

1. APPROPRIATE SITE MANAGEMENT PRACTICES

1.1 All site works will be carried out using “best practicable means” (BPM) in order to comply with relevant legislation under the Environmental Protection Act 1990 and the Control of Pollution Act 1974 to prevent statutory nuisance.

1.2 The contractor will ensure that any construction lighting is appropriate for Health and Safety requirements and not intrusive to residents or sensitive site fauna.

Prior to any works that may have environmental impacts, the relevant Statutory Authorities will be consulted.

Monitoring

1.3 Where local residents are likely to be affected, good practice working methods that minimise noise, dust, and air pollution impacts will be used at all times.

1.4 The effectiveness of all measures will be monitored frequently by the main contractor and Site Manager and reviewed at least weekly. Officers of the relevant Council departments may be consulted to ensure compliance with relevant legislation.

Publicity

1.5 There will be regular liaison with local residents who may be affected by construction works. Local residents will be informed of the nature of works, proposed hours of work and their expected duration.

1.6 Communication with local residents will include publicity, including the name and telephone number of a main contact. The contact person will be able to give further information to the caller and deal with any complaints or emergencies that may arise periodically. The Council's Environmental Health Department will be notified of any complaints made about the site.

1.7 A site notice board will be provided adjacent to the main site entrance at a point convenient for public access. This will display the following information:

- name, address and telephone number of the Contractor
- out-of-hours contact number in case of emergency
- description of site project
- timetable of works
- commitment to comply with the Council's Code of Practice for site works

- statement that any work at anti-social hours shall be agreed in advance with the Council and communicated to residents by way of a letter drop
- Council contact number in case of complaints

Operation

1.8 Where noise, dust and air pollution are likely to affect local residents the contractor shall be responsible for ensuring that:

- 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 will be properly silenced and meet statutory emission standards;
- effective methods of work are adopted to prevent dust from becoming airborne at source. As dust is harder to suppress once it has become airborne, careful consideration at the design stage will be required to deal with the enclosure of fixed plant, addition of moisture, or provision of effective exhaust ventilation and filtering;
- measures are taken to protect listed buildings as necessary; and
- prior to the commencement of site works, the workforce will be fully briefed on environmental standards on site through the provision of training. All staff will be made aware of the CEMP and Considerate Constructors Scheme and carry out work to the relevant standards.

2. NOISE MANAGEMENT AND CONTROL

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

Monday to Friday	08:00 hrs to 18:00 hrs
Saturday	08:00 hrs to 13:00 hrs
Saturday from 13:00 hrs	No work where noise is audible at the site boundary
Sunday & Bank Holiday	No work on site except by prior agreement with the local authority

- 2.2 All vehicles and plant arriving at and leaving the site shall comply with the same restrictions on hours. Vehicles shall not be parked off-site in the vicinity outside these hours except in properly designated 'lay up' parking places. The main contractor and Site Manager will ensure that instruction is given to all drivers including those delivering materials or removing waste to and from the site.
- 2.3 Any work outside of the stipulated hours above will only be carried out on prior approval of Stoke-on-Trent City Council Pollution Control Departments. Local residents will also be informed in advance of the proposed activity.

Agreeing Noise Controls in Advance

- 2.4 A Prior Consent agreement with Stoke-on-Trent City Council will be sought for any substantial or particularly noise-sensitive project. Under Section 61 of the Control of Pollution Act 1974 prior agreement can be reached on noise controls, which prevent the need for formal interventions, which may later be introduced without warning, with associated delays and costs. Noise problems as far as is practical will be anticipated in advance and control measures will be agreed with the local authority to prevent problems later.

Plant and Equipment

- 2.5 Noisy plant and equipment will be sited as far away as is practicable from sensitive receptors. The use of barriers, such as soil mounds, site huts, acoustic sheds and partitions to deflect noise away from noise sensitive areas will be employed wherever practicable. Rapid access to portable acoustic screens such as those specified in British Standard BS5228:1997:Part 1 will be provided.
- 2.6 Where necessary, site hoardings will be provided. These aid with egress of noise and dust. Hoarding may take the form of existing buildings, security hoards, or purpose built noise screens. Specific noise reduction hoarding is available where

noise impact is a particular issue, or effective hoarding can be constructed on site from two sheets of 12mmmm board filled with a sound absorbing material such Rockwool.

