

ITEM	DESCRIPTION (BEST PRACTICE)	MITIGATION MEASURES
6 Dust and emissions control measures		
6.1 Pre-site preparation	For all sites with areas of open ground that are close to sensitive receptors, developers should follow best practice to prevent dust and other pollutant emissions from being carried outside the boundary.	1. Machinery and fuel storage and dust generation activities should not be located close to boundaries and sensitive receptors if at all possible. 2. Boundaries facing to be erected on boundaries near receptors as works progress. 3. Temporary hoarding, fencing with netting to be erected in areas adjacent to receptors if dust level necessitate additional protection.
6.2 Haul routes		
6.2.1 Surface of roads	Unpaved haul routes can account for a significant proportion of fugitive dust emissions, especially in dry or windy conditions, when the generation of dust through the movement of vehicles is exacerbated. It is recommended that to comply with good practice, developers should ensure that hard surfaces or paving are used for all haul routes, even if routes are temporary.	1. Use consolidated and sealed surfaces on roads near to residential areas. Temporary haul roads will be sealed appropriately to reduce dust emissions. 2. Development roads to be constructed to binder course level in accordance with the phasing plan. 3. Regularly inspect haul routes for intensity and repair if required. 4. When the haul route changes, re-use surface where possible.
6.2.2 Damping down	Developers will need to wash or damp down haul routes both within and outside the site. This is particularly important for sites close to residential properties or other sensitive receptors. Developers should consider the environmental and economic benefits from the use of groundwater sources on site, as opposed to bringing drinking water onto site for the purpose of dust suppression. Where possible the source of water should be sustainable to maximise use and re-use of this resource. For example, water produced from dewatering can be used on site. The majority of water that is generated from dewatering is discharged into watercourses or soakaways. Under the Water Act 2003, dewatering processes now require an Abstraction Licence to ensure appropriate environmental management.	1. Use agreed wet cleaning methods or mechanical road sweepers on all roads during periods of dry weather as and when required. 2. Clean road edges and pavements using agreed wet cleaning methods. 3. Provide hardstanding areas for vehicles and regularly inspect and clean these areas. 4. It is not considered appropriate to use groundwaters for damping down on this development. 5. Temporary and permanent roads to be damped down at appropriate intervals during dry periods with specialist equipment.
6.2.3 Vehicles	All developers should carry out the following controls to reduce dust and particulates associated with vehicles - such as that from exhaust emissions, the contact of tyres on the road surface or dust blowing from materials carried.	1. All vehicles should switch off engines - no idling. 2. Clean or wash all vehicles effectively before they leave a site if there is a risk of affecting nearby sensitive receptors. 3. All loads, entrance and leaving site to be covered where appropriate. 4. Wheel wash facilities will be provided as and when necessary at site entrance. 5. A speed limit of 10 m.p.h will be imposed throughout the site.
6.3 Site entrances / exits	Developers should employ the following control measures to help prevent dust being spread outside the site boundary by site vehicles at entrances and exits.	1. Wash or clean all vehicles effectively before leaving site. 2. Provide paved area between wheel wash facilities and public road. 3. Vehicles carrying dusty materials should be securely covered before leaving the site.
6.4 Mobile crushing plant	This section only applies to construction sites that will operate mobile crushing plant at some point. This is an inherently dusty activity and will often be on sites normally classed as medium or high risk.	NOT APPLICABLE ON THIS SITE
6.5 Concrete batching	As for mobile crushing plants, construction sites with concrete batching plants will often be categorised as medium or high risk.	NOT APPLICABLE ON THIS SITE
6.6 Excavation and earthworks	Excavation and earthwork activities can be a potential source of dust outside the site if they are not properly controlled. If these activities are essential, then developers need to act to minimise dust disturbance as much as possible.	1. All dusty activities to be damped down, especially during dry weather. 2. Minimize drop heights to control fall of materials. 3. Re-vegetate earthworks and other exposed areas to stabilise all surfaces. 4. Topsoil mounds stored for more than two months to be seeded. 5. Use Hessian, mulch or geotextiles where it is not possible to re-vegetate or cover with topsoil on any spoil heap left for more than 4 weeks.
6.7 Stockpiles and storage mounds	Developers should avoid the use of long-term stockpiles on site wherever possible unless it performs the function of visual or noise screening. If necessary, the following measures should be in place:	1. Do not build steep sided stockpiles or mounds or those that have sharp changes in shape. 2. Wherever possible keep stockpiles or mounds away from the site boundary, sensitive receptors, watercourse and surface drains. 3. Take into account the prevailing wind direction when siting stockpiles to reduce the likelihood of affecting sensitive receptors. 4. Seed and re-vegetate long term stockpiles to stabilise surfaces. 5. Re-use hard core material where possible to avoid unnecessary vehicle trips.
6.8 Cutting, grinding and sawing	Ideally, these activities should not be conducted on site and pre-fabricated material should be brought in where possible. In cases, where such work must take place, then the following techniques should be followed: This method is suitable for all sizes of demolition or construction sites. When materials, such as concrete slabs or bricks, are cut with a power tool without extraction or suppression, a second worker can 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	1. All equipment should use water suppression or suitable local exhaust ventilation systems. 2. Use dust reduction techniques where available. 3. All other equipment should be fitted with water suppression systems. 4. Use local exhaust ventilation. 5. Service all fans and filters regularly to ensure they are properly maintained.
6.9 Chutes and skips	Best practice guidance to be followed when using chutes and skips	1. Re-vegetate cover slopes on removal. 2. Minimise drop heights to control fall of materials. 3. Skips to be stored in an appropriate location and fenced off.
