

## CONTROL OF POLLUTION AND NOISE FROM DEMOLITION AND CONSTRUCTION SITES

Welcome to the Plymouth City Council Code of Practice for Construction and Demolition Sites. No one can fail to miss the exciting re-development that is underway across Plymouth and we are fortunate that the City of Plymouth has a buoyant property market that contributes significantly to the local economy. Inevitably this brings some disruption and disturbance when vacant sites are developed or refurbishment takes place. It is important that disturbance to local residents and the environment is minimised during this process.

With this in mind the Council has developed a Code of Practice to provide advice to developers, contractors, residents and businesses on what standards we expect from those carrying out construction and demolition works.

### Introduction

At any one time there are many demolition, construction and refurbishment sites underway within Plymouth City. The work is essential to enable the city to maintain its status as a top class city in the southwest.

This Code of Practice (CoP) has been developed to make it easier for building contractors and developers to demolish and construct whilst complying with the law and hopefully creating minimum disturbance.

This document is intended as a guide to good practice but should not replace a good dialogue between developers, contractors and regulators. On-going discussion with the Council is actively encouraged throughout all stages of a project.

The Council prefers to regulate these sites on a voluntary and proactive basis and encourage all developments to accept the principles contained within this document. However should problems/complaints not be dealt with satisfactorily, the Council does have specific powers under the Control of Pollution Act 1974 and the Environmental Protection Act 1990 to deal with noise and environmental nuisance.

### Getting started

Before starting works we recommend that you seek advice from the Council's Environmental Protection and Monitoring (EP) Team and discuss proposed methods of working and measures to minimise disruption.

Contact names and numbers of appropriate site personnel should be provided to EP at the earliest opportunity.

You should identify any residential properties, nursing homes, schools or other sensitive premises close by which are likely to be affected by the works.

Good relations can be developed by keeping people informed of progress and by treating complaints fairly and rapidly. Prior to starting it is good practice to inform neighbours of:

- The start date
- The nature and duration of the project
- The main stages of the project including possible noisy sections
- Contact names and numbers of appropriate site personnel.

**Before any works start on site, including site clearance and any vegetation removal, a Notice Board shall be erected, at a publically visible point at the perimeter of the site, clearly identifying the developer's point of contact (Full name, email address, and phone number) who will respond promptly to any enquiries from neighbours regarding any aspect of the construction process, and to address any issues arising from any such enquiries. The Notice Board to be retained for this purpose during the construction phase of the development.**

The Council should always be informed in advance of any unusual or particularly noisy activities. If a project is likely to take a significant amount of time then it is useful to maintain regular communication with EP and site neighbours for example by newsletter or site notice.

### **Noise and vibration**

Noise is probably one of the greatest causes of complaint from demolition and construction sites. For this reason the Council has adopted a specific policy on acceptable hours of operation for all sites and we may also require you to keep within specified noise levels.

The Council's policy on hours of work is as follows:

- Monday to Friday: 8am to 6pm
- Saturday: 8.30am to 1pm
- No Sunday, Bank Holiday or Public Holiday working

Work may be permitted outside of these hours in exceptional circumstances and only by prior agreement with the Council and will be conditional on the contractor informing local residents in advance of the proposed activity.

There are industry codes of practice that we will expect you to follow and comply with:

- BS5228: Noise Control on Construction and Open Sites
  - Part 1 Code of Practice for Basic information and Procedures for Noise Control
  - Part 2 Guide to Noise Control Legislation for Building sites, including Road Construction and Maintenance

We expect you to take all reasonable steps to reduce noise as much as possible.

For your general guidance:

- Noisy plant and equipment should be sited as far as is practicable from noise-sensitive buildings,
- Throttle down or turn off machinery when not in use,
- Use modern, quiet and well-maintained equipment and fit effective exhaust silencers to vehicles and mechanical plant,
- Erect acoustic enclosures around essential, continuously running noisy equipment,
- Careful material handling such as lowering rather than dropping items,
- Considerate siting of loading/unloading areas,
- Controlling the opening of site gates,
- Erecting fencing or hoarding, where possible higher than the line of sight to neighbours,
- Avoiding unnecessary noise (such as shouting, loud radios or excessive revving of engines) by effective site management.

