

University of British Columbia



Department of

Anesthesiology, Pharmacology & Therapeutics (APT)

Faculty/Staff/Student

Safety Orientation Manual

EMERGENCY NUMBER FOR

FIRE

POLICE

AMBULANCE

HAZARDOUS MATERIAL SPILLS

9-1-1

OTHER EMERGENCY NUMBERS

EMERGENCY FIRST AID (at UBC CAMPUS)

822 – 4444

PATROL (UBC CAMPUS SECURITY)

822 - 2222

POISON CONTROL CENTRE

682 - 5050

R.C.M.P. Police (UBC)

224 - 1322

VANCOUVER HOSPITAL, UBC SITE, EMERGENCY DEPT.

822 - 7222

NON-EMERGENCY NUMBERS

HEALTH, SAFETY and ENVIRONMENT

822 - 2029

TROUBLE CALLS (UBC Campus)

822-2173

Departments Mission Statement

"The Department of Anesthesiology, Pharmacology & Therapeutics is committed to providing a safe, healthy and secure environment for its faculty, staff and students, and to acting in an environmentally responsible manner"

Department's Organizational Chart:

Department Head: *Dr. Brian Warriner: 604-822-2575*

Department Associate Head: *Dr. David Fedida: 604-822-2575*

Department Secretary (General Inquiries): *Marnie Bymak: 604-822-2575*

Administrator: *Aileen To: 604-822-5565*

Manager: *Andy Jeffries: 604-822-3137*

Graduate Secretary: *Wynne Leung: 604-827-3289*

Departmental Workshop: *Christian Caritey: 604-822-3206*

Department's Safety Committee Representatives:

Chair of committee: **Dr. Richard Wall**

Phone: 604-822-2154 *Room:* 406A

Co-Chair (2nd floor member): **Andy Jeffries**

Phone: 604-822-2575 *Room:* 215

Basement Floor Member: **Christian Caritey**

Phone: 604-822-2575 *Room:* 15

1st Floor Member (Pharmacy): **Dr. Helen Fleisig**

Phone: 604-827-3329 *Room:* 106

3rd Floor Member: **Ciprian Jauca**

Phone: 604-822-0700 *Room:* 307

4th Floor Member: **Rama Tadavarty**

Phone: 604-822-2722 *Room:* 412A

Medical Block C

Procedures and Information

General

- MSDS sheets are in yellow binders located in room 213 and should be updated when you receive any new chemicals. The location must also be noted in or around the area in which they are stored. (Page 33)
- Courses in Laboratory Biological Safety, Chemical Safety and Animal User Training (online) are offered at UBC and if applicable, are mandatory. Please see Andy Jeffries (2-3137) for information. (Page 26-30)
- The red Safety Manual located in every lab should be read thoroughly to familiarize yourself with the regulations within the department.
- Any injuries need to be reported and should be documented properly. (Page 37-40)
- Familiarize yourself with the floor plan of Medical Block C and make note of all extinguishers, pull stations and emergency exits. (Page 11-18)
- First aid kits in you work area should be checked regularly and made sure that they are properly stocked. The kit should include an inventory with a list of its contents.
- Every month a email will be sent around the different labs containing a checklist which a designated person will fill out and return. (A copy of this is on Page 7)

Waste Disposal

Animals- Animals are to be placed in a black bag, properly indentified by filling out a disposal tag and placed in the basement cold room, Room 3B (Sample on page 9)

Solvents- Solvents must be placed in red containers properly tagged and placed in the cold room (Sample on page 10) Containers need to be ordered through Andy Jeffries.

Sharps- Must be put into yellow/red containers specially for sharps disposal. These must be tagged with the biological waste tags and placed in the cold room for pickup and incineration. The containers are available in the department, ask Andy for assistance.

Glass- Must be disposed of in the gray cans supplied by UBC and must have the plastic liner tied off and labeled with : "Glass waste", Lab which it originated and phone number. These can be placed in room 3A for pickup. (replacement cans are also stored in room 3A)

Expired/Unused drugs and chemicals- A chemical waste inventory form must be filled out and the items placed in a cardboard box. Once this has been done, give both to Andy Jeffries for disposal. (Sample on page 8)

Laboratory Safety

-All gas cylinders must be chained up. If your area does not have this setup please see Christian Caritey in Room 15

-All solvents must be properly stored in flammable cabinets

-Labs that have a Bio-safety cabinets must have the unit tested yearly. See Andy Jeffries to set this up:

-All Controlled/Toxic drugs must be locked up and their usage must be documented.

-While working in your lab, proper attire must be worn: Lab coat, gloves, NO shorts and NO sandals.

-Gloves must not be worn while not working i.e.: talking on the phone, handling pens etc.

MONTHLY SAFETY CHECKLIST FOR ROOM _____

Please ensure that this lab is always a safe workplace by taking time to check the following items at least once per month.

