

# WORKING ON CRAFT IN DRY DOCKS

WHAT YOU SHOULD KNOW



# HAZARD WARNINGS



**Toxic or Very Toxic**



**Corrosive**



**Oxidising**



**Flammable or  
Highly Flammable**



**Harmful or Irritant**



**Biological**



**Hazardous to  
the Environment**

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**Working on Craft in Dry docks**

Thank you for taking the time to pick up a copy of this guidance.

The content is provided to assist you to plan your works to minimise the risk of an incident occurring during your project.

If you do not wish to carry out the work yourself or feel you cannot meet the requirements of the guidance there are many organisations adjacent to our waterways that can plan and carry out the works on your behalf.

If you would like further information please contact the local waterway office for more details.

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# INTRODUCTION

British Waterways has a number of dry dock facilities around the country that can be hired by boaters to carry out repairs or maintenance to their craft.

All of these facilities are classed as workplaces. That means you should take care to minimise the effect your work may have on yourself and on others.

This guidance aims to help you make the best use of these facilities and to minimise the risk of an accident occurring whilst using the dry dock. It covers common issues that may be encountered and the procedure to follow to minimise risk. The content is provided as general guidance only, it does not aim to cover all activities or problems that may be encountered by the hirer, only an overview to assist planning.

**Please remember it is the responsibility of every individual carrying out work in the dry dock to assess the risks associated with their activities. As a hirer/ user of this dock it is your responsibility to carry out such a risk assessment and to ensure all necessary precautionary measures are in place for your activities.**

## **Young persons in the work place.**

To minimise the risk to young people we request that children under the age of 16 are not permitted to enter the dry dock area.

## **Before starting work**

Before your boat is placed in the dry dock you must provide us with details of the work you plan to carry out and a timetable for its completion.

To make the job easier a simple form is attached to this guidance. You will need a special permit from us before you can carry out certain activities. These are classified as controlled work activities. These include grit blasting, the removal and application of certain paint systems, welding etc. Please get advice from the local BW representative on these requirements.

If they are not available or unable to help, further assistance and guidance is available through the local BW office.

## **Placement and chocking of craft**

When your craft is placed in the dry dock it should be stored with sufficient space to allow adequate room for the proposed works. It should only be chocked using suitable materials, cradles and purpose-made struts to ensure the stability of the craft and the safety of those working in the area. Once safely positioned chocks should not be removed or repositioned.

**Craft on British Waterways property must not be chocked using old oil drums, scrap timber, bricks and blocks or other such materials. If you fail to comply with this requirement we reserve the right to remove your craft from the dry dock.**

## **Insurance**

**It is the responsibility of all contractors to ensure that sufficient insurance cover is in place to cover loss or damage to the craft and any claims for injury or damage to third parties or their property caused by the works. It is also strongly advised that owners carrying out works should hold suitable insurance for their works and possible third party claims.**

# GENERAL GUIDANCE ON WORKPLACE SAFETY

## Health welfare and hygiene

To protect yourself and others from illness keep your work area as clean and tidy as possible. Before starting work, find out where any welfare facilities are located. During work take regular breaks from intense or stressful operations. Use barrier creams before starting work and wash your hands and any other exposed areas with clean water before leaving. Please note, at many locations, welfare facilities, first aid equipment and cleaning materials will not be provided and therefore, you must provide your own.

## Smoking

British Waterways do not permit smoking in the workplace. Therefore we ask that you do not smoke in the dry dock area.

## Protective clothing and equipment

When carrying out some work tasks you will need to wear protective clothing or equipment. To ensure it is suitable you must familiarise yourself with the safety requirements of each task and/or seek advice from suppliers. The local BW office or representative will give you advice on local suppliers of protective clothing and equipment who will give you advice on its use.

**Remember that anyone in the area who could be affected by the works must be protected, not just those carrying out the task.**

## Hazardous substances

Should be kept in their original containers. Where this is not possible, you should clearly label the substitute containers. They should never be stored in food or drink containers.

When using hazardous substances, ensure you read and understand the instructions and use all appropriate controls to minimise harmful effects.

Remember that materials such as lead/anti fouling paints and gel coat residue are hazardous wastes and should be handled and disposed of accordingly.

## Asbestos

Some older craft may have asbestos present in exhaust insulation, thermal insulation or exhaust gaskets.

Extreme care should be taken where the presence of asbestos is suspected especially where it may be disturbed during works.

**Removal of asbestos must only be carried out by licensed contractors and must only be removed from craft on our property with written permission.**

## Manual handling – lifting and carrying

Severe injuries can result from poorly planned and executed manual lifting.

Before carrying out any manual lifting consider the following:

### When assessing the lift consider:

- Using lifting/carrying aids such as trolleys or sack barrows
- Making the load smaller/lighter to lift
- Changing the system of work to reduce the effort required
- Changing the layout of the area or way of working to improve efficiency.

### Before lifting and carrying you must ask yourself:

- Is the lift within my limits?
- Can I avoid lifting where there is a risk of injury?

**Always avoid manual lifting if a mechanical alternative is available.**

When Lifting

- Stop and think – plan the lift. Do you need help? If so, seek assistance.

# 1

## Mechanical lifting equipment

If you decide you need to use mechanical lifting equipment its use must be agreed with us.

All mechanical lifting operations are subject to strict regulation. The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) require all lifts to be planned and executed by competent persons. If you need to utilise mechanical lifting as part of your works it must be thoroughly planned with sufficient notice given for us to consider the safety implications.

It is also important to remember that any lifting equipment used in the workplace must be suitable for the purpose and maintained in good condition.

## Slips, trips and falls

Slips, trips and falls are the most common type of accidents in the workplace. To minimise the risk to you and those working with or near you consider the potential hazards in the table below as part of your risk assessment.

Slips	Trips
Spills and splashes of liquids and solids	Uneven surfaces
Wet floors/Unsuitable footwear	Holes and cracks
Rain, sleet, snow, ice	Changes in levels, e.g. ramps, steps, stairs
Floor surface	Cables, leads and hoses across walkways
Powder/dusty floor	Obstructions
Sloping surfaces	Low-level fixtures and fittings
Additional Factors	Additional Factors
Badly located walkways	Poor or unsuitable lighting
Poorly maintained workspace	Moving goods, lifting, carrying
Rushing around	Distractions, fatigue
Effects of Alcohol	

Once you have identified potential hazards of your operation you must apply good housekeeping to minimise the risk of slips and trips.

## Working alone

If your project involves you working alone please consider the following before starting work:

- Is safe access to and from your boat possible?
- Does the work or the location present an increased risk to you whilst working alone. e.g. are you going to carry out hazardous activities such as welding, removing old paint or using materials that could release gases or produce noxious vapours?
- Can all ladders, trestles, work equipment and materials be handled safely by one person?
- Does someone know where you are in case of accident/emergency?
- Is there an agreed method of communication with others should an accident happen?

## If in doubt seek help before starting work.

## Shared workspace

When working near to others, please ensure that your actions or failings do not affect them.

## Please:

- Carry out a risk assessment of your activities, to identify the hazards of your work and possible affects on others, a simple form is provided for this purpose
- Take all necessary precautions to prevent harmful effects that may result in accidents or ill health. E.g. when you are welding, someone else may be painting or handling flammable materials.

## If in doubt seek advice

## Accident reporting

If you are unfortunate enough to have an accident during your works, no matter how small you must report it to us.

We record all accidents and near misses and use the information to minimise the chance of further incidents.

## Reporting your misfortune could save someone else from injury.

## SPECIAL GUIDANCE FOR DRY DOCKS

### On Arrival at the dry dock

On arrival at the dry dock the BW representative who meets you will brief you on what you should do in the case of an emergency, what safety equipment is provided and who to report any problems to.

They will ask you to walk round the dry dock to familiarise yourself with:

- Dock edge fencing
- Any information boards
- Official access points and or fire exits
- The location of any fire fighting equipment
- The position of other safety equipment such as life buoys or throw lines, emergency stops or isolators.

### Access to the dry dock

When entering or leaving the dry dock please only use the official access points provided. These will have been pointed out to you at the hand over stage. If special access is required please get permission from BW staff.

### Perimeter fencing

When you arrive you will note that the dock edges are fenced to restrict access. The BW representative who meets you will brief you on what fencing must remain in place for safety and who to report any problems to. You will be told what to do if you require additional access to your craft such as by gangways. During your walk round the dock you will be asked to inspect the fencing and to familiarise yourself with the terms used for the fence components. The type of fencing will vary from dock to dock with chains and metal stanchions the commonest form of protection. The fencing may also be fitted with protective timbers at ground level (toe boards) to stop rubbish or materials falling into the dock.

Where it is necessary to remove fencing or chains i.e. to access a boat from the land via a gangway or from a platform, the access must have the prior agreement of BW and must meet dry dock safety standards. This means handrails and toe boards should be fitted on all open sides where there is a risk of persons falling from height or where tools/equipment could fall on anyone working below.

When work is not being carried out the fencing must be put back in its original position to provide perimeter protection.

### Working at height

When working close to unfenced edges<sup>1</sup> or at a height of over two metres (6ft 6ins), a safe working platform should be erected and maintained to prevent the fall of workers, materials or equipment.

However, if this is not possible, other methods of protection should be used. For example, safety harnesses are commercially available and should be considered where safe working platforms are not feasible.

Please remember any person wearing a safety harness must be competent in its use and maintenance.

When using ladders to gain access to your craft, they must be secured in place and be at the correct angle, 1 metre out for every 4 metres of height. Where ladders are used they must be in good condition, suitable for the job and extend at least 1 metre above the deck or platform level.

**<sup>1</sup>This includes any unfenced decks, or top of your boat where work is to be carried out at height.**

### **Fire precautions -**

#### **Good housekeeping**

Many of the activities carried out in the dry dock can increase the chances of fire. To minimise risks please follow this advice:

- Think of ways to minimise the risk of fire when planning your work
- Always replace flammable and highly flammable materials with less flammable substitutes
- Minimise the quantities of combustible, flammable and highly flammable materials such as paper, rags, paints, petrol and thinners. Store them in suitable fire retardant stores or under fire retardant blankets out of direct sunlight
- Remember where flammable vapours exist, electrical equipment including battery operated tools could ignite the vapour.
- Remove all flammable waste materials from site at the end of each working day and dispose of it in accordance with manufacturer's recommendations.

If a fire does start, raise the alarm and get everyone out of the dry dock,

**Do not** try to put the fire out unless you are trained to do so and can manage the risks. Once you are safe ring the emergency services, provide them with the location, the details of fire and any other information that is requested. Please do not re-enter the dry dock until it has been made safe to do so.

#### **Confined spaces**

All dry docks within BW are classified as confined spaces. This means that the dock may be susceptible to a build up of flammable or noxious gases or a lack of oxygen.

In addition, depending on the work to be carried out, the vessel you are working on could also be classified as a confined space and susceptible to these effects.

Under work conditions there is the possibility that anyone in the confined space could be:

- Overcome by gas, fumes, vapours or lack of oxygen
- Drowned by water or free-flowing solids i.e. silt.
- Injured due to fire or explosion
- Overcome by high temperature

It is essential that the potential hazards associated with each confined space are fully appreciated, and that the appropriate planning and preparation for the work is undertaken.

In order to prevent accidents, work in confined spaces must be thoroughly planned. You must give us advance notice of all works to be carried out in the dry dock. When we consider your application we may ask you to carry out gas monitoring before and during your works.

**We recognise that you may not be able to assess all the risks of working in confined spaces. If you are unsure you are welcome to ask our advice.**

#### **Selection of tools & equipment**

Dry dock areas have special hazards such as wet or damp atmospheres and slippery surfaces. All tools and equipment should be selected for their suitability for the job in the surroundings they are to be used. Before use check all your tools and equipment to ensure they are in a suitable condition to carry out the task safely.

### **Using electricity and electric tools**

To minimise the risk to users, we only provide 110volt electricity supplies in our dry docks. If you plan to use electrical equipment powered by a generator only use the 110v supply and equipment with Centre Tapped Earth (CTE). Even better would be to use battery-powered tools.

If your work requires specialist electrical, air or hydraulic equipment, you must get permission to use it from our representative prior to use.

### **Welding and cutting**

Welding and cutting are two of the most hazardous procedures carried out in dry docks and should only be undertaken by competent, experienced people who can complete the work safely.

You will require permission from us before carrying out welding or cutting.

### **Before using welding equipment check:**

- There is adequate ventilation to prevent unnecessary inhalation of fumes or build up of gas
- The equipment to be used is in good order
- Fumes from your generator do not accumulate in the work area.
- Ensure you wear appropriate personal protective equipment (PPE).

### **In addition**

- Use suitable screens when arc welding so that passers by and others using the area do not suffer a welding flash (arc eye).

### **When gas welding, ensure:**

- There are no leaks from pipes, regulators, gas or oxygen cylinders
- Flashback arresters are fitted to the equipment
- Gas bottles are used upright
- Regulators are set correctly and turned off when not in use

### **Do Not**

- Subject cylinders to mechanical damage, falls or unnecessary or excessive heating
- Allow regulator valves or fittings to be damaged. If damage occurs remove the equipment from use
- Roll cylinders on the ground whilst transporting
- Vent the dry dock with oxygen, as oxygen enrichment is extremely hazardous.

### **Do**

- Transport cylinders in a secured upright position on an appropriate trolley
- Store acetylene cylinders in an upright position.

# 2

## **SUMMARY** Please remember a few simple rules

### **Beware of:**

- Unprotected edges and falls from height
- Slip, trip and fall hazards

### **Ensure**

- Only recommended points of access are used
- Only 110V electrical appliances and supply is used. If possible replace them with battery powered or air tools
- You are aware of all welfare facilities
- All emergency and accident/incident reporting procedures are explained and adhered to
- Personal protective equipment is used at all times
- All work equipment is fit for use
- When lifting, correct manual lifting techniques are used
- You are familiar with the position of any safety equipment and signage i.e. fire fighting equipment, buoyancy aids, emergency stops and isolators.

Please remember

**Planning prevents accidents!**



**British  
Waterways**

# REQUEST TO CARRY OUT WORK IN DRY DOCKS

## PART 3 - FORMS

**Form completed by:**

Name:

Owner

Contractor

Craft name:

Craft index number:

## **INTRODUCTION**

In accordance with our policy on health and safety, British Waterways seek to ensure that risks to all who use, visit, live or work on or near our waterways are as low as possible.

You will already have been given a copy of our guidance for works in dry docks. To minimise the risk to you and others that may be affected by your works, please take a few minutes to read the guidance and complete this form. It will help you in planning your works and allow us to understand your requirements.

Once completed hand this form to the local/waterway office for processing. We will use the information you provide to assess whether it is appropriate for us to grant you permission to carry out the requested work.

After reviewing the information we may require further details from you. We may also suggest certain controls that must be put in place to minimise risks which have been identified. If we grant you permission, you must comply with all our reasonable requests and instructions. If you do not you will not be allowed to start/continue work in the dry dock.

Once you begin you will be responsible for your works - you will not be advised how to carry them out.

**Please note it is your responsibility to ensure that the works are carried out safely and do not adversely affect the safety of others.**

**Description of works Proposed works****What is the nature of the works you propose to carry out?**

What are you going to do and how will you do it?

**Duration of works How long will the work take?**

Expected duration of hire (Number of Days/Weeks)

(Date hire to begin will be agreed with Waterway representative)

**Will you be doing any of the following?**

- |  |                                  |
|--|----------------------------------|
| <input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> | Working alone                    |
| <input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> | Manual lifting                   |
| <input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> | Working at height                |
| <input type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b> | Using electricity or power tools |

**Controlled work  
activities**

Does the work include any of the following activities?

- |  |   |
|--|---|
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Disturbing/removing Asbestos</b>                       |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Welding</b>  |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Burning</b>  |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Grit blasting</b>                                      |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Other forms of paint removal</b>                       |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Excessive Noise</b>                                    |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Dust</b>   |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | <b>Work that may cause fumes or gases (e.g. painting)</b> |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | Mechanical lifting (see page 4)                           |
| <input type="checkbox"/> YES <input type="checkbox"/> NO | Use of hazardous substances (see page 5)                  |

If you have answered Yes to any of the above, highlighted in bold, please give details below.

**Controlled work  
activities****Will any lifting operations be carried out by mechanical means:** **YES**  **NO** If yes, please give brief details of lifting operation.

**Please note British Waterways requires all mechanical lifting operations on our property to be carried out to the standards specified in BS 7121. i.e. A lift managed and supervised by competent persons**

**Details of competent person**

Name:	Company:
Address:	

**The size and type of crane or lifting appliance to be used**

**You will not be permitted to carry out mechanical lifting operations unless this information is provided.**

**Materials and Substances** Please provide a description and an indication of the quantities of all the materials and substances that will be used during the works.

**Do they fall into any of the following categories?**

- |                          |            |                          |           |                          |
|--------------------------|------------|--------------------------|-----------|--------------------------|
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Toxic or very toxic      |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Harmful                  |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Corrosive                |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Irritant                 |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Hazardous to environment |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Oxidising                |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Highly flammable         |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Flammable                |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Combustible              |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Biological               |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Dust or particulate      |
| <input type="checkbox"/> | <b>YES</b> | <input type="checkbox"/> | <b>NO</b> | Odorous                  |

(Please see hazard warning symbols on the inside front cover)

**Are you aware of any precautions or personal protective equipment required when using any of the above materials?**      YES  NO

If so give details



**Emergency planning What might go wrong and how will incidents be dealt with?**

e.g. if there is an accident or incident on site such as a fire or liquid spill releasing corrosive liquid.

**Statement by person proposing to carry out work in BW Dry Docks**

The information I have supplied is a true statement of how I plan to carry out the works and the materials I will use. Before I change any part of my programme I will discuss the changes with the designated BW representative.

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

# **AUTHORISATION /REQUEST FOR FURTHER INFORMATION**

To be completed by authorised BW representative

BW Office

I have read the attached application from

Mr/Mrs/Ms

Owner  Contractor  Owner's representative

Boat Name/Index No.

and confirm that:

- We give permission for you to work in our dry dock.
- We require further information before the works commence.

Details of information required

**Notice to Hirer** **Important** - Before starting work, please read the BW guidance for working on craft in dry docks.

Please remember, it is the responsibility of every individual working in the dry dock to assess the risks associated with their activities and to ensure all necessary precautionary measures are in place to minimise those risks.

Signed ..... Date .....  
On Behalf of British Waterways

(Copy to be returned to applicant)

# HAND OVER CHECKLIST

To be completed by authorised BW representative

BW Office

Proposed period of rental:

Boat Name/Index No.

(To be tailored to provisions  
at each dry Dock)

**Where appropriate ensure that the tenant is shown both the location and application of safety/emergency equipment.**

Action complete*	Items, Equipment and locations
YES/NO/NA	Buoyancy aids/Lifebuoys/Throwlines
YES/NO	Fire fighting equipment – fire blankets/extinguishers
YES/NO/NA	Fire precautions i.e. alarm, emergency assembly points and routes
YES/NO/NA	First aid equipment
YES/NO	Points and method of access and exit from the dry dock
YES/NO/NA	Areas of prohibited access
YES/NO/NA	Ventilation
YES/NO	Emergency procedures
YES/NO/NA	Welfare facilities i.e. toilet, wash points, drinking water etc.
YES/NO	Accident/incident reporting procedure
YES/NO	Other - local information
YES/NO	Other - local information

(\*Delete as applicable)

**Ensure that the hirer has been supplied with a copy of the safety guidance and that the relevant actions above have been understood by obtaining a verification signature below.**

**Declaration By Hirer**

**I have been shown around the dry dock and I am comfortable with the location, equipment and procedures. I understand that any works carried out on my craft, by me or my representative are my responsibility.**

Signature (hirer):

**Declaration By BW Representative**

**I have walked around the dry dock area with the hirer and answered all relevant questions on handover.**

Signature (BW):

Date:

Time:

## BW LOCATIONS

Waterway unit	Address	Email
<b>North West Waterways</b>	Waterside House Waterside Drive Wigan WN3 5AZ	enquiries.northwest@britishwaterways.co.uk
<b>West Midlands Waterways</b>	Peel's Wharf Lichfield Street Fazely Tamworth B78 3QZ	enquires.westmidlands@britishwaterways.co.uk
<b>South Wales &amp; Severn Waterways</b>	The Dock Office Commercial Road Gloucester GL1 2EB	enquiries.southwalessevern@britishwaterways.co.uk
<b>South East Waterways</b>	South East Waterways P.O. Box 7601 Daventry NN11 1DN	Enquiries.southeast@britishwaterways.co.uk
<b>London Waterways</b>	London Waterways P.O. Box 7601 Daventry NN11 1DN	enquiries.london@britishwaterways.co.uk
<b>East Midland Waterways</b>	East Midlands P.O. Box 7601 Daventry NN11 1DN	enquiries.eastmidlands@britishwaterways.co.uk
<b>North East Waterways</b>	Fearns Wharf Neptune Street Leeds LS9 8PB	enquiries.northeast@britishwaterways.co.uk
<b>Manchester &amp; Pennine Waterways</b>	Red Bull Wharf Congleton Road South Church Lawton Stoke-on-Trent ST7 3AP	enquiries.manchesterpennine@britishwaterways.co.uk
<b>North Wales &amp; Borders Waterways</b>	Navigation House Navigation Road Northwich CW8 1BH	enquiries.northwalesborders@britishwaterways.co.uk
<b>Central Shires Waterways</b>	Peel's Wharf Lichfield Street Fazeley Tamworth B78 3QZ	enquiries.centralshires@britishwaterways.co.uk
<b>Kennet &amp; Avon Waterways</b>	The Locks Bath Road Devizes SN10 1QR	enquiries.kennetavon@britishwaterways.co.uk