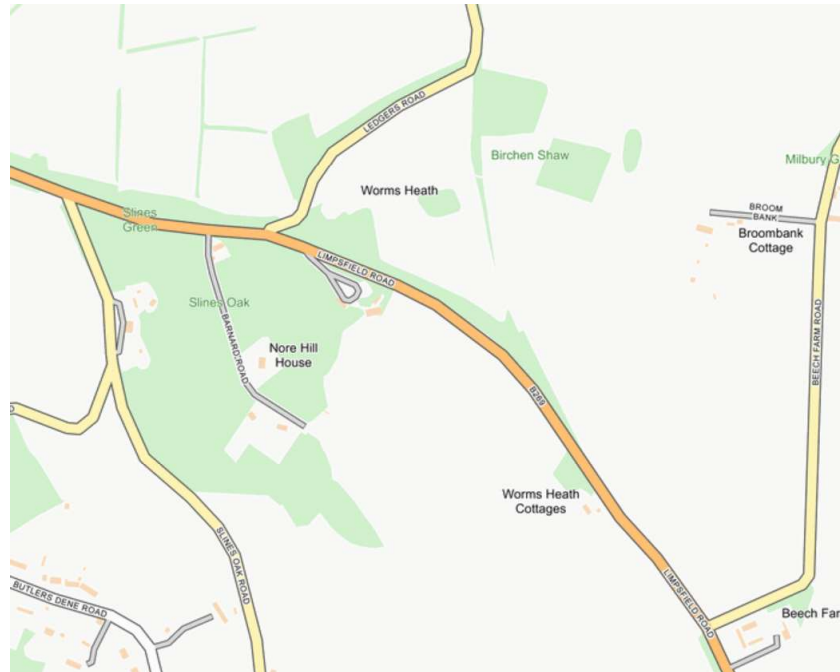


Figure 1 – Map of Potentially Sensitive Receptors within 500m of Site Boundary

## 4 SOURCES

The following section identifies the potential sources of dust.

### 4.1 Dust Generating Activities on Site

Dust may potentially be generated from the following on site activities:

- Vehicle movements in and out of the site, and around the site
- Unloading, handling and using waste to carry out the earthworks
- Wind blowing across exposed soil surfaces and stockpiles, if present

It is noted that dust production may increase during periods of strong winds or dry weather.

### 4.2 Local Contributors of Dust and Emissions

The site is in an agricultural area surrounded by fields and woodland, with sporadic housing and small farm units (within 500m of the site). Dust from agricultural activities (such as

harvesting) has therefore been identified as a potential source. This is a seasonal activity and likely to occur as very isolated incidents.

## **5 DUST CONTROL MEASURES**

The following section details the control measures that will be implemented on site to prevent or minimise the generation of dust from the identified sources in Section 4.

### **5.1**

#### **5.2 Methods of Prevention**

In order to minimise the dust, potentially generated by the on site activities, the following prevention/mitigation measures shall be implemented at the site.

##### **5.2.1 Vehicle movements in/out of the site**

- Site access roads and internal haul roads shall be maintained, in a good condition, to prevent deterioration and minimise the generation of dust.
- Mud and other debris shall be monitored by the site personnel and cleaned when necessary.
- Where roads are surfaced, they shall be swept regularly to limit the generation of dust from the movement of vehicles using the roads.
- Vehicles will abide by an on site speed limit, which will reduce their potential for generating dust. This speed limit may be reduced during dry weather or strong winds.
- During periods of dry weather and/or heavy traffic, the roads shall be dampened to prevent dust production.

##### **5.2.2 Unloading, handling and using waste**

- Wastes will be unloaded at their place of use to minimise handling and restrict the potential generation of dust.
- The moisture content of the imported waste is typically sufficient for the materials to be used/placed without the generation of dust.
- Stockpiles will be kept to a minimum. Any stockpiled materials will be monitored for dust generation and mitigation measures (such as dampening or removal of the stockpile) will be implemented, where necessary.
- The activities will only be undertaken during working hours, therefore preventing the generation of dust outside of the working hours. Working hours may be reduced further in dry summer months.

##### **5.2.3 Wind Action**

- The wind will blow dust across the site and potentially beyond the site boundaries. Site personnel shall consider the wind direction and strength when undertaking activities that may generate dust.
- Dust created by the movement of vehicles will be blown by the wind.
- The moisture content of the imported waste is typically sufficient for the materials to be used/placed without the generation of dust. During summer months, the

placed materials may become dry and, if disturbed, may produce wind blown dust. Disturbance of completed earthworks areas shall be avoided during dry periods

- If materials have been stockpiled, this may become dry in the summer months and potentially generate wind blown dust.

