



NATIONAL MUSEUMS LIVERPOOL

SAFETY GUIDELINES FOR CONTRACTORS

Revised by
Health and Safety Section 2015

CONTENTS

1.	Introduction.....	2
2.	Contractors Employees and Vehicles.....	2
3.	Abrasive Wheels.....	3
4.	Asbestos.....	3
5.	Cartridge Tools.....	3
6.	Vibrating Tools Regulations	4
7.	Confined Spaces.....	4
8.	Drilling Operations.....	4
9.	Demolition.....	5
10.	Excavations.....	5
11.	Electrical Equipment (Portable).....	6
12.	Fire Precautions.....	6
13.	Housekeeping.....	6
14.	Lifting Appliances and Lifting Gear.....	7
15.	Liquid Petroleum Gas Portable Cylinders.....	7
16.	Overhead Power Lines.....	7
17.	Plant and Machinery.....	7
18.	Permit to Work.....	8
19.	Protective Equipment.....	8
20.	Reporting Accidents.....	9
21.	Toxic/Hazardous Materials and Substances.....	9
22.	Underground Services.....	9
23.	Welding and Flame Cutting.....	10
24.	Work at Heights.....	10
25.	Work Sites (Protection of Employees and Members of The Public).....	11
26.	Written Method Statements (Safe Working).....	11

1. Introduction

National Museums Liverpool (hereafter referred to as NML) will make every effort to identify and utilise competent contractors, in accordance with its statutory obligations under the Health and Safety at Work Act (1974) and the Construction (Design and Management) Regulations 2015.

It is important that contractors are aware of the importance NML places on safe working procedures. The purpose of this booklet is to ensure:

- that NML and its contractors discharge their respective statutory obligations;
- that the health and safety of members of the public, employees and contractors employees is ensured;
- that safe access and egress is maintained;
- that safe working methods are established.

These guidelines have been prepared as a code of practice so that contractors can adopt safe working methods and comply with various statutory requirements.

However it must not be assumed that the contents of this code of practice covers every contingency or hazard, and observance of the rules, does not relieve contractors of their obligations or any obligations under the conditions of Contract.

Contractors must ensure that these guidelines are made known to and understood by both their employees and sub-contractors.

2. Contractors Employees and Vehicles

The contractor shall ensure that every person employed is sufficiently qualified, competent and supervised with regard to both the provisions of the contract and all relevant statutory provisions / duties. Additionally, evidence of employee competence may be requested, where appropriate, for:

- operation of hydraulic platform /MWEF/ lorry mounted crane;
- use of cable avoidance / detection tools;
- abrasive wheels (mounting / dressing wheels);
- scaffold erection;
- other specific tasks as required.

The contractor must provide all employees engaged under the contract with an appropriate form of identification, to be approved by NML, containing the following details:

- photograph of operative;
- operatives name;
- contractors name, address and telephone number.

The contractors shall ensure that identification is visible and worn at all times during the contract. Contractors must also comply with NML's signing-in procedures, ensuring that appropriate identification is provided when signing into a building and that all passes provided are duly returned upon leaving the building. Operatives who fail to wear identification will be removed from site.

All vehicles used by the contractor in the course of works must display the company name and telephone number.

It will be the responsibility of the contractor to ensure that all sub-contractors comply with these requirements.

3. Abrasive Wheels

All grinding machines used by contractors must comply with the requirements of the Provision and Use of Work Equipment Regulations 1998. Any person who mounts or dresses a wheel must be properly trained in accordance with this legislation. The names of all such persons must be recorded in the register for the purposes of the regulations (F2346). In addition a certificate of competence must be issued to every such trained person. The register and certificate of competence must be available for inspection by appointed NML representatives.

All users of grinding machines must wear the necessary Personal Protective Equipment including eye protection, ear defenders and respiratory protective equipment. On those occasions in which grinding machines are used extensively, for example to remove large amounts of pointing, NML may require the contractor to provide dedicated local exhaust ventilation.

Should the use of abrasive wheels be required, the contractor must advise the Estate Management Department as a permit to work may be required.

4. Asbestos

Any contractor visiting NML's sites, must contact the building manager on arrival, in order to inspect the on-site asbestos register.

Should any contractor be unsure of the nature of any fibrous products in the vicinity of the work, they must seek guidance from the Estate Management Department.

