London Canal Museum 14th - 21st February 1998

Health & Safety Plan

(Abridged for use as an example for Health and Safety Handbook)

- i) Setting up the accomodation (first floor)
- ii) Setting up the worksite (ground floor)
- iii) Safe system of work
- iv) Emergency Procedures
- v) Daily checklist
- vi) Volunteers health & safety introductory talk
- vii) Visitors procedure

i) Setting up the accomodation (first floor)

- 1. Clearance of museum displays to the satisfaction of Canal Museum Trust.
- 2. Catering cooker to be located on first floor (via the horse ramp) beneath a set of opening windows, a fire extinguisher shall also be provided.
- 3. Kitchen to contain :-
 - Electric hob
 - Gas stove
 - Deep fat fryer
 - Electric water boiler
 - Fire extinguisher & fire blanket
- 4. Utility room (education room) to contain :-
 - Electric fridge
 - Catering kit & food
 - First aid kit (catering)

ii) Setting up the worksite (ground floor)

Refer to the accompanying sketch 'safe system of work'

- 1. Clearance of museum displays to the satisfaction of Canal Museum Trust.
- 2. Open museum doors to encourage thru-ventilation.
- 3. Position skips during delivery away from entrance / exits to other buildings.
- 4. Locate skip ramps away from entrance / exits to other buildings & delivery areas. Ensure they are fixed to skip side & angled correctly. Install a timber end stop at top of ramp.
- 5. Establish hard hat area inside museum to include ground floor & ice pits.
- 6. Test atmosphere in ice pits.
- 7. Fix 110v festoon lighting throughout ice pits 1&2, and test halogen lighting. Ensure lighting is so placed to minimize shadows where possible.
- 8. Remove two barriers from sides of hatch, replace with stop boards at floor level & temporary hand rails at waist height fixed to remaining barriers.
- 9. Fix access / escape ladders at correct angle & projection above hatch opening. Ensure ladders are firmly footed at base & fixed at top.
- 10.Test submersible pump & pump sump dry.
- 11.Install acrow props / bracing to connecting passage between ice pits 1&2.
- 12. Sheet fully over sump hole & hole located in connecting passage.
- 13.Erect hoist frame, electric hoists & cables above hatch. Conduct test lowerings of empty barrows to establish 'hoist area' at pit level.
- 14.Re-erect two barriers at pit level around 'hoist area' & stabilise using ties.
- 15. Ground floor office to contain :-
 - Washing facilities
 - Electric water boiler / tea making facilities
 - First aid kit (site)
 - Emergency telephone

16.Establish health & safety notices & visitor book outside ground floor office.

iii) Safe system of work

Refer to the accompanying sketch 'safe system of work' (Not included for brevity.)

General Practices

- Never enter ice pits unless instructed to do so by an appointed leader
- Atmospheric testing to be carried out by a competant person every hour & when suspect materials are discovered
- You must wear a hard hat, safety boots, & gloves when working in the ice pits
 Nover work alone
- Never work alone
- Keep equipment clean, especially ladders & skip ramps
- Retire & report any broken / faulty tools & equipment
- Beware of moving vehicles when working in New Wharf Road
- Only one person at a time allowed on ladders & ramps (except escape ladder)
- Only use 'escape ladder' during emergencies
- Tea & meal breaks to be taken in ground floor office or first floor accomodation
- Temporary handrails to be fitted around hatch openings when work ceases

Digging Practices

- Do not work too closely to others
- Do not enter 'hoist area' unless instructed to do so by an appointed leader
- Do not fill skips & barrows above level of sides
- Observe 'one way system' for barrows from pit level to skips
- Only take barrows up skip ramps if you feel confident to do so
- Work in a methodical pattern to avoid unecessary holes (suggest working from a ring trench towards centre of pit)
- Maintain an even surface at foot of ladders
- Maintain sump pit at least 0.5m below pit level & avoid any build up of water
- Maintain gentle grade between pits 1 & 2, working in Ice pit No.2 when instructed
- Maintain sheeting over all unattended pits & trenches
- If any suspected voids or hazardous materials are discovered, all unecessary personnel to leave the pit & material placed in bags
- When instructed to work in 'hoist area' only do so when hoist operations have been stopped & hoist operators made aware of your presence

Hoist Practices

- Hoists may only be operated by personnel appointed by the leader
- No leaning over hatch permitted at any time
- Only Hoist operator & assistant allowed near hatch opening at all times
- Only Banksmen allowed to enter 'hoist area' & only to handle barrow chains
- No hoist operation allowed without a signal between banksmen & hoist operator, and the hoist operator checking the 'hoist area' is clear first
- Hoists to be swung away from hatch & switched off when personnel digging in hoist area

iv) Emergency Procedures

Whilst thorough plans have been made to prevent accidents, it is essential that anyone on the site is familiar with the actions to be taken in an emergency if one were to happen.

