DUST MANAGEMENT PLAN
for
City Skips
Hillside Industrial Estate
Cheadle

January 2016

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1 INTRODUCTION

AC Environmental Consulting (ACEC) Ltd, on behalf of City Skips, have prepared a dust management scheme (DMS) for a site at Hillside Industrial Estate, Cheadle.

This Dust Management Plan has been produced as part of the Site Management Plan.

2 SITE SETTING

The site, covering an area of 0.13 hectares (shown in Drawing No. CITY 1), is located in an industrial setting at Hillside Industrial Estate, Cheadle. It is bounded to the north by woodland and open fields, to the west by a Heavy Goods Vehicle yard, and to the south and east by other industrial sheds.

Several residential properties and other potentially sensitive receptors lie some 300m from the site to the south.

Wind roses for the nearest sites are shown in the Figures below. This shows that the prevailing winds are SW, blowing across the site to the woodland and open fields.

Fig 1: Windrose for RAF Shawbury

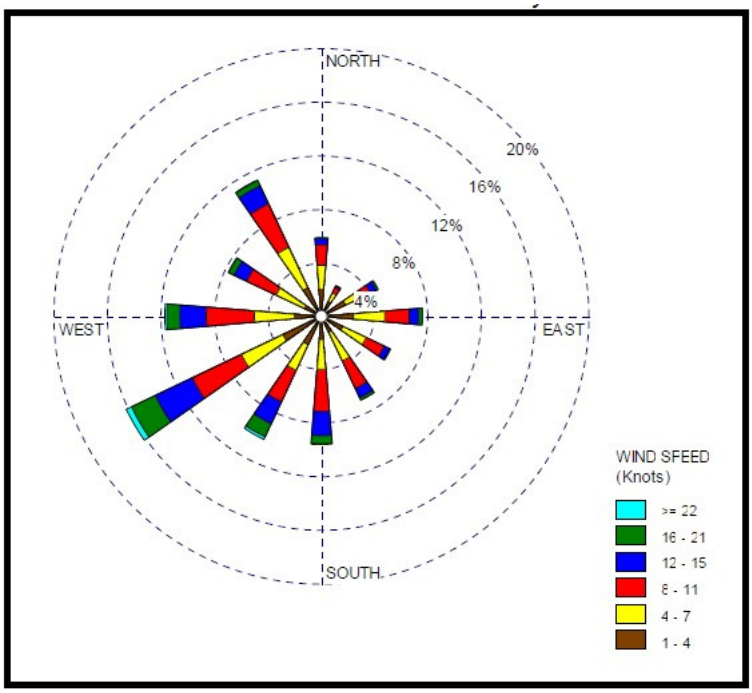


Fig 2: Windrose for Birmingham Elmdon

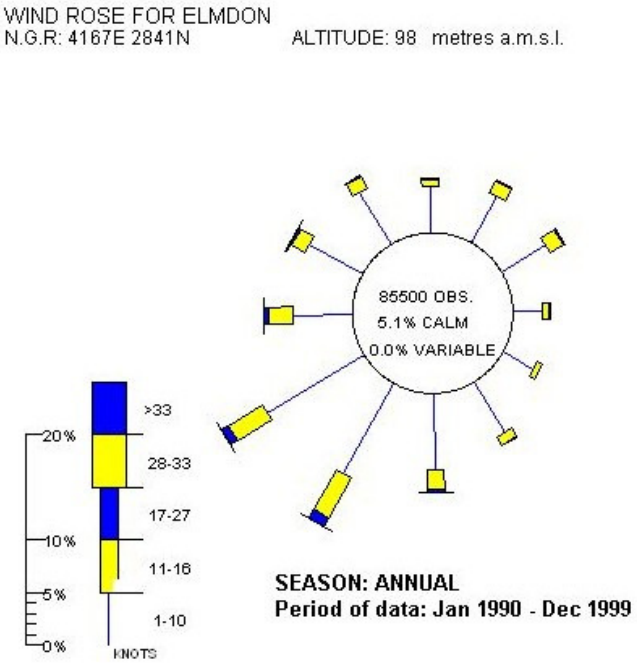
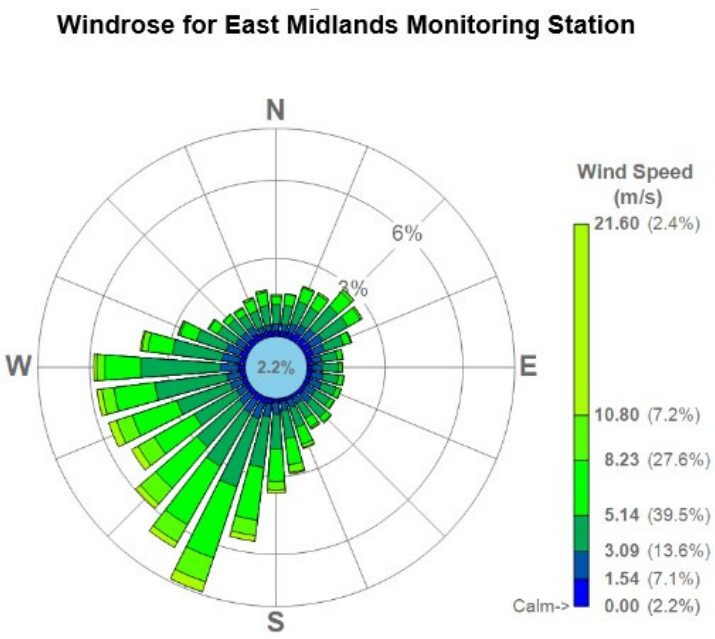


