Code of Practice for Construction and Demolition Sites

Introduction

In any construction, demolition or excavation site there are major concerns of noise, air pollution, site conditions and safety of both the workforce and members of the public.

Compliance with the relevant parts of this document should enable work to be completed safely and in an environmentally friendly way.

Work on any construction/demolition site must have regard for the safety of people outside the site who may not recognise the dangers associated with such work, as well as the workers themselves. This document does not replace a contractors statutory responsibility to provide and maintain safe working conditions, although reference is made to the Health and Safety at Work Act 1974.

Where planning permission has been granted by the Council for construction or demolition works subject to a Code of Construction Practice Condition, requiring the submission of a detailed management plan for approval prior to the commencement of any works on site, the management plan must be based on the information contained in this Code but should also include separate sections on the following:

1) Site management arrangements including site office, developer contact number in event of any construction/demolition related problems, and site security information.

(These subject areas normally to be investigated and acted upon as appropriate by the Council’s Planning & Regeneration Service in consultation with other Departments where necessary).

2) Construction traffic routes, timing of lorry movements, weight limitations on routes, initial inspection of roads to assess rate of wear and extent of repairs required at end of construction/demolition stage, wheel wash facilities, access points, hours of deliveries, numbers and types of vehicles, construction traffic parking.
3) Hours of site operation, dust suppression measures, noise limitation measures.

Site Management

Construction/demolition sites hold an interest for adults and children, so active measures should be taken to keep them out and consideration should be given to the provision of non-climbable security fencing at least 2 metres high.

The contractor will prepare and provide a current Emergency Contacts Set of Procedures for each work site. These procedures will be followed in any site emergency. They will contain emergency telephone numbers and the method of notifying services/the council for action.

Copies of the procedures will be issued to the Council, Devon Fire and Rescue Service, police, ambulance service and statutory authorities etc.

For those sites at which contaminated material is encountered, the Contractors Safety Officer will ensure that a Worker's Safety Information Sheet is prepared and prominently displayed in rest/mess rooms and wash rooms covering hygiene, work practices, clothing requirements etc.

Crane arcs will be confined within the site periphery unless agreed otherwise with the Council land the police. At the completion of works the contractor will leave the site free from plant, rubble and any unwanted materials.

The security of neighbouring property should be considered. Care should be taken not to leave scaffolding and ladders or any conditions, which facilitate access to neighbouring property.

The contractor will follow a "good housekeeping" policy at all times. This will include, but not necessarily be limited to, the following requirements:

- rubbish will be removed at frequent intervals and the site kept clean and tidy. The new law on waste management "The Duty Of Care part II of The Environmental Protection Act 1990", requires that all reasonable steps be taken to look after any waste you have and prevent its illegal disposal by others.
• toilet facilities will be kept clean.
• foodwaste will be removed frequently.

A rodent survey should be carried out by a suitably qualified contractor prior to the commencement of any work at the site to identify any rodent activity. A copy of the contractors report must be submitted to the Environmental Services division of Plymouth City Council together with details of any baiting programme that is required.

**Noise and hours of working**

The contractor should apply to the Council for formal prior approval of works in accordance with Section 61 of the Control of Pollution Act 1974.

Before works on site are commenced, the contractor will be required to submit to the council for approval the following information:

- a method statement (in accordance with the principle described in BS 5228) stating precisely the type of plant to be used and the proposed noise control methods
- a programme of work indicating the noise intensity and the location for each activity on the programme
- documentation from the manufacturers literature establishing the sound power levels of the plant
- calculations of LAeq and peak levels at specified buildings, as requested

The contractor will also be required to comply with other relevant provisions of the Control of Pollution Act 1974 and the Environmental Protection Act 1990.

The contractor should also comply with the recommendations set out in BS 5228:1997 AMD 1 Code of practice for noise control on construction and demolition sites:

- **Part 1**: 1997 Code of practice for basic information and procedures for noise and vibration control (AMD 10394) dated April 1999
- **Part 2**: 1997 Guide to noise and vibration control legislation for construction and demolition, including road construction and maintenance
- **Part 4**: 1992 Code of practice for noise and vibration control applicable to piling operations (AMD 7787) dated 15 July 1993
- **Part 5**: 1997 Code of practice applicable to surface mineral extraction (except coal) sites

Works plant and equipment must also comply with the Noise at Work Regulations 1989 in order to protect on-site personnel. Technique and choice of equipment should be dependant on the nature of the surrounding buildings and the environment eg. residential/commercial. All worksite gates should be
controlled to give the minimum amount of time open for passage of vehicles, in order to minimise plant vehicle noise to the local environment.

Noisy plant or equipment should be sited as far as is practicable from noise-sensitive buildings. Vehicles and mechanical plant used for the purpose of the works shall be fitted with effective exhaust silencers and maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.

For each item of plant used in the works, the values quoted in the relevant EC Directive/UK statutory instrument, where appropriate, should not be exceeded (e.g. S.I 1984/1992, 1985/1968, 1987/1730, 1988/361, 1989/1127).

Note: Plant: muffling should be in accordance with the recommendations set out in BS 5228:1997, Code of practice for noise control on construction and demolition sites:

- compressors should be fitted with properly lined and sealed acoustic covers, which should be kept, closed whenever in use
- pneumatic percussive tools should be fitted with mufflers or silencers of the type recommended by the manufacturers
- machines in intermittent use should be shut down in the intervening periods between work or throttled down to a minimum
- care should be taken when loading or unloading vehicles or dismantling scaffolding or moving materials etc. to reduce impact noise
- the delivery and collection of skips is a very noisy operation. In noise sensitive areas this operation will be restricted only to specified hours

Piling Operations

The noise sensitivity of the area should be considered when determining the method of piling to be used. The Environmental Regulation Services Department 01752 304147 should be informed as to the agreed method.

Sheet piling shall be carried out using hydraulically operated or vibratory hammers, wherever practicable.

The use of conventional impact hammers should be avoided. In cases where it is used a Hush Piling Rig or complete enclosure of the system should be deployed to reduce noise levels. Other methods not involving impact noise and ground vibration eg Taywood Pilemaster should be used.

Blasting operations

These must be carried out in accordance relevant British Standards
The contractor should ensure that measures are taken to:

- protect the residents, users of buildings close-by and passers-by from nuisance or harm and
- protect buildings from physical damage.

The following factors will be considered:

- Human exposure - the contractor will comply with BS 6472: 1992, guide to Evaluation of Human Exposure to Vibration in Buildings (1Hz to 80Hz). The standards for vibration assessment are defined in this British Standard.

- Protection of Structures - demolition and construction activities will be carried out in such a way that vibrations arising will not cause significant damage to adjacent structures.

Vibration levels must not exceed 10 mm/sec at any nearby buildings.

**Hours of working**

Hours of construction operation will be restricted to between the following:

- 8.00am to 6.00pm (Monday to Friday)
- 8.30am to 1.00pm (Saturday)
- No Sunday or Bank Holiday working

Any works outside the permitted hours are to be by prior approval of the Plymouth City Council's Environmental Regulation Services.

Note: approval will not be granted other than in exceptional circumstances and will be conditional on the contractor informing local residents in advance of the proposed activity.

**Noise limits**

The noise limits to be applied to a site are those set out in the General Noise Restrictions page.

Noise shall be measured at first floor level or above, 1 metre from the nearest residential facade. Please note these limits do not apply to buildings in occupation during construction.

Sound levels will be monitored according to the methods set out in Annex E of BS 5228:1997 Part I. All measurements shall be made on a sound level meter (currently calibrated) complying with BS 60651:1994, Specification for Sound...
Level Meters. A programme of noise monitoring by a suitably qualified noise practitioner will be agreed between the developer and the Council.

**Dust and air pollution**

Dust pollution will be minimised during excavation or construction works and the watering of the area should be undertaken where necessary to minimise dust transference into neighbouring premises. Whenever possible dust suppressed tools should be used.

Stockpiles shall aim to minimise the effects of attrition and wind action. They shall be sited and shaped to minimise the potential for dust generation. Handling operations shall be kept to a minimum and materials must be deposited onto the stockpile from the minimum practicable height without causing obstruction to lighting to adjacent property. The surface of long-term stockpiles shall be stabilised.

Wheelwash facilities should be provided at site exits to prevent any transfer of mud onto roads.

Before and during construction operations it may be necessary to monitor the emission of methane gas. Should this prove to be necessary, the contractor will be required to establish a programme of testing for methane and other hazardous gases by a specialist practitioner.

Burning of materials on site shall not be permitted.

The contractor should take all necessary precautions to prevent the occurrence of smoke emissions or fumes from 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 they are not left running for long periods when not in use.

The contractor should comply with the provisions of the Control of Pollution Act 1974 Part IV; the Health and Safety at Work Act 1974, the Clean Air Act 1993 and the Environmental Protection Act 1990.

**Waste disposal**

The contractor will comply with the provisions of the Control of Pollution Act 1974 Part 1 and Waste on Land and the Control of Pollution (Special Waste) Regulations 1980 (Amendment 1988). The removal and disposal of contaminated materials will be conducted under a strict consignment note system as regulated by the Environment Agency. Disposal sites will be agreed with the Environment Agency and Plymouth City Councils Environmental Regulation Services.
The contractor will comply with the Control of Substances Hazardous to Health Regulations (COSHH) 1999 and HSE Guidance Note EH 40, Occupational Exposure Limits (latest edition), to ensure that contaminated excavated materials are handled and disposed of safely and properly.

Any contaminated soil should be analysed to determine the correct description of waste. Disposal should be only to a suitably licensed waste disposal site for that appropriate waste category. Enquiries regarding appropriately licensed sites should be directed to the Environment Agency’s Local office in Bodmin on 01208 78301.

The contractor will take measures to ensure that any liquid of a potential hazardous nature on site are controlled in accordance with COSHH Regulation and containers have an appropriate bund to contain any spillages and thus avoid contaminants from reaching water courses or groundwater.

Any excavation works below the water table, including any extensive site de-watering will require permission from the local Environment Agency office 01208 78301. The de-watering and disposal measures will be agreed with the Environment Agency in advance and all required licenses should be obtained prior to any works commencing.

Please note that this document is for guidance. There are occasions where alternative arrangements are necessary to take account of site-specific situations. Always seek clarification from the Environmental Protection Team, and/or Highways Department, and/or Planning & Regeneration Service before using this document, or submitting a Management Plan where required.