

**FULSTON MANOR SCHOOL, BRENCHLEY ROAD,
SITTINGBOURNE, KENT ME10 4EG**

**THE CONTROL OF DUST AND EMISSIONS FROM
CONSTRUCTION AND DEMOLITION**

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1. Introduction

This document details how dust and emissions will be controlled on this development project. It takes into account the 5 Air Quality Management Areas (AQMA) under the Environment Act 1995.

It is an offence under the Environmental Protection Act 1990 (EPA) to cause nuisance to the inhabitants of the neighbourhood by generating dust and this document details what specific dust controls and mitigating measures will be put in place.

We will follow Best Practice Guidance to ensure we identify good practice methods for demolition and construction based upon the level of risk identified.

Where possible, best practice mitigation measures will be carried out at all times, although it may be impossible to fully comply with the guidance for certain emergency works. In these cases, we will provide the Environment and Public Protection Service as much notice as possible.

1.1. How to use this document

The following 3 principles are well established and are central to our control strategies:

- 1. Prevention**
- 2. Suppression**
- 3. Containment**

The 3 principles are embedded in our control measures and are used in a way that is appropriate to the scale of this particular development and the potential exposure of site workers, residential neighbours and other susceptible receptors. The content details how we have assessed the development for its potential risk and what controls and mitigation measures will be put in place.

2. Air Quality Impact Evaluation

A site evaluation will be conducted before any work activities begin on site. This assess the likely impact of the development, based on size and location, will have on local air quality both inside and outside the site boundary. This applies to all proposed construction activities, including demolition, site clearing and construction phases.

In order to successfully control demolition and construction activity, it is important to evaluate the risk from pollutants emitted from site. It is envisaged that this approach will bring additional benefits, such as a reduction in the number of nuisance complaints; the majority of which relate to dust and noise emitted from construction activities.

2.1. Site evaluation

The need and ability of a developer to deploy effective control measures is often dependant on the size and scale of a development. In addition, consideration will need to be given to site location with regard to local air quality and ground conditions.

Therefore, it is the intention of this document that best practice activity uses the following criteria to assess the potential impact of a demolition or construction site.

Take account of these criteria:

- the area taken up by the development;
- the number of properties being developed;
- the potential impact of the development on sensitive receptors close to the development, for example residential, schools, hospitals, rest homes and other building uses which would be affected by high levels of air pollution or dust;
- is the site located in an Air Quality Management Area. See www.portair.co.uk;
- is the site located on contaminated land.

2.2. Site impact

The potential for a demolition or construction site to impact at sensitive receptors is dependent on many factors, which include the following:

- location of the building site;
- proximity of sensitive receptors;
- whether demolition will need to take place;
- extent of any intended excavation;
- nature, location and size of stockpiles and the length of time they are to be onsite;
- occurrence and scale of dust generating activities - including cutting, grinding and sawing;
- necessity for on-site concrete crusher or cement batcher;
- number and type of vehicles and plant required on-site;
- potential for dirt or mud to be made airborne through vehicle movements;
- weather conditions.

A small number, or even one, of these factors may be the cause of increased or prolonged impact on sensitive receptors. In many cases developers' own experience will provide the knowledge needed to judge the likely impact of each activity.

2.3. Site Evaluation Guidelines

Low Risk Sites

Development of one property and up to a maximum of 10 and; Potential for emissions and dust to have an infrequent impact on sensitive receptors
Not located in or near an AQMA
Not located on contaminated land

Medium Risk Sites

Development of between 10 to 50 properties and;
Potential for emissions and dust to have an intermittent or likely impact on sensitive receptors
Located near to AQMA or contaminated land

High Risk Sites

Development of over 50 properties or;
Major development defined by planning
Potential for emissions and dust to have significant impact on sensitive receptors
Located in an AQMA
Located on contaminated land

This project has been evaluated as a Low Risk Site

2.4. Mitigation Measures for Low Risk Sites – To be adhered to for this project

2.4.1. Site Planning

- Erect effective barriers around dusty activities or the site boundary;
- No bonfires;
- Plan site layout machinery and dust causing activities should be located away from sensitive receptors.

