

GOOD PRACTICE GUIDE

Control of pollution and noise from demolition and construction sites



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1. Introduction

- 1.1 This good practice guide is intended to be used as a guidance by developers, their contractors and any sub contractors working on construction/demolition sites within the London Borough of Lewisham in controlling the environmental impacts of their work.
- 1.2 Development has the potential to cause significant environmental impacts and neighbourhood nuisance. These effects however, can be reduced by implementing good practice.
- 1.3 The Council has specific powers under the Control of Pollution Act 1974 and the Environmental Protection Act 1990 to deal with noise and environmental nuisance. The contractor should also always comply with all other relevant legislation including the provisions of The Clean Air Act 1993, The Environment Act 1995, the Pollution Prevention and Control Act 1999 and The Health and Safety at Work Act 1974.
- 1.4 The Council seeks to ensure that all contractors demonstrate good practice in their work programming, design, techniques and methods of working. Adherence to this guide will assist contractors in demonstrating their commitment to good practice and will minimise the environmental impacts and effects on the local community.
- 1.5 Developers and their contractors should also have regard to any London Best/Good Practice guidance available for managing environmental effects from demolition and construction sites.
- 1.6 Where local residents are likely to be affected, all relevant and appropriate working methods that minimise noise, dust and air pollution, in particular, are to be employed at all times. Measures included in this guide are not exhaustive and additional measures can be used which will reduce environmental impacts further. Adherence to this Guide therefore does not invoke the defence of Best Practicable Means.
- 1.7 The Council welcomes innovative approaches that are successful in reducing environmental impacts, and developers are recommended to contact Lewisham's Environmental Protection Team at the earliest opportunity to discuss any new methods that they may wish to trial.
- 1.8 In order to demonstrate commitment to good practice, the contractor is encouraged to complete and return the form found in Appendix 1 as well as referring to the documents listed in the References section.
- 1.9 The London Borough of Lewisham does not have a specific 'Considerate Contractors' scheme but does encourage contractors to participate in the national scheme, and/or Freight Operator Recognition Scheme and also to consider producing a Construction Logistic Plan, guidance of which is available from TfL, the contact details of which are in Appendix 3.
- 1.10 Should a contractor wish to apply to the Council for a Section 61 consent, under the Control of Pollution Act 1974, then guidance can be found on Lewisham's website or by contacting the London Borough of Lewisham's Environmental Protection Team. It should be noted that an application must be submitted to the Council at least 28 days before the start of works.

2. General Principles

The contractor should designate the person(s) who will have responsibility for ensuring adherence to good practice measures. A designated person should be on site at all times that operations are taking place and have the necessary authority to initiate changes to work practices and/or mitigation as appropriate.

2.1 Hours of work

2.1.1 Where residential occupiers are likely to be affected by noise, the hours of work will normally be restricted to:-

Monday – Friday:	8am – 6pm
Saturday:	8am – 1pm
Sunday and Bank Holidays:	No work where noise audible at site boundary

2.1.2 All vehicles and plant arriving at and leaving the site should comply with the same restrictions on hours. The main contractor should be held responsible for ensuring these instructions are given to all drivers, including those delivering site materials.

2.1.3 The working hours may also be restricted through Planning condition. Any deviation from these hours will require prior approval from the Lewisham Environmental Protection Team (see Appendix 3 for the form return) and, if conditioned, the Development Control Team. It should be noted that approval will only be granted under exceptional circumstances and will always be conditional on the contractor informing local residents in advance of the proposed activity.

2.2 Community Liaison and Complaint Resolution

2.2.1 The Council considers that liaison with local residents who may be affected by construction works is essential. The local residents should be informed of the nature of the works, proposed hours of work and their expected duration.