Fig 3: Windrose for East Midlands



3 SITE OPERATIONS

3.1 Existing Operations

The site is used for the recycling of waste from the skiphire business and the storage of skips.

4 POTENTIAL FOR EMISSIONS

Typically, the greatest proportion of dust emitted from mineral workings is largely deposited within 100 m of the dust source(s)[1].

The principal dust sources anticipated would be from loading and tipping operations and site transport, which may also raise visible dust. Windblown dust emissions may occur when moderate to high winds blow across loose materials on the ground and in stockpiles.

As shown in Figure 1, the prevailing winds blow towards the north and north-east, i.e. towards the woodland and open fields.

5 MEANS OF PREVENTION

The operations will be governed by conditions attached to any planning permission and environmental permit, and such conditions include specific requirements in respect of the control of dust. The following means of prevention are based on existing site management procedures and current best practice guidance.

Relevant parts of current best practice for minerals extraction[2] can also be taken to apply to waste management and processing operations and will be referred to as appropriate. The essence of the guidance for the minerals industry is that dust impacts can be controlled by effective site management.

5.1 Weather Conditions

As an over-riding requirement, if during dry windy conditions any operations are identified as causing or likely to cause visible emissions across the site boundaries, or if abnormal emissions are observed within the site, the Site Manager will immediately modify, reduce or suspend those operations until either effective remedial actions can be taken or the weather conditions giving rise to the emissions have moderated.

A trigger system will be adopted to identify those weather conditions when there is an increased or high risk of windblown wood dust. The trigger levels are detailed in the following matrix.

Table 5.1: Windblown dust risk matrix

Wind Speed			**Rainfall**		
Beaufort	ms^{-1}	mph	Dry	Light Showers	Heavy Rain
5+	8+	18+	Red	Red	Amber
3-4	3-8	8-17	Red	Amber	Green
1-2	0-3	1-7	Amber	Green	Green

[1] Best Practice Guide appended to The Environmental Effects of Dust from Surface Mineral Workings, HMSO, 1995.

[2] Minerals Policy Statement 2, Appendix B, *Methods for Controlling Dust*, ODPM, 2005

The trigger levels will be interpreted as follows:
· Green: Windblown dust not normally likely to occur in significant quantities - normal dust suppression measures to be employed;

· Amber: Increased risk of windblown dust - additional checks on downwind boundary for visible dust - stockpiles will be inspected and treated as necessary; and

· Red: High risk of windblown dust - no dusty activities to take place if winds blow from the north or northwest - stockpiles will be inspected and treated as necessary to prevent dust arising. Treatment shall consist of damping down with water by hose or bowser and covering with tarpaulins.

When “red” conditions occur and the wind blows from the north or north-west, all outdoor, dust generating operations, will be immediately suspended.

5.2 Loading and Tipping
Drop heights will be controlled during all loading and tipping operations to reduce the entrainment of dust into the atmosphere. Routine spraying of stockpiles with a handheld hose will take place to dampen the material and to reduce dust emissions.

5.4 Site Traffic
All site traffic will keep to designated routes. The designated routes will be dampened using the mist spray unit and will be swept as necessary to damp down and remove any loose materials.

Standard good practices will be adopted for site traffic, including:
· avoiding abrupt changes in alignment;
· regular clearing, wetting and maintenance of yard surfaces;
· setting site speed limit of 5 mph;
· fitting site plant with upswept exhausts and radiator fan shields;
· evenly loading vehicles to avoid spillages; and
· regular application of water in dry conditions

5.5 Road Transport
All lorries carrying material into or out of the site will be securely sheeted. The wheels, chassis and under-bodies of departing transport will be inspected for cleanliness by the driver. If necessary, the vehicle will be cleaned and further inspected by the driver before proceeding towards the site entrance. A hard-standing equipped with a hose and brush will be provided for this purpose.

