



## **Environmental Management Plan**

Site Name – Chatburn Road, CLITHEROE  
Prepared for: Ribble Valley Borough Council

## REPORT ISSUE

Issue / Revision	Issue 1	Revision 2	Revision 3	Revision 4
Remarks				
Date				
Prepared By				
Signature				
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# TABLE OF CONTENTS

- 1.0 DUST MANAGEMENT PLAN
  - 1.1 Preparation
    - 1.1.1 Site Preparation
    - 1.1.2 Training, Awareness and Competency
- 1.2 SITE PLANNING
  - 1.2.1 Site Layout
  - 1.2.2 Haul Roads
  - 1.2.3 Dust Suppression
- 1.3 CONSTRUCTION TRAFFIC
  - 1.3.1 Site Entrance
  - 1.3.2 Vehicle Speed Limits
  - 1.3.3 Prevention of Dust from Vehicle Movements
  - 1.3.4 Reduction of Vehicle Emissions
- 1.4 SITE ACTIVITIES
  - 1.4.1 Excavation and Earthworks
  - 1.4.2 Stockpiling
  - 1.4.3 Site Machinery
  - 1.4.4 Cutting, Grinding and Sawing
  - 1.4.5 Fitting Out
  - 1.4.6 Waste Disposal
- 1.5 SUMMARY OF MITIGATION MEASURES
- 1.6 CONTROL OF NOISE AND VIBRATION LEVELS
- 1.7 WHEEL CLEANING FACILITIES
- 1.8 PROGRAM OF WORKS

## **1.0 DUST MANAGEMENT PLAN**

Activities undertaken during the construction phase of a development have the potential to generate fugitive dust emissions. The site is located within a residential area and next to an active hospital building. Mitigation measures will therefore be needed to reduce dust effects beyond the site boundary. These are intended to be stringent but achievable and in line with the Best Practical Means (BPM).

Suitable mitigation measures have been identified through a review of The Greater London Authority 'Best Practice Guidance: The Control of Dust and Emissions from Construction and Demolition'. McDermott Homes will ensure that all on-site contractors follow BPM at all times to minimise dust emissions. These are set out in the following Sections.

It should be noted that there will be no construction works outside the following hours:

- Monday – Friday 07:30 – 18:00; and,
- Saturday 08:30 – 14:00.

In addition, no construction work will take place on a Sunday, Bank or Public Holidays.

### **1.1 Preparation**

#### **1.1.1 Site preparation**

Machinery, fuel storage and dust generating will be located away from the site boundary and sensitive receptor locations as far as practicable.

#### **1.1.2 Training, Awareness and Competency**

All site personnel will receive training on health and safety, BPM, site housekeeping and pollution policy. Inclusion of these items as part of site induction training should be considered. Additionally, all staff will be aware of reporting procedures and a trained and responsible manager will be on site during working hours to maintain the logbook and carry out inspections.

## **1.2 SITE PLANNING**

### **1.2.1 Site Layout**

Careful consideration will be given to site layout and, where possible, dust generating activities are to be located away from the boundary and sensitive receptor locations. However, it should be noted that due to the nature of construction this will not always be possible. Due to the meteorological conditions of the area, wind-blown dust effects are most likely to occur towards the north of the site. This will be considered when verifying impacts during routine inspections. See attached construction management plan indicating the location of compound, phasing, build routes and site access.

### **1.2.2 Haul Roads**

Un-paved haul roads can account for a significant proportion of fugitive dust emissions. However, due to the size of the site it proposed the new estate road will be brought up to base course before housebuilding activity is commenced.

### **1.2.3 Dust Suppression**

All routes within the site are to be water sprayed and swept clean as necessary. The use of recycled or 'grey' water for the purposes of the dust suppression will be considered.

It is necessary to continuously monitor for dust throughout the day. This will be in the form of visual inspections undertaken by the site manager. Records of any significant emissions or impacts will be maintained within a log book.

Haulage routes will too be regularly inspected if introduced and any necessary repairs carried out as soon as required.