Should any contractor disturb any asbestos products, they should **immediately isolate the area** and contact the building manager/Estate Management Department.

No contractor shall undertake any work involving asbestos removal, management or treatment unless they hold a current licence under the Control of Asbestos Regulations 2012. Prior to the commencement of treatment works the relevant **Licensed Contractor** will be provided with a bulk analysis report, completed by an analysis laboratory, which holds UKAS accreditation.

Contractors will be required to complete a Risk Assessment and Method Statement Form, for the consideration of NML's Snr Health and Safety Officer prior to the commencement of work. All air monitoring associated with the Asbestos treatment work shall be undertaken by a UKAS accredited laboratory, appointed by the Authority.

5. Cartridge Tools

Cartridge tools may only be used with prior approval from the Estate Management Department.

Cartridge tools can only be used for specialist applications and only low power indirect acting type tools must be used.

6. Vibrating Tools Regulations

Control of Noise

The Control of Noise at Work Regulations 2005 and Control of Vibration at Work Regulations 2005. Current noise action levels are **80db(A)**, **85db(A)** and **87db(A)** respectively. This means that employers must ensure that ear protection is introduced. If the noise reaches the action levels stated in the regulation. Noise surveys must be carried out by a competent person to ensure that workshop noise is kept to the lowest level as far as is reasonably practicable. This will include an examination of machinery, tools and equipment to determine whether or not noise levels can effectively be reduced by possible modifications. For example, more regular maintenance, replacing with new, noise dampening, metal cutting blades, noise attenuation of walls/ceilings, etc. If ear protection needs to be acknowledged as a last resort mechanism, the reduced action level criteria in bold above, must now apply.

Control of Vibration

Contractors must need to ensure that the levels of vibration from their equipment are reduced to the lowest level possible when on site. Contractors, when planning operations, must adopt an hierarchy of control measures in an effort to reduce the amount of employee exposure to vibrating tools. For example, a driver operated mechanical excavator/breaker could be used to break into concrete slabs instead of a hand operated pneumatic drill. Where possible and practicable, hand tools should be considered rather than vibrating ones.

If vibrating tools must be used, their use must be limited according to the levels of vibration that they produce. The Health and Safety Executive (HSE) have imposed an **exposure limit value (ELV)** of 5 metres per second squared (5m^2) on all vibrating tools. An **exposure action limit value (EAV)** of (2.5m^2) has also been set by HSE. Immediate action must be taken if the level of vibration reaches this level. As a "rule of thumb", a pneumatic drill (breaker) could reach its **EAV** after a **few minutes** use. Grinders and sanders may reach that level in approximately a **half hour!**

The Control of Vibration at Work Regulations 2005 imposes a duty on contractors to:

Assess
Control
Check

In order to do this, a risk assessment needs to be prepared to include the use of appropriate tools, possible alternative methods to reduce employee vibration, minimum exposure limits set on all vibrating tools and health surveillance where appropriate on noise and vibration exposure.

7. Confined Spaces

Work in confined spaces shall be subject to the requirements as laid down in the 'Safe Working in Sewers and at Sewage Works' Health and Safety Guidelines No. 2 (issued by 'The National Joint Health and Safety Committee for the Water Service') and other Codes of Practice, Guidance Notes and British Standards appertaining to the particular operation.

No contractor's employees may enter manholes, sewers, tanks or other confined spaces without the appropriate certificated training, the necessary tests being carried out and the correct safety rescue equipment being provided for such operations.

8. Drilling Operations

Contractors must not **under any circumstances** commence drilling operations without carrying out a thorough survey of the area in question. The survey **must** include:

- a thorough check for hidden electrical, gas, water etc pipes using a wall scanning device;
- a check on the fabric of the wall to be drilled (dust emissions must be kept to an absolute minimum during drilling operations);

9. Demolition

All demolition work must conform with the Construction Design and Management Regulations 2015.

All necessary steps must be taken to warn, and prevent the approach of, persons who may be endangered by the operations.

A detailed method statement specific to the operation must be provided and approved. Additional special precautions will apply should the demolition involve handling any material suspected of containing asbestos or any other hazardous material.

10. Excavations

All excavation work must be carried out in compliance with the Construction Design and Management regulation 2015. Before work commences, NML shall provide the contractor with any plans in its possession detailing the presence of underground services. On those occasions in which plans are not in the possession of NML the contractor will be directed to the relevant Statutory Undertaking.