All site surfaces will be dampened as necessary by hose or towing a mist spray unit across these surfaces. A speed limit of 5mph will be set on site.

The site entrance will be inspected daily to ensure that track-out is not carried out onto the public highway. A road sweeper will be deployed as necessary to remove any muddy or loose deposits.

5.6 Wind blow across stockpiles and loose materials
Material stockpile areas will be clearly designated. Loose materials both inside and outside these designated areas will be swept to minimise windblown dust.

5.7 Other Matters

General matters and the management of the site can affect the likelihood of significant dust emissions. These include:

· high standards of house-keeping to minimise track-out and windblown dust;
· the use of clean water for dust suppression, to avoid re-circulating fine material; and
· effective staff training in respect of the causes and prevention of unacceptable emissions of dust.

The water supply to the dust suppression installations will be protected against frost to ensure availability at all times.

6 MAINTENANCE

Effective control of dust emissions requires the maintenance and proper operation of all plant and equipment, including fixed and mobile dust suppression equipment. A programme of planned maintenance will be carried out on all plant and equipment in accordance with the manufacturers' recommendations to ensure that it operates at optimum efficiency.

Stocks of essential spares and consumable items will be held at the site or kept readily available for use at short notice.

Any malfunction or breakdown leading to abnormal emissions will be dealt with promptly and operations will be modified or suspended until normal working can be restored. All such malfunctions, and the actions taken, will be recorded in the site logbook.

7 SITE MANAGEMENT

The Site Manager will exercise day-to-day control of the site, either personally or by delegation to suitably trained and responsible staff. The Site Manager will be responsible for the satisfactory working of the site and for ensuring compliance with the dust management scheme.

Daily records, a copy of which is attached as Appendix A, will be kept at the start of operations and again in the middle of the working day. The records will be kept on site for a minimum of two years and will be made available on request for inspection by the relevant authorities.

Staff at all levels will receive the necessary training and instruction in their duties relating to all operations and the potential sources of dust emissions. Particular emphasis will be given to plant and equipment malfunctions and abnormal conditions. The Site Manager will ensure that external hauliers and other visitors are aware of the need to comply with the provisions of this scheme so far as they are relevant to their activities on site.

Any member of staff who fails to comply with the provisions of the dust management scheme will be re-trained as necessary. External hauliers and other visitors failing to observe the requirements of the scheme will be asked to leave the site.

8 EMISSIONS MONITORING

Activities with the potential to cause dust emissions, as detailed in Section 4, will be monitored at the start-up of operations and again during the working day. This will include a visual assessment of any impacts beyond the downwind site boundary.

All observations and findings, including wind and other weather conditions, will be noted in the daily records.

Should visible dust be generated, the Site Manager will act promptly to identify the source(s) of the dust and take the necessary corrective action. Each event, its cause and the action taken will be noted in the daily records.

If necessary to avoid potential nuisance, the Site Manager will instruct the reduction or suspension of any operation or process causing visible dust emissions across the site boundary towards any sensitive receptor until the emissions can be controlled.

All site personnel will be instructed to inform the Site Manager whenever visible dust emissions are observed, or appear likely to occur, as a result of any operation or process.

9 COMPLAINTS

All complaints will be recorded in the site diary and reported to the Site Manager, who will investigate the circumstances and ensure that the necessary corrective measures are taken. A prompt response will be made to the complainant and a record, including copies of all correspondence and telephone file notes, will be made in the site dairy. Relevant authorities, e.g. Staffordshire County Council (SCC), will be advised in writing within one week of any dust complaint received, together with details of the findings of the investigation and any corrective measures which have been taken.

In the event of any substantiated complaint, the effectiveness of the dust management scheme will be reviewed.

10 REVIEW AND UPDATE

The continuing effectiveness of the dust management and monitoring plan will be reviewed in consultation with the planning authority and / or SCC every two years.

The reviews will take into account the compliance records, complaints history, site records and any recent sensitive developments on neighbouring land.

The plan will be amended as necessary, including any changes to the control measures which may be agreed with the planning authority and / or SCC.

Appendix A: Dust Management Daily Record

Date:	**Start-up (am)**	**Midday**	**Action Taken**
Weather: Wind Strength/Direction Sunny/dry/showers/rain			
Operations: Plant Transport Tipping Loading Other			
Dust Suppression: Sprays Handheld hose Road Sweeper			
Visible Dust/Track out: Plant/transport • Yard • Entrance Tipping Materials Handling • Unprocessed waste • Recyclables Windblow • Yard • Stockpiles Off-site			
Comments:			**Date:**