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Department of Art
Darkroom Safety and Orientation Guide

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1) Introduction:

This guide is designed to assist you in working safely and efficiently in the darkroom. All aspects of expected safe conduct, how to store and handle chemicals, and what to do in the event of a chemical spill are outlined here. All instructors and students working in the Department of Art darkroom are required to read this document in its entirety, and take part in a training/orientation session lead by the technician, Kevin Jordan.

Upon completion of the safety training/orientation session, students must sign a training completion form indicating that they have completed the safety session. If you have any questions regarding any of the information covered in this guide, please contact the technician or your photography instructor.

University Health & Safety regulations require that anyone who comes into contact with potentially hazardous substances must receive specific training. This training will cover the following:

- How to mix all darkroom chemicals from concentrates.
- How to label all containers, and how to pour waste chemicals into the waste chemical containers.
- Basic familiarity with the WHMIS system, and the dangers of the chemistry in use in the darkroom.

- What to do in the event of a spill
- **2) General Safety Rules:**
- Only students who have completed darkroom training are permitted to work in the darkroom.
- Only students who have completed the safety training session are allowed to work in the darkroom.
- Students are required to familiarize themselves with the MSDS sheets of any chemical they work with for the first time. These sheets are available on line.
- Keep the work area clean and uncluttered to prevent tripping hazards.
- Wet and dry areas should be clearly separated.
- Only store chemicals in their appropriate storage areas.
- Never eat or drink in the darkroom.
- High-heeled shoes, sandals, open-toed shoes should not be worn.
- Appropriate safety equipment must be worn at all times while mixing chemicals.
- Always wash hands with soap and warm water after working with chemicals.
- Know how to use the spill kit and eye wash station (and where they are stored) prior to an actual emergency.
- Pregnant women should not be exposed to any powdered photographic chemicals.
- Store all chemicals in locations that will minimize the chance of breakage and splashing.
- All chemicals must be properly labeled.
- Keep all containers closed if not in use to prevent the release of toxic gases.
- Do not wash any chemicals down the sink.
- All spent chemicals should be placed into an appropriate waste container.
- Inform the Facilities Technician when waste chemical containers are full.

3) Safety Equipment

The following items are available for use in the darkroom/photo area:

- Fire extinguisher: currently located outside of the Print Darkroom in the hallway across from 685 and in room 683.
- Eyewash bottles: in hallway outside Print Darkroom 686Z and inside the Film Darkroom room 676.
- Eyewash Stations: In room 683 and in the hallway across from the Woodshop room 694.
- Waste containers for chemical: In room 686Z Print Darkroom and in room 676 Film Darkroom.
- Spill Kit: In room 682.
- Safety glasses: In Film Darkroom 676.
- Gloves: In Chemical Storage Area.
- Tongs: In all Darkrooms.
- First Aid Kits: Room 686Z Print Darkroom and Room 687 Film Darkroom
- Shower: Room 683
- [Help Phone: In Hallway Across from Woodshop, room 694](#)

4) Material Safety Data Sheets (MSDS) & Chemical Storage

The Department of Art is required to have Material Safety Data Sheets (MSDS) available to any individual working with hazardous chemicals. Faculty, staff and students have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. Everyone using the darkroom must also know what protective measures are available to prevent adverse effects from occurring.

Information that can be found on an MSDS sheet includes:

- The identity of the chemical substance
- Physical and chemical characteristics
- Physical and health hazards
- Primary routes of entry
- Carcinogenic status
- Precautions for safe handling and use (including personal protective equipment)
- Spill response
- Emergency and first aid procedures

MSDS sites/resources on the Internet

There are many sites on the internet that list darkroom related MSDS. Below is the manufacturers web site supplying the U of C darkrooms:

www.ilfordphoto.com/healthandsafety/datasheets.asp

www.kodak.com/ek/US/en/About_Kodak_Top/Global_Sustainability/Material_Safety_Data_Sheets.htm

The Province of Alberta's WHMIS resource page

<http://whmis.org/jurisdictions/ab.html>

You are responsible for reviewing and being familiar with the MSDS information for the following chemistry:

Film Developer, Print Developer, Fixer, Fixer Remover, Stop Bath and Photo-Flo

If any new chemistry is added to the darkroom processes in any Department of Art photography course you are required to familiarize yourself with the MSDS sheets of each item.