1. Evacuation of the Ice Wells

Evacuation of the ice wells will be required in the event of a real or potential danger to people in them. The signal to evacuate will be one of:

- Sounding of the gas alarm
- Whistle sounding with shouts of "evacuate"
- Calling out "evacuate"

The need to evacuate could arise from:

- Suspected gas, chemical, or high volume water ingress
- Dangerous conditions elsewhere in the Museum building (e.g. a fire)
- Discovery of something in the refuse which might pose a threat evacuation pending investigation.
- Some other situation where remaining in the wells would give rise to potential danger.
- a. If the signal to evacuate is given, everyone in the Wells should leave all tools behind (though not in a position where people following might fall over them) and walk briskly (do not run) to the ladders. Both ladders will be used the one leading direct to the Museum gallery is to be preferred if both are free.
- b. The person nearest the hoist operator should inform the latter by shouting. The hoist operator will call the camp leader or his deputy.
- c. Everyone leaving must note who is following them and observe that they follow all the way out of the wells. The last person to leave the front well (the one without the opening above) should, so far as possible, check visually that nobody is behind him or her. This is essential to ensure that everyone leaves the wells or attention is immediately drawn to anyone who does not do so. If emergency evacuation has to take place in darkness, people are to hold hands and evacuate in a "chain" as far as the area under the floor opening.
- d. After leaving the wells everyone who was in them is to assemble in the area near the main museum entrance and a roll call will be taken. Everyone will be expected to confirm that those working near them before the evacuation are present.
- e. Re-entry into the wells is not allowed until the situation has been assessed by the camp leader or his deputy and the emergency declared over.

In the event of it being necessary to evacuate whilst a person is injured or trapped in the wells, the injured person is to be helped to the surface if the injuries so allow (e.g. twisted ankle) but in the event of a person being trapped, the rescue will be performed by the fire service. (The camp leader or deputy will judge the circumstances and make decisions as required at the time).

2. Gas Detection

- a. In the event of the gas alarm sounding, follow the emergency evacuation procedure.
- b. The Camp Leader or deputy will not declare the emergency over until the atmosphere has been retested and found to be safe.
- c. During the sounding of the gas alarm there must be no attempt to rescue anyone thought or known to be still in the well if there is reason to suspect that someone is still in the well, the fire service must be called by dialling 999.

3. Electrical blackout

In the event of a failure of electricity supply so that there is no light in the wells, torches will be used to provide emergency lighting. Unless there is also an emergency requiring emergency evacuation, the emergency evacuation procedure will <u>not</u> be followed but instead everyone will leave the wells in a *slow and careful* manner using the torches. The person nearest the torches will use them to light the way for others to leave. Nobody will remain in the wells during a complete failure of the electric lighting.

4. Fire

The building does not have a fire alarm system. Emergency lighting to fire escape routes is provided. Whistles will be the alarm signal together with shouts of "Fire". In the event of discovery of a fire:

- Use whistles to wake or alert others, and call "Fire".
- Evacuate the building by the nearest exit. The rear fire exit leads to the side of the canal basin. the route from there to New Wharf Road is via Battlebridge Moorings and the exit in the corner of the basin to Wharfedale Road then back along the street. Close all doors and windows (where no delay will be caused) behind you. Do not stop to collect belongings. However, at night, pick up warm clothing, sleeping bag, etc. as immediately available without delaying your exit.
- Call the fire service by ringing 999 from the Museum's telephone or any available telephone.
- Assemble in New Wharf Road on the opposite side to the Museum for a rollcall (as per well evacuation)
- Do not re-enter until it has been declared safe to do so by the fire service or the camp leader or his deputy.

Small fires

Small fires, e.g. in a waste paper bin, may be tackled using extinguishers which are located strategically around the building. Water extinguishers (which are coloured red all over) should not be used on electrical equipment or on cooking fires involving hot fat - a fire blanket or powder or gas fire extinguisher should be used on these. Fire can spread very quickly - if in any doubt, evacuate.

5. Injury

In the event of a serious injury, help must be summoned by using the whistles followed by shouting "injury". The nearest persons must:

- a. Call the Camp Leader or deputy, and the first aider.
- b. If the first aider feels it necessary Dial 999 using the phone in the ground floor office to call an ambulance (if the injured person is in the wells the fire service should also be called)

If the patient is in the wells, those who are not able to offer help should leave the wells. The first-aider will assess the injury and decide the appropriate measures to be taken. In general, if the patient is able to climb the ladder safely with assistance this will be done but where this is unsafe or not possible due to his or her condition, the fire service will be asked to lift the patient out of the well - the hoists will not be used except under direction of the fire service.

In some circumstances the first-aider may decide to take the patient to hospital by car or van rather than wait for an ambulance. The nearest hospital is:

University College Hospital Accident & Emergency Department Cecil Flemming House, Grafton Way

The map shows the location and route.

v) Daily Checklist

A competant person as appointed by the planning supervisor must ensure the following daily checks are made of the worksite before any personnel begin work :-

- Check museum doors are opened
- Check atmospheric condition of ice pits is safe
- Note water level & use submersible pump to empty sump
- Check both lighting systems are operational
- Check condition of all ladders & ramps
- Check ice pits for new structural failure & note condition of existing
- Remove any temporary gaurdrails to hatch openings

vi) VOLUNTEERS HEALTH & SAFETY INTRODUCTORY TALK Not included for brevity

vii) Visitors Procedures

As a visitor you are required to read the following parts of the Health & Safety Plan, and sign the Health & Safety Declaration , before gaining entry to the designated worksite.