#### **5.2.4 General Measures**

- Site personnel shall conduct visual assessments of dust emissions within the site and at the downwind site boundary. If potential or actual dust issues are identified the appropriate preventative or remedial actions will be implemented, as soon as practicable.
- Weather conditions will be considered when scheduling site activities. In windy and or dry conditions activities that are considered a high dust risk will be postponed, if practicable, or additional mitigation measures (such as dampening) will be implemented.
- The routine washing of on site plant and vehicles to mitigate dust generation from vehicles.

#### **5.2.5 Suspension of Activities**

- Site personnel shall suspend site activities, if excessive dust generation is observed. This judgement should be based on visual inspection(s) and weather conditions on the day.

### **5.3 Dampening**

Dampening of material will be carried out in the following situations:

- On haul roads and unloading areas, where vehicles are generating significant dust.
- During periods of dry weather, such as summer months, if materials are generating significant dust
- When dust emissions are observed by the site personnel during the visual assessment;
- When dust emissions have been observed outside of the site boundary during the visual inspection;
- In response to any complaints received about dust from the site

## **6 MONITORING AND REPORTING**

### **6.1 Dust Monitoring**

Site personnel will carry out visual inspections of the site, this will include dust monitoring, when weather conditions are conducive to dust generation. On site activities will be observed and if significant dust generation is observed, the offending activity will cease and the site boundary will be inspected to ensure that dust isn't being emitted from the site. If dust emissions are observed outside of the downwind site boundary, appropriate mitigation

measures (such as dampening haul roads) shall be identified and implemented the activity recommences. Dust monitoring will only be carried out during operational hours.

## **6.2 Response to dust events**

If significant levels of dust are observed during visual inspections of the site, the site personnel will conduct an investigation to identify the cause of the dust generation.

If the dust generation is attributed to an activity on the site and mitigation measures have failed, the activities that are the source of the dust will cease until remedial measures have been identified and implemented. Visual monitoring will be increased, as necessary, until the dust problem has been resolved.

If on site dust emissions are continually identified as excessive or complaints are repeatedly received, the site personnel will review the mitigation measures and monitoring strategy detailed in this DMP and amend/improve appropriately.

Dust events will be recorded, including any mitigation measured undertaken. Due to the remote location of the site, dust events are envisaged to be infrequent and the likelihood of dust impacting the sensitive receptors is considered to be low.

## **6.3 Recording**

Dust events will be recorded including the dates, times, wind direction, weather conditions and observations of any detrimental/environmental effect. As stated above, dust events will be investigated and mitigation measures will be implemented, where necessary, these will also be recorded. Records will be kept and retained in accordance with the Environmental Management System (EMS) (WH/007) and Permit.

## **7 COMPLAINTS**

All complaints received concerning dust emissions from the site will be dealt with in accordance with the EMS (WH/007) complaints procedure. Complaints may be received from interested parties, including operatives, customers, clients and regulatory authorities.

Complaints shall be recorded and shall include at least the following:

- Name and contact details of the person who expressed concern or made a complaint;
- Specific subject(s) of the concern or complaint;
- The source / location of where the complaint comes from;
- Date and time communicated to the site and name of the person to whom it was communicated;
- Nature and date(s) of any actions and checks and who carried them out;
- Nature and date of any response to the person who expressed a concern or made the complaint; and
- Name of the person who communicated the response.

The full complaints form is contained in Section 6 of the EMS (WH/007).

## **8 RESPONSIBILITY**

The site will be managed by competent personnel, as described in Section 5 of the EMS (WH/007). The Site Manager, Site Foreman and any other delegated personnel are responsible for this DMP and compliance with the procedures it contains.

### Appendix A – Dust Event Record Form

The following form shall be completed and retained, as a record of Dust Events.

<b>DUST EVENT RECORD FORM</b>	
Date:	
Weather conditions (dry, rain, fog etc)	
Temperature (very warm, warm, mild, cold or degrees if known)	
Wind strength (none, light, steady, strong, gusting). Use Beaufort scale if known	
Wind direction (e.g. from SW)	
Time of Event	
Duration of Event	
Type of Event (dust from haul roads, stockpiles)	
Is the source evident?	
Actions required.- to mitigate and/or stop  (such as dampening, alter working area and/or method, restrict vehicles, reduce working hours)	
Comment and Observations	