Item	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1. Personal protective equipment available and used.												
2. Good housekeeping; food and drink absent.												
3. Aisles and doorway clear and free of tripping hazards.												
4. Water hoses wired or clamped; gas cylinders clamped.												
5. Fume hoods neat and functioning.												
6. Flammable solvents < 50 L in open lab.												
7. peroxidizable compounds dated upon opening and tested every 6 - 12 months as appropriate.												
8. Proper labelling of chemicals; labels clear and legible.												
9. Compatible storage of chemicals.												
10. Sink traps, eye wash fountains flushed regularly.												
Checked (✓) by (initials)												



Chemical Waste Inventory

	Chemical Name	Size/volume/ weight	Identification/ Comments	Code (office only)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				

Name	Dept	Pharmacology And Therapeutics
Building	Medical Block C	Rm #
Phone	604-822-	Date
		Email

For Office Use Only:
Date Received
Approved

This form must be completed in full and returned to the Environmental Services Facility for approval. Please fax or email the form to Ivan Leversage at 604-827-5087 or leversag@interchange.ubc.ca. Please contact Ivan Leversage (604-822-6306) if you have any further inquiries.



BIOLOGICAL WASTE DISPOSAL TAG

University of British Columbia, Environmental Services (827-5389)

Parcel
Identification No.:



B000113499

BIOLOGICAL WASTE DISPOSAL TAG

Parcel
Identification No.:



B000113499

GENERATOR TO
COMPLETE THIS
SECTION ONLY

WASTE CONTENT (Please ☒ only one box)

☐ Uncontaminated Pathological Animal

BIOMEDICAL (TDG Class 6.2, 6.1)

☐ Anatomical - Human

☐ Blood & Body Fluids*

☐ Primates**

☐ Sharps ***

☐ Cytotoxics (Ethidium Bromide solid)

☐ Pharmaceuticals (Non-narcotic)

BIOHAZARDOUS

☐ Pathological

☐ Autoclaved Risk Group 1

☐ Autoclaved Risk Group 2

☐ Autoclaved Risk Group 3**

OTHER****

NOTES:

* Human or Animal

Special arrangements must be made for Primates and RG 3 (Contact ESH)

** Scalpel/razor blades, needles, syringes (NOT GLASS)

*** Contact ESH

Office use only:

WEIGHT _____ kg

UBC Environmental Services Facility (Contact 827-5389)

May 2



Container
Identification
Number



S000015053

SOLVENTS - DISPOSAL

Container
Identification
Number



S000015053

Final Waste Disposition

- | | |
|--|--|
| <input type="checkbox"/> Onsite Recycling 1 | <input type="checkbox"/> Offsite Recycling 1 |
| <input type="checkbox"/> Onsite Recycling 2 | <input type="checkbox"/> Offsite Recycling 2 |
| <input type="checkbox"/> Onsite Incineration 1 | <input type="checkbox"/> Offsite Incineration/Disposal 1 |
| <input type="checkbox"/> Onsite Incineration 2 | <input type="checkbox"/> Offsite Incineration/Disposal 2 |

Date Processed

m	m	d	d	y	y
---	---	---	---	---	---

SOLVENTS - RECEIPT

Container
Identification
Number



S000015053

GENERATOR
COMPLETE THIS
SECTION ONLY

Affix Generator
Identification Barcode Label
Here

Waste Contents (check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Amines _____% | <input type="checkbox"/> Esters _____% | <input type="checkbox"/> Carbon Tet. _____% |
| <input type="checkbox"/> Acetone _____% | <input type="checkbox"/> Methanol _____% | <input type="checkbox"/> Chloroform _____% |
| <input type="checkbox"/> Ethanol _____% | <input type="checkbox"/> Thinners _____% | <input type="checkbox"/> Freons _____% |
| <input type="checkbox"/> Ethers _____% | <input type="checkbox"/> Xylene _____% | <input type="checkbox"/> TCE _____% |

Other _____ Percent _____

Date Received

m	m	d	d	y	y
---	---	---	---	---	---

Waste Quantity

--	--	--	--

Units

--

Storage Location

Building _____

Room _____ Shelf/Row _____

LIFE SAFETY SYSTEMS AND BUILDING FEATURES

Building Name: Medical Block C

Building Purpose: _____

Life Safety Systems in the this building consist of the following:

- ✓ Emergency exits
- ✓ Emergency lighting
- ☐ Emergency power
- ✓ Fire alarm system
- ✓ Fire extinguisher(s)
- ✓ Fire hose cabinets & standpipes
- ✓ Fire hydrant(s)
- ☐ Fire pump
- ☐ Sprinkler system

Emergency Exits

Emergency exits are located throughout the building and marked by lighted signs and placards. Maintenance of lighted emergency exit signs is handled by UBC Plant Operations.

