MANCHESTER CITY COUNCIL

Air Quality and Planning

Technical Guidance

November 2026

Environmental Protection
Environmental Health
Neighbourhoods Directorate
Manchester City Council

Contents

Service Aim 3
How to use this guidance 3
1 Introduction 4
2 Background 5
2.1 Air Quality and Planning 5
2.2 Role of the Environmental Protection Team 5
2.3 National Policy and Guidance 6
2.4 Local Policy 6
2.5 Local Air Quality 7
3 Guidance 9
3.1 Construction and Demolition 9
3.2 Development Planning 10
3.3 Electric Vehicle Charging Guidance 11
3.4 Chimney Heights 12
Appendix I: Greater Manchester Air Quality Management Area 13
Appendix II: Electric Vehicle Charging - MCC Best Practice Recommendations 14
Appendix III: References 16

Service Aim

Our Manchester Strategy 2025–2035 sets out the city's priorities for the next ten years.[1] It provides a shared framework for residents, public services, businesses and voluntary and community organisations to work together to build the best possible future for Manchester.

The Strategy aims to improve quality of life, reduce inequality and ensure that Manchester's residents benefit from the city's continued development. Its 12 priorities are grouped under three themes:

- Our people: supporting everyone who calls Manchester home to live their best lives.
- Our neighbourhoods: ensuring that the places where people live are attractive, well kept and places to be proud of.
- Our city: securing Manchester's future and maintaining its position as one of the best places in the world.

The priorities most relevant to this guidance include improving health and reducing health inequalities, providing clean and green neighbourhoods, adapting to climate change, rapidly reducing carbon emissions and providing reliable, affordable, safe and clean transport.

This guidance supports those priorities by setting out the Council's expectations for considering air quality in the planning process. It aims to encourage good practice, minimise emissions and exposure, and secure appropriate mitigation to protect the health and wellbeing of people who live and work in Manchester.

Applicants, developers and air quality consultants are advised to read this document prior to submitting a planning application.

How to use this guidance

Start with section 3 to decide whether an air quality assessment is needed and what it should contain. Use section 3.1 for demolition and construction effects, section 3.3 for electric vehicle charging provision and section 3.4 for chimney height requirements.

This document is intended to provide practical guidance, and the appendices provide supporting information, mapping, detailed recommendations and references. It should be read alongside current legislation, policy and technical guidance. These may be subject to change, and readers should ensure that they refer to the most current requirements and guidance.

The Council has taken all reasonable precautions to ensure the information is correct. However, the Council, its officers, servants, or agents, will not accept any liability for loss or damage caused by any person relying on this information, or for any errors or omissions in the information provided.

1 Introduction

Air pollution affects both mortality and quality of life. Action is therefore needed to minimise its effects on public health.

Local planning decisions have an important role to play since they can significantly affect local air quality through their design, location and management of emissions, whether through emission sources or sensitive receptors.

This technical guidance focuses primarily on reducing air pollution from road transport, the major source of emissions in Manchester. It also addresses other development-related emission sources where they are relevant to planning, but these are covered in less detail.

The guidance seeks to support the planning system in reducing emissions, minimising exposure and improving local air quality.

Developments may also be subject to other regulatory regimes, including environmental permitting and environmental impact assessment. Where these apply, additional or separate air quality assessments may be required to meet the relevant regulatory requirements. Applicants should identify these requirements at an early stage and ensure that information submitted through the planning process is consistent with any related permit or assessment.

This guidance is not exhaustive. Applicants seeking advice on the air quality requirements for a particular development should contact the Environmental Protection team through the Council's website:

www.manchester.gov.uk

2 Background

Manchester City Council (MCC) recognises the significant adverse effects of air pollution on health and wellbeing, including increased mortality and potential adverse effects on pregnancy and birth outcomes.[2]

The main pollutants of concern are nitrogen dioxide (NO_2) and particulate matter (PM_{10} and $PM_{2.5}$). The latest monitoring and assessment indicate that applicable Local Air Quality Management (LAQM) objectives are currently being met at monitored and assessed relevant exposure locations in Manchester. However, Manchester remains within the Greater Manchester AQMA for annual mean NO_2, pending formal review of the AQMA. Elevated NO_2 concentrations remain associated with the city centre and busy roads, while particulate matter continues to be an important health concern. Continued monitoring and action are therefore needed to reduce concentrations and associated health impacts.[3]

Once emitted into the atmosphere, pollutants are carried and dispersed with air movement and may be subject to chemical change. Controlling concentrations either within pollution hotspots or across a wider area must take such atmospheric processes into account. This means that action is needed not only in the specific locations where the most harm occurs, but also more widely across the district, region and further afield in the United Kingdom and continental Europe.