- 2.7 Effective screening/hoarding must be appropriately sited between the noise source and the potential receptor, contain no holes and ensure that the screening material overlaps with minimal gaps.
- 2.8 Wherever practicable all plant and machinery will be powered by mains electricity in preference to locally powered sources such as diesel generators. Hand tools will be electrically powered rather than diesel or petrol driven where practicable.
- 2.9 All plant and machinery will comply with relevant statutory and manufactures' requirements. Vehicles and plant used for the purpose of the works will be fitted with effective exhaust silencers, maintained in good and efficient working order and operated to minimise noise emissions.
- 2.10 Machinery in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum. Noise emitting equipment required to run continuously e.g. generators, will be housed in suitable noise reducing enclosures.
- 2.11 Where potentially noisy operations such as piling is required, the least intrusive method in terms of noise and vibration will be selected.
- 2.12 Only "sound reduced" compressors shall be used. Models will be fitted with properly lined and sealed acoustic covers that shall be kept closed whenever the machinery is in use.
- 2.13 Pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. Equipment that breaks concrete, brickwork or masonry by bending or by bursting shall be used in preference to percussive tools as far as practicable.
- 2.14 Where practicable rotary drills bursters actuated by hydraulic, chemical or electrical power will be used for excavating hard or extrusive materials.
- 2.15 Plant will be maintained in good working order so that extraneous noise from mechanical vibration, creaking and squeaking is kept to a minimum.
- 2.16 Care will be taken when loading or unloading vehicles, or moving materials etc to reduce noise impact.

3. DUST MANAGEMENT AND CONTROL

- 3.1 In assessing the need for dust control measures regard shall be paid to:
- the nature of works
 - proximity of dust sensitive receptors (e.g. houses, specific crops, utilities)
 - effects on the general public and road user
- 3.2 Where necessary methods of dust prevention will be agreed with the Pollution Control Department of Stoke-on-Trent City Council in advance of works starting on site.
- 3.3 A mains water supply will be available on site from commencement of works. Watering down of the area will be carried out whenever dry or windy conditions pose a risk of dust blowing off site, affecting neighbouring occupied properties.
- 3.4 The choice of plant and equipment and the method of work will reflect the necessity to employ “best practicable means” (BPM).
- 3.5 Where adequate dust control cannot be achieved by the choice of appropriate plant, equipment and work method the most common means of dust suppression using water and/or containment by screening and enclosure will be adopted.
- 3.6 Water suppression of dust will be employed for operations such as cutting or sandblasting of stone or concrete as well as in more general applications where dampening will prevent wind whipping of dust from stockpiles and operational areas of the site, or from demolition.
- 3.7 Where dust is likely to be a persistent problem water spray systems will be available from the commencement of works. The use of these systems will be applied in operations such as demolition and soil removal during construction.
- 3.8 Finely divided materials such as sand and cement products will be stored where practicable under cover or in sealed containers. In some circumstances screening or enclosure may be required in addition to water suppression.
- 3.9 As far as practical constraints will allow, obvious sources of dust such as spillages of finely divided materials will be removed using a wet cleaning technique.
- 3.10 The importance of cleaning will be applied to internal roads and the highway which may become coated with dust from other operations and can become a secondary source of dust emissions.

- 3.11 A speed limit will be applied to vehicles operating on the Site during dry conditions.
- 3.12 Easily cleaned hard-standing areas will be provided within the site for vehicles entering, parking and leaving.
- 3.13 Wheel washing facilities adjacent to the egress points used by vehicles leaving the site will be provided.
- 3.14 Personnel and mechanical road sweepers will be used to clean the hard-standing area and to clean any mud or debris deposited by works vehicles on internal roads and the public highway in the vicinity of the site.
- 3.15 All vehicles carrying potentially dusty materials (skips and removal vehicles) to or from the site will be required to be fully sheeted on the public highway. Watering of any rubble chutes shall be undertaken whenever necessary to prevent excessive dust emissions. Chutes will be fitted with a 'sock' enclosing the discharge into the skip or truck. Socks will be maintained in position at all times when the chutes are in use.
- 3.16 Any plant used for crushing of materials must have a permit, issued by the appropriate local authority under the Pollution Prevention and Control Regulations 2000 (prescribed processes). All works will be carried out in accordance with the conditions of such a permit. Plant used to recycle materials will require a permit/licence from the Environment Agency. The relevant Regulatory Authority will be notified prior to the equipment being brought on site.
- 3.17 Water bowsters will be provided for use in suppressing surface dust generated from unpaved roads or other sources during periods of dry weather, use of sprinklers and water carts, and re-vegetation of stockpiles will be applied where appropriate.
- 3.18 Materials and storage/stockpiling areas will be located away from sensitive locations, such as residential properties, as far as reasonably practicable. Stockpiles will be screened or bunded where practicable. Stockpiles of all potentially dusty materials shall be damped down or covered to prevent emissions of dust from the site. Stockpile sites will be planned, sited and profiled to minimise the potential for dust generation. Handling of material should be kept to a minimum and when deposited onto a stockpile it should be dropped from the minimum possible height.
- 3.19 Particularly dusty activities such as soil stripping will be carried out in suitable weather conditions when practical (i.e. when the ground is damp and during periods of low wind speed) to minimise dust impact on receptors.
- 3.20 Care will be taken to control dust arising from the waste or recycled materials being deposited, handled, processed and stored on the Site.

