

**For clearing Condition 9 of
Planning Consent Ref:
152039/FULL**

Dust Control Measures

**Development at
Land Adjacent to No 1
Felix Cottages
Kiln Road
Emmer Green
Reading
RG4 9PE**

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DUST ASSESSMENT & MITIGATION

A three stage process is described to provide sufficient information to enable the identification of appropriate mitigation measures to ensure the minimisation of dust impact on local receptors and air quality. The stages are:

- 1) Scale of the proposal for dust generation;
- 2) A dust impact risk assessment;
- 3) Appropriate mitigation measure implementation listing.

Four site activities are recognised as potential for dust generation:

- 1) Demolition;
- 2) Earthworks;
- 3) Construction;
- 4) Trackout (off-site vehicle movements).

1) SCALE OF PROPOSAL (table 1.)

The size of any proposal will determine the level of potential dust emission. Using these activities the table below classifies the scale of a proposal as Small, Medium and Large.

Activity	Criteria	Scale
Demolition	<20,000m ³ total volume of structure working at <10m above ground.	*Small
	20,000-50,000m ³ total volume of structure working at 10-20m above ground.	Medium
	>50,000m ³ total volume of structure working >20m above ground	Large
Earthworks	<2,500m ² total site area using <5 heavy moving vehicles	*Small
	2,500m ² -10,000m ² total site area, 5-10 heavy moving vehicles.	Medium
	>10,000m ² total site area >10 heavy moving vehicles	Large
Construction	<25,000m ³ construction material. <10 dwellings.	*Small
	25,000m ³ -100,000m ³ construction material. 10-50 dwellings.	Medium
	>100,000m ³ construction material. >50 dwellings.	Large
Trackout	<10 HDV (>3.5t) outward movements off-site in any one day.	*Small
	10-50 HDV (>3.5t) outward movements in any one day.	Medium
	>50 HDV (>3.5t) outward movements in any one day	Large

Whichever is the largest will be the overall scale

2) DUST IMPACT RISK ASSESSMENT

The potential risk of dust impacting on receptors requires assessing to enable to gauge the level of required mitigation. The level of dust impact is associated with:

- The number, location and sensitivity of receptors;
- The type, location and frequency of site activity;
- The scale of the development.

Further information and reference is available at the Institute of Air Quality Management and the Mayor of London Control of Dust Supplementary Planning Guidance.

Small and Medium Risk Assessment

The number and degree of sensitive receptors in proximity to the proposal works are used to determine the level of risk.

Sensitive Receptors for SMALL and MEDIUM proposals. Table 2

High Sensitivity	Medium Sensitivity	Low Sensitivity
Hospitals and clinics	Schools	Farms
Hi-Tech industries	Residential areas	Light and heavy industry
Painting & furnishing	Food retailers	Outdoor storage
Food Processing	Green houses and Nurseries	
	Horticultural land	
	Offices	

Assessment of the dust impact risk for SMALL and MEDIUM proposals. Table 3

Sensitive receptors	Number of total receptors	Distance from source (m)		
		<20	<50	<100
High	>50	Large	Large	Medium
	10-50	Large	Medium	Small
	1-10	Medium	Small	Small
Medium	>1	Medium	Small	Small
Low	>1	Small	Small	Small

The highest outcome will be the overall level of risk

3) MITIGATION MEASURES

The outcome of the scaling and risk assessment will identify the level of likely impact on the local amenity and air quality and the required level of mitigation. The mitigation is listed in any dust management plan or dust minimisation scheme together with responsibility for each measure implementation and control.

REQUIRED MITIGATION MEASURES Table 4.

Measure	Scale and Risk		
	Small	Medium	Large
Develop and implement a stakeholder communications plan that includes community engagement before work commences on-site.	✓		
Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager.	✓		
Display the head or regional office contact information	✓		
Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. Make the log available to LPA if required.	✓		
Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book.	✓		
Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces such as street furniture, cars and window sills within 100m of site boundary, with cleaning to be provided if necessary.	✓		
Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.		✓	
Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.		✓	
Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site.		✓	
Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period		✓	
Avoid site runoff of water or mud.		✓	
Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover.	✓	✓	
Ensure all NRMM meet the highest emission standards, where applicable.		✓	
Ensure all vehicles switch off engines when stationary - no idling vehicles.		✓	
Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.		✓	
Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems.		✓	✓
Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate.	✓		
Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.		✓	✓
Ensure equipment is readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.		✓	
Do not permit bonfires and burning of waste materials.		✓	

DEMOLITION SPECIFIC			
Soft strip inside buildings before demolition (retaining walls and windows in the rest of the building where possible, to provide a screen against dust).	✓		
Ensure effective water suppression is used during demolition operations. Hand held sprays are more effective than hoses attached to equipment as the water can be directed to where it is needed. In addition high volume water suppression systems, manually controlled, can produce fine water droplets that effectively bring the dust particles to the ground.		✓	
Use appropriate manual or mechanical demolition systems.	✓		
Bag and remove any biological debris or damp down such material before demolition.	✓		
EARTHWORKS SPECIFIC			
Only remove the cover in small areas during work and not all at once	✓		
All contractors and sub-contractors to be made aware of and sign-up to the dust management scheme.	✓		
Ensure sand and other aggregates are stored in bunded areas	✓		
Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.		✓	
For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.	✓		
TRACKOUT SPECIFIC			
Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site. This may require the sweeper being continuously in use.		✓	
Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.	✓	✓	
Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.	✓		
Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable).	✓	✓	
Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits.			

SUMMARY

PROJECT SPECIFIC REQUIREMENTS

From Scale of Proposal table 1: Works fall into SMALL risk category.

From Dust Impact Risk Assessment table 2: Works fall within MEDIUM sensitivity risk category.

From Dust Impact Risk Assessment table 3: Worst case distance from source <20m therefore **MEDIUM** risk required mitigation measures (table 4) will apply to the proposed development.

NOISE CONTROL

The contractor will take the “best practicable means” to stop noise. For example, using the proper equipment which should be well maintained. Where possible, it should have silencers fitted or should have noise-containing hoods, etc.

The activity of noisy cutting/drilling will where practicable, be restricted to a boarded enclosure, set up on site.

Informing your Neighbours

Giving neighbours advance warning of what work is to be done and how long the works will last.

They will then have a better idea of how much noise they have to put up with. Often, it is the uncertainty about the noise which worries people the most - they will be much happier if they know what is going on and they have an end in sight. It is therefore excellent “public relations” if you can give your neighbours detailed information.

Deliveries of plant, equipment or materials - This can be noisy, especially if it involves use of hoists from lorries or tipper lorries. So early morning deliveries will not be allowed.

Erection and dismantling of Scaffolding – Will only be done within reasonable hours.