

M60/M62/M66 Simister Island Interchange

TR010064

6.5 FIRST ITERATION ENVIRONMENTAL MANAGEMENT PLAN APPENDIX A: OUTLINE AIR QUALITY AND DUST MANAGEMENT PLAN

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Infrastructure Planning

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Development Consent Order 202[]

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Outline Air Quality and Dust Management Plan

A.1 Background to the plan

- A.1.1 This Outline Air Quality and Dust Management Plan (Outline AQDMP) sets out the generic and specific measures that will be used by the Principal Contractor (PC) to manage dust and emissions of pollutants to air generated by the construction of the Scheme, which can affect residential occupants, businesses and commercial facilities, users of the road and public rights of way network, users of open space, and sensitive ecological sites and habitats.
- A.1.2 The construction dust assessment determined in development of the M60/M62/M66 Simister Island Interchange (the "Scheme") showed that construction would give rise to a high risk of dust based on receptor numbers and a large potential for dust emissions. The application concluded no significant effects based on best practice and appropriate mitigation measures.
- A.1.3 This Outline AQDMP will be updated by the PC to an Air Quality and Dust Management Plan (AQDMP) and included within the Second Iteration Environmental Management Plan (EMP), as appropriate, prior to commencement of works in accordance with the Requirements in Schedule 2 of the draft Development Consent Order (DCO) (TR010064/APP/3.1) and the requirements of the First Iteration EMP.

A.2 Responsibilities

- A.2.1 In relation to the control and management of dust and emissions to air the PC shall establish the appropriate roles and responsibilities for site staff in accordance with the roles and responsibilities set out in Chapter 2 of this First Iteration EMP.
- A.2.2 Bury Metropolitan Borough Council (and possibly Manchester City Council and/or Rochdale Metropolitan Borough Council depending on final construction boundary) will be consulted by the Principal Contractor to review the AQDMP prior to the completion of the Second Iteration EMP.

A.3 Consent requirements

- A.3.1 Construction of the Scheme must be undertaken such that:
 - Data can be recorded, reviewed, and provided to the Environmental Health Officer (EHO), when requested.



A.4 Control measures

- A.4.1 In order to minimise potential emissions of fugitive dust during construction, best practice measures shall be employed during the works to control fugitive dust (and hence avoid or reduce potential impacts) in compliance with DMRB LA 105 Air Quality (Standards for Highways, 2019).
- A.4.2 The following control measures will be implemented across all construction works where practicable. These measures are based on those outlined by the Institute for Air Quality Management Publication Guidance on the assessment of dust from demolition and construction (Institute of Air Quality Management (2023)).

Monitoring

- A.4.3 The PC would undertake daily onsite and offsite visual inspections, where receptors (including roads) are nearby, to monitor dust control measures, record inspection results and make the log available to the relevant planning authority upon request.
- A.4.4 The frequency of inspections would be increased by the person accountable for fugitive dust issues when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.
- A.4.5 The construction team shall assess the weather forecast ahead of works which have potential for dust generation and would, where reasonably practical, reprogramme works to minimise any effects caused by the weather.

Preparing and Maintaining the Site

- A.4.6 In preparing and maintaining the site, consideration shall be given to:
 - Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is reasonably practicable.
 - Where deemed appropriate, set up of static dust suppression equipment or erect solid screen or barrier/bund around particularly dusty activities.
 - Fully enclose 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.



- Keep site fencing, barriers, traffic management and scaffolding clean using wet methods where there is the risk of dust accumulation.
- Where reasonably practical cover, seed, or fence stockpiles to prevent wind whipping.
- Remove materials that have the potential to produce dust from site as soon as reasonably practical, unless being reused onsite. If they are being reused onsite, cover as appropriate.
- Site access points would be designed to minimise queuing traffic adjacent to access points.
- Access gates to be located at least 10m from receptors where practicable.

Construction activities

- A.4.7 Construction activities would include the following measures to limit dust emissions, as appropriate:
 - Ensure an adequate water supply on the site for effective dust/particulate matter suppression should it be required. Use nonpotable water where practicable and appropriate for dust suppression where available.
 - Minimise drop heights from loading shovels, and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
 - Where required and appropriate use enclosed chutes and covered skips.
 - Avoid dry sweeping of areas if causing visible dust emissions and the area is within 350m of human receptors.
- A.4.8 The AQDMP to be included within the Second Iteration EMP will be updated to give details on measures to limit dust from specific construction activities and/or locations including but not limited to borrow pit excavations, earthworks, demolition, and the storage and handling of materials.

Haul roads and track out

A.4.9 Track out is the movement of dust and dirt from a construction site onto the public road network, where it may be deposited and then resuspended by vehicles using the network. Haul roads would be provided onsite for use by construction vehicles to access works areas. The



construction and maintenance of haul roads would include the following measures to limit dust emissions from track out, as appropriate:

- 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.
- Avoid dry sweeping of large areas.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Implement a wheel washing system with rumble grids or other suitable methods to dislodge accumulated dust and mud prior to leaving the site where reasonably practicable.
- Inspect haul roads, including crossing points on the existing highway, for integrity and instigate any necessary repairs to the surface as soon as reasonably practicable.
- Install hard surfaced haul roads, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned.
- Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permit.
- Access gates to be located at least 10m from receptors where practicable.