2.2.2 Communication to local residents should include publicity, including the name and telephone number of a main contact which should also be displayed on the site hoardings. This contact person should be able to give further information to the caller and deal with any complaints or emergencies that may arise at any time. A copy of the letter to be sent to residents along with the planned distribution list should be included with the return form in Appendix 1 and sent to London Borough of Lewisham's Environmental Protection Team at least 28 days before the start of works.

2.2.3 Complaints should be reported to the London Borough of Lewisham's Environmental Protection Team within 24 hours by telephone and/or email, investigated and where appropriate measurements taken and where necessary mitigation methods implemented or work practices modified.

2.2.4 The results of the investigation, along with details of any mitigation methods implemented or work practice that has been modified and how complainants have been kept informed should also be sent to the London Borough of Lewisham's Environmental Protection Team as soon as possible.

2.2.5 All site staff are to be regularly briefed regarding the complaints procedure.

3. Noise and Vibration

3.1 Site Preparation, design and layout

3.1.1 It is important to know the area where the construction site will be based. This will include understanding where the nearest sensitive resource or residential receptor is, the general ambient noise level in the area and having an understanding of what the impacts will be, given the duration, scale and type of construction and demolition required.

3.1.2 Where practicable:

- locate the site access and the material storage away from sensitive receptors
- the standard hoarding height of 2.44m (surface density of not less than 7kg/m²) should be increased to break the line of sight to any residential window.
- position site huts to provide additional screening of works.
- maximise the screening effect of buildings through programming/phasing of works. Planning the demolition sequence to utilise screening afforded by buildings to be demolished.
- provide turning space within the site, avoiding the need to reverse and reducing the associated noise from reverse warning systems.
- delivery routes and vehicle holding areas should be chosen to avoid diverting traffic.
- establish an electricity supply to the site. This will reduce the need for diesel generators which can have a localised noise and air quality impact.
- ensure adequate planning within the project to prevent noise generating from double handling of materials and overlapping of high noise activities.

3.2 Operations

3.2.1 All plant and equipment, including any on hire, is checked to ensure it is in good working order and conforms to the manufacturers' standards. Equipment is to be properly silenced and meet statutory emission standards. Defective items are not to be used.

3.2.2 All large concrete pours are started as early as possible, within normal hours, to avoid overruns.

3.2.3 When working within a building, wherever possible ensure all openings (i.e. windows and doors) are sealed.

3.2.4 Before works commence, the site workforce should be fully briefed on the need to keep all noise generated to a minimum. Shouting and raised voices are not permitted other than in cases where warnings of danger must be given. Radios should not be played at a volume that is likely to disturb local residents.

3.2.5 Minimise the opening and closing of the site access through good coordination of deliveries and vehicle movements

3.3 Monitoring

- 3.3.1 As a minimum attended noise monitoring should be undertaken at the start of each new activity as identified in the Method Statement/Works Schedule and during out of hours work (if this has been agreed). The Contractor should maintain a record of these noise monitoring results.
- 3.3.2 Monitoring locations should be chosen to accurately measure the worse affected locations on/off site and be subject to agreement with the Environmental Protection Team.
- 3.3.3 Noise and vibration monitoring should be used by the Contractor as a proactive tool to: improve work processes; identify and address issues as they arise; investigate complaints and check compliance with any noise predicted levels.

For development of over 15,000 square metres of land, or over 150 properties, the following additional monitoring requirements should be considered:

Continuous noise monitoring should be undertaken at one or more permanent monitoring station(s), being capable of sending text and/or e-mail alerts when trigger levels are exceeded and compatible with the Council's web based facility for presenting real time noise data. Trigger levels are to be set in agreement with the Environmental Protection Team and reflecting the predicted noise levels.

Upon receiving a text/e-mail alert, the nominated person should investigate as soon as reasonably practicable to ensure that Best Practicable Means are being implemented and all noise is minimised as far as reasonably practicable

- 3.3.4 The effectiveness of all measures should be monitored frequently by the main contractor, reviewed at least weekly and may be subject to inspection by officers of the London Borough of Lewisham.

