



Backwater Artists Group Health & Safety Manual

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1. Introduction

This manual has been compiled to provide basic information on safe practices and procedures in Backwater Artists Group. It is intended to protect you and those around you. Backwater Artists Group is legally obliged to take reasonable steps to ensure the safety, health and welfare of all employees, members, contractors and visitors to the studio. At Backwater Artists Group we will take all necessary and appropriate measures to fulfil our duty of care and protect the health of our employees and members.

Health and safety are vital concerns and no one in the studio has a right to endanger either themselves or anyone else through uninformed or negligent use of implements, materials, or facilities.

It is a basic requirement that you read and understand this manual before beginning to work in the Studios. If you have any questions about the contents, please contact our Studio Director.

Anyone who utilises materials or machinery in a hazardous or potentially hazardous manner is endangering themselves and others and may be subject to disciplinary or legal action.

In addition to safety it is important to recognize that the studio is a collective space accommodating a number of artists; as such it is required that each member respect both their own and the overall collective space. This includes showing due consideration in relation to individual privacy, tidiness, storage of materials, noise levels, etc.

2. General Safety in the Studio Basic Preventative Measures:

1. DO NOT eat, drink, or smoke in the studios.
2. SUBSTITUTE less hazardous materials or techniques when possible. There are many instances where highly toxic chemicals can be replaced by less toxic materials.
3. KNOW the materials and their hazards. If labels do not provide adequate information regarding contents, hazards, and precautions, use resource books or the internet to research the product - your health is worth the effort.
4. STORE materials safely. Ensure to use clearly labelled unbreakable containers, and always cover them when not in use to deter their evaporation into the environment. Do not store materials in food containers to avoid accidental ingestion. Store spray paints, turpentine and other hazardous materials in metal cabinets. Metal cabinets have been placed throughout the studio for your use.
5. ENSURE proper ventilation.
6. WEAR appropriate personal protective equipment such respirators, face shields, ear muffs, proper footwear and gloves.
7. ASK if you are unsure about the operation of any equipment. Misuse of tools leads to accidents. No equipment is to be altered or modified unless on manufacturers recommendation.
8. Keep all walkways in the communal areas clear and free from hazards.
9. Members are advised against lifting heavy loads.

3. Painting & Drawing in the Studio

In general the most common fine art practices of painting and drawing can from initial inspection seem relatively harmless to one's health & safety. However with such activity on mass, as within the art school environment, the large range of diverse materials associated with contemporary painting and drawing can present serious risks to one health if not controlled safely within the studio environment.

General hazards

Oil Paint

With the possible exception of lead, arsenic or chromate pigments, there is little danger of acute or immediate poisoning from accidental ingestion of paint. However, many of the pigments - especially lead, chromate and cadmium - can have serious long-term chronic effects from repeated exposures to small amounts. Some pigments can cause skin irritation and allergies. They include chrome yellow, zinc yellow, chromium oxide green and the cobalt pigments. The following list acts as a quick reference of common pigments and their hazards.

Common Pigments and their Hazards:

Lead Pigments - Use with Caution: Chrome green, Chrome yellow, Flake White (white lead), Molybdenite (Moly) orange, Naples yellow.

Possible Carcinogens - Use with caution: Cadmium orange, Cadmium red, Cadmium yellow (also other cadmium colors), Chrome yellow, Diarylide (benzidine) yellow; Lithol red Phthalocyanine (phthalo) blue*, Phthalocyanine (phthalo) green*, Zinc yellow Pigments with Moderate Hazards: Burnt and raw Umber, Cobalt green, Cobalt violet (cobalt phosphate), Cobalt yellow, Manganese blue, Manganese violet, Toluidine (hansa) red,

Pigments with no Significant Hazard: Burnt and raw sienna English red, Ivory black, Mars black, Mars yellow, (and all other mars colors) Prussian blue, Titanium white, Ultramarine blue*, paints contaminated with PCBs

Note: It is difficult to determine what pigments are in a tube of paint because product labelling often varies.

Oil Paint Dryers

Cobalt dryers are slightly toxic by skin contact moderately toxic by inhalation, possibly causing allergies.

Solvents

Solvents and paint thinners are moderately toxic by skin contact and inhalation and highly toxic by ingestion. This applies to odourless solvents as well. When using solvents and thinners have good general or local ventilation. **The use of white spirit is not permitted in the studios.**

Acrylic Paint

Acrylic paints usually contain stabilizers, which release ammonia and a formaldehyde preservative. These can be inhaled by artists while they work or while paints are drying. Formaldehyde is a throat, eye, and respiratory system irritant which can cause dermatitis, allergies and asthma. It is also a suspected carcinogen. Risks can be minimized through dilution ventilation (such as a window exhaust fan) or simply by using a brand of acrylics, which does not contain formaldehyde.