The Contractor shall ensure that excavation work, carried out in the vicinity of underground services conforms at all times to the requirements of the regulation. The contractor must ensure that there are no buried services in the vicinity of the area to be excavated. Safe working will be established through a combination of the use of service plans and / or the use of cable detection / avoidance tools and safe digging techniques.

Edge protection must be erected around excavations and all necessary support work for excavations beyond 1.2m in depth. All excavations must be inspected by a competent person every day and, where an excavation is deeper than 1.2m and is open for 7 days, it must be examined and its condition recorded in the register for the purpose.

11. Electrical Equipment (Portable)

Contractors using portable electrical equipment shall ensure it operates at a voltage not greater than 110 volts, centre tapped to earth.

All electrical equipment must be safe to use and comply with the requirements of 'The Electricity at Work Regulations 1989'. The equipment must be isolated from the supply at the end of each working period (e.g. lunch times, evening etc).

All portable / electrical equipment must be tested and maintained in accordance with the guidance contained in the H.S.E. publication in IND(G)107L: Maintaining Portable and Transportable Electrical Equipment.

12. Fire Precautions

The contractor must take all necessary precautions to prevent personal injury, death and damage to the works or other property from fire. Comply with Joint Code of Practice 'Fire Prevention on Construction Sites', published by the Building Employers Confederation, the Loss Prevention Council and the National Contractors' Group.

The contractor, his employees and all sub-contractors are to comply with the 'Standard Fire Precautions for Contractors Engaged on Crown Works' whilst carrying out the works. No naked flames, welding or spark producing apparatus, equipment or processes are to be used to carry out operations of work without prior specific authority from the employer.

Smoking **will not** be permitted onsite or in the compound.

The contractor must familiarise themselves with NML's evacuation procedures and ensure that established fire routes are maintained. Any work which requires alterations to existing fire routes or the disconnection of any part of an active fire alarm system requires the prior permission of the Estate Management Department.

All forms of heating and lighting in cabins provided by the contractor must be installed and maintained so as not to present a fire or health risk. The contractor shall equip every cabin used as an office or mess room with a suitable fire extinguisher. A reasonable standard of cleanliness must be maintained in and around these places and all fire exits must be kept clear of obstructions.

Contractors working in occupied premises shall ensure established escape routes for employees and the public are maintained. Where work requires alterations to existing escape routes or disconnection of any part of an active fire alarm system NML's Snr Health and Safety Officer must be informed prior to work commencing.

All highly flammable liquids / materials must be stored in accordance with statutory regulations.

13. Housekeeping

Contractors must keep their work areas clean and not allow rubbish or scrap, etc, to accumulate. The working area must be left in a tidy and safe condition at all times.

Particular attention shall be paid to stacked materials.

14. Lifting Appliances and Lifting Gear

Contractors shall ensure that all lifting appliances and lifting gear are accompanied by a current test certificate, a mandatory examination and inspection documentation.

Test certificate and inspection registers must be available for inspection by the appointed NML representatives.

15. Liquid Petroleum Gas Portable Cylinders

All LPG cylinders not in use must be stored in a compound **not less** than 3m from any building and stored in an upright position. The compound **must be divided** to separate full cylinders from empty ones and be clearly marked Liquid Petroleum Gas – Highly Flammable – No Smoking. Oxygen cylinders must not be stored alongside LPG and it is prohibited to keep additional or unnecessary cylinders at the workplace including empty ones.

Suitable fire extinguishers (CO₂ or dry powder types) must be provided in the storage area and in the vicinity of the workplace.

Tar boilers, heaters, melting torches and like appliances, must be fitted with not less than 4.57m of armoured hose and there must never be less than 3.04m between the cylinder and the appliance. (Heat of any description must never be applied to any LPG cylinder). Tar boilers must never be left unattended.

No 'Hot Work' may be undertaken on a flat roof above an occupied room and all access and egress points must be protected with a suitable canopy to protect persons entering and leaving premises.

The dangers of inadequate ventilation cannot be over-emphasised particularly where cookers, heaters etc, are used in offices, mess cabins. Do not block up ventilators.

16. Overhead Power Lines

NML will undertake to provide contractors with information about the presence of overhead power lines in the immediate vicinity of the work location.