3.4 Plant and Equipment

- 3.4.1 Noisy plant or equipment should be sited as far away as is practicable from sensitive buildings. The use of barriers, such as soil mounds, site huts, acoustic sheds or partitions to deflect noise away from noise sensitive areas, is to be employed wherever practicable.
- 3.4.2 Wherever practicable all plant and equipment should be powered by mains electricity in preference to locally powered sources such as diesel generators. Hand tools should also be electrically powered rather than petrol or diesel driven.
- 3.4.3 Vehicles and mechanical plant used for the purpose of the works should be fitted with effective exhaust silencers, maintained in good and efficient working order and operated to minimise noise emissions. The contractor should ensure that all plant complies with the relevant statutory and manufacturers' requirements.

- 3.4.4 For works consented to occur outside of normal working hours, where practicable, a broad-band reverse warning system should be used on all vehicles and at any time where it is safe to do so, all sirens and alarms should be disengaged.
- 3.4.5 Machines in intermittent use should be shut down in the intervening periods between work or throttled down to a minimum. Noise emitting equipment that is required to run continuously may have to be housed in suitable enclosures.
- 3.4.6 Compressors should be "sound reduced" models fitted with properly lined and sealed acoustic covers that should be kept closed whenever the machines are in use.
- 3.4.7 Equipment which breaks concrete, brickwork or masonry by bending or by bursting should be used in preference to percussive tools as far as practicable.
- 3.4.8 Pneumatic percussive tools should be fitted with mufflers or silencers of the type recommended by the manufacturers.
- 3.4.9 During backfilling and ground compaction work, dead rollers should be used in preference to vibrating rollers where practicable.
- 3.4.10 Where practicable rotary drills and bursters actuated by hydraulic, chemical or electrical power should be used for excavating hard or extrusive material.
- 3.4.11 Plant should be maintained in good workmanlike condition so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
- 3.4.12 Care should be taken when loading or unloading vehicles, dismantling scaffolding or moving materials etc to reduce impact noise. 2.10 2.10

3.5 Piling

- 3.5.1 In assessing the impact of any piling operations, the contractor will comply with the recommendations set out in the relevant current British Standard BS5228 Part 1 "Code of practice for noise and vibration control on construction and open sites".
- 3.5.2 The use of conventional impact hammers should, wherever possible, be avoided. Any pile driving is to be carried out by plant equipped with a recognised noise reducing system.
- 3.5.3 Where there is a potential for disturbance the hours of piling should, where reasonably practicable, be limited to accommodate local circumstances thereby ensuring disturbances are minimised.

4. Dust and Air Pollution

4.1 Introduction

4.1.1 A development may include all or some of the following phases which have the potential to generate dust:

- Demolition
- Earthworks
- Construction
- Vehicle Movements and Trackout

The Institute of Air Quality Management (IAQM) has produced guidance¹ on assessing the risks of dust arising from each of these activities and it is recommended that this guidance and risk assessment methodology be followed.

4.1.2 Once the risk of dust and air pollution from each of the phases has been assessed, these risks need to be managed and appropriate mitigation measures put in place which may go beyond the general principles outlined in Chapter 2.

4.1.3 The London Council's Best Practice Guidance² provides detailed methods to mitigate emissions of dust and other pollutants and follows a risk assessment approach as to the level of monitoring and mitigation required.

4.1.4 This guide is not intended to duplicate the contents of the London Council's BPG and developers are directed to refer to the latter document in order to identify the mitigation measures appropriate to the site. However, this guide provides supplementary information that relates specifically to the London Borough of Lewisham.

4.2 Site-Specific Measures

The following points are intended to provide information and requirements that are specific to the London Borough of Lewisham:

4.2.1 There are 6 Air Quality Management Areas within the borough which cover all the areas north of the A205 (South Circular) together with major roads in the south. Developments within an Air Quality Management Area will be expected to implement stricter control measures so as to ensure that work towards meeting Air Quality Objectives are not impeded.