Road transport is the major source of NO_2 emissions in Manchester. However, other development-related sources include gas or biomass boilers and combined heat and power (CHP) plant, which are dealt with in section 3 of this document. Domestic combustion, particularly the burning of wood and other solid fuels, is also a major source of $PM_{2.5}$ emissions in the UK, but detailed consideration of this source is outside the scope of this guidance.[4]

2.1 Air Quality and Planning

New development can pose the following concerns in relation to air quality:

- Emissions that arise from construction and use of a site, which add cumulatively to existing pollution levels locally, across the district and beyond.
- Harm to individuals arising as a result of introducing new exposure to air pollutants through their occupation of the development.

2.2 Role of the Environmental Protection Team

The Environmental Protection team (EP) is consulted by the Local Planning Authority (LPA) on applications for new developments within Manchester's district.

EP considers a range of environmental issues, including air quality, before making a recommendation to the LPA. It may recommend approval, approval subject to appropriate conditions, or refusal.

The recommendations made by EP are not binding on the LPA, which will consider all relevant issues concerning a planning application, but air quality is a material planning consideration within the decision-making process.

In addition to making recommendations to the LPA, EP can provide advice to applicants and their consultants before a planning application is submitted or an air quality assessment is prepared.

EP also advises on chimney and stack heights through the planning process and administers the Council's separate chimney height approval function under the Clean Air Act 1993 where this applies.

2.3 National Policy and Guidance

Local authorities have statutory responsibilities for LAQM under Part IV of the Environment Act 1995, as amended by the Environment Act 2021 and associated regulations.[5] These responsibilities include reviewing and assessing local air quality, designating Air Quality Management Areas where relevant air quality objectives are unlikely to be achieved, and preparing action plans setting out measures to improve air quality.[6]

The Environment Act 2021 also established a framework for long term environmental targets. The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 set national targets for an annual mean $PM_{2.5}$ concentration of 10 µg/m³ or lower by 2040 and a reduction in population exposure to $PM_{2.5}$ of at least 35% by 2040 compared with 2018.[7]

Air pollution is an important public health consideration. The Public Health Outcomes Framework includes indicators that support understanding of public health trends and inequalities.[8]

Local planning decisions can affect air quality through the location and design of development, changes in emissions and the introduction of new exposure. The National Planning Policy Framework requires planning policies and decisions to ensure that development is appropriate for its location, taking account of the likely effects, including cumulative effects, of pollution on health, living conditions and the natural environment. Development should avoid or appropriately mitigate unacceptable levels of air pollution, sustain and contribute towards compliance with relevant limit values, objectives and targets, including those for $PM_{2.5}$, and take account of Air Quality Management Areas and relevant air quality action plans.[9]

Regard should also be had to the government's Planning Practice Guidance on air quality[10] and relevant technical guidance published by the Institute of Air Quality Management (IAQM)[11]. These provide guidance on assessing the air quality effects of development, determining significance and identifying appropriate mitigation.

2.4 Local Policy

Manchester's statutory development plan includes the Manchester Core Strategy 2012[12] and the Places for Everyone Joint Development Plan 2022–2039 adopted on 21 March 2024[13].

Policy EN16 of the Manchester Core Strategy seeks to improve air quality across Manchester, particularly within Air Quality Management Areas. It expects development to minimise and mitigate emissions generated by traffic and by the use of the development

itself, including emissions from combined heat and power and biomass plant. Policy DM1 also requires development to have regard to its effects on amenity, including air quality.

Policy JP-S5, Clean Air, of Places for Everyone requires a comprehensive range of measures to support improvements in air quality. These include locating and designing development to reduce reliance on polluting forms of transport; assessing applications against current relevant guidance; requiring relevant air pollution information where development could adversely affect air quality; avoiding unacceptable point source pollution; minimising exposure to high pollution levels; and securing suitable mitigation where necessary.

