

METHOD STATEMENT TO BE ADOPTED BY THE MAIN CONTRACTOR

Organisation	City Build Manchester Ltd
Site	North Manchester General Hospital
Location	Delaunays Rd, Crumpsall, Manchester M8 5RB
Description of Task	Control of dust
Overall Risk Rating	High

Key Risks: Respirable crystalline silica (RCS), Wood Dust, Aspergillus

High	Grinding
High	Drilling
High	Cutting
High	Sanding
Medium	Chiselling
High	Blasting
Medium	Polishing
Medium	Mixing and handling
Medium	Shovelling dry materials
High	Concrete drilling/breaking/crushing
Low	Dust generated by Traffic in hot weather

In a Construction Environment the following must be avoided:

- leaks or spillages cause a build-up of dust containing Respirable crystalline silica (RCS)
- dust containing RCS is not cleaned up safely, e.g. by dry sweeping rather than wet cleaning.
- clothing and surfaces are contaminated with dust containing RCS if not cleaned off prior to leaving site
- accumulated dust containing RCS is 'raised' from the ground during excavation works or other surfaces by moving vehicles and people.
- fine dusts remain in the air from construction work activities

Working Method to help alleviate Risks

1. Employ a safe system of work and assess the Risk

- Assess the risks linked to the work and materials.

High dust levels are caused by one or more of the following:

- task – the more energy the work involves, the bigger the risk. High-energy tools like cut-off saws, grinders and grit blasters produce a lot of dust in a very short time;
- work area – the more enclosed a space, the more the dust will build up. However, do not assume that dust levels will be low when working outside with high-energy tools;
- time – the longer the work takes the more dust there will be;
- frequency – regularly doing the same work day after day increases the risks.
- Movement of vehicles around the site area



Control the dust:

Even if you stop some dust this way, you may do other work that could still produce high dust levels. In these cases, the most important action is to stop the dust getting into the air. There are various ways of doing this:

- Water – water damps down dust clouds. However, it needs to be used correctly. This means enough water supplied at the right levels for the whole time that the work is being done. Just wetting the material beforehand does not work.
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- Install hardstanding's/permanent surfaces with regular inspection and maintenance
- Keep in compacted condition use static sprinklers already in use, additives and binders to prevent dust omission.
- Clean highways and footpaths on a regular basis using wet methods vacuum sweeping and not dry methods
- Materials & stockpile to be covered with Tarps.
- Washing facilities, hose pipes and ample water supply will be provided at site exits, all vehicles to be washed down before exiting the site.
- Keep vehicle movements to a minimum. – speed control. Limit vehicle speeds to 5mph – the slower the vehicle speeds, the lower the dust generation.
- Mechanical road sweeper should be readily available as and when required with circular brush commonly fitted to side for cleaning kerbs.
- On-tool extraction – removes dust as it is being produced. It is a type of local exhaust ventilation (LEV) system that fits directly onto the tool. This 'system' consists of several individual parts – the tool, capturing hood, extraction unit and tubing. Use an extraction unit to the correct specification (i.e. H (High) or M (Medium) as a minimum

Respiratory protective equipment (RPE) Water or on-tool extraction may not always be appropriate or they might not reduce exposure enough. Often respiratory protection (RPE) must be provided as well. You will need to make sure that the RPE is:

- adequate for the amount and type of dust – RPE has an assigned protection factor (APF) which shows how much protection it gives the wearer. The general level for construction dust is an APF of 20. This means the wearer only breathes one twentieth of the amount of dust in the air.
- suitable for the work – disposable masks or half masks can become uncomfortable to wear for long periods. Powered RPE helps minimise this. Consider it when people are working for more than an hour without a break.
- compatible with other items of protective equipment.
- fits the user. Face fit testing is a requirement for tight fitting masks.
- worn correctly. Anyone using tight-fitting masks also needs to be clean shaven. RPE is the last line of protection.

Ecological Impact:

- Dust from demolition and construction sites deposited on vegetation may create ecological stress within the local plant community. During long dry periods dust can coat plant foliage adversely affecting photosynthesis and other biological functions. Rainfall removes the deposited dust from foliage and can rapidly leach chemicals into the soil. Plant communities near short-term works are likely to recover within a year of the dust soiling stress ceasing.
- Existing trees, vegetation and plant foliage to be washed down on a regular basis

**Other controls:**

Depending upon the work you are doing you may have to combine these measures with other controls. Think about:

- limiting the number of people near the work.
- rotating those doing the task.
- enclosing the work to stop dust escaping. Use sheeting or temporary screens.
- general mechanical ventilation to remove dusty air from the work area, Use Air Cubes
- selecting work clothes that do not keep hold of the dust. You also need to make sure workers are doing the job in the right way and are using controls properly.

Train workers about dust risks and how this can harm their health

- how to use the dust controls and check that they are working.
- how to maintain and clean equipment
- how to use and look after RPE and other personal protective equipment (PPE)
- what to do if something goes wrong.

Review (the controls):

You may already have the right controls in place, but are they all working properly? Check the controls work by:

- having procedures to ensure that work is done in the right way
- checking controls are effective. Does the work still seem dusty? You might need to carry out dust exposure monitoring
- involving workers. They can help identify problems and find solutions
- maintaining equipment: – follow instructions in maintenance manuals; – regularly look for signs of damage. Make repairs; – replace disposable masks in line with manufacturer's recommendations; – properly clean, store, and maintain no disposable RPE. Change RPE filters as recommended by the supplier; – carry out a thorough examination and test of any on-tool extraction system at least every 14 months.
- supervising workers. Make sure they: – use the controls provided; – follow the correct work method; – attend any health surveillance where it is needed. You may have to put a health surveillance programme in place. You may need advice for this from an occupational health professional.