4.2.2 The whole of the borough of Lewisham lies within the London Low Emission Zone. Compliance with the relevant emissions standards is required for all affected vehicles associated with the site. It is good practice for contractors to aim to meet the highest Euro standards for emissions for all HGVs and LGVs accessing the site.

4.2.3 Monitoring of dust is expected at all demolition/construction sites. This ranges from regular visual observations and record-keeping for smaller, low-risk sites to the installation of multiple real-time automatic particulate monitors at higher risk sites. Where two or more real-time monitors are employed, the Council should set both relative and absolute trigger action levels. If these levels are reached, the developer should investigate the cause of the elevated concentrations and take appropriate remedial action. This may involve the temporary cessation of dust-generating activities on site.

- 4.2.4 The developer should comply with all regulations introduced under The Clean Air Act 1993. As best practice, the burning of any materials on the site will **NOT** be permitted. Suitable provisions will, therefore, need to be in place for the removal of all waste from site.
- 4.2.5 Where a development will give rise to several HGV movements per hour during either of the phases, it is recommended that a Construction Logistics Plan is prepared and submitted.
- 4.2.6 The contractor should ensure that the area around the site, including the public highway, is regularly and adequately swept using wet sweeping methods only to prevent any accumulation of dust and mud. Depending on the assessed risk, the use of wheel cleaning facilities may be required.
- 4.2.7 The application of dust suppressants to the hard surfaces on and around the site can help reduce the re-suspension of dust. Developers should consider whether it is appropriate to implement a programme of application and can seek advice on the application from the Council.
- 4.2.8 Any plant used for the crushing of materials must be authorised by a local authority under the Environmental Protection Act 1990 Part 1 (Prescribed Processes). All works should be carried out in accordance with the conditions of such an authorisation. Where plant is used to recycle materials, the appropriate licence from the Environment Agency should be obtained. The process operator should notify the local authority prior to the movement of the plant on to the site.
- 4.2.9 The contractor should take all necessary precautions to prevent the occurrence of smoke emissions or fumes from the site plant or stored fuel oils for safety reasons and to prevent such emissions or fumes drifting into residential areas. In particular, plant should be well maintained and measures taken to ensure that it is shut down in the intervening periods between work or throttled down to a minimum.
- 4.2.10 All Non-Road Mobile Machinery should use Ultra Low Sulphur Diesel (ULSD).
- 4.2.11 Effective methods of work are adopted to prevent dust from becoming airborne at source, including enclosure of fixed plant, addition of moisture, or provision of effective exhaust ventilation and filtering.

5. Sandblasting

- 5.1 The work area should be close-sheeted to reduce dust nuisance from grit. Routine checking is required to ensure that the sheeting remains sound or sealed during the operation. Particular attention should also be given to the working platform to ensure that it is properly sheeted or sealed to contain dust.
- 5.2 Non-siliceous grit should be used to avoid long term irreversible lung damage from silica dust.
- 5.3 Proper protection should be provided for any structure painted with lead based paint.
- 5.4 In cases where water is used for large scale cleaning and blasting the requirements of the Environment Agency should be followed.
- 5.5 All grit should be prevented from falling into water courses.

6. Asbestos

- 6.1 Special precautions and surveys should be taken if materials containing asbestos are encountered. The contractor should comply with the Control of Asbestos at Work Regulations. The contractor should observe the exposure limits and measurement methods for asbestos that are set out in the relevant and current Health and Safety Executive Guidance Notes. The contractor should consult with the Health and Safety Executive concerning precautions required when removing asbestos material.
- 6.2 Please note that all asbestos removal **SHOULD** be carried out by Registered Contractors and documented; and status of site attaining to asbestos confirmed.