Chemical Storage

All chemicals must be stored properly; this includes proper labeling, proper placement (off the floor) and compatible storage containers. Improperly stored and labeled chemicals can result in the following dangerous conditions:

- Release of potentially toxic vapors
- Degraded containers that allow chemicals to become contaminated
- Degraded containers releasing vapors that can affect the integrity of nearby containers and the air quality
- Degraded labels that result in generation of unknowns

All chemicals MUST be correctly labeled.

Proper chemical storage includes the following practices:

- Deteriorating labels must be replaced before the chemical becomes unknown
- Containers will be dated when they arrive on site
- Older chemicals are to be used first.

5) Chemical Disposal

As a chemical user, YOU have a legal and moral responsibility to ensure the proper disposal of any hazardous waste you generate.

When chemicals have been exhausted, the following steps should be followed to dispose of them:

- Place spent chemical into Waste Container.

DO NOT PUT CHEMICALS DOWN THE DRAIN!

As soon as the container is full, email or inform the photography instructor or the photography technician.

6) Emergency Chemical Spill Procedures for MINOR spills that are known to be of limited danger:

In the event of a spill involving the release of a type or quantity of chemical that does not pose an immediate risk to health, and does not have the potential to become a major emergency within a short time period:

1. Notify a Department of Art Facilities Technician and the photography instructor.
2. Isolate the area. Close darkroom doors and evacuate the immediate area if necessary.
3. Remove all ignition sources and establish exhaust ventilation if possible.
4. Choose appropriate personal protective equipment such as gloves, goggles and lab coat, etc.
5. Utilizing a spill kit and spill guide, the technician will confine and contain the spill with absorbent material, collect the solid material into the dustpan and place into the 5 gallon bucket or other appropriate container; he will then arrange for pick up.

In the event of a serious injury in the darkroom the following procedures are to be followed:

1. Clear anyone not assisting the injured person from the room.
2. Report the injury to the instructor and or technician. If the instructor or technician are not present, contact **Security** at 403/220-5333. There is a direct help phone across from the Woodshop, room 694.
3. Limit access to the area.
4. Remain with the injured person until help arrives.

When reporting an injury, you will be asked for the following information:

- Where the injury occurred (**building and room number**)
- Nature of the injury (**SPEAK CLEARLY and SLOWLY**)
- Any immediate actions you took

7) Darkroom Closing Procedures

- Proper disposal of hazardous materials is required whenever a student leaves the darkroom.
- You are responsible for leaving the darkroom clean and ready for use by the next group/student.

8) Additional Tips for Handling Chemicals

- **ALWAYS** discard stop bath solutions contaminated with developer.
- **ALWAYS** cover all baths when not in use (to prevent release of toxic vapors).

9) Five ways to stay safe on campus

- Know who to call:
 - For imminent life-threatening situations, call **911**.
 - For all other situations call Campus Security at **220-5333**

If you are feeling harassed or threatened, call Campus Security or contact the Office of Diversity, Equity and Protected Disclosure at 220-4439.

For other support:

Students' Union Wellness Centre: 210-9355

Lifeworks for faculty and staff: 1-877-207-8833

- Download the UC Emergency app at ucalgary.ca/emergencyapp
- Know your emergency exits and your assembly point
ucalgary.ca/emergencyplan
- Know what to do in the event of an active shooter on campus: Get out — hide — fight.
ucalgary.ca/emergencyplan
- **Request a Safewalk** available 24/7 at 220-5333