The emerging Manchester Local Plan will, once adopted, replace relevant parts of the existing local planning framework. At the time of publication, it is not yet adopted and should be given weight in accordance with its stage of preparation and other material considerations. Applicants should check the latest status and wording of its proposed air quality policy when preparing an application.[14]

2.5 Local Air Quality

This guidance supports compliance with statutory air quality objectives and continued reductions in pollutant concentrations and population exposure. Particular attention is given to nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), cumulative impacts and the introduction of new exposure to existing pollution.

Nitrogen Dioxide (NO_2)

Manchester's original Air Quality Management Area was declared in 2001 and subsequently amended. Since 2016, Manchester has formed part of the Greater Manchester (GM) Air Quality Management Area (AQMA), which was declared for exceedances of the annual mean NO_2 objective.[15] The area covering Manchester is shown in Appendix I.

The current GM Air Quality Action Plan (AQAP) was published in 2016. Progress on monitoring and air quality improvement measures is reported through the combined GM Annual Status Report.[16] The AQAP is currently being refreshed, taking account of relevant developments across GM, including the Clean Air Plan. The refreshed AQAP will remain the statutory air quality action plan for GM while the AQMA remains in place.[17]

Particulate Matter (PM_{10} and $PM_{2.5}$)

Manchester currently meets the applicable LAQM objective for PM_{10}. However, particulate matter remains an important public health concern and further reductions in concentrations and population exposure are required.

The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 set national targets for:

- an annual mean $PM_{2.5}$ concentration of 10 µg/m³ or lower by 2040; and
- a reduction in population exposure to $PM_{2.5}$ of at least 35% by 2040 compared with 2018[7].

The GM Five-Year Environment Plan 2025–2030 includes a target to reduce population exposure to $PM_{2.5}$ by 22% by January 2028 compared with 2018. It also monitors the proportion of monitoring sites meeting World Health Organization (WHO) air quality guideline and interim target concentrations[18].

WHO guidelines provide health-based benchmarks for continued improvement. They are more stringent than current UK legal standards and should not be presented as statutory local limits or as targets that Manchester can achieve through local action alone.

3 Guidance

Air quality should be considered from the earliest stages of development design and throughout the planning process. The scope and level of assessment should be proportionate to the nature and scale of the development, the sensitivity of surrounding uses, existing air quality conditions and the potential for cumulative impacts.

Policy JP-S5 of the Places for Everyone Joint Development Plan requires planning applications to have regard to the most recent relevant guidance published by the IAQM, or successor guidance. This includes guidance on land use planning and development control and the assessment of dust from demolition and construction.

Early engagement with the Council is encouraged where the assessment requirements are uncertain or where a development may introduce new exposure, generate significant emissions or affect an Air Quality Management Area.

The following sections set out MCC's expectations in relation to construction and demolition, development planning, electric vehicle charging infrastructure and chimney heights.

Before submitting an application, applicants should confirm that they have:

- considered air quality from the earliest design stage;
- identified construction and operational emission sources and sensitive receptors;
- determined whether an air quality assessment, Construction Environmental Management Plan or Dust Management Plan is required;
- considered cumulative effects and the exposure of future occupants;
- followed the latest relevant IAQM, Defra and statutory guidance;
- identified specific, proportionate and deliverable mitigation; and
- provided the information needed to secure and monitor that mitigation.

3.1 Construction and Demolition

Demolition, earthworks and construction activities can affect local air quality through dust, particulate matter and emissions from construction plant and vehicles. Potential effects include:

- dust deposition and the soiling of surfaces;
- visible dust emissions;
- increased concentrations of particulate matter;
- mud and dust being carried onto the public highway and resuspended by vehicles;
- emissions from construction plant, non-road mobile machinery and vehicles accessing the site; and
- effects on sensitive human and ecological receptors.

Applications should be supported by a proportionate assessment of construction phase air quality effects where required. Assessments should follow the most recent published version of the IAQM's Guidance on the Assessment of Dust from Demolition and Construction, or relevant successor guidance.

The assessment should consider demolition, earthworks, construction and trackout separately. It should identify the potential dust emission magnitude, the sensitivity of the surrounding area and the resulting risk of effects before mitigation. Appropriate site specific mitigation should then be identified for each activity, followed by consideration of residual effects.

The assessment and proposed mitigation should be prepared by a suitably qualified and experienced person. The submitted information should provide sufficient detail for the Council to understand how the risk classification and mitigation measures have been determined.