Ventilation

Please make sure that your studio is properly ventilated at all times.

Stretcher Building

Stretcher building can be done our woodwork area on the mezzanine in the Sculpture Block. Booking to be done through the office.

Spray painting

Spray painting or aerosol spraying is to be done outdoors in clear area (away from the cars) and not in the studios. A respirator and suitable clothing should be worn and drop sheets used. You may also use the portable welding curtains in the Sculpture Block (to be brought outside).

Studio Clothing

Because oil paint and solvents do contain toxins it is important that they be kept away from the skin and therefore from entering the bloodstream. The best way to minimize risks is to reserve a set of clothing solely for studio use, or to wear coveralls or a smock over street clothes. Also less paint is inhaled if it does not dry and evaporate on clothing.

Drawing

Use of drawing fixatives are prohibited in the studios. Works must be sprayed outdoors. Fixative contains toluene and xylene, which are hazardous to health. Graphite, charcoal and chalk pastel can also be harmful if the dust is inhaled in excessive quantities. Take suitable precautions (i.e. wear a respirator) if doing a large-scale work with powdered graphite.

4. Sculpture in the Studio

The basic fabrication of sculptural objects and 3D arrangements and sets ups is encouraged and possible within the studio confines providing the activity is done in responsible and safe manner with the correct health & safety issues addressed and by using the correct and appropriate tools for the job and the studio environment.

Use of hand tools

Hand tools include a wide variety of non-powered devices such as wrenches, pliers, hammers, and screwdrivers. These tools may seem harmless, but they are the cause of many injuries. The following is a summary of safety practices related to hand tools.

General Hazards:

The two most common hazards associated with the use of hand tools are misuse and improper maintenance. Misuse occurs when a hand tool is used for something other than its intended purpose. (An example would be using a screwdriver as a chisel. This may cause the tip to break and strike someone).

Personal Protective Equipment:

- The type of personal protective equipment (PPE) needed when using hand tools depends on the nature of the task. At a minimum, eye protection should always be worn.
- The use of hand protection may also be appropriate to provide protection against cuts, abrasion, and repeated impact.

Hammers:

- Do not use a hammer if the handle is damaged or loose.
- Remove from service any hammer exhibiting signs of excessive wear such as cracks, chips, or a mushroomed head.
- Match the proper type of hammer to the job it is designed to perform.
- Do not strike the surface at an angle. The hammer face should contact the striking surface squarely. Glancing blows made with a hammer often lead to injury.

Screwdrivers:

- Never use a screwdriver as a pry bar, chisel, punch, stirrer, or scraper.
- Always use a screwdriver tip that properly fits the slot of the screw.
- Use magnetic or screw-holding screwdrivers to start fasteners in tight areas.

Utility Knives/Blades:

- Always use a sharp blade. Dull blades require more force and thus are more likely to slip.

Replace the blade when it starts to “tear” instead of cut.

- Never leave a knife unattended with the blade exposed. Consider using a self-retracting knife with a spring-loaded blade. (The blade will retract when pressure on the knife is released).

- Keep your free hand away from the line of the cut.

- Don't bend or apply side loads to blades by using them to open cans or pry loose objects.

Blades are brittle and can snap easily.

Pliers:

- Do not increase the handle length of pliers to gain more leverage. Use a larger pair of pliers or bolt cutters.

- Do not substitute pliers for a wrench when turning nuts and bolts. Pliers cannot grip these items properly and will slip.

- Never use pliers as a hammer or hammer on the handles. Such abuse is likely to result in cracks or breaks.

- Cut hardened wire only with pliers designed for that purpose.

- Always cut at right angles. Never rock from side to side or bend the wire back and forth against the cutting edges.

Wrenches:

- Choose a wrench that properly fits the fastener that is to be turned. Using the correct size reduces the chances of wrench slippage.
- Avoid using a length of pipe or other extension to improve the leverage of a wrench. Manufacturers design wrenches so that the amount of leverage obtained with the handle is the maximum safe application.
- Use socket wrenches for hard-to-reach areas.
- Always try to pull on a wrench (instead of pushing) in case the fastener suddenly loosens.

The use of power tools

The use of power tools in the studio is limited to cordless drills and electric screwdrivers.

The use of any other powered tool such jig saws, round saws, electric orbital, fixed or belt sanders needs to cleared with the office before use. You will be asked to provide a risk assessment and may be required to have your own insurance.