Emergency Lighting

In the event of a power failure, emergency lighting has been provided to cover all common corridors, stairwells and exit signage. Maintenance of emergency lights is handled by UBC Plant Operations.

Fire Alarm System

There are manual pull stations and smoke detectors throughout the building. The fire alarm system is supervised by the Vancouver Fire & Rescue Services through the 911 dispatch centre. Daily maintenance is handled by UBC Plant Operations.

Fire Extinguisher(s)

There are portable fire extinguishers placed strategically (i.e. visible and accessible) throughout the building. They are maintained and inspected by Vancouver Fire & Rescue Services (VFRS) at 604-822-8292.

Fire Hydrant(s)

There is 3 fire hydrant located near the building, located outside the west door, across the road at Pharmacy and across the road at Microbiology.

Floor plans for each floor of the building are attached as **Appendix 2**. A map showing the location of life safety systems is attached as **Appendix 3**.

INSTRUCTIONS IN CASE OF AN EMERGENCY

Emergency Director: Andy Jeffries

Alternate Emergency Director: Christian Caritey

Policy

In the event of a fire, explosion, or any situation threatening human safety, the Emergency Director has standing instructions to sound the fire alarm and clear the building without seeking further authorization.

Emergency Response

In the event of a fire, explosion, or any situation threatening human safety, the Emergency Director will:

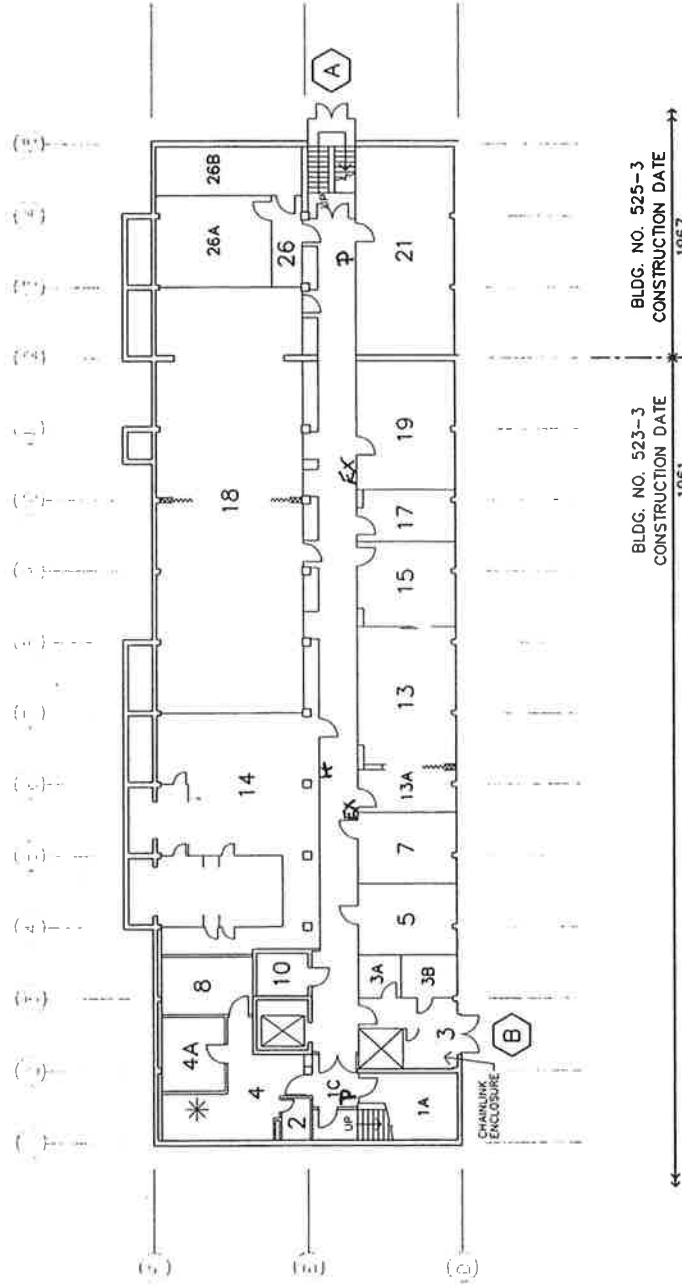
1. Immediately **sound the alarm**.
 - Break-glass stations are located at each end of each floor.
2. Phone the Fire Department at **911**.
 - State your name and location. Give any information you have about the emergency (e.g. location, whether fire is spreading fast, people trapped, known hazardous materials).
3. **Evacuate** the building. Urge people to stay calm, and to evacuate quickly and in an orderly manner. **Walk, do not run**. Shut doors behind you - do not lock them. Assist anyone having difficulty in getting out. Ask others for assistance, as necessary.
4. Do not allow people to use the elevator.
5. On exiting the building, ask people to **move to the designated assembly area**, well away from the building. The designated assembly area is the quadrangle to the east of the building.
6. One person must **call 911** from a position of safety and give additional information as required.
7. **Meet firefighters at the annunciator panel (fire panel)**, located on the stairwell ground floor west entrance, to give any additional information about the building as required.
8. **Do not allow anyone to re-enter the building** until the Fire Department gives permission to do so. When ok, give the "all clear" to allow building occupants to re-enter the building.