Where appropriate, mitigation should be secured through a Construction Environmental Management Plan or Dust Management Plan. Measures should be proportionate to the assessed risk and address site management, communications, dust generating activities, construction plant and vehicles, trackout, monitoring and complaints.

For major developments in Manchester city centre, the Council recommends that non-road mobile machinery (NRMM) used for demolition or construction should meet Stage IIIA emissions standards as a minimum. Machinery meeting Stage IV or a higher emissions standard should be used wherever reasonably practicable. These established emissions stage classifications are used as planning benchmarks and do not replace applicable statutory engine type approval requirements under Regulation (EU) 2016/1628[19]. Details of the machinery to be used, including its emissions stage, should be recorded in the Construction Environmental Management Plan or equivalent document.

3.2 Development Planning

When preparing a planning application, applicants should consider how the development may affect local air quality and how existing pollution may affect future occupants and users. Consideration should be given to construction and operational emissions, cumulative impacts from committed development, and the introduction of new exposure to poor air quality.

Potential sources and effects may include:

- additional vehicle movements;
- changes to road layout or traffic flow;
- combustion plant, generators and energy centres;
- extraction and ventilation systems;
- industrial or commercial processes;
- exposure of new occupants to existing pollution sources; and
- cumulative effects with other committed development.

Applicants should use the most recent relevant IAQM guidance, or successor guidance, to screen developments and prepare air quality assessments. The scope and methodology must be proportionate to the likely effects. Where requirements are uncertain or the development may have significant effects, applicants should agree the approach with the Council at an early stage.

Where an air quality assessment is required, it should:

- describe the development, relevant receptors and existing air quality conditions;
- identify the relevant legislation, policy, objectives and assessment levels;
- explain and justify the assessment methodology, data and assumptions;
- assess construction and operational effects;
- consider both the effect of the development on local air quality and the effect of existing pollution on future occupants;
- consider cumulative effects;
- describe model verification and uncertainty, where modelling is used;
- assess the significance of the likely effects;
- identify measures to avoid or minimise emissions and exposure; and
- clearly describe residual effects following mitigation.

Air quality should be considered from the design stage. Development should use good design and appropriate mitigation to minimise emissions and exposure, even where pollutant concentrations are predicted to remain below statutory objectives or the overall effect is judged not significant.

$PM_{2.5}$

Development should also consider the statutory $PM_{2.5}$ concentration and population exposure reduction targets. For developments that would normally require an air quality assessment, applicants should identify relevant sources of $PM_{2.5}$ and its precursor pollutants and demonstrate how emissions and exposure have been minimised as far as reasonably practicable, in accordance with the Department for Environment, Food and Rural Affairs (Defra) interim planning guidance[20]. A qualitative assessment may be used where appropriate quantitative evidence is not available, and this consideration should be documented within the planning application.

Mitigation and damage costs

Mitigation should follow the hierarchy of avoiding emissions and exposure through site selection and design, reducing remaining effects and, where justified, offsetting residual emissions. Measures should be specific to the development, proportionate to its effects and capable of being secured and delivered.

Where damage costs are used to inform mitigation or financial contributions, calculations should follow the current Defra air quality appraisal guidance and use the applicable published values and assessment period[21]. Damage cost calculations do not replace the need to assess pollutant concentrations, exposure and the significance of effects where these matters are relevant.

3.3 Electric Vehicle Charging Guidance

Electric vehicle charging infrastructure can support the transition to lower emission transport. It should be provided as part of a wider approach that reduces reliance on private cars and supports walking, wheeling, cycling and public transport.

Development proposals should take account of the applicable requirements of Part S of the Building Regulations and Approved Document S[22]. Compliance with these

requirements is determined separately through the building control process.

Planning applications should identify the proposed chargepoint and cable route provision, including their location, accessibility and power rating, and show how they relate to the proposed parking arrangements.

Appendix II sets out MCC's recommendations, which apply alongside relevant statutory requirements and planning policy.

3.4 Chimney Heights

Chimneys and stacks should be designed to provide effective dispersion and to prevent emissions, so far as practicable, from becoming prejudicial to health or a nuisance.

Under section 14 of the Clean Air Act 1993[23], chimney height approval is required for a furnace that:

- burns pulverised fuel;
- burns other solid matter at a rate of 45.4 kg or more per hour; or
- burns liquid or gaseous matter at a rate equivalent to 366.4 kW or more.