Safe use of Cordless drill /Electric driver

- Examine the material to be drilled for splits, loose knots & nails, etc.
- Select and securely tighten the correct drill or driver bit.
- Keep fingers, hands, clothing and hair, etc., well clear of the rotating drill chuck, drill bit or driver bit.
- Beware of hot drill bits caused by friction or abrasion.
- Securely clamp your project to a stable work surface to avoid having hands and fingers close to the hot drill bit.
- Allow the drill to reach operating speed, then apply load gradually. Do not apply excessive force.
- Cordless hand drills or screwdrivers normally will not operate when the battery charge level is too low.
- Avoid blocking & covering the motor ventilation slots with your hands. Be cautious of drilling too close to edges and corners.

5. Wet based materials & chemical hazards in the studio

Plaster & clay can be used in the studio in a limited manner only and appropriate dust masks need to be worn if using small amounts of plaster or similar powder based materials.

Materials such as latex, silicone rubbers, resins, paint stripper, shellac, varnish, stains, plastic wood, creosote and enamel paints are all harmful by inhalation, ingestion and skin contact. Particular care should be taken not to use any of these substances in a crowded workspace without adequate ventilation. Many paints and compounds are suspected carcinogens and can cause health problems.

The Darkroom is an enclosed space in which users require the use of chemicals to produce their work. A folder containing Material Safety Data Sheets detailing the appropriate use and safety information relevant to all chemistry in the Darkroom will be kept in an easily accessible location in the Darkroom. For this reason all users of the space will ensure that any chemical brought into the space is appropriate for safe usage within the Darkroom and in a secure clearly labeled container. Any dangerous, corrosive or flammable material will be kept under lock and key with clear instructions in a metal storage cupboard.

In order to take preventative measures it is important to note the following:

How Chemicals Enter the Body

Inhalation: This is the major route of entry for airborne chemicals. The chemicals can have a direct effect on the nose, upper respiratory tract and the lungs or they can enter the blood stream and thus affect the blood, bone, heart, brain, liver, kidneys or bladder.

Ingestion: This is not normally a direct route of entry from exposure except by willful or accidental ingestion. Materials can also enter the stomach through indirect means. For example, the lung has a cleaning mechanism, which pushes material out of the lung where it can be swallowed. This can result in an exposure to most of the internal organs or even in a local action on the stomach wall.

Skin Contact: Some materials are absorbed through the skin and therefore when they enter the bloodstream they can be transported throughout the body and accumulate in, or affect,

the most sensitive areas of the body. Skin contact can also result in allergic reaction, the removal of the protective skin oil, or dermatitis. In some cases, the chemical contact may result in a cancerous lesion.

6. The use of heat based equipment in the studio

The use of heat based equipment such as kilns, blow torches, welders and hot plates MUST be cleared with the office beforehand. **You will be asked to provide a risk assessment and you will be required to have your own insurance.**

Welding is to be done in a clear outside area (away from the cars). Welding curtains and the appropriate PPE are to be used.

7. Electrical safety

Faulty wiring or appliances are dangerous and potentially lethal. Wiring supplying socket outlets and the socket outlets themselves are only to be worked upon by contractors who have the permission of the management of Backwater Artists Group. This does not of course prevent persons from plugging/unplugging or switching appliances on or off at the socket.

Extension Cables

Note: The studio is currently working towards eliminating the use of extensions cables. This will come into effect as soon as an adequate number of electrical sockets are installed in our individual studio spaces. Until then please follow the guidelines below when using extension cables.

Always fully unwind an extension cable when using it to supply appliances rated at 1000w or more, this is to avoid overheating.

Make sure you are using a correctly rated extension cable for the job. In general it is easiest to use a 13 amp cable for all tasks to avoid overloading.

If you construct an extension lead or decide to increase the length of an existing one bear in mind the following points:

- use plugs and sockets with unbreakable rubber casings;
- use a flex connector or in-line switch to allow an increase in length;
- remember not to overload sockets or extension cables (use the previous

equation for fuse rating to determine whether you will overload a 13 amp cable or socket);

- run or cover cables so that they are not a trip hazard.

Electricity in Wet or Dusty Environments

Special socket outlets are needed in very dusty or wet environments. When working outside only use appliances which are well insulated against water ingress. Use appliances and extension cables with orange 'high visibility' flex.

Lighting

Some of you may use Tungsten incandescent lamps, these operate at high temperature.

Combustible materials (particularly fabric) should be kept at a safe distance from the lamps.

Similarly spotlights concentrate the heat and combustible materials should be kept at a safe distance from the lamps.

8. What to Do if an Accident Happens

First Aid

Should an accident occur, contact the staff immediately. They will call for an ambulance or taxi to hospital if necessary and alert the trained first-aid personnel.