7. Contaminated Land

- 7.1 If during site works contamination is encountered on site, which has not previously been identified, no further development should take place until a site investigation has been carried out to characterise and risk assess the contamination. The investigation will survey and assess the nature and extent of contamination. Recommendations for remediation should be submitted to and approved in writing by the Council's Environmental Protection Team before further works can proceed.
- 7.2 If nuisance issues emanate from newly found contamination, or remedial activity; contingency measures must be built in to abate nuisance occurring – via method statement provisions, contingencies for abatement and monitoring – e.g. dealing with odour issues emanating from hydrocarbon sources.
- 7.3 The contractor should consult with the Health and Safety Executive when working on land which is contaminated.
- 7.4 The contractor should consult with the Environment Agency; and other pertinent stakeholders; and the Council's Environmental Protection Team regarding proposed measures to prevent the contamination of water courses and aquifers.

8. Urban Ecology

- 8.1 The contractor should comply with the provisions of the current Wildlife and Countryside Act, with the requirements of the Unitary Development Plan and any conditions attached to planning permissions. The first priority is to maintain habitats intact and undisturbed and, if possible, to make improvements to enhance natural habitats.
- 8.2 No mature trees should be interfered with without written consent and prior consultation with the Council's Planning Group.
- 8.3 When Japanese Knotweed is encountered the contractor should comply with the Environment Agency's current code of practice for its management, destruction and disposal.
- 8.4 All wild birds are protected under law when they are nesting under the Wildlife and Countryside Act 1981 (as amended). Please be aware that bird nesting season is between April-September and any works that will involve the demolition or development (including conversions) of buildings may affect species such as House Sparrows, Swallows and House Martins.
- 8.5 The removal and cutting of vegetation, including hedges, trees and scrub should ideally be undertaken outside of nesting season or only after a survey inspection carried out by a suitably qualified person has determined that there are no nesting birds.

9. Ancillary Site Activities

- 9.1 Access to the site should be located to ensure the minimum of disturbance from vehicles entering or leaving the site to persons in nearby noise sensitive buildings.
- 9.2 The contractor will be responsible for all lorries delivering to or exiting from the work site and should comply with the time restrictions in 2.1.1.
- 9.3 Wherever practicable waiting or queuing on the public highway should be avoided. Where lorries cannot immediately enter or leave the site, engines should be switched off while waiting. It is good practice for a banksman to be employed to control and direct vehicle movements to and from the site where these are likely to overlap.
- 9.4 Lorries should enter and exit the site in a forward direction except where space restrictions do not allow this. These conditions will be subject to prior discussions with the Highway Authority and the Police before implementation.
- 9.5 Wherever practicable all loading and unloading of vehicles will take place on site.
- 9.6 Details of measures to reduce the impact of construction traffic movements through the management and rationalisation of travel and traffic routes and safe pedestrian movements should be submitted to the London Borough of Lewisham, Highways Team for their approval.
- 9.7 Rubbish should be removed at frequent intervals and the site kept clean and tidy.
- 9.8 Fly-tipping will not be permitted. Loads should only be deposited at authorised tips or into designated barges. Deposition should be in accordance with the requirements of the Environment Agency, the current Environmental Legislation and Special Waste Regulations.
- 9.9 To prove the correct depositing of excavated material and to prevent the occurrence of fly-tipping a ticket system will be operated at all sites. The contractor will provide a sequentially numbered ticket system for each work site to confirm that each lorry load of spoil is deposited at an approved site.
- 9.10 Where safe from contamination, spoil should be re-used on site reducing the vehicle movements.
- 9.11 Hoardings should be frequently inspected, repaired and repainted as necessary.
- 9.12 Unless agreed by the Council, police and third party land and property owners, crane arcs should be confined within the site. A licence should be made to Lewisham Highways, if the jib at any point extends over the public highway.
- 9.12 Site lighting should be positioned and directed so as not to intrude unnecessarily on adjacent buildings and land uses. It should not cause distraction or confusion to passing drivers on adjoining public highways.
- 9.13 Toilet and washing facilities will be provided, be kept clean and properly maintained.