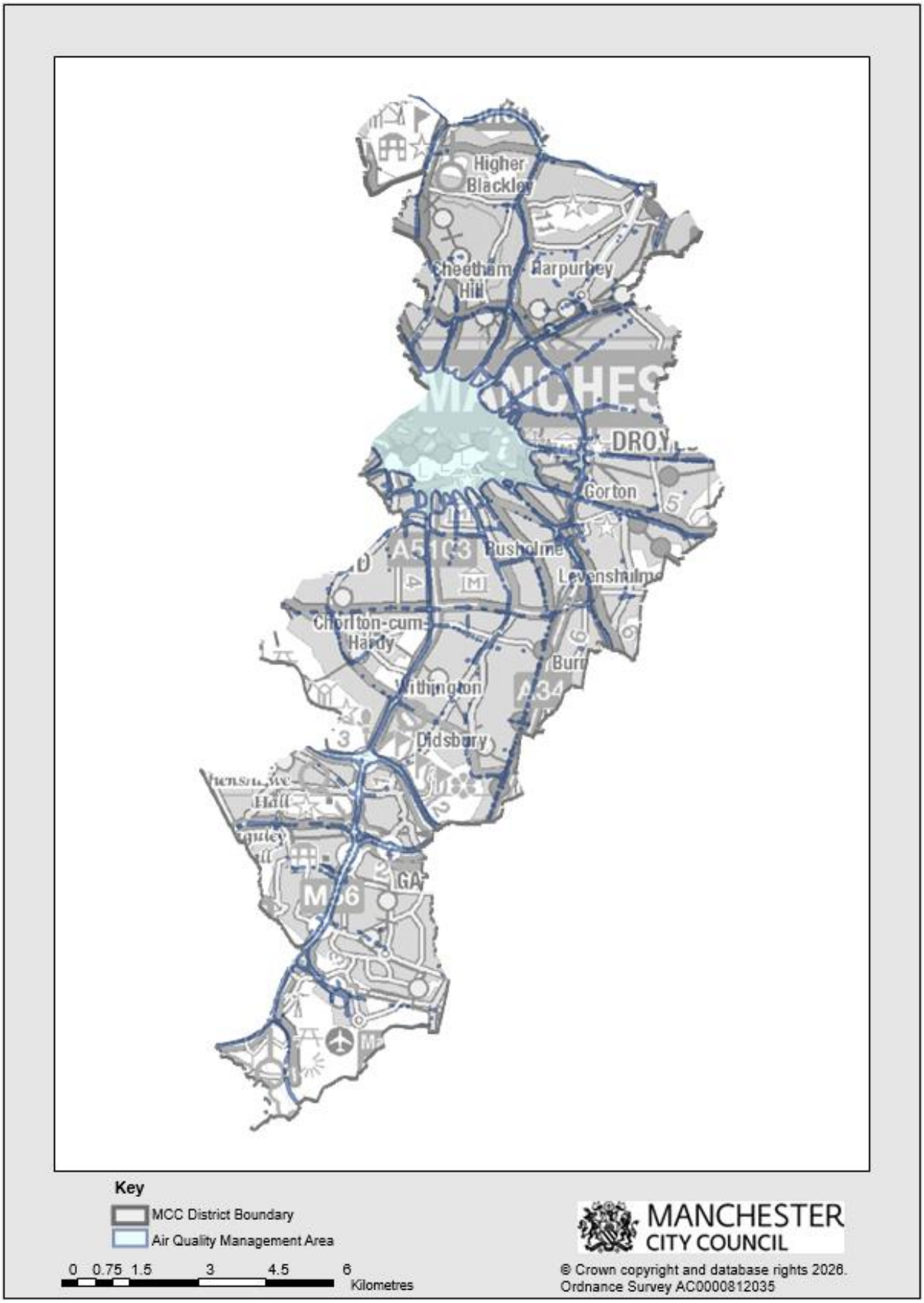
The chimney height must be approved before the furnace is used, unless an exemption applies. Approval may be granted subject to conditions relating to the rate or quality of emissions, or both.