If a work task requires the contractor to bring plant, vehicles or equipment within 9m of lines on wooden poles and 15m of lines on steel pylons, the contractor must contact the owner of the lines in order to agree a method of work and appropriate precautions.

Contractors working in the vicinity of overhead power cables must consult the owner of the lines (usually the electricity supplier) before work commences, in order that the proposed work can be discussed and the lines diverted, made dead or other precautions taken.

All such work shall be subject to the requirements detailed in H.S.E. Guidance Note G.S.6: Avoidance of Overhead Electric Lines, including the erection of timber or non-conductive goal posts, warning signs etc.

17. Plant and Machinery

In accordance with the Provision and Use of Work Equipment Regulations 1998 the contractor shall ensure that all plant / machinery / equipment is of good mechanical construction, fit for the purpose in hand, properly maintained and all necessary inspections carried out.

NML shall request sight of records of test, maintenance and examination for certain safety critical items of equipment, including:

- air monitoring equipment;
- cable detection / avoidance tools;
- negative pressure units.

All plant / machinery / equipment **must** be operated by a **competent person** who must ensure that no unauthorised persons are allowed to operate the plant / machinery. Evidence of machine competency must be provided on request.

18. Permit to Work

Whenever there is a need to control a particularly hazardous process, or in response to a specific statutory requirement, the contractor will be required to implement a permit to work system. Processes which will require a permit to work system to be implemented will include:

- confined space entry;
- boiler flue / furnace operations;
- hot work;
- working near water;
- abrasive wheels;
- electrical operations (as advised).

19. Protective Equipment

The contractor shall ensure that suitable Personal Protective Equipment (PPE) is issued and its use enforced in accordance with the requirements of the Personal Protective Equipment at Work Regulations (1992).

It is the responsibility of the contractor to ensure his employees are provided with all necessary personal protective equipment. Contractor's employees who fail to wear required personal protective equipment will be removed from site.

NML will notify the contractor of those sites which, due to head injuries being reasonably foreseeable, have been designated as 'hard hat' sites. The contractor shall ensure that safety helmets are issued to and worn by his employees, sub-contractors and visitors, as required by the Construction (Head Protection) Regulations 1989.

20. Reporting Accidents

The contractor shall notify NML of all accidents to its employees, arising from the contract that are reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995.

All accidents involving members of the public, arising from the contract, shall be reported to NML by the contractor.

An investigation must be carried out by the contractor and a copy of his report forwarded to NML's Snr Health and Safety Officer.

21. Toxic / Hazardous Materials and Substances

Contractors using toxic / hazardous materials or substances shall ensure that they provide NML with a copy of a Risk Assessment prior to use, in accordance with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (as amended). Particular attention will be paid to the risks to health of staff and members of the public.

In some cases, such as extensive proprietary wood treatments and Damp Proof Courses, NML may also request a detailed method statement prior to the commencement of work.

Contractors shall ensure that all their employees are familiar with the C.O.S.H.H. assessment for any hazardous materials or substances they are using, including the identified control measures.

22. Underground Services

When undertaking excavations, in areas where underground services may be present, NML will endeavour to provide the contractor with plans indicating the presence of the underground surfaces, where these are held. On those occasions in which service plans are not held by NML, the contractor will be directed to the appropriate statutory body.

Notwithstanding the availability of service plans, the contractor must ensure that safe digging and safe working methods, including the use of cable detection and avoidance tools, are implemented in accordance with HS(G)47: Avoiding Danger from Underground Services.

The contractor shall ensure that a written record of the test and calibration is maintained, and available, for all Cable Avoidance Tools.

The contractor shall ensure that all users of Cable Avoidance / Detection Tools have been trained and certified in their use.

23. Welding and Flame Cutting

Contractors intending to use oxy-acetylene or electric welding or cutting plant shall discuss the fire precautions with the occupier of the premises and / or the appointed NML representative prior to the issue of a permit to work. Particular attention must be given to the following:

- the immediate work area must be segregated to the greatest extent practicable by non combustible screens;
- the immediate work area must be adequately cleaned and freed from combustible material before work commences;
- work in any enclosed building or structure shall require the presence of an additional employee whose duty shall be to guard against the outbreak of fire;
- adequate and suitable means of extinguishing fire shall be readily available;
- a **thorough examination** of the work area **shall be carried out** at the end of **each** working period;
- all burning / welding gear should only be retained at the workplace for the duration of its actual use. All cylinders must be secured or fixed in purpose built trolleys and flashback arrestors fitted between the regulator and hose;
- prior to 'burning off' existing metal work built into or projecting through walls or partitions an examination must be carried out to establish that the other end of the metal is not in close proximity to combustible material which may be ignited by the conduction of heat.