## Monitoring

On long term or potentially noisy projects you are advised to carry out a noise survey before works begin. This will be used to set acceptable noise levels.

Sound levels should be monitored using methods contained in Annex E of BS 5228:1997 Part 1. Measurements should be taken with a Class 1 Integrating Logging Sound Meter calibrated with a Class 1 Acoustic Calibrator. Laeq and Lmax F noise levels should be recorded together with a record of the noise events principally affecting noise level at the time of the monitoring.

If it is deemed necessary to carry out a noise survey it should be conducted by a suitably qualified noise consultant and be agreed with the Council.

Each site should be considered on its own individual merits.

The suitability of specific noise limits is highly dependant upon the individual site. The factors to be considered include:

- The characteristics of the potentially affected neighbours;
- Baseline ambient noise levels;
- The nature and duration of the works.

## Piling

The noise sensitivity of the area should be considered when determining the method of piling to be used. The Public Protection Service (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 should be used.

You should note that with regard to piling operations working hours may be restricted due to the levels of noise generated.

## Blasting

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.

## Dust and air pollution

Contractors on every site have a duty to adopt 'Best Practicable Means' to minimise dust nuisance arising from site activity. Dust nuisance occurs more readily during prolonged dry weather and especially in strong winds. Consequently, good site management includes the ability to respond quickly to such situations.

The following should be considered:

- Plant should be well maintained and measures taken to ensure that they are not left running for long periods when not in use,
- Stockpiling should be limited and be dampened down and covered,
- Vehicles carrying dusty materials should be sheeted,
- Regularly sweep and water spray hard standings,
- Wheel washing equipment should be provided at the site exit,
- Limit vehicle speeds over all unmade surfaces,
- Regular damping down of work-faces, loading operations, unsurfaced haul routes and verges,
- Screen buildings likely to be affected by dust.

The use of crushers on site should be carefully considered in terms of the potential to cause dust and nuisance to neighbours. Any crushing plant must be authorised under the Environmental Protection Act 1990.

In addition, where there is evidence of volatile or airborne materials or there is a risk of fumes affecting the local area, the contractor should conduct a programme of regular air monitoring in consultation with the Council.

Burning of materials on site is not permitted.

Special precautions must be taken if materials containing asbestos are encountered on site.

### **Lighting**

Site lighting must be positioned and directed to minimise nuisance to residents.

In the event that evening or night working has been expressly permitted by the Environmental Protection and Monitoring Team lighting for the works must be planned so as not to cause unnecessary nuisance to neighbouring residents.

### **Mud on the road**

This is a common source of complaint and potentially hazardous. You will need to ensure that the site and surrounding carriageways and footpaths are kept clean. Steps to reduce mud traffic include:

- Providing easily cleansable hard-standings for all vehicles leaving the site,
- Providing wheel washing facilities for vehicles leaving the site,
- Using a mechanical road sweeper to clean the site hard standing and any mud or debris deposited by site vehicles on roads or footpaths in the vicinity of the site.
- Adequately sheet lorries carrying waste material from site to prevent it from falling off on-route to disposal.

### **Pest control**

Pest problems are commonplace where site disturbance takes place. Because of the impact on neighbouring properties/land the Council requires the following:

- Contractors will be required to bait for rodent pests, prior to site disturbance and eradicate where infestation exists on site.
- The contractor should take all necessary steps to ensure that pests - rodents, birds, insects and plants are controlled at all times. This should include liaison with the Public Protection Service.

- Where poison is laid, it must comply with any relevant Health and Safety requirement and access should not be possible by children or non-target species.
- Preventative measures must also be taken such as the correct and satisfactory stopping and sealing of all disused drains and sewers.
- There shall be no accumulation of rubbish or putrescible material on site. All on-site messing/catering must pay strict attention to food delivery, handling, storage and disposal.
- It is advisable to establish if there are records of pests being present on site in the past.
- Records of all treatments should be recorded and available for inspection by Public Protection Service.

### **Contaminated land**

Development is increasingly being conducted on brownfield sites that are often contaminated. For any new development land contamination would have normally been identified in the planning phase of the project. The contractor should obtain and review copies of any site investigations that have been carried on the site.

You will need to satisfy yourself and the Council that a thorough assessment of potential risks to the following has been undertaken:

- Users of the site
- Workers during redevelopment
- Neighbours and members of the public
- The local environment
- Construction materials

Consideration must be given to the potential for wind blown dust on contaminated sites affecting neighbouring residents, this is particularly important when material is being stockpiled on site. Stockpiles must be appropriately managed to minimise dust.

Where contaminated material is being removed from site vehicles must be sheeted at all times.

If any contamination or ground gas is identified or suspected during the course of the works, the contractor should notify the Council immediately and undertake further specific investigations.

### **Waste management**

All wastes must be removed off site using a registered waste carrier and sent to sites authorised to receive it. Disposal must be in accordance with relevant legislation.

All waste documentation – Transfer Notes and Consignment Notes – must be completed and held on site.

The generation of waste on site can be minimised by:

- Reducing over-ordering and the correct storage of materials
- Reuse materials on site
- Recycling of materials

As of the 6 April 2008 it became a legal requirement for all new construction projects worth more than £300 000 (excluding VAT) to produce a Site Waste Management Plan.

The kind of information required includes:

- types of waste removed from the site
- identity of the person who removed the waste and their waste carrier registration number
- a description of the waste
- site that the waste was taken to
- environmental permit or exemption held by the site where the material is taken. For further information please visit the <http://www.netregs.org.uk/> website.

A copy of your Site Waste Management Plan should be submitted to:

Environmental Protection, Public Protection Service, Windsor House, Tavistock Road, Plymouth, PL6 5UF. Telephone: 01752 304147

We recommend that where there is a potential for a development to have an impact on the water environment that the Environment Agency document Works in, Near or Liable to Affect Watercourses: Pollution Prevention Guidance 5 is consulted, this document is available on the <https://www.gov.uk/government/organisations/environment-agency> website.

**CHECKLIST**

Do I know?

<input type="checkbox"/>	What hours can I work?
<input type="checkbox"/>	How much noise I can make?
<input type="checkbox"/>	If I am likely to create high levels of vibration
<input type="checkbox"/>	What dust problems I may cause and how to minimise them
<input type="checkbox"/>	What condition the machinery is in and does it comply with the law
<input type="checkbox"/>	If there is any contamination or hazardous materials on site
<input type="checkbox"/>	How to deal with them if there is
<input type="checkbox"/>	The neighbours and do they know what I am doing, when and for how long
<input type="checkbox"/>	A Notice Board is being displayed at the site identifying a point of contact for neighbour's enquiries
<input type="checkbox"/>	What permissions I need
<input type="checkbox"/>	Who can help me find out about any of the above
<input type="checkbox"/>	Do I need a Site Waste Management Plan for my project

If you do not know the answer to the last question please contact the Public Protection Service on 01752 304147.

## **APPENDIX I**

### **Useful contact information**

#### **Public Protection Service**

Tel: 01752 304147

Email: [public.protection@plymouth.gov.uk](mailto:public.protection@plymouth.gov.uk)

#### **Building Control**

Tel: 01752 304343

Email: [buildingcon@plymouth.gov.uk](mailto:buildingcon@plymouth.gov.uk)

#### **Planning Control**

Tel: 01752 304024 or 01752 304366

Email: [planningconsents@plymouth.gov.uk](mailto:planningconsents@plymouth.gov.uk)

#### **Health and Safety Executive**

Tel: 0845 3450055

Website: <http://www.hse.gov.uk>

#### **Environment Agency (general enquiries)**

Tel: 08708 506506

Email: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

#### **Environment Agency (emergencies)**

Tel: 0800 807060

#### **South West Water**

Tel: 0800 1691144

Website: <http://southwestwater.custhelp.com/app/answers/list>