Applications should provide sufficient information to demonstrate that the proposed chimney height, location and discharge conditions will achieve adequate dispersion. In determining the appropriate chimney height, the Council will have regard to the matters specified in section 15 of the Clean Air Act 1993, including the purpose of the chimney, nearby buildings and neighbouring ground levels. The assessment should also address other relevant matters such as nearby receptors, local air quality, emission characteristics and building downwash.

The HMIP D1 method may be used as a screening tool where appropriate, but its original default background concentrations and guideline values are outdated. Current air quality objectives and representative background concentrations must be used. Detailed dispersion modelling may be required where the screening method is unsuitable or where buildings, terrain, multiple stacks or sensitive receptors could materially affect dispersion[24].

Applicants should apply separately for chimney height approval through MCC's chimney height approval service. Planning permission or other regulatory approval does not remove the need to obtain approval under the Clean Air Act where it applies[25].

Appendix I: Greater Manchester Air Quality Management Area



Map 1 – Manchester section of the Greater Manchester Air Quality Management Area

Appendix II: Electric Vehicle Charging - MCC Best Practice Recommendations

Electric vehicle chargepoints and associated infrastructure are recommended for:

- developments of one or more residential units with parking spaces; and
- non-residential developments with parking spaces.

Table 1: Recommended electric vehicle charging provision

Development type	Parking arrangement	Recommended provision	Cable route provision
Residential	On-site or allocated parking	One EV chargepoint, with a minimum rating of 7 kW, for each dwelling with an on-site or allocated parking space	Not specified
Residential	Unallocated parking	EV chargepoints, each with a minimum rating of 7 kW, for at least 20% of parking spaces	Cable routes to all remaining parking spaces
Non-residential	10 or fewer parking spaces	At least one EV chargepoint	Cable routes to all staff parking spaces
Non-residential	11 or more parking spaces	EV chargepoints for at least 20% of parking spaces	Cable routes to all staff parking spaces

Table 2: Recommended minimum chargepoint rating by end use

Minimum rating	Typical end uses
7 kW*	Offices, hotels, nursing homes, sheltered accommodation, industrial units and retail units
22 kW*	Supermarkets and comparable uses
50 kW*	Service stations and comparable uses

*** Technical note:** Mode 3 charging should provide 7 kW at 32 A single phase or 22 kW at 32 A three phase. Mode 4 rapid charging may be required where a minimum rating of 50 kW is recommended. Chargepoints should comply with BS EN IEC 61851-1:2019, Electric vehicle conductive charging system - General requirements, or any successor standard.

Other considerations

Other matters that the Local Planning Authority may require to be addressed include:

- chargepoint type and charging speed;
- electrical and safety standards;

- back-office functionality;
- data security;
- interoperability and compatibility;
- smart charging, where appropriate;
- load management; and
- anti-collision barriers.

Appendix III: References

[1] Our Manchester Strategy 2025-35 | Manchester City Council

[2] Committee on the Medical Effects of Air Pollutants (COMEAP), Reports and Statements, UK Health Security Agency; Air pollution: effects on adverse birth outcomes, UKHSA

[3] Air quality | Manchester City Council

[4] Emissions of air pollutants in the UK – Particulate matter (PM10 and PM2.5) - GOV.UK

[5] Environment Act 1995; Environment Act 2021

[6] England (exc. London) Policy Guidance | LAQM

[7] The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023

[8] Public Health Outcomes Framework - GOV.UK

[9] National Planning Policy Framework - GOV.UK

[10] Air quality - GOV.UK

[11] Guidance - IAQM

[12] Core Strategy 2012-2027 | Manchester City Council

[13] Places For Everyone - Greater Manchester Combined Authority

[14] Local Plan | Manchester City Council

[15] Greater Manchester Air Quality Management Area

[16] Monitoring reports | Clean Air Greater Manchester

[17] Greater Manchester Clean Air Plan | Clean Air Greater Manchester

[18] Greater Manchester Combined Authority, Five-Year Environment Plan 2025–2030

[19] Regulation (EU) 2016/1628

[20] PM2.5 Targets: Interim Planning Guidance - DEFRA UK Air - GOV.UK

[21] Air quality appraisal: damage cost guidance - GOV.UK

[22] Infrastructure for charging electric vehicles: Approved Document S - GOV.UK

[23] Clean Air Act 1993, section 14

[24] FAQ 89 - HMIP D1 Stack Height Calculation | LAQM

[25] Apply for chimney height approval | Manchester City Council