Plant and vehicles

- A.4.10 All non-road mobile machinery (NRMM) emissions (i.e. mobile machines, transportable industrial equipment or vehicles which are fitted with an internal combustion engine and not intended for transporting goods or passengers on roads) will comply with NRMM regulations.
- A.4.11 Measures would be implemented to limit emissions from construction plant and vehicles, including the following, as appropriate:
 - Construction plant, vehicles and equipment would be operated in accordance with manufacturer's guidance and would be regularly maintained and checked.
 - Engines would be switched off when not in use.
 - Vehicle and construction plant exhausts should be directed away from the ground and be positioned at a height to facilitate appropriate dispersal of exhaust emissions.



- The movement of construction traffic around the site would be kept to the minimum reasonable for the effective and efficient operation of the site and construction of the Scheme.
- Where stationary generators are required, ensure these are sited as far from sensitive receptors as practicable.
- The use of diesel or petrol powered generators would be reduced by using mains electricity, hybrid generators, hydrogen generators, solar panels or battery powered equipment where reasonably practicable.

A.5 Specific Site Controls

- A.5.1 Chapter 5: Air Quality of the Environmental Statement (TR010064/APP/6.1) concludes that there are no significant effects resulting from construction dust with best practice construction phase mitigation measures in place.
- A.5.2 Additional site-specific measures, not discussed above to be implemented where required are set out in Table A.1.

Table A.1 Additional air quality mitigation control measures

Activity	Measure
Liaison	During construction, ensure appropriate mechanisms to communicate with residents would be set up to highlight potential periods of disruption (for example web-based newspapers and radio announcements).
	An information webpage shall be provided and kept up to date on the National Highways website to reflect construction and community liaison requirements. The webpage shall provide up-to-date information on the progress of the construction works, areas affected by construction (for example advanced notification very dusty activities), and mitigation in place to reduce effects.
	The communication strategy shall minimise the likelihood of complaints. Residents shall be provided with a point of contact for any queries or complaints, which will also be displayed at site entrances where practicable. The role of the Community Liaison Manager is described under Chapter 2 of this First Iteration EMP.
	Regular liaison would be undertaken with the relevant local authorities, this would include discussing any complaints that had been received.



Activity	Measure
Site management	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 complaints log available to the relevant planning authority upon request
	Record any exceptional incidents that cause dust and/or air emissions, either on-site or off-site, and the action taken to resolve the situation in the logbook.
	If applicable, hold regular liaison meetings with other highrisk construction sites within 500m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. In particular, an understanding of potential interactions of the off-site transport/deliveries which might be using the same strategic road network routes will be established.
Monitoring	The Principal Contractor would be legally obligated to consider dust suppression measures in line with the dust risk potential of the Scheme. The need for dust monitoring will be discussed by the Principal Contractor with Bury Metropolitan Borough Council (and possibly Manchester City Council and/or Rochdale Metropolitan Borough Council depending on final construction boundary). Front Line Supervisors would visually monitor dust and record in site diary.
	Monitoring is not required for construction and operational traffic emission sources of air pollution, as this assessment has concluded there would be no significant effects. On this basis, there is no requirement for developing a forward monitoring and evaluation plan. Relevant planning authority monitoring is likely to continue and will provide a reasonable confirmation of the Scheme performance across the air quality study area.
Preparing and maintaining the site	Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is reasonably practicable.
	Consider best practical means for covering, seeding or fencing stockpiles.
Operating plant and equipment and Sustainable Travel	Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable.
	Where stationary generators are required, ensure these are sited as far from sensitive receptors as possible where practical.



Activity	Measure
	Operate stationary generators within manufacturer guidelines, under optimum load for periods of operation and regularly service equipment to maintain efficient operation.
	Manage the sustainable delivery of goods and materials through careful programming of delivery.
	Minimising speed limits on site and haul roads.
	Where reasonably practical support and encourage sustainable travel (such as, public transport, cycling, walking, and car-sharing).
	Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction (for example, 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.
Operations	Where required and appropriate use enclosed chutes and covered skips.
	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.
	Minimise drop heights from loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment where appropriate.
Waste management	No bonfires and burning of waste materials.
Demolition	Ensure effective water suppression is used during demolition operations. Handheld 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.
	Avoid explosive blasting, using appropriate manual or mechanical alternatives.
	Bag and remove any biological debris or damp down such materials before demolition.
	Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.



Activity	Measure
	Where reasonably practical re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces (or other suitable methods).
Earthworks	Stockpiles to be sealed / graded where practicable to reduce surface area and roughness to reduce wind blown dust.
	Exposure of areas will be timed accordingly to avoid large unnecessary open areas.
Construction	For small supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust.
	Scabbling will be avoided.
	Maintain on-site haul routes for integrity and where necessary carry out repairs to the surface as soon as reasonably practicable. Produce a log of haul route inspections.
	Install hard surfaced haul routes where reasonably practical, which are regularly damped down with mobile sprinkler systems, or mobile water bowsers and are regularly cleaned.
Track out	Ensure there is an adequate area of hard surfaced road between the wheel wash facility / rumble strip and the site exit, wherever site size and layout permit.
	In locations without hard standing, it may be necessary to clean the vehicle bodies in addition to wheels.
	Where practicable access gates to be located at least 10m from receptors.



A.6 References

Institute of Air Quality Management (2016). Guidance on the assessment of dust from demolition and construction (Version 1.1). Accessed July 2023. http://iagm.co.uk/text/guidance/construction-dust-2016.pdf

Institute of Air Quality Management (2023). Guidance on the assessment of dust from demolition and construction (Version 2.1). Accessed November 2023. https://iaqm.co.uk/wp-

content/uploads/2013/02/Construction-dust-2023-BG-v6-amendments.pdf Standards for Highways (2019). Design Manual for Roads and Bridges: LA 105 Air Quality. Accessed July 2023

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