Appendix 1

Good Practice Measures - A statement of intent

When completed please send and/or e-mail to London Borough of Lewisham, Environmental Protection Team, Wearside Service Centre, Wearside Road, London SE13 7EZ; environmentalprotection@lewisham.gov.uk, together with any supporting documents. *Use separate sheets if required.*

Company Name.....

Registered Office

Telephone Fax

Address for
Correspondence

E-mail

On Site Contact

Name Tel

Location and Outlined description of works:



Proposed start date

Estimated duration of works

Programme of works, giving details of method of demolition and construction, plant and equipment:

Detail measures being used to demonstrate the use of Good Practice when choosing machinery and methods of demolition and construction:

Detail of publicity proposed and procedure for dealing with complaints:



Appendix 2

London Borough of Lewisham Environmental Protection Team.

Application for works not conforming with this good practice guide.

When completed please send and/or e-mail, together with any supporting documents.

Applicant.....

Registered Office.....

Telephone..... Mobile.....

E-mail.....

Contact Name/s.....

.....

Address for correspondence (if different from above)

.....

.....

Telephone..... Mobile.....

E-mail.....

Contact Name/s.....

.....

Location of works

.....



Proposed start date.....

Estimated duration of works.....

Proposed hours of works – (where not in accordance with Good Practice Guide)

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Full details of proposed works – Please give full details of plant and machinery to be used an any other proposed deviations from the Good Practice Guide

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Reasons for not adhering to Good Practice Guide

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Details of advance publicity, consultation and measures taken/proposed to minimise noise, dust and pollution

.....
.....

Signed..... Date.....

Designation

For use by Environmental Protection Team

Comments:.....

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.....
.....
.....

Signed Date

Appendix 3

List of Contacts

London Borough of Lewisham

Environmental Protection
Wearside Service Centre
Wearside Road,
London SE13 7EZ

Tel: 020 8314 6789

E-mail: environmentaprotection@lewisham.gov.uk

Building Control

Tel: 020 8314 8233

Fax: 020 8314 3138

Traffic and Transport

Tel: 020 8314 2235

Fax: 020 8314 2577

E-mail: highways@lewisham.gov.uk

Development Control

Tel: 020 8314 7400

Fax: 020 8314 3127

Health and Safety Executive

Tel: 020 7556 2100

Environment Agency

Tel: 0800 807060
(Emergency)

Tel: 01932 789833
(South East)

Fax: 01932 786463

Considerate Contractor Scheme

Tel: 0800 783 1423

E-mail: enquiries@ccscheme.org.uk

Freight Operator Recognition Scheme

Tel: 08448 09 09 44

E-mail: fors@tfl.gov.uk

References

¹ Institute of Air Quality Management, Guidance on Construction Impacts v.1.1 (Jan 2012)

² London Council's Best Practice Guidance: The Control of Dust and Emissions from Construction and Demolition (Nov 2006)

Appendix 4

Definitions

“Best Practicable Means” (BPM) – refers to the efficient and realistic approach to the control of emissions from scheduled processes and is defined in statute within Section 72 of the Control of Pollution Act 1974 and Section 79 of the Environmental Protection Act 1990. BPM is defined by reference to the following provisions in Section 79(9) of the Environmental Protection Act 1990:

- a) “‘practicable’ means reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications;
- b) the means to be employed include the design, installation, maintenance and manner and periods of operation of plant and machinery, and the design, construction and maintenance of buildings and structures;
- c) the test is to apply only so far as compatible with any duty imposed by law;
- d) the test is to apply only so far as compatible with safety and safe working conditions, and with the exigencies of any emergency or unforeseeable circumstances.”

"Construction", in this document includes all site preparation, demolition, material delivery, materials and waste removal, on-site fabrication, piling, boring, context works and all related engineering and construction activities.