- 3.21 Monitoring of dust by means of a daily site walk-over will be carried out to inspect the perimeter and check for dust deposition on fencing and any trees close to the edge of the area of the site being worked on. A daily inspection of the local area will also be carried out to check for any evidence of excessive levels of dust deposition that may be a result of the construction site activities. This will confirm the effectiveness of adopted dust management procedures and allow any problems to be identified so that remedial action can be employed as necessary.
- 3.22 Operations will be monitored and if necessary stopped in particularly dry and windy weather conditions when the dust control measures are proving to be ineffective'.
- 3.23 Although dust will occur from site activities, this is likely to have a minimal and temporary impact on the surrounding environment if appropriate mitigation is applied. The use of best practice to control dust during construction activities is normally sufficient to avoid any unacceptable problems occurring. Provided the proposed dust management measures are properly implemented, dust will be controlled to an acceptable level.

4. CONTROL OF SMOKE AND EMISSIONS

- 4.1 Smoke can be considered to constitute a Statutory Nuisance under the Environmental Protection Act 1990 if it affects the occupiers of other properties. The emission of dark smoke from industrial or trading premises (including construction sites) constitutes an offence under the Clean Air Act 1993. The lighting of fires on site shall not be permitted and waste will be disposed of under the conditions set out in a Site Waste Management Plan (SWMP).
- 4.2 If timber has been confirmed diseased, burning of the material shall only occur after the local authority has been informed in writing and permission to burn on site has been granted.
- 4.3 All necessary precautions will be taken to prevent emissions of smoke and fumes from site plant / equipment or stored fuel oils. Plant will be well maintained and measures will be taken to ensure that it is shut down in intervening periods between work or throttled down to a minimum.

5. CONSTRUCTION LIGHTING

5.1 Where required, construction lighting will be provided. This can provide a deterrent to vandals and thieves and allow late/early working where authorised, but may also cause a nuisance to local residents and impact fauna. Therefore, when planning and designing a lighting compound the following must be considered:

- Keep lighting to the minimum brightness required;
- Direct lighting downwards where appropriate;
- Use of baffles if up lighting is unavoidable;
- Use of energy efficient lightning;
- Consult the site ecologist before any lighting is installed, to ensure minimum disturbance of local bat roosts

6. WASTE MANAGEMENT

- 6.1 A Site Waste Management Plan will be maintained throughout the works. All major waste streams that will be generated during the Contract will be identified including;
- green waste
 - construction waste, including;
 - spoil
 - demolition waste
 - asphalt or bitumen
 - concrete and metal
 - chemical and paints
 - office waste
 - kitchen waste
 - sewage effluent;
- 6.2 For each waste stream how and where the waste is to be reused, recycled, stockpiled or disposed of will be identified
- 6.3 Waste generated from site activities will be sorted and amounts estimated and recorded.
- 6.4 Where available, waste suitable for reuse or recycling will be reused or recycled.
- 6.5 Materials and products with recycled content will be proposed for the works wherever these are cost and performance competitive and they are environmentally preferable to the non-recycled alternative.
- 6.6 Waste oil will be sent to approved recyclers where appropriate.
- 6.7 Waste and containers not able to be recycled will be disposed of at a licensed landfill site.
- 6.8 No construction waste material will be left on site once the site works have been completed.
- 6.9 The site will be left in a clean and tidy state on completion of the site works.
- 6.10 How the waste will be transported between the site and point of reuse, recycling, stockpiling, treating or disposal and who will be responsible will be identified.