2.4.2. Construction Traffic & Site Equipment

- All vehicles should switch off engines
 - no idling vehicles;
- Wash or clean all vehicles effectively before leaving the site if close to sensitive receptors;
- All loads entering and leaving site to be covered;
- No site runoff of water or mud;
- All Non Road Mobile Machinery (NRMM) to use ultra Low Sulphur tax-exempt Diesel (ULSD) where available.

2.4.3. Demolition Works

- Use water as dust suppressant;
- Cutting equipment to use water as suppressant;
- Securely cover skips and minimise drop heights.

2.4.4. Site Activities

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- Minimise dust generating activities;
 - Use water as dust suppressant where applicable;
 - Keep stockpiles for the shortest possible time.

3. Method Statement

3.1. For This Site

-
- Summary of work to be carried out:
This project involves the demolition of existing temporary buildings and the construction of a two storey building comprising of 6no general purpose classrooms, offices and toilets with associated external works. The existing site is within the grounds of Fulston Manor school.
 - Description of site layout and access:
 - proposed haul routes
The site leads directly onto an onsite private car park with adequate provision for loading & unloading
 - location of site equipment including supply of water for damping down:
The site has an existing water supply and multiple external water supplies.
 - source of water:
Mains water supply
 - drainage and enclosed areas:

There is an existing drainage run at the front of the site together with numerous surface water gulleys. There is also a manhole giving us access to the drain run

- Inventory of dust generating activities and dust & emission control methods to be used:
 1. Breaking up of existing hardstanding & excavation
Breaking out equipment to use water as suppressant where applicable. All Site Equipment to follow guidelines as detailed in 2.4.2 above
 2. Concreting works including pre-cast concrete flooring
Cutting equipment to use water as a suppressant where possible
 3. Cutting of bricks & blocks during construction
Cutting equipment to use water as a suppressant where possible
 4. General joinery works
Vacuum extraction attachments to be fitted to all cutting equipment
 5. General housekeeping
Water to be used as a as suppressant when sweeping up, etc when applicable. Vacuum cleaners to be used where possible rather than sweeping up dry dust
- Details of any fuel stored on site:
No fuel will be stored on site
- Identification of an authorised responsible person on-site for air quality:
Steve Waller – Quality & Environmental Manager
- A site log book to record details and action taken in response to exceptional incidents or dust-causing episodes will be kept on site.

3.4.1. Asbestos

None

3.4.2. Demolition

The existing temporary buildings on site are to be removed before construction works commence.

3.4.3. Contaminated Land

None

4.0. Dust and Emissions Control Measures

4.1. Pre-Site Preparation

Low Risk Site

- Machinery, fuel and chemical storage and dust generating activities should not be located close to boundaries and sensitive receptors if at all possible;
- Erect effective barriers around dusty activities or the site boundary.

4.2. Haulage Routes

Not applicable as all haulage will be from the public highway via a private carpark providing access to the site.

4.3 Site Entrances and Exits

Low Risk

- No extra control measures required as there are no nearby sensitive receptors. Any plant or equipment used on the site will be washed down thoroughly prior to being removed

4.4. Mobile Crushing Plant

Not applicable for this site

4.5. Concrete Batching

Not applicable for this site

4.6. Excavation and Earthworks

Excavation and earthwork activities can be a potential source of dust outside the site if they are not properly controlled. We will minimise dust disturbance as much as possible.

Low Risk

- All dusty activities will be damped down, especially during dry weather;
- Temporarily cover earthworks if possible;
- Minimise drop heights to control the fall of materials.

4.7. Stockpiles and Storage Mounds

Developers should avoid the use of long-term stockpiles on-site wherever possible.

Low Risk

- Make sure that stockpiles exist for the shortest possible time.

4.8. Cutting Grinding and Sawing

Where possible, these activities will not be conducted on site and pre-fabricated material will be brought in where possible. In cases where such work must take place, then the following techniques will be followed.