## **1.3 CONSTRUCTION TRAFFIC**

### **1.3.1 Site Entrance**

The entrance to the site is located from Chatburn Road. The area surrounding the site is residential and industrial. The number of vehicles entering and leaving the site will be limited as far as possible to reduce dust impacts at these locations.

### **1.3.2 Vehicle Speed Limits**

An appropriate speed limit of **15 miles per hour** will be implemented on site to reduce dust re-suspension from road vehicles.

### **1.3.3 Prevention of Dust from Vehicle Movements**

Vehicles leaving the site have the potential to transport dust beyond the boundary through trackout. The use of hand held jet wheel washing upon leaving the site will be implemented, as well as procedures for effective cleaning and inspection of vehicles.

As with haul roads, the entrance and exit to the site is to be cleaned as necessary. The use of recycled or 'grey' water will be considered.

Vehicles carrying dusty materials are to be securely covered and information about vehicles entering and leaving the site, and their loads, will be recorded by the site manager.

### **1.3.4 Reduction of Vehicle Emissions**

Vehicles will avoid leaving engines idling and queuing of vehicles entering the site will be controlled.

## **1.4 SITE ACTIVITIES**

All site activities will be undertaken in accordance with an approved Method Statement produced by McDermott Homes. This will consider potential dust emissions where relevant.

### **1.4.1 Excavation and Earthworks**

Excavation and earthworks will be undertaken throughout the site in order to prepare the foundations for the relevant plots. Significant earth moving works will not take place on dry or windy days if variations to construction programme are possible. Where applicable, water is to be used as a dust suppressant during excavation and earth moving activities. Any exposed areas will be re-vegetated as the development progresses.

### **1.4.2 Stockpiling**

Stockpiles are to be kept for the shortest possible time and the height minimised. The predominant wind direction will be taken into account when sitting stockpiles to reduce the likelihood of effects upon sensitive receptors. Daily checks for dust will be carried out by the site manager to prevent dust build up.

### **1.4.3 Site Machinery**

The use of diesel and petrol powered generators will be minimised by using mains electricity as a power source for site machinery as far as possible.

The use of concrete batchers and crushers are regulated as Part B processes under the Environmental Permitting Regulations (2010). As such, the Local Authority will be notified if a concrete batcher or crusher is to be used on site. A copy of the permit will be kept on site and the operations recorded in the site log-book.

### **1.4.4 Cutting, Grinding and Sawing**

Cutting, grinding and sawing activities will not be conducted on site where possible and prefabricated material will be imported. If cutting, grinding and sawing on site is necessary, all equipment will have either water suppressants or dust extraction systems installed.

### **1.4.5 Fitting Out**

All machinery for activities such as plastering, sanding and rendering are to be fitted with dust suppression and/or collection equipment.

### **1.4.6 Waste Disposal**

Burning of any materials will not be permitted on site. All wastes will be recycled or disposed of in accordance with relevant legislation.

## **1.5 SUMMARY OF MITIGATION MEASURES**

Reference should be made to Table 1 for a summary of mitigation measures to be implemented on the site.

**Table 1 Summary of Dust Mitigation Measures**

<b>Issue</b>	<b>Control Measure</b>
Site Planning	<ul style="list-style-type: none"> <li>• No bonfires</li> <li>• Plan site layout – machinery and dust causing activities will be located away from sensitive receptors</li> <li>• All site personnel to be fully trained</li> <li>• Trained and responsible manager on site during working times to record activities and carry out inspections</li> </ul>
Construction Traffic	<ul style="list-style-type: none"> <li>• Vehicles to avoid leaving engines idling</li> <li>• Effective vehicle cleaning and specific fixed wheel washing on leaving site and damping down of haul routes</li> <li>• All loads entering and leaving site to be covered</li> <li>• Avoid site runoff of water or mud</li> <li>• On-road vehicles to comply to set emission standards</li> <li>• Minimise movement of construction traffic around site</li> <li>• Hard surfacing and effective cleaning of haul routes</li> <li>• A site speed limit of 15 miles per hour to be implemented</li> </ul>
Earthworks	<ul style="list-style-type: none"> <li>• Minimise dust generating activities</li> <li>• Use water as dust suppressant where applicable</li> <li>• Re-vegetate earthworks and exposed areas</li> </ul>
Construction Works	<ul style="list-style-type: none"> <li>• Ensuring concrete batcher and crusher has permit to operate</li> <li>• On-site cutting, grinding and sawing activities to use water suppressant or appropriate dust extraction systems</li> <li>• Machinery for plastering, sanding or rendering to be fitted with dust suppression/collection equipment</li> </ul>