24. Work at Heights

All aluminium tower scaffolds used by the contractor must be of sound construction and erected by a competent person who has completed a tower scaffolding course (PASMA) or in the case of tube and fitting scaffolds, a competent scaffold contractor (Registered Scaffolder: CITB).

A Hand-Over Certificate must be obtained for all tube and fitting scaffolds, a copy of which must be available for inspection by NML's Health and Safety Officer.

Scaffolding inspections must be carried out as required, every seven days and after adverse weather conditions, the results of which must be recorded in the Scaffold Register This register must be available for inspection by the appointed NML representative.

The new Work at Height Regulations requires a suitable and sufficient assessment of the risk at lower levels (under 2 metres) as well as at higher levels. Extending ladders must only be used as a last resort when all safer alternatives have been discounted for reasons of practicality. All ladders must be subjected to a formal recorded annual inspection and must also be inspected on every occasion of use.

A ladder must be set on a firm level base and secured, usually by lashing, at or near its upper resting place. If it cannot be lashed, the ladder may be footed (permissible only if ladder is 3m or less) or a suitable proprietary ladder safety device used.

Ladders must show evidence of recent inspection **before** being allowed on site. They must be appropriate to the height of working. **Under No Circumstances** must contractors borrow ladders (or any other access equipment) from NML.

When undertaking work on a pitched roof, other than for a short duration, the contractor shall ensure that suitable edge protection, consisting of a guardrail and toe board is provided. An intermediate guardrail is required if there is an unprotected gap exceeding 470mm between guardrail and toe board. Short duration work, such as TV mast erection or the replacement of odd tiles, can be carried out by the use of a

suitable roof ladder with a properly fitted ridge iron. In this event, a harness (to EN361) and Lanyard (EN358) **must** be used, firmly attached to a secure anchorage point.

Mobile elevated work platforms (M.E.W.P) must be tested annually under L.O.L.E.R. 1998. The operatives must hold a IPAF license and safety harnesses must be worn when working inside the M.E.W.P. The Work at Height Regulations 2005 requires a written agreed emergency rescue procedure for M.E.W.P operatives.

Crawling ladders / crawling boards must be provided for safe access and egress to the work area on the roof except where the handhold and foothold afforded by the battens or similar members of the structure afford safe access and egress.

Where 'mansafe' systems are provided by NML, contractors must familiarise themselves in the means of operation and use harness / lanyard systems as previously described.

25. Work Sites (Protection of Employees and Members of the Public)

During works, safe access and egress to and from buildings adjacent to the immediate work area must always be provided. Where there is a danger that persons may be struck by falling objects or the fall of stacked materials, suitable preventative measures **must be provided** i.e. barriers, signs, chocks etc.

The contractor shall ensure that if the entrance is obstructed during work, that suitable alternative provision is made for members of the public, with particular attention paid to the needs of the elderly and persons with mobility problems.

The contractor **must ensure** that adequate segregation between the works and areas occupied by members of the public/staff is maintained **at all times**. Under no circumstances should unauthorised persons be able to gain access to the work site.

26. Written Method Statements (Safe Working)

The contractor will be expected to provide a detailed method statement, prior to the commencement of work, for any of the following operations:

- asbestos works;
- crane operations;
- demolition;
- laser equipment / devices;
- working at height;
- excavations.

Additionally, method statements may be requested for alternative operations considered to be of a hazardous nature.

The method statement should be submitted to the Estate Management Department for approval by NML's Snr Health and Safety Officer.

ACKNOWLEDGEMENT OF SAFETY GUIDELINES ISSUE

STATEMENT OF CONTRACTOR

I, the undersigned, acknowledge issue of NML's ***Safety Guidelines for Contractors*** booklet.

I also confirm, that myself, my employees (or sub-contractors where required) will **strictly adhere** to the recommended procedures contained within the aforementioned booklet.

Signed:

Print Name:

Name of Company:

Address:

.....

Date:

!!! IMPORTANT !!!

If you have any medical conditions or are on any medication, please make us aware by stating below: