

Practical Restoration Handbook

**Health & Safety - Section 2**  
**Personal Safety and Insurance**

by

Alan Jervis and Mike Palmer

Please note that, for convenience, the Practical Restoration Handbook "Health & Safety" chapter is split into 4 sections:

1. Site Aspects
2. Personal Safety and Insurance
3. Construction Design and Management Regulations
4. Control of Substances Hazardous to Health

Although these sections are primarily separate there are subjects which overlap and so all four sections must be considered as one chapter. It is essential that all four sections are read together to get an adequate understanding of the Health and Safety requirements for waterway restoration.

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## 1. INTRODUCTION

- 1.1 Volunteers have achieved a great deal in canal restoration and they have saved many miles of canal through a unique mix of determination, skills, enthusiasm and sheer hard work. Unfortunately they are often perceived by external bodies as an increased risk on site as their experience of construction sites may be limited. However, it is precisely because they know nothing about construction sites that, with simple precautions and proper briefing, they can be much more cautious and thus safer. This chapter outlines precautions to be taken on site and offers guidance for briefing of volunteers.
- 1.2 Although volunteers are low cost, this does not mean they are free, history shows us that it is unwise to class them as ‘unskilled cannon fodder’ and training and investment pays dividends. This is especially the case for Health and Safety. A responsible attitude and a little time and effort paid to Health and Safety results in a good working environment that volunteers are keen to return to time after time. The volunteer has only one objective: to finish the job properly – and (s)he can’t do this from hospital!
- 1.3 As a further practical point although volunteers are a “cheap” resource they can sue you if injury results from your failing to take your Health and Safety responsibilities seriously. This can prove very expensive (and an injured member of the public would be even costlier!).
- 1.4 Please note that, because each restoration project is different, what are given here as guidelines of good practice may well become essential practices for your site, particularly if your site complies with requirements under Construction Design and Management Regulations (see PRH "Health and Safety Section 3"). It is the authors opinion that, even where it is not mandatory, it is “best practice” to adopt a structure that at least follows the spirit of CDM i.e. both responsibilities and information concerning Health and Safety are clearly outlined and communicated.
- 1.5 This guide is based on current practice of the Waterway Recovery Group (WRG – the national co-ordinating body for voluntary labour on the inland waterways of Britain but is written with all waterway restoration societies in mind. Thus some recommendations contained within this guide will be noted as mandatory for WRG groups who have adopted them as best practice for all their activities. This does not necessarily mean they are mandatory or legally required for your project.

## 2. VOLUNTEERS - EDUCATION, RECORD KEEPING AND HEALTH PROBLEMS

- 2.1 As mentioned in the introduction volunteers are the most important resource that you can have. For some years now WRG have ensured that new volunteers to Canal Camps are all given a Safety Talk covering all aspects of safety and how the Camp itself will run. This is based on a standard talk which each leader tailors to the project concerned. This has proved to be very helpful not only as protection for the leader, but it also represents a chance to get to know the volunteers and to explain far more than just the safety side of the camp. The standard form of this talk is given in Appendix 5. In addition a “Volunteers’ Health and Safety Guide” (known as the “thin green book”) containing information directly relevant to the volunteer is given free of charge. These twin actions bring all volunteers, whatever their background, up to speed on Health and Safety matters so that before they go onto site they are all aware of what they can expect and what is expected of them. At least one Canal Trust has taken the green book, modified it to be appropriate to their site and now issues it to all new volunteers.

- 2.2 Whether given a formal talk or not, all volunteers should be made aware of what will happen if they fail to take their responsibilities seriously. It is WRG policy that any volunteer that acts in an unsafe manner is given one formal warning from the site leader, if they continue to act unsafely then they are asked to leave site.
- 2.3 It is recommended that details of each volunteer should always be recorded and kept on site in case of emergency. It is for this reason that the authors recommend the use of a standard booking form, even for volunteers who turn up “on the day” or just for an hour or so. It not only has benefits on site but can also be used at a later date for membership recruitment, etc (though please remember the implications of the Data Protection Act). A standard WRG booking form is given in Appendix 3 as this has been found over a period of many years to give all the information needed for the Site Leader. Any form will, of course, be project dependant but WRG have found the one given here to be a good starting point. Where the project demands it (such as a confined space) you may also wish to get all volunteers to sign on and off site in a site log or similar. Any information disclosed should be treated as confidential between the leaders and the volunteer.
- 2.4 It is necessary for the site leader to have warning (ideally in advance) of any problem that a volunteer brings with them to the site so that he can adjust the works or take appropriate action to ensure no additional risk is created. Some health problems or disabilities may have implications for the type of work a volunteer should be asked to do. Examples of these include epilepsy, asthma and diabetes, to name but a few. There is space on WRG booking forms for volunteers to give notification of any relevant health problems; leaders and those responsible in other situations should take care to ascertain this information. Ideally, any information thus volunteered should be followed up and restrictions clarified before the booking is accepted. If volunteers are likely to require medication (such as an asthma inhaler) then it should be ensured that they take them on site. One item often dismissed as "not important" is any allergies a volunteer suffers from. From practical experience the authors can confirm that this "minor" issue causes a considerable proportion of the incidents on a Camp – it is essential the leader has a record of the volunteers allergies.
- 2.5 In general, volunteers should not be placed in a situation where, as a result of their health problem, their own safety or that of others may be at risk. For example, someone with epilepsy who experiences random seizures without warning should not work at heights, operate machinery or work in or near water. It is however, not possible to produce a list of “blanket restrictions” for particular disabilities as each individual case is different.

### 3. SPECIFIC RISKS TO VOLUNTEERS

- 3.1 Obviously there are many new risks for volunteers on site, the ones listed below are highlighted as they are “specialist” and a new volunteer may not have encountered them before.
- 3.2 **The water itself:** Ridiculous though it seems many volunteers will not be used to working near water and very few will be used to working from a boat. If your site has such hazards (many, of course, don't) then take care to brief your volunteers well and ensure any personal buoyancy or life saving aids are provided. Regulation 14 of the Construction (Health, Safety and Welfare) Regulations 1996 states that when working on or near water you should:
- take steps to prevent people from falling into water so far as is reasonably practical; and

- ensure that personal protective and rescue equipment is immediately available for use and maintained, in the event of a fall: and
  - make sure safe transport by water is under the control of a competent person (the Maritime and Coastguard Agency (MCA) have issued a code of practice
- 3.3 **Pollution:** This usually means untreated sewage or slurry spillages and these are a rare isolated occurrence. However, if the stretch of canal is urban or near industrial areas then check for pollution. Volunteers should also be made aware of the possibility of dead animals and discarded hypodermic needles. In both cases the procedure should be the same. Clear the immediate area and inform the landowner or authorities. One specific form of water borne hazard is Weil's disease.
- 3.4 **Weil's Disease (Leptospirosis):** Weil's Disease is a serious, and sometimes even fatal, infection that is transmitted to humans by contact with the urine of infected rats (which may frequently contaminate canal banks and water at work sites). The infection enters the body through breaks in the skin or via the lining of the mouth, nose or eyes. The following preventative measures should be applied:
- All cuts and broken skin must be covered with waterproof plasters and/or gloves.
  - Hands should be washed thoroughly before eating, drinking or smoking.
  - Contaminated clothing (overalls etc.) should be removed before entering food preparation or eating areas.
- 3.5 The disease starts with a flu-like illness with a persistent and severe headache. Anyone experiencing these symptoms up to three weeks after being in contact with canal or river water MUST draw the fact to their doctor's attention. The disease is cured in the early stages by antibiotics. See Appendix 6 for a data sheet.
- 3.6 **Tetanus:** All volunteers should be advised to be immunised against tetanus, which can be contacted even via trivial wounds. Initial immunisation consists of a course of three injections, after which a booster dose is required every ten years to maintain immunity.
- 3.7 **Cement:** The hazards associated with cement are discussed in PRH chapters "Concreting" and "Health and Safety 1". However, it is highlighted here as it is the most common cause of serious injury in the authors experience. Cement burns and associated long-term skin complaints are very serious and your volunteers should be taught to avoid contact with cement and what to do in the event of contact.
- 3.8 **Fatigue and musculoskeletal problems:** It is also true to say that many volunteers will also not be used to the potential hard work of canal restoration. A desire to compete or just do their bit can result in them overreaching themselves. Whilst this often only leads to aches and pains the following day the potential for serious long-term damage is considerable. Please read section VIII on manual handling and ensure that your volunteers are aware of the risks.

## 4. GENERAL MEDICAL FACILITIES

- 4.1 It is always possible that a volunteer may be taken ill whilst performing voluntary work. It is essential to ascertain the location of the nearest 24-hour casualty department and have a map or easy directions available in an emergency. Where this is some distance away, and the project Camp is of several days'

duration, it may be worth making contact with a local GP surgery in advance to ascertain if they are prepared to see volunteers as temporary patients, should the need arise.

## 5. FIRST AID

- 5.1 In a place of work, legislation states that there must be someone responsible for first aid at all times when people are at work. The level of qualification and experience which that person must have depends on a number of factors including the nature of the work being carried out, the risks involved and the number of people employed. It is good practice for everyone on site to be aware of any First Aiders and for them to be easily distinguishable – for this reason WRG provide "First Aider" helmet stickers for any of their volunteers who wish to wear them.
- 5.2 For a small, low hazard undertaking, cover may be provided by an appointed person. This is someone who is appointed to take charge in an emergency who will call the emergency services and only render first aid for which (s)he has been trained. It is recommended that appointed persons have some first aid training.
- 5.3 In larger or more hazardous undertakings, qualified First Aiders are required. A First Aider is someone who has completed an approved course, run by an HSE Approved organisation, within the last three years. Examples of these courses are the traditional "four day First Aid at Work" course or the newer "24 contact hours" course. Many Voluntary Aid societies courses would also be acceptable (e.g. St Johns Ambulance).
- 5.4 Note for WRG groups; when you are working on a restoration site where there is no clearly defined system (such as a CDM structure for safety planning, see PRH "Health & Safety Section 3") then it is the WRG leader who is responsible for ensuring first aid cover is available. WRG aims to offer in-house Emergency First Aid training to those organisers, leaders, assistants and volunteers who wish to receive it. This training is similar to that provided for Appointed Persons in the workplace and leaders should therefore be prepared to delegate first aid responsibility to a more experienced volunteer, such as a doctor, nurse or qualified First Aider, when appropriate. (Providing of course that the volunteer is prepared to accept that responsibility).
- 5.5 The principles of first aid are:
- To sustain life
  - To prevent further injury
  - To promote recovery
- 5.6 It can further be added that, for any serious injury, any treatment given should only be “something to do” whilst you are waiting for the emergency services to arrive! Remember that reassurance and comfort can be as important as strapping limbs up.

### What to do in the Event of an Accident

- 5.7 When an accident occurs involving serious injury, the chances of survival of the casualty will be much improved by the speedy arrival of the emergency services. Channels of communication are particularly important when it comes to getting help to remote work sites. The procedure for calling the emergency

services must be planned in advance e.g. where is the nearest telephone?, what is the name and/or number of the nearest road access?, what is the O.S. grid ref.? etc. These details should be written down and all volunteers should know where to find them.

5.8 If an accident occurs:

- Protect the scene, protect other workers, protect yourself
- Before going to the aid of a casualty, make sure that it is safe to do so – never put yourself, or others, at risk
- Send a competent person to call the emergency services – with as many details as possible
- Reassure the volunteer and make them comfortable (without moving them)
- Administer any first aid treatment within your capabilities

5.9 Never move a seriously injured casualty unless it is essential to do so.

5.10 For some time it has been WRG policy to always ensure that there is at least one “emergency” vehicle available at all times while on site. This is recommended as good practice and the “emergency” vehicle should be “turned round” ready to leave site and the keys should be in a place known by all drivers on site. Some examples where this has proved to be a good idea are:

- where a minor trip to casualty is required
- where a volunteer has unexpectedly taken a dunking in freezing water and needs to return to the hall
- where a volunteer appears to be in the early stages of sunstroke and needs to spend the rest of the day in the shade

## Emergency First Aid Treatment

5.11 These notes are for guidance only. Do what you can until the emergency services arrive and always be prepared to hand over control of the situation to someone with appropriate experience and training.

5.12 **Resuscitation:** The priorities are:

- A – Airway
- B – Breathing
- C – Circulation

and they must be dealt with in that order.

- Check for consciousness - ‘shake and shout’
- Open the airway of an unconscious casualty by removing any obstructions from the mouth (do not remove any well-fitting dentures), placing two fingers under the point of the chin and lifting the jaw. Place your other hand on the casualty’s forehead and tilt the head back
- Check for breathing by listening, feeling for breath on your cheek and watching for chest movements
- Check for a pulse. Feel for the ‘Adam’s apple’, slide your fingers back into the hollow and feel for five seconds for the carotid pulse.

**5.13 If the casualty is unconscious, has a pulse and is breathing, (s)he must be placed in the recovery or semi-prone position**

**If the casualty is not breathing, it will be necessary to begin mouth-to-mouth ventilation:**

- Ensure the airway is open (as before) and the head is tilted well back. Pinch the casualty's nostrils closed
- Take a deep breath, seal your lips around the casualty's mouth and blow until you see the chest rise
- Remove your mouth and allow the chest to fall. Continue at a rate of 10 breaths per minute, rechecking the pulse after every 10 breaths.

**5.14 If the casualty is not breathing and there is no pulse, it will be necessary to combine mouth-to-mouth ventilation with external cardiac compressions.**

- With the casualty lying on a firm surface, place the heel of one hand approximately two finger-widths above the point where the bottom rib meets the breast bone. Place the heel of the other hand over it and interlock your fingers.
- Keeping your arms straight, press down vertically on the breast bone, depressing it approximately four to five centimetres. Release the pressure.
- Combine this with artificial ventilation by alternating two breaths with 15 compressions. You are aiming for between 60 and 80 compressions per minute. You will need to continue this until help arrives. Do not waste time re-checking the pulse unless there are other visible signs of life returning.

**5.15 Bleeding:** Major bleeding is controlled by pressure. Place a pad or bandage (if available) over the wound and apply pressure whilst elevating the injured part (if practicable). If no dressing is available, use your hands to apply pressure.

**5.16 Burns and Scalds:** First aid treatment is to cool the burnt part with cold water. Remove constricting items such as clothing and jewellery from the burnt area but do not remove anything that has stuck to the burnt area. Do not apply any ointment etc. and do not burst any blisters. Cover the burn with a light, clean, non-adherent material. If the burn is large, lay the casualty down and elevate the legs, checking breathing and pulse every 10 minutes until the ambulance arrives.

**5.17 Eye injuries:** Lay the casualty down to examine the eye. Loose foreign bodies may be removed by irrigation with clean tap water or eyewash solution. Do not attempt to remove foreign bodies which stick to, or are embedded in, the eye. If this is the case, or if there is a wound to the eye itself, cover the eye with a soft pad. Bandage the pad in place, bandaging both eyes to prevent eye movement. Take or send the casualty to hospital - call an ambulance if the casualty cannot otherwise be transported lying down.

**5.18 Shock:** This is of concern for two reasons. Clinical shock for the victim themselves as a result of an injury (keep them warm, elevate their legs if possible and reassure them) but a problem more often overlooked is the shock effect of an accident on other volunteers. This may well be their first experience of work site accidents and it can have an upsetting effect on some. This shock may well be delayed by many hours and a careful eye should be kept on them for some days. Initially you may wish to get them all working together on a simple but absorbing job to take their minds off what has happened. Afterwards check they are happy with the work you have allocated (it can be unnerving to be working in the same area that another volunteer recently had an accident in).

## First Aid Boxes

5.19 First aid boxes should contain (example):

- one guidance card (such as “The Fast Guide to First Aid” by St Johns Ambulance)
- 20 sterile, individually wrapped adhesive dressings (plasters)
- 2 sterile eye pads
- 6 triangular bandages
- 6 safety pins
- sterile unmedicated dressings - 6 x medium, 2 x large, 3 x extra large
- sterile water for eye irrigation, 3 x 300ml, if mains tap water is not available
- individually wrapped moist cleaning wipes (if water is not available)
- a pair of blunt-ended dressing scissors may also be kept in the box and it is sensible to include disposable aprons and gloves

5.20 Please note that the example above is a guide for a minimum kit and the works being undertaken may well make it advisable to increase some supplies. This first aid box should accompany volunteers to site: if more than one site is being worked, the appropriate number of boxes should be provided. (‘Travelling’ first aid kits are of limited use due to the reduced contents and are not recommended for use on construction sites).

5.21 The first aid box should be sealed to stop the contents getting dirty and it should be green with a white cross.

## 6. ACCIDENT REPORTING

6.1 It is strongly suggested that accident records follow the HSE recommended procedure. This is that accident/treatment records should include:

- Full name and address of injured person
- Occupation (on site)
- Date and time of accident/occurrence
- Date the entry was made
- Place and circumstances of accident, including full details of work being carried out and names and addresses of any witnesses
- Details of injury and any treatment given
- Signature of the person making the entry (and address, if not the injured party)

6.2 All accidents/injuries and treatments should be recorded however trivial they may seem. These records should be kept for a minimum of three years. The simplest way of ensuring all these details are recorded and kept is to include an HSE standard “accident book” (Form B1510) in with the first aid kit.

- 6.3 In the event of a fatal or serious accident (e.g. broken bones, major lacerations requiring stitches, or any accident resulting in the removal of the casualty to hospital by the ambulance service) full statements should be obtained from any witnesses. The landowner should also be informed (on a BW site this is the Waterway Manager).
- 6.4 Note for WRG groups: In the case of an accident requiring the emergency services, hospitalisation (other than a visit to casualty) or involving serious equipment damage, which may result in an insurance claim, the Company Secretary or Head Office must be notified as soon as possible. Contact details are given in Appendix 4. The initial report should be as soon as possible by telephone, followed by a detailed written report including casualties/witnesses. In serious cases, statements, plans and measurements may be needed.

## 7. WELFARE

- 7.1 Welfare in this case is in the Health and Safety/First Aid sense. Care should be taken to brief your volunteers as to the dangers of heat and cold, dehydration etc. Volunteers may well be unused to spending all day out in the open air and work sites can be very cold and windy or very sunny with little shade. Keep an eye out for early signs of dehydration or hypothermia. Ensure that they take enough clothes to cover up from the sun or keep warm; many thin layers is better than one thick jumper.
- 7.2 Make sure there is shade and cover from rain where they can dry out clothes and sit in relative comfort. An adequate supply of drinking water is essential. The subject of volunteers welfare is further discussed in PRH "Site Management" and HSE Construction sheets 18 (fixed sites) and 46 (transient sites). Volunteers are exactly that; they do not have to work for you and if they don't enjoy it then they won't come back nor will they tell their friends about how enjoyable it was.
- 7.3 It is accepted that a residential project is a temporary 'home' to volunteers in addition to being a work site and certain other items may be kept in the form of a 'self-administration' kit. This may include items such as:
- Paracetamol (no more than 25 tablets)
  - High protection factor sun cream
  - Cream/lotion for sunburn
  - Calamine lotion and/or mild anti-histamine cream
  - Liquid or cream antiseptics have little treatment value but will do no harm, so may be kept if desired
  - A pair of tweezers may be kept for the removal of superficial splinters provided they are kept clean

Although called a 'self-administration' kit, use of the contents should be supervised by a responsible person.

## 8. MANUAL LIFTING AND HANDLING

- 8.1 It is important to use correct methods of handling and lifting in order to reduce the risk of (potentially permanent) injury occurring. Volunteers should be clearly instructed to look after their backs as they are often not used to such intensive effort, be it the long, hard slog of brick laying or the frenetic intensity of a concrete pour. A moment spent showing your volunteers good digging techniques will not only be rewarded by less aching at the end of the day but by a more productive time all round. Gloves and steel toe caps should be available to volunteers should they feel they are needed.
- 8.2 Some sites or projects may require a formal Manual Handling Assessment. This is where each task of the project is assessed to ensure that all handling and lifting does not present an unacceptable (short or long term) risk to the personnel carrying out the work. This is good practice whether your site falls under Manual Handling Operations Regulations (1992) or not and the basics of any assessment are given below. Two specific areas of risk need to be considered: repetitive handling of small loads and individual handling of large loads. The normal maximum limit for repetitive handling is 25kg and loads above this should not be handled by volunteers on a repetitive basis – cement bags have recently been halved from 50kg for this reason. However it must be recognised that damage can occur with much smaller loads if badly handled. For loads above 25kg the individual task must be carefully checked and if possible avoided. Unfortunately, at some point most canal restorations involve coping stones well in excess of 25kg that usually need to be carefully positioned in difficult places. For these specialist lifts the use of rollers, chocks and bars is essential as are gloves and steel toe caps for any volunteers involved. The most important thing to ensure is that the "point of no return" is never reached, the load should never be out of control and a rest break should be possible at all times during the manoeuvre.
- 8.3 Volunteers should avoid the 'macho factor' (and women are just as guilty of this as men). There is nothing to be ashamed of in asking for help with a lift – never attempt to show off by lifting heavy objects unaided.
- 8.4 Remember – your spine supports your whole body and protects the central nervous system – don't take risks. Back injuries can be serious, causing permanent disability – follow these guidelines to reduce the risk:

Make an assessment before starting to lift any load. This assessment will have four components:

- **The load:** not only the weight but the physical size or shape, centre of gravity, and sharp or protruding edges, etc. What is it? Does it contain a hazardous substance? Is it wet or slippery?
- **The task:** where are you lifting from and to? Why are you doing it – is it really necessary? Is there any mechanical equipment available to do the lift for you?
- **The environment:** is there adequate space in which to lift correctly? Are you standing on a firm and secure surface? Is there somewhere you can test the load if you need to lift in stages or if you get into difficulties?
- **The individual:** what about you? Are you physically capable of carrying out this lift or do you need help? Are you wearing the appropriate protective clothing? People with knee problems or weak thigh muscles should not lift heavy loads.

- 8.5 Having made your assessment – plan your lift. If you are lifting in a group make sure that you are all of a similar build and height. Make one person 'in charge' of the lift and all others take instructions from him/her.

## The Basic Lift

8.6 This is generally considered to be the foundation of good lifting technique, although in practice, its applications are limited.

- **Foot placement:** start with the load between the feet. The leading foot should be in line with the side of the load, pointing in the direction of movement, toes level with the front edge.
- **Knees bent/back straight:** Bend knees and hips to get down to the level of the load. Tuck your chin in and keep your spine straight. Lean forward slightly to get over the load but don't incline the trunk more than is absolutely necessary. Avoid putting one knee on the floor as this makes for an unstable lifting action.
- **Grip:** It is important to get a full, firm, secure grip on the load. Ideally, grip the load at the upper, outer corner on the side of the leading foot, tilt it slightly and grip the opposite corner with the other hand. In practice, other hand placements may be better depending on the nature of the load and what is to be done with it. Always use gloves.
- **Lift:** Move the load by leaning forward a little, keeping the rear arm straight. Pull the load firmly into contact with the body, moving the rear hand forward along the lower edge. Stand up in one co-ordinated movement, keeping the load in contact with the body throughout. Remember that an individual's maximum lifting capability is from hand to elbow height (when the arms are at rest in a standing position) with the load kept close to the body.

Lowering: Reverse the above guidelines, bending the hips and knees whilst tilting the load to avoid trapping the fingers.

## Carrying Loads

8.7 Carrying tasks can lead to the rapid onset of muscular fatigue in the neck, back, shoulders and arms. Where appropriate, it may be better to carry loads on the back or shoulders rather than in front of the body. One arm lifts are not recommended but if necessary then keep your shoulders level and switch hands regularly. To minimise the levels of fatigue, the following guidelines are recommended:

- Use mechanical aids (a wheelbarrow!) wherever possible.
- Keep loads light. Divide large loads into smaller units even if this means more return trips.
- Minimise the distance. A series of short return trips is better than one large carry.
- Take regular and frequent rest breaks.

## Pushing and Pulling

8.8 Some research indicates that pushing a load results in a higher loading on the spine than pulling and can fix the rib cage, making breathing difficult. Pulling is therefore probably safer than pushing in an ideal situation, but there are occasions when pushing will obviously be safer, especially where there is a risk of the load getting out of control. It is safer to be above a load on a slope than below it. On the flat, the best way to shift a heavy load is to put your back against it and push it - the drawback with this method is that you cannot see where you are going and so you may need another person to guide you.

## Repetitive Handling and Vibration

- 8.9 Carefully consider any jobs you allocate to volunteers that involve repetitive handling. Many volunteers will be unused to handling objects such as bricks which, although not heavy in themselves, will represent a significant strain if handled repeatedly. Issue gloves if appropriate and rotate volunteers through repetitive jobs. Schedule adequate breaks and keep an eye on volunteers especially the following day as strains and stresses may well take a while to show through.
- 8.10 Similarly volunteers performing work where vibration is an issue (e.g. demolition with electric or pneumatic breakers) need to be well briefed on the dangers, issued with suitable gloves and have scheduled breaks.

## 9. FIRE PREVENTION AND CONTROL

- 9.1 As with most matters of Health and Safety prevention is better than cure. Good housekeeping will go a long way towards preventing fires. Rubbish, paper, oily rags, etc. can ignite spontaneously or by heat and fumes from mechanical plant.
- 9.2 Prevent means of ignition coming into contact with a fuel/air mixture, e.g. over-heating mechanical equipment, faulty/over-heating electrical equipment, accumulation of material which spontaneously ignites, or by carelessly discarding a cigarette end. A common problem is spilt diesel soaking into acoustic lagging on dumpers, etc. and then igniting from the exhaust.

### What is Fire?

- 9.3 Combustion is a chemical reaction accompanied by the evolution of light and heat. Three basic components are necessary before combustion can occur:
- A combustible substance (the fuel)
  - Heat
  - Oxygen
- 9.4 When a flammable substance is heated to a certain critical temperature (called its ignition temperature) it will ignite and continue to burn as long as there is fuel, the proper temperature and a supply of oxygen. Knowledge of this chemical reaction forms the basis for knowing how to extinguish fire. Heat can be taken away by cooling, oxygen can be taken away by excluding the air, and fuel can be removed.
- 9.5 **Cooling:** In order to extinguish a fire by cooling it is only necessary to absorb a small portion of the total heat being evolved by the fire. The most common and practical agent is water applied in the form of a solid stream, finely divided spray or incorporated in foam.
- 9.6 **Removing the Fuel:** Taking the fuel away from the fire can be difficult and dangerous, but there are exceptions. Escape of flammable gases, from a leaking pipe or connection can be stopped by turning off the valve and stopping the flow of fuel; the fire will then go out. Fire caused by an electrical fault **MUST** have the supply isolated immediately, to prevent electrocution and to help reduce heat at the fault.

- 9.7 **Limiting Oxygen:** Excluding air (oxygen) from a fire can be accomplished through smothering, by covering the burning area with fire blanket, or foam from an extinguisher, or even throwing sand or earth on the fire.
- 9.8 Extinction of a fire by diluting the reactants, oxygen and fuel vapours below the concentration necessary to support combustion can be accomplished by blanketing the fire area with carbon dioxide (CO<sub>2</sub>).

## Types of Fires and Extinguishers

- 9.9 Fires are commonly divided into groups and different types of extinguishers are required to fight them. It is important the correct extinguisher be used, the wrong choice (e.g. water on an oil fire) may well make the situation worse. Previously the bodies of fire extinguishers were colour coded as to which fire it could be used on, however recent legislation means that now the body of the fire extinguisher is red with an (optional) identification colour panel. Fortunately the new colour codes for the panels are the same as the old codes for the bodies.

### Fire Groups:

Group “A” fire involves solid materials, usually organic materials, in which combustion involves the formation of glowing embers, i.e. materials smouldering, such as wood, cloth, paper etc. This category of fire is usually put out by cooling, with the use of water, but in enclosed and confined spaces can be extinguished by smothering with the use of a dry powder extinguisher, or a CO<sub>2</sub> (Carbon Dioxide) type.

Group “B” fires involve flammable liquids, i.e. petrol, oils etc., or solids which melt when heated to form liquids. These types of fires are put out by smothering, using CO<sub>2</sub> or by using foam which both cools and smothers the fire.

Group “C” fires involve electrical and gas based fires which cannot safely be dealt with by foam. These fires are also smothered by using special powders and CO<sub>2</sub> extinguishers.

N.B. Volunteers are advised not to use Halon (BCF) extinguishers (GREEN colour code).

### Fire Extinguishers:

TYPE	COLOUR	USE	NOT FOR USE ON
Water	RED	wood, paper, textiles, fabric etc.	burning liquid, electrical or flammable metals
Foam	CREAM	burning liquid	electrical or flammable metals
Powder	BLUE	burning liquid	flammable metals, electrical
Carbon dioxide	BLACK	burning liquid	flammable metals
Halons (BCF)	GREEN	burning liquid	flammable metals

## Fire Fighting

- 9.10 Do not tackle a fire unless you are certain it is safe to do so. Unless you are absolutely confident that you can deal with the fire by yourself then call the Fire Brigade. The procedure for calling the emergency services must be planned in advance e.g. where is the nearest telephone?, what is the name and/or number of the nearest road access?, what is the O.S. grid ref.? etc. These details should be written down and all volunteers should know where to find them.

- When tackling a fire always aim the extinguisher’s jet at the base of the burning material.
- Where there is a strong wind or draught then extinguish from upwind to downwind.
- Always make sure that you have a safe means of escape.
- If a person’s clothing is on fire don’t hesitate to use a water or powder extinguisher on them. Alternatively throw a rug or blanket over them to smother the flames, or roll them on the ground.
- As soon as possible cool any burnt skin with cold water and leave it cooling for five minutes.
- Do not attempt to remove burnt clothing.

## **Fire as a Tool**

9.11 It is a condition of IWA/WRG Insurance that the following rules are followed for management of fires and other heat sources. If your site participates in IWA/WRG cover then it must follow these rules:

**Burning of Debris:** The following precautions must be observed:

- Fires must be in a cleared area and at least 9 metres distant from any property.
- Fires not to be left unattended at any time.
- Suitable fire extinguishers to be kept available for immediate use.
- Fires to be extinguished at least one hour prior to leaving the site at the end of each working day.

**Heat Application:** These conditions must be observed wherever a naked flame or open heat source is used.

- Work area to be cleared of combustible material below where work is being undertaken and to a safe distance, i.e. not less than 6 metres where welding/cutting are involved. Where this is impracticable, combustible material will be covered with asbestos blankets or similar protective equipment and combustible parts of premises to be similarly protected.
- Fire extinguisher of a suitable type to be kept immediately adjacent to the work area and available for immediate use.
- Equipment must be lit as short a time before use as possible and immediately extinguished after use. Lighted equipment must NOT be left unattended.
- A thorough examination for signs of combustion to be made within or below the work area in which work has been undertaken half an hour after the termination of each work period.

## **10. CONTROL OF DRIVERS AND OPERATORS**

10.1 Consider carefully how you are going to control who drives what (and when, and where) on your site. Apart from the serious Health and Safety implications of an “anything goes” policy there are practical advantages to running a tight ship - at least you know where the van, dumper, excavator is when you need it.

10.2 WRG have for some years now operated a Driver Authorisation scheme which has satisfied our insurers and other bodies such as British Waterways. For groups that participate in the insurance cover arranged by IWA/WRG this scheme is mandatory but even for groups who obtain cover from elsewhere it is

strongly recommended that they participate in the WRG Driver Authorisation scheme as this gives an easy check on who is competent to operate equipment.

- 10.3 The system comprises of 14 classifications of plant and two grades of user: operators and instructors. Operators have been given basic instruction on safe operation of a particular class of plant and have gained enough “hands on” experience (under an instructors supervision) to be safe to operate that plant (or at least to realise when they need additional advice to assess a risk). At this point he applies for an “operator card” on a form available from the instructor or Head Office.
- 10.4 The experience given on the form will be assessed by the WRG Board or appointed representative. If satisfied then the volunteer will be issued with a laminated card that will give classes of equipment he is authorised to operate. Once sufficient experience has been gained on a wide variety of sites and jobs, not only of operation but also maintenance, then the operator may apply for instructor status. Their experience and ability to teach others will again be assessed by the WRG Board. Once this is granted they may instruct others who may then apply for operator status. A consistency check is that instructors all work from a series of guidance sheets written by experts that cover the main points and they elaborate from there based on their own experiences. The classes that are covered are:
1. Vans
  2. Land Rovers
  3. Trailers
  4. Barrow Hoists
  5. Small Cranes
  6. Dumpers
  7. Smalley Excavators
  8. Skid steer Loader
  9. Small track laying excavators
  10. Large track laying excavators
  11. JCB3 (and Clones)
  12. Draglines
  13. Work Boats
  14. Other

Category 14 is an additional category that allows odds and ends (such as telescopic loaders or tractor mounted winches) to be included in the scheme.

- 10.5 Further guidance on the operation of vehicles, plant and equipment is given in the PRH “Vehicles and Trailers” and “Plant”. It is strongly advised that these are studied and any recommendations taken on board. Please note that there are several other requirements for anyone who wishes to drive or operate equipment insured under cover granted through participating in the IWA/WRG insurance in addition to the issuing of a Driver Authorisation card. These minimum requirements are listed in the next section.
- 10.6 Remember this scheme is meant to make restoration work safer, not to limit the number of drivers or operators. If you want to learn how to operate an item of plant or drive a vehicle then ask the site leader and then find an Instructor.

## 11. IWA/WRG INSURANCE COVER

- 11.1 The IWA has, for many years, arranged first class insurance cover at very competitive premiums for the IWA, its subsidiary companies and participating corporate members. It is a condition of participation in the insurance cover that corporate membership of the IWA must be current. The premiums paid by corporate members are usually considerably less than premiums quoted to individual clubs/Societies trusts for similar independent policies. Corporate membership details are available from IWA Head Office. Please note that the relationship between IWA and their brokers is excellent and the IWA will work very hard to keep it that way. All of the details given below are subject to change as the IWA negotiates improved conditions. **Please note that all dealings with insurance should be via the Insurance Officer or the Events Insurance Officer, as appropriate. In the first instance contact should be via IWA Head Office.**
- 11.2 WRG groups have public liability cover for their normal activities. For other groups, Societies, Trusts etc. the IWA can offer inclusion in the following categories: Public Liability, Loss of Money, Group Personal Accident, Employers Liability and Property. Further policies provide Contract Works Cover, Plant Cover, Motor Cover and Marine Liability (a policy specifically written to provide appropriate cover if you organise “events” connected with, or on, water or if you are legally responsible for moorings, slipways, etc.).
- 11.3 With regard to events, providing you have taken out annual public and marine liability insurance cover you will not need an insurance extension when organising socials, boat gatherings, rallies, festivals, etc. However, it is a requirement for participation in our insurance that all events (other than normal activities of a restoration group) are registered with the IWA Events Officer. He will advise whether or not anything you intend to do will put yourselves or the IWA at risk.
- 11.4 It is essential that any "material fact" you are aware of is declared to the Insurers (via the IWA Officers). In this case a material fact is any activity outside the "expected norm". The classic example of this is the fairground ride at a boat rally. Unless specifically declared to the Insurers this ride would not be covered for public liability. It is not sufficient just to determine that the fairground owner has their own insurance cover. In the event of an accident, should the equipment owners insurance cover prove inadequate then the claim may well revert to the IWA policies. If our Insurers are unaware, i.e. material facts have not been declared, they will probably deny responsibility and the claim will end up back with the organisers. Thus a failure to declare material facts could well render the organisers legally liable. The IWA Events Officer can advise further. Another material fact that must be declared is the letting off of fireworks at your event.
- 11.5 Some comments on these individual policies:

**Public liability** – This provides indemnity for public liability in respect of third party accidental injury or property damage – includes individual member indemnity and member to member indemnity. Limit of indemnity is £2.5M (increased to £5M where required by Local Authority). As a guide premiums range between £65 and £115pa. This is essential cover if you are doing any active work on your project.

It is also this cover that is relevant for a frequent problem area – temporary use of halls, etc. Cover has recently been extended so that free loan of premises for meetings is covered (for damage to the building and its contents). The use of IWA members homes for meetings is included in this cover. However, if you do pay a fee for hire of a hall or other meeting place it is essential that proof is obtained of doing so. It is also important that you do not sign any document concerning liability without first checking it is within

the scope of the IWA public liability cover. If not then you may well be personally liable for any damage. This additional cover does not extend to longer occupation of Third party premises e.g. accommodation for Canal Camps. A fuller briefing note is available from IWA Head Office.

**Group Personal Accident** – Age range 15 - 74 years inc. Premium approx. £12pa. Benefits are £15k for death, loss of limb(s) or eye(s) and permanent disablement from occupation.

**Loss of money** – Sums covered depend on location and circumstances. Present premium is approx. £10.

**Employers liability** – Minimum premium £50pa. Individual cover for each employing Society or Trust. Indemnity limit £10M.

**Property Schedule** – Categories included are buildings, contents, sales stock and trophies, rally equipment, temporary buildings and waterway structures (Note that caravans and trailers are insured as rally equipment and must be fitted with a wheel clamp, towing socket lock or other approved security device). The categories on the property schedule each have different premiums but all property is subject to a generous 33% discount. Insured value basis is the replacement cost with a £250 excess, except for damage by fire or lightning.

#### **Contractors All Risks (Royal and Sun Alliance)**

This premium provides insurance cover for your project works, plant and materials should they be damaged by an insured peril (such as fire, theft, malicious damage). Note that it will not cover the actual existing structure being worked on (if there is any!). Premiums vary according to the value of the works insured. Insured value basis for plant and tools is current market value.

#### **Marine Liability (Eagle Star – Navigators)**

This policy provides an indemnity of £1M for any one accident against waterborne risks only for claims made and law costs incurred by third parties for which you may become legally liable. This is a must if you are going to run events and should be seriously considered if you own or are responsible for moorings, slipways, marina facilities. The minimum present premium is £56.25pa. It is stressed that the policy does not provide any cover in respect of navigational risks (these can be insured under specific Marine Hull policies).

#### **Motor Policies (Cornhill)**

Our policies provide for cars, vans, minibuses etc., belonging to the participating body. Loan vehicles can be accommodated with prior notification. Items of plant such as dumpers can be insured for road use. Each vehicle is quoted separately. The insurance of motor vehicles has minimum requirements for anyone who wishes to drive a vehicle insured under IWA policies. These are given below.

#### 11.4 For Road Going Vehicles a driver must:

- Be 25 years of age or over
- Have held a full driving licence for this class of vehicle for one year
- Have no current endorsements on their licence
- Have no medical condition which requires notification to DVLA
- Have no special terms currently imposed on their own policies
- Have their driving licence on their person (see below)
- Be a competent driver of that type of vehicle
- Be authorised by the keeper of the vehicle to drive it

- Be entirely sober and unimpaired by drugs or medicines
- Hold a WRG Driver Authorisation Card for that category of vehicle

Please note that by special application to the WRG Board (who administer the Driver Authorisation scheme) one or more of the first 5 points may be relaxed and a Driver Authorisation card can be issued.

11.5 For on site plant an operator must:

- Have held a full driving licence for one year
- Have no current endorsements on their licence
- Have no medical condition which requires notification to DVLA
- Have no special terms currently imposed on their own policies
- Have their driving licence on their person (see below)
- Be a minimum of 17 years of age (or whatever the legal minimum age for that category is)
- Be a competent driver of that type of vehicle
- Be authorised by the site leader to drive it
- Be entirely sober and unimpaired by drugs or medicines
- Hold a WRG Driver Authorisation Card for that category of equipment

11.6 Again by special application to the WRG Board one or more of the first 4 points may be relaxed and a Driver Authorisation card can be issued.

11.7 Where an item of plant goes on the road (assuming it is legal to do so) then the operator must also have authority to drive at least one category of Road Going Vehicle.

11.7 For WRG groups: Every vehicle has an official keeper and permission must be obtained from that keeper before authorisation is given to drive. This keeper will most likely be the site leader for any working party. Remember that permission to drive a WRG vehicle must be obtained from the official keeper for each time you wish to drive it. This will ensure that when the site leader has an urgent need for a van (s)he knows where they are.

11.8 The procedure to be followed in the event of a vehicle or plant accident should be well communicated to all volunteers. For WRG Groups they are given in Appendix 4.

11.9 All WRG vehicle documents are held at IWA head office in Rickmansworth and they will be produced at Rickmansworth police station if requested. It is for this reason that it is necessary to carry your licence with you so that, if requested by the police, you can provide your licence at the time to avoid having to journey to Rickmansworth (or wherever your vehicle documents are kept) to present your licence then.

## APPENDIX 1 - LIST OF TEXTS AND PUBLICATIONS REFERENCE IN PRH "HEALTH & SAFETY SECTIONS 1-4"

Note that texts are listed under the section of the guide in which they are primarily referenced but may also be referred to in other sections. It is recommended that these texts are obtained as they will assist greatly with Health and Safety planning.

### Section 1 - Site Aspects

Code	Title	Available from
	<b>HSE Construction Summary Sheets</b>	
SS2(rev)	Safe Use of Ladders	HSE
SS3 (rev)	General Access Scaffolds	HSE
SS6	Portable Electric Tools and Equipment	HSE
SS8 (rev)	Safety in Excavations	HSE
SS11(rev)	Safe Use of Propane and other LPG cylinders	HSE
SS12	Flame Cutting and Welding with Compressed Gases	HSE
SS16	The Control of Substances Hazardous to Health	HSE
SS17	Construction site Health and Safety Checklist	HSE
SS26	Cement	HSE
SS28-35	Your Body at Risk: Are you Properly Protected?	HSE
SS50	Personal Protective Equipment: Safety Helmets	HSE
na	Noise in Construction	HSE
na	Construction (Working Places) Regulations 1966	HMSO
na	Carriage of Dangerous Substances in Packages Regulation	HMSO
na	Health and Safety at Work Act	HMSO

### Section 2 - Personal Safety and Insurance

Code	Title	Available from
green book	Volunteers' Health and Safety Guide	WRG
B1510	Accident Record Book	HSE
IND(G) 84L	Leptospirosis - are you at risk?	HSE
SS18	Provision of Welfare at Transient Construction Sites	HSE
SS46	Provision of Welfare at Transient Construction Sites	HSE
SS51	Construction Fire Safety	HSE
na	Insurance Briefing notes (various)	IWA

### Section 3 - Construction Design and Management Regulations

Code	Title	Available from
na	Construction, Design and Management Regulations 1994	HMSO
F10	Notification of project to HSE	HSE
C400	CDM Regulations - How the Regulations affect you!	HSE
SS17	Construction Site Health and Safety Checklist	HSE
SS40	The Role of the Planning Supervisor	HSE

SS44	The Health and Safety File	HSE
	Guide to the Provision and Use of Work Equipment Regulations 1998	HMSO
	Guide to the Lifting Operations and Lifting Equipment Regulations 1998	HSE
F91/CE	Lifting Appliances Record	HMSO
F91/A	Scaffolding Record	HMSO
F91/J	Lifting Gear Record	HMSO
F91/B	Dam Inspection Record	HMSO
F2202	Welfare Arrangements Record	HMSO
na	Volunteers Working Safely	BW

### Section 4 - Control of Substances Hazardous to Health

Code	Title	Available from
	<b>Legal Acts</b>	
na	Control of Substances Hazardous to Health 1988 & 1994	HMSO
na	Health and Safety at Work Act, 1974, 1992	HMSO
na	Factories Act 1961 Revised	HMSO
na	Health and Safety Information, Employees Regulations 1989	HMSO
na	Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972	HMSO
na	Approved Code of Practice Control of Substances Hazardous to Health 1994 (ACOPS)	HMSO
	<b>Health and Safety Executive Guidance Notes</b>	
	<b>Environmental Hygiene Series:</b>	
EH17	Petroleum based adhesives in Building Operations	HSE
EH8	Arsenic: toxic hazards and precautions	HSE
EH9	Spraying of highly flammable liquids	HSE
EH16	Isocyanates: toxic hazards and precautions	HSE
EH22	Ventilation of Buildings	HSE
EH26	Occupational Skin Diseases: Health and Safety Precautions	HSE
EH40	Occupational Exposure Limits (Revised Annually)	HSE
EH42	Monitoring Strategies for Toxic Substances	HSE
EH43	Carbon Monoxide	HSE
EH44	Dust in the Workplace: general principles of protection	HSE
EH46	Exposure to Mineral Wools	HSE
	<b>General Series</b>	
GS5	Entry into Confined Spaces	HSE
GS29/4/	Health and Safety in Demolition Work. Part 4	HSE
GS46	In Situ Timber Treatment using Timber Preservatives; health and environmental precautions	
	<b>Medical Series</b>	
MS8	Isocyanates; medical surveillance	HSE
MS15	Welding	HSE

	<b>Hazard Information Sheets</b>	
No. 1	Cements 1985	HSE
No. 5	Solvents 1988	HSE
No. 7	Skin Hazards 1988	HSE
No. 8	Pesticides 1989	HSE
	<b>Construction Summary Sheets</b>	
SS15	Confined Spaces 1988	HSE
SS24	Chemical Cleaners	HSE
SS26	Cement	HSE
SS27	Solvents	HSE
SS36	Silica	HSE
	<b>Respiratory Protective Equipment</b>	
BS4275	Recommendations for the selection, use and maintenance of Respiratory Protective Equipment 1974	HSE
	Respiratory Protective Equipment (RPE): Legislative Requirements and lists of HSE approved standards and type approved equipment 1989	HSE
	<b>Health Safety Leaflets</b>	
	Introducing COSHH. A brief guide for all employers to the requirements for controlling hazardous substances in the workplace	
	Introducing Assessment: a simplified guide for employers	
	Managing Health and Safety in Construction	
	Part 1: Principals and Applications to main contractor/ visiting group projects. HMSO 1988	
	Part 2: Management Contracting HMSO 1988	
	Hazard and Risks Explained	
	Control of Hardwood Dusts 1987	
	Health Hazards to Painters 1989	
	<b>Miscellaneous Documents</b>	
	A Guide to Safe Use of Chemicals in Construction	CIRIA
	Construction Safety Manual : Section 25	BEC/BAS
	Development of Contaminated Land; Dept. Of Environment Circular 21/87	DoETR
	COSHH In Construction : A BEC Guide	BEC
L101	Safe Work in Confined Spaces	HSE

## Addresses

### Health and Safety Executive

HSE Books  
PO Box 1999  
Sudbury  
Suffolk  
CO10 6FS

**HMSO**

Any Local HMSO bookshop

**Ciria**

6 Storeys Gate

Westminster

London,

SW1P 3AU

0171 222 8891

[www.ciria.org.uk](http://www.ciria.org.uk)

**BEC Publications**

Federation House

2309 Coventry Road

Sheldon

Birmingham

B26 3PL

0121 742 0824

**Inland Waterways Association**

Waterway Recovery Group Ltd

PO Box 114

Rickmansworth

WD3 1LT

01923 711114

## **APPENDIX 2 – ORGANISATIONS PARTICIPATING IN IWA/WRG INSURANCE SCHEME**

Please note that this list of participating members is not set in concrete. There may be lapsed members or new members who have been included after publication. Contact the IWA Insurance Officer (via IWA Head Office) for details of current membership.

The INLAND WATERWAYS ASSOCIATION

And its Subsidiary Companies,

And participating Corporate Members and their subsidiaries as detailed below:

Anderton Boat Lift Trust

+ Friends of Anderton Boat Lift

Ashby Canal Association

+ The Ashby Canal Co. Ltd (trading arm of the Association)

Ashton Packet Boat Co.

Association of Independent Museums

Association of Waterways Cruising Clubs (AWCC)

Aston Clinton Boat Club

Barnsley Canal Group

Basingstoke Canal Boat Club

Birmingham Canal Navigations Society

Black Country Boating Festivals

Boats for the Handicapped

Brighthouse & Sowerby Bridge Boat Club

Buckingham Canal Society

Bude Canal Society

Bude Canal Trust Ltd

Burslem Port Project

Calder Navigation Society

Chesterfield Canals Trust

Chichester Canals Society

+ Chichester Canal Trading Ltd

Chiswick Pier Trust

Combeswood Canal Trust

Cotswold Canal Trust

+ Cotswold Canals Trust (Trading) Ltd

Crooke Cruising Club

Derby and Sandiacre Canal Trust

+ Derby and Sandiacre Canal society

Driffield Navigation Amenities Association

Driffield Navigation Trust the

Droitwich Canals Trust

+ Droitwich Canals Cruises Ltd

Dudley Canal Trust

Erewash Canal Preservation and Development Association  
Forth & Clyde Canal Community Project  
Forth & Clyde Canal Society  
Foxton Inclined Plane Trust  
Fradley Junction Cruising Club  
Friends of the Chelmer & Blackwater Navigation  
Friends of River Kelvin  
Furness Vale Boat Club  
Garth Allan  
Grand Union Canal Society  
Grand Western Canal Association Ltd (formerly Grand Western Canal Trust)  
Grantham Canal Restoration Society Ltd  
Grantham Canal Partnership  
Greenwood Centre  
Greyhound Boat Club  
Hereford and Gloucester Canal Trust  
I.F. Kemp Boat Services  
Inland Waterways Protection Society  
Kensal Rise Association of Boaters Ltd  
Kent & East Sussex Canal Restoration Group  
Lancaster Canal Trust  
Lapal Canal Trust Ltd  
Lichfield and Hatherton Canals Restoration Trust Ltd  
Littleborough Historical and Archaeological Society  
Louth Navigation Trust  
Macclesfield Canal Society  
Manchester Bolton and Bury Canal Society  
Manchester Steamship Society  
Manchester Taxi Drivers Org, for Handicapped Children  
Melton and Oakham Waterways Society  
Monmouth, Brecon and Abergavenny Canals Trust  
Neath & Tennant Canal Preservation Society  
Newbury Working Party Group  
North Cheshire Cruising Club  
Old Union Canal Society  
Noted interest of BW in conjunction with Old Union  
Osborn-Wood Turners  
Oxford House (RISCA) History Society  
Paisley Canal and Waterways Society  
Peter Mountford (Blacksmiths)  
P. Speight Narrowboat Painting Service  
Pocklington Canal Amenity Society  
Proprietors for the Stroudwater Navigation  
Regents Canal Boat Owners Association  
Residential Boat Owners Association  
Ribble Link Trust  
Rickmansworth Waterways Trust  
River Bann and Lough Neagh Association

River Stour Trust  
Rochdale Canal Society  
Friends of Sowerby Bridge  
Sale Cruising Club  
Saltisford Canal Trust  
+ Saltisford Canal Trading Ltd  
+ Saltisford Association of Moorers  
Sankey Canal Restoration Society  
Scottish Inland Waterways Association  
+ Edinburgh Canal Society  
+ Broxburn Union Canal Society  
Severn Navigation Restoration Trust  
Shropshire Union Canal Society  
Sleaford Navigation Trust  
+ Sleaford Navigation (Sales) Ltd  
Somerset Navigators Boat Club  
Somersetshire Coal Canal Society  
+ The Dorset and Somerset Canal Society  
Southampton Canal Society  
South Pennine Boat Club  
South Staffordshire Narrowboat Co Ltd  
Stratford upon Avon Canal Society  
Surrey and Hants Canal Society  
Swansea Canal Society  
Symbol Restoration Society Ltd  
Thames and Medway Canal Association  
Thames Explorer Trust  
Thome Cruising Club  
Thrupp Canal Cruising Club Ltd  
Trent & Mersey Canal Society  
Tudor Cruising Club  
Water Adventure Centre  
Weighbridge Cruising and Social Club  
Wendover Arm Trust  
West Glamorgan Rainbow Boat Trust  
West Kilbride Museum Society  
Wey & Arun Canal Trust Ltd, The  
+ W&A Enterprises Ltd  
Whitchurch Waterway Trust  
White Rose Boat Club  
Wilts & Berks Canal Amenity Group  
Wooden Canal Boat Society Ltd  
Worcester Birmingham Canal Society  
Boat Museum Trust Ltd  
Huddersfield Canals Group  
Royal Naval Museum

## APPENDIX 3 – VOLUNTEER REGISTRATION FORM

<h3>canal camps application form</h3>	
First name _____	Surname _____
Address _____ _____	
Postcode _____	Tel. no. _____
Date of birth _____	Occupation _____
I wish to attend the following Canal Camp(s):	
camp no _____	at _____ dates _____
camp no _____	at _____ dates _____
I enclose payment of £ _____ (Cheques should be made payable to “WRG Camps A/c”)	
Any special diet? _____	
Do you possess a valid, clean UK driving licence? YES/NO	
Do you possess a WRG plant operator’s authorisation? YES/NO	
If YES, please give category numbers _____	
Have you been on a Canal Camp before? YES/NO If so, how many/where/when: _____	
Are you attending the camp as part of your Duke of Edinburgh’s Award? YES/NO	
Do you suffer from any illness, such as epilepsy, about which we should know? YES/NO (if YES, please give details in a covering letter)	
How do you intend to travel to the camp? _____	
How did you first hear about Canal Camps? _____	
In the unlikely event that you should injure yourself, whom should we contact?	
Name _____	Tel. no. _____
Signed (Parent’s signature necessary if you are under 18) _____	
Please return this form to:	

## **APPENDIX 4 – ACCIDENT REPORTING PROCEDURE AND CONTACT DETAILS FOR INSURANCE**

In the case of an accident involving:

- attendance by the emergency services, or
- hospitalisation of a volunteer (other than a visit to casualty), or
- a member of the public, or
- serious vehicle equipment or plant damage

which may result in an insurance claim, the Company Secretary or WRG Head Office must be notified as soon as possible. This is in addition to any procedure that may be outlined in local Health and Safety plans.

The initial report should be as soon as possible by telephone, followed by a detailed written report including casualties/witnesses. In serious cases, statements, plans and measurements may be needed. The landowner should also be informed (on a BW site this is the Waterway Manager).

Christopher R Davey  
WRG Company Secretary  
c/o Inland Waterways Association  
3 Norfolk Court  
Norfolk Road  
Rickmansworth  
WD3 1LT

Tel. 01923 711114

For all WRG owned vehicles the legal documents are held at WRG Head Office in Rickmansworth. If the police request to see them then these documents will be presented by Head Office Staff at Rickmansworth Police Station. It is the drivers responsibility to make this request to Head Office. It is the drivers responsibility to present his license at the time of the incident.

For information purposes our insurance brokers are the Leicester Branch of AON Risk Services, however, please make first contact via IWA Head Office.

## APPENDIX 5 – A SPECIMEN SAFETY TALK FOR VOLUNTEERS

CANAL CAMP NO: \_\_\_\_\_ LEADER: \_\_\_\_\_

Please use the guidelines below and overleaf for your safety talk.

Please note down below any extra points you made which you felt were valid.

Once the talk has been completed then they must sign the form on page 4 to say they have read the small H&S leaflet, listened to your safety talk and agree to follow your instructions.

At the end of the camp send all 4 pages to Neil Edwards where they will be kept on record.

### GENERAL

- Welcome them properly and introduce everyone.
- Explain the importance and relevance of the work they will be doing.
- Explain how the Campleader is in charge and how WRG is responsible for them 24 hours a day.
- Explain how they have “a responsibility for their own safety and the safety of others around them” (quote from H&S at Work Act).
- Explain the leadership hierarchy (usually leader > assistant > local)
- Outline exactly the procedure to be followed in an emergency.
- Show them the Large Health and Safety Guide and explain where it will be available for consultation on site. (We recommend taking one of the flight cases on site and keeping all documentation in that).
- Explain that if they are not happy with anything, please tell the leader.
- Explain that they are responsible for possessions or valuables.
- Tell them if they break any rules then they will be given one firm warning only. If they continue to break the rules then they will be sent home.
- Ensure they have all read a copy of the “Volunteers’ Health and Safety Guide”. Ask if there are any questions and collect any DoE books.

ADDITIONAL POINTS MADE:

## **SAFETY CONSIDERATIONS FOR THE WORK SITE**

### **Work**

- Always have the jobs fully explained, do not guess.
- Don't do the job if you are unhappy (e.g. you are bored or unsure)
- If unsure of the details then ask again.
- Do not work solo (i.e. out of earshot or eyesight).
- Don't copy but learn.
- Ignore "Old Hands" who should know better.
- Report any dangerous practices or near misses to the Leader.
- Tell them that if they leave the site then tell the leader.
- "A tidy site is a safe site"

### **Tools**

- Keep them clean
- If they break a tool then they must make it safe and tell the leader.
- Put tools back where you found them.
- Do not misuse them. "The right tool for the right job".
- When they are not being used store them safely.

### **Plant/Vehicles**

- Explain who is allowed to drive what (and only if asked to by the leader).
- Explain the Driver Authorisation card scheme.
- Explain how any volunteer can ask to see anyone's card.
- Explain the importance of good maintenance as well as safe operation.
- Explain where to put keys and starting handles when not in use.
- Explain how machine operators may have limited vision.
- Explain how volunteers should avoid crush zones, etc.

### **Safety Equipment**

- Where appropriate mention the CDM Site Safety Plan, including its location.
- Hard hats/Toe caps/Gloves/Goggles/Dust masks/Ear defenders. Explain how all of these should be provided in decent condition.
- Volunteers will be told when to use them and they must do so.

- Do not continue with the jobs if they are unhappy with the H&S equipment.
- If any safety equipment is broken then tell the Leader.
- Explain about the radios and the phone and show how to use them.

## **First Aid**

- Find out who is a First Aider
- Explain where the First Aid Kits are (Vans/accommodation/site)
- If they use anything from a kit then please arrange its replacement (via the leader)
- Fill in the Accident Book for any accident or hazardous occurrence and tell the leader immediately.
- Beware the effects of extreme heat (cold drinks/sun block/long sleeves).
- Beware the effects of extreme cold (hot drinks/many layers).

## **COSHH** (Note: all relevant data sheets are in all of our vans)

- Explain carefully the handling procedures for any hazardous materials they may encounter (especially cement and fuels).
- Weils disease. Wash it and cover it. Explain the symptoms.

## **Particular Site Hazards**

- Public Right of Way (always consider the risk to Joe Public).
- Fire risks.
- Deep/Toxic water or mud.
- Landowners.
- Dodgy people around.

## **SAFETY CONSIDERATIONS FOR THE ACCOMMODATION**

### **How the system works**

- Explain what jobs will be on a rota system (cooking, washing up, cleaning up).
- Explain where the rotas will be found.
- Explain where van/hall/plant/etc. keys should be kept.
- \* Explain how the sober person/duty driver system works.
- \* Explain how the hall is their home for the next week and consideration for others and keeping it clean will make all the difference. “A tidy Hall is a happy Hall”.
- If they leave the accommodation then tell the leader.

## **Safety**

- Location of First Aid kits (if any item is used tell the leader).
- Location of Fire exits (do not block).
- Location of Fire extinguishers.
- \* No smoking.

## **Catering**

- Explain just how important the cook is!
- Make sure they have given all their allergies/hates/requirements to the cook for him/her to ignore.
- Explain when meals will be served.
- Explain the brewing up kit (keep the Burco full!).
- \* Don't go hungry, use the toaster.

## **Other points**

- Ensure they have given all details of any medication to the leader (very important point).
- The cook can obtain specialist shopping if asked nicely.
- \* There may be other users of the hall. Explain the procedure for making sure their kit isn't interfered with.
- \* Explain about any Hall caretaker.
- Tell them where the nearest payphone is.

## **Socialising**

- Mention any trips to showers or swimming baths.
- \* Explain any other possibilities (cinema, slide show, bowling, mystery tour, etc.) and see what happens.
- Explain there is no compulsion to drink alcohol or even to go out with the main group but under 18's must be accompanied.

### **NOTE:**

Points labelled with \* may be omitted at the Camp Leaders discretion.

Camp No: \_\_\_\_\_ Site: \_\_\_\_\_ Date: \_\_\_\_\_

Leader: \_\_\_\_\_ Assistant: \_\_\_\_\_ Talk given by: \_\_\_\_\_

**Health and Safety Declaration:**

I have read and understood the WRG “Volunteers Health and Safety Guide” given to me and agree to abide by it. I was also present at a safety talk given by the Canal Camp leader (or an appointed substitute) and agree to follow any instructions given then or subsequently by the Camp leader or assistant.

(Note: This information will be kept on record.)

<p>Name: <input type="text"/></p>	<p>Signature: <input type="text"/></p>	<p>Name: <input type="text"/></p>	<p>Signature: <input type="text"/></p>
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## APPENDIX 6 - LEPTOSPIROSIS - FURTHER INFORMATION

### What is Leptospirosis?

Two types of Leptospirosis infection affect workers in the UK:

**Weil's disease** - this is a serious and sometimes fatal infection that is transmitted to humans by contact with urine from infected rats.

**Hardjo form of Leptospirosis** - this is transmitted from cattle to humans.

### What are the symptoms?

Both diseases start with a flue like illness with a persistent and severe headache.

### Who is at risk?

Anyone is at risk who is exposed to rats, rat or cattle urine or to fetal fluids from cattle. Farmers are now the main group at risk for both Weil's disease and cattle Leptospirosis: the cattle form is a special risk for dairy farmers. Other workers who have contracted Leptospirosis in recent years include vet meat inspectors, butchers, abattoir and sewer workers. **Workers in contact with canal and river water are also at risk.**

### How might I catch it?

The bacteria can get into your body through cuts and scratches and through the lining of the mouth, throat and eyes after contact with infected urine or contaminated water such as sewers, ditches, ponds and slow flowing rivers. Rat urine may also contaminate animal feed stuffs on farms.

### How can I prevent it?

Get rid of rats. Do not touch them with unprotected hands.

Consult your vet about the cattle infection.

Cover all cuts and broken skin with waterproof plasters before and during work.

Wear protective clothing.

Wash your hands after handling any animal, or any contaminated clothing or materials and always before eating, drinking or smoking.

### What else should I do?

Report any illness to your doctor. Tell the doctor about your work and show this text.

Leptospirosis is much less severe if it is treated promptly, if your Doctor decides you have Leptospirosis tell your site leader who should then report it to the Health and Safety Executive.

### To your doctor

The volunteers work may expose him/her to the danger of Leptospirosis (either *L. icterohaemorrhagiae* or *L. Hardjo*). Early diagnosis and treatment are vital in Weil's disease as jaundice is often absent in the early stages. The illness in *L. Hardjo* may also be greatly shortened by appropriate antibiotic treatment. (Your local Public Health Laboratory Service or hospital consultant microbiologist should be able to offer advice and serological testing).

You or your doctor can get further information from the Employment Medical Advisory Service at any office of the Health and Safety Executive.

Text taken from HSE document IND(G)84L. Current at 2/90.