9. What to Do if there is a fire in the studio

- If you notice a fire, raise the alarm immediately by pressing the nearest manual call point and exit the building. The Fire Warden (Backwater Staff, Gerry Morey & selected members) will investigate and be responsible for ringing the Emergency Fire Service; this is to prevent multi-calls to the Fire Service.
- The Fire alarm is a continuous ringing bell. When you hear it – leave immediately by the nearest exit. Do not assume it is merely a routine fire drill. Leave the building quickly and calmly. Do not waste time in an attempt to retrieve personal belongings

or work documents. If you are using a machine, switch it off, if quick to do so. If you are the last to leave a room close the door as you go.

- The security doors on each floor will disable when the alarm goes off. Failing this, they can be disabled by turning the black plastic key in the green box beside each door, simply lift the plastic flap and insert the key in the key slot and turn – you will see a light come on on the top left of the green box which indicates that the door is disabled.
- Do not enter a lift during a Fire Drill / Fire Evacuation.
- If you have a temporary or permanent disability and cannot leave the building unassisted please go to the nearest place of refuge. The place of refuge for Wandesford Quay is the common area outside the lift on each floor. A Fire Warden will check these areas and assist you in exiting the building safely.
- Tackle the fire **only** if it is safe to do so and you have been trained in using Fire extinguishers. Do not attempt to extinguish a fire on your own. Leave the building immediately if the fire extinguisher is not dampening down the fire. Ensure there is an exit close to you if tackling a fire.
- Assemble for roll call at the designated Evacuation Point which is under the 'assembly point' sign next to the main gates on the Backwater Artists Group Sculpture Block and wait for the Fire Warden to take a head count.
- Do not return or enter the building for any reason until it is safe to do you and you have been given permission by the designated Fire Warden.

Fire, After Hours procedure for Building Users

- If a fire occurs after office hours when a designated Fire Warden is not present, please raise the alarm immediately by pressing the nearest manual call point and exit the building.
- Leave the building quickly and calmly. Do not waste time in an attempt to retrieve personal belongings or work documents. If you are using a machine then switch it off, if quick to do so. If you are the last to leave a room close the door as you go.
- Do not enter a lift during a Fire Drill / Fire Evacuation.

- If exiting by the main door to the courtyard, please take the sign-in/out clipboard (from inside main door), and Fire Register Book (in cabinet by main door – Key is taped under cabinet), with you. If they are missing assume someone has already taken out, do not waste time searching for them.
- The **sign-in/out Sheets** will enable a head count of building occupants to take place so that the Fire Service can determine who might be in the building. The **Fire Register Book** will have plans of the building, including storage areas of chemicals etc which is necessary for the Fire Service to do their work extinguishing the fire.
- When you are safely out of the building call 999 or 112 and ask for the Emergency Fire Service. When they answer give the following information.

Say 'I want the fire service for Cork City'.

- STATE NAME & ADDRESS: **Wandesford Quay Studios & Gallery, Wandesford Quay, Cork City.** Directions: **Between Sharman Crawford Street and Clarkes Bridge.**
- TYPE OF FIRE (location of fire, materials involved)
- NUMBER OF PEOPLE IN BUILDING (any missing people)
- ANY RISKS, (gas, chemicals, obstructions etc.,)
- Assemble for roll call at the designated Evacuation Point which is under the 'assembly point' sign next to the main gates on the Backwater Artists Group Sculpture Block. Whomever rang the Emergency Fire Service should take responsibility for taking a head count and giving the Fire Service the Fire Register Book and sign-in/out sheet when they arrive. Inform the Fire Service the water supply is on the main road. Please also ring the 'emergency contact number' written on the front of the folder, to inform Backwater Artists Group/Cork Printmakers Main Contact.
- Do not return or enter the building for any reason until it is safe to do so and you have been given permission by the Fire Service.

Additional Important Information:

- The designated FIRE MARSHAL for either side of the Building will be noted on the white board on the ground floor above sign-in sheets.
- There will be two Fire Drills organised every year.
- The Fire alarm will be tested each week on Monday at 11am. The alarm will go off for five seconds and switched off again. You do not have to exit the building; it is solely to test the alarm system. If the fire alarm goes off on any Monday morning at/near 11am for more than five seconds (approx) please consider a real fire evacuation is taking place and adhere to procedures as stated above.
- **Sign-in/out Sheets** must be signed in and out by all staff/members/visitors to the building. A new sheet will be attached daily. This will be used by the Fire Warden when taking a roll call at the assembly point during a fire evacuation and will be presented to the Fire Service when they arrive on the scene. The sign-in/out Sheets will enable a head count of building occupants to take place so that the Fire Service can determine who might be in the building.