## **1.6 CONTROL OF NOISE AND VIBRATION LEVELS**

In the first instance McDermott Homes will undertake all available means to reduce the likelihood of elevated levels of noise and vibration from the works. Where levels may be exceeded McDermott Homes will take appropriate action to prevent or adequately control exposure according to principles of best practice.

Site risk assessment identifies that emissions of noise and vibration may arise from vehicles and machinery associated with the works. McDermott Homes will ensure all vehicles and mechanical plant used for the purpose of the works will comply with current legislation regarding noise and vibration emissions.

Throughout the works McDermott Homes will comply with the following:

- All vehicles and mechanical plant used during the works will be fitted with effective exhaust silencers and will be maintained in good and efficient working order,
- All generators and compressors will be 'sound reduced' models, fitted with properly lined and sealed acoustic covers, which will be kept closed whenever the machines are in use,
- All pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers,
- All airlines will be maintained and checked regularly to prevent leaks,
- Plant and equipment in intermittent use will be shut-down, or throttled down to a minimum, in the intervening period between work activities,
- All pumps will be fitted with effective exhaust silencers and will be maintained in good and efficient working order. All dewatering pumps will be 'sound reduced' models fitted with properly lined and sealed acoustic covers,
- All stationary plant will be screened, where reasonably practicable,
- McDermott Homes will avoid the over-night operation of generators and/ or compressors, using mains power instead, where reasonably practicable to do so. Where the use of generators cannot be avoided, measures will be taken to avoid noise transmission beyond the site boundaries, particularly where residential property adjoins the site. Silenced generators will be used in this instance.

The location and nature of off-site receptors will be taken into account when arranging and/or managing site activities in order to minimise noise at the site boundaries, as far as reasonably practicable and will include the following:

- Selective location of generators and other stationary plant and equipment,
- Use of mobile noise screens where impacts of noise may occur,
- Limiting the amount of working plant at any time, and
- Silencing plant.

McDermott Homes will consider the location of works associated with high levels of vibration in relation to identified receptors to prevent damage to adjacent and other properties.



## **1.7 WHEEL CLEANING FACILITIES**

A general jet-wash facility will be provided within an area of the site before exiting the development, this will be managed by the ground-works contractor and supervised by the Site Management.

Mobile road sweepers will also be employed to ensure on and off site roads are kept clean. A road sweeper will generally be employed once a week (usually Friday afternoon) however this will be at the discretion of the site management and can be increased from time to time as required.

## **1.8 Program of Works.**

### **1.8.1 Phasing**

The development is to be split into 2 phases with phasing and build routes detailed on the construction management plan. McDermott Homes intend to utilise a central compound that will serve phases 1 and 2. Once Phase 1 roads are completed and build routes 1 – 5 are occupied it is intended that construction traffic will use Road 2 for the remainder of the development.

### **1.8.2 Traffic Management**

Separation of residential properties, construction vehicles, site personnel and site visitors has been considered within the construction management plan. Access routes into site have been segregated where possible from residential access routes.

Site access signs will be installed and maintained guiding construction deliveries to the site construction entrance.

Suppliers to be emailed site access routes for delivery drivers to observe.

A development site traffic management plan will be displayed within the site office and routes signed on site with maximum speed signs. Traffic management plan to be updated frequently to consider the evolving site-specific construction activities.