When materials, such as concrete slabs or bricks, are cut with a power tool without extraction or suppression, a second worker will pour water from a plastic bottle over the material as it is being cut. This greatly reduces the amount of dust generated and can stop the occurrence of a statutory nuisance.

Low Risk

- All equipment should use water suppressant or suitable local exhaust ventilation systems where possible.

4.9. Chutes and Skips

Low and Medium Risk

- Securely cover skips;
- Minimise drop heights to control the fall of materials;

- Regularly damp down surfaces with water.

4.10. Scabbling

Not applicable for this site

4.11. Waste Disposal/Burning

Taking into account the Clean Air Act 1993 and nuisance legislation (the EPA):

- **No burning** of any material is permitted on site;
- All excess material should not be wasted, but used or safely removed from site according to appropriate legislation.

4.12. Dealing with spillages

The following measures will be followed:

- Use bunded areas wherever practicable;
- Regularly inspect the site area for spillages;
- Have spillage kits readily available;
- Clean spillages using agreed wet handling methods;
- Vacuum or sweep regularly to prevent the build up of fine waste dust material, which is spilled on the site and is designated as waste that is no longer fit for use should be dealt with in accordance with the Waste Management Licensing Regulations (WMLR) 1994;
- Inform the Environment Agency and the Health Protection Agency (HPA) if harmful substances are spilled.

4.13 Demolition Activities

Not applicable for this site

4.14 Hazardous and Contaminated Materials

Under the Control of Substances Hazardous to Health (COSHH) Regulations 2002, developers must ensure that they take into account risks to the workforce from exposure to any harmful substances generated by work activities. Construction sites are often associated with activities that emit Volatile Organic Compounds (VOCs), such as use of paints,

adhesives, bitumen products and concrete and timber treatments. Emphasis should be placed on preventing or reducing emissions at source and where this is not possible personal protective equipment may be appropriate.

We will employ similar techniques according to appropriate legislation and low emission products, which comply with the new EU Paints Directive 22, should be used whenever possible.

4.15. Specific Site Activities

Other activities, specific this construction site:

4.15.1. Sand, Grit and Shot Blasting

- Not applicable

4.15.2. Plaining and Sanding

- Use fans and/or filters, dust suppression techniques and water sprays.

4.15.3. Fitting Out

- Fit all machinery for activities such as plastering, sanding or rendering with dust suppression/collection equipment;
- Vacuum all waste material.

4.15.4. Welding and Soldering

- Not applicable.

4.15.5. Tarmac Laying and Use of Bitumen

- Not applicable

4.16. General Control Measures

General Control Measures that we be adhered to on this project are as follows:

- Ensure that all machinery is well maintained and that silencers/mufflers are fitted where appropriate
- Turn off mechanical equipment when it is not in use
- Avoid unnecessary shouting and playing loud radios
- Try to avoid noisy work in places or at times that are likely to disturb neighbours or school occupants

- Only carry out noisy work between 8am and 6pm on weekdays and between 9am and 1pm on Saturdays
- Schedule deliveries to arrive during the normal working day, avoiding school drop off and pick up times
- Where possible use site huts or stock piles as noise barriers by locating them between the works and neighbours
- Always try to do any job in the quietest way possible
- Make sure that cars and lorries leaving the site don't carry dust or mud onto the road by washing down the wheels and covering the backs of any lorries carrying any dusty material
- Have a plentiful supply of water on the site to damp down any operations that are likely to cause dust
- Keep any fine dusty material covered or well damped down; this is especially important during dry windy weather
- Clear up any spillages of dusty material promptly and maintain the site in a clean condition
- Use fine water sprays to damp down dusty areas or work
- Do not dispose of waste by burning

5. Site Monitoring

5.1. Site Monitoring Protocols

If best practicable means are followed correctly, then formation of dust and harmful emissions from this construction site should be minimised as much as possible.

This site is classified as low risk and as such, the following measures will be taken:

Low Risk

- Employ best practice methods at all times;
- Take into account the impact of air quality and dust on occupational exposure standards to minimise worker exposure and breaches of air quality objectives that may occur outside the site boundary, such as by visual assessment;
- Keep an accurate log of complaints from the public.