6.10 Scabbling	Scabbling is the process of grinding concrete using a machine topped with steel or carbide material to rapidly pound it	NOT APPLICABLE ON THIS SITE
6.11 Waste disposal / burning	Waste disposal/burning Previous Government best-practice documents ¹⁷ state that under the Clean Air Act 1993, bonfires are not recommended on site and if unavoidable, they should be supervised at all times. However, it is recognised across London that local authorities prefer to set conditions that prevent any bonfires on site. Taking into account the Clean Air Act 1993 and nuisance legislation (Environmental Protection Act 1990), this Best Practice Guidance recommends that: 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. In addition to the above, the developer should produce a waste or recycling plan.	1. NO BURNING ON THIS SITE. 2. Identify waste streams. 3. Re-use / recycle materials where appropriate. E.g. crush inert material for re-use. 4. Establish a dedicated storage area for timber for re-use. 5. All skips to be labelled identification, where relevant.
6.12 Dealing with spillages	Best practice guidance to be followed when dealing with spillages	1. Use bunded areas wherever practicable. 2. Regularly inspect the site area for spillages. 3. Spillages to be readily available. 4. Clean spillages using agreed wet handling methods. 5. Vacuum or sweep regularly to prevent the build up of fine waste dust material.
6.13 Demolition activities	Potential dust hazards can be assessed according to BS 6187: Code of Practice for Demolition ¹⁹ , which includes all aspects of project development and management from demolition techniques to re-using or recycling materials. The demolition of buildings may result in a site being classified as medium or high risk during this activity.	NO DEMOLITION ON THIS SITE
6.14 Hazardous or 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.	1. Refer to Construction Phase Health & Safety Plan. 2. All paints are to meet new EU legislation on VOCs.
6.15 Specific site activities	Sand, Grit and Shot Blasting Planing and Sanding Filling out Welding and soldering Tarmac laying and use of bitumen	1. NOT APPLICABLE ON THIS SITE 1. Use fans and/or filters, dust suppression techniques and water sprays in accordance with latest HSE guidance notes. 2. NOT APPLICABLE ON THIS SITE 3. NOT APPLICABLE ON THIS SITE 4. Do not overheat bitumen and cover pots. Use great care in all processes to prevent spillages and extinguish any accidental fires immediately.
7 Emission controls for vehicles and plant		
7.1 On-road vehicles	Emissions from vehicles associated with construction sites can significantly add to levels of local air pollution, so it is important that best practical means of reducing vehicle emissions are adopted	1. All vehicles to comply with current regulations
7.2 Off-road vehicles and plant	Developers can specify tax-exempt 'red' diesel with a sulphur content equivalent to ultra low sulphur diesel (ultra low sulphur diesel means fuel meeting the specification within EN590:2004). This measure will automatically reduce particulate emissions by 30 per cent. In addition to this, fitting suitable after treatment devices can reduce the remaining particles by at least 85 per cent. As fine particles are of great concern to health this is, therefore, a very effective way of reducing any health impacts to workers and sensitive receptors. In addition to the emission standards specified above, further measures should be put in place to reduce exhaust emissions and these are listed opposite. In addition to local air pollutants, carbon dioxide is also emitted from vehicle exhausts. As it is a key gas linked to climate change, controls should be put in place to limit emissions; these controls will also help developers reduce fuel costs. Detailed help and advice is available on the Energy Saving Trust's website (www.est.gov.uk).	1. No vehicle or plant will be left idling unnecessarily. 2. HGVs/Vehicles and plant should be well maintained. 3. Should any emissions of dark smoke occur (except during start up) then the relevant machinery should be stopped immediately and the problem rectified before being used. 4. Engines and exhaust systems should be regularly serviced according to the manufacturers recommendations. 5. All vehicles should hold current MOT certificates where required. 6. Vehicle exhausts should be directed away from the ground and positioned so that they are not directed at site entrances. 7. Locate plant away from the boundaries close to residential areas where possible. 8. Reduce the number of vehicle movements through better planning. 9. Only materials needed for the jobs are to be brought to site. 10. Where work on site occurs close to residential or other sensitive receptors near the site boundary, non-essential vehicles and machinery should not enter these areas. 11. Control awareness or marking of vehicles outside the site, both during and before site access. 12. Avoid use of diesel or petrol powered generators by using mains electricity or battery powered equipment where possible and if safety concerns can be overcome.
7.3 Additional plant and vehicle controls		NOT SUITABLE FOR USE ON THIS SITE
7.4 Use of rivers, canals or railways	Where construction sites are located near to waterways or railways it may be feasible for construction materials to be delivered or removed from the site using these means, rather than by road. The obvious benefit is that it will reduce the number of trips made by HGVs on local roads, therefore reducing local emissions and disturbance to sensitive receptors. This option is rarely used in London, but developers following this guidance, should try to make use of the waterways wherever possible or investigate if there is spare capacity on nearby railways.	
8 Site Monitoring		
8.1 Site monitoring protocols	If best practicable means identified in Sections 6 and 7 are followed correctly, then formation of dust and harmful emissions from construction sites should be minimised as much as possible. However, continuous site monitoring is still an important way of helping developers manage dust and PM10 emissions from construction and demolition. The location of a construction site could impact on a local area to the extent where air quality is worsened within an existing air quality management area (AQMA) or is worsened to the extent where an AQMA needs to be declared by the relevant local authority.	1. Employ best practice methods at all times. 2. 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. 3. An accurate log of complaints from the public will be kept on the letterbox report system. 4. Determine the prevailing wind direction across the site using data from a nearby weather station.