INSTRUCTIONS TO THE OCCUPANTS AND STAFF IN CASE OF EMERGENCY

If you discover a fire or explosion in the building -

1. Immediately **sound the fire alarm**. See the marked floor plans for the break-glass station nearest to you.
2. Go to the **Emergency Director** or Alternate Emergency Director to give **information you have about the emergency** – location, floor, whether fire is spreading, people trapped, etc.
 - The Emergency Director is located room 215 , phone 2-3137.
 - The person in charge will pass the information on to the fire department.
3. **Attempt to control the fire** with available fire equipment – ***if you can do so safely!*** Use an extinguisher or a hose from a hose cabinet. See the marked floor plan for equipment locations.
4. If you cannot control the fire, try to **isolate it** by closing the doors. Do not lock doors.
5. **Leave by the nearest safe exit.**
6. **Do not use the elevator.**
7. **Walk, do not run.** Shut doors behind you. On leaving the building, move well away from it immediately. Go to the **designated assembly area, which is to the east of the building.**
8. **Do not reenter the building** until fire department and the Emergency Director have given permission to do so.

If you hear the fire alarm ringing – follow steps 5 through 8, above.



P PULL STATION
H FIRE HOSE CABINET
EX FIRE EXTINGUISHER

* DENOTES LAST REVISION

NO. DATE PROJ. NO. DWG. NO. BY

PAGE 1 OF 6

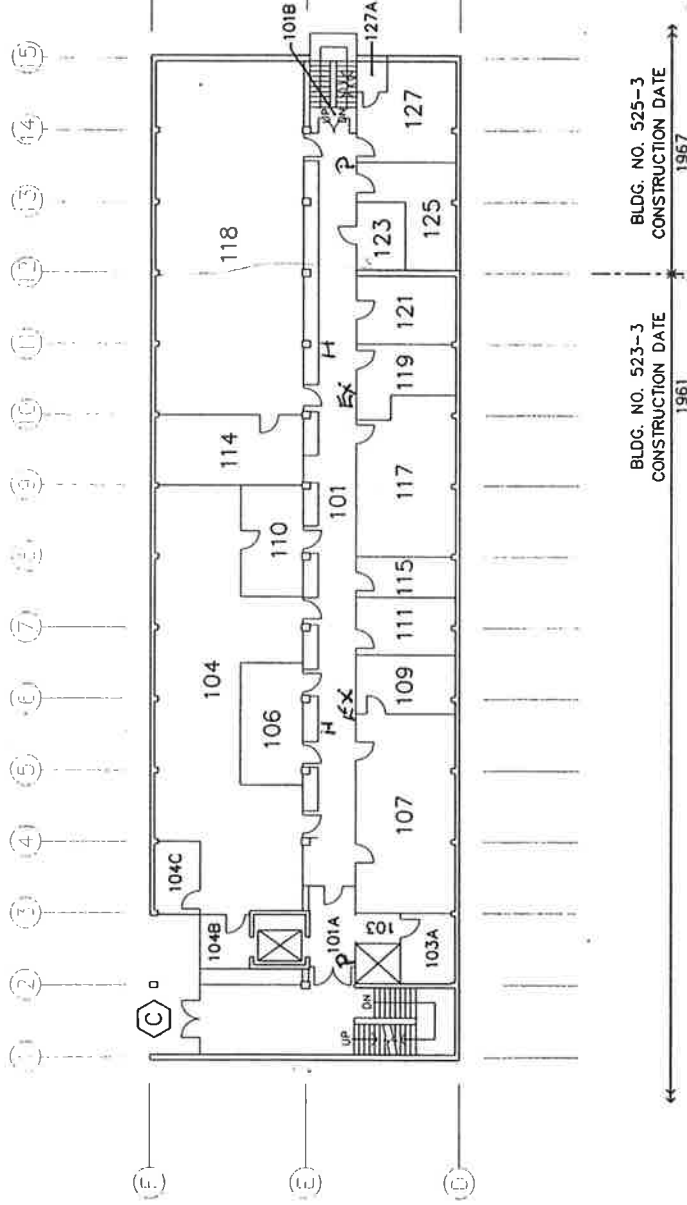
COPYRIGHT © THE UNIVERSITY OF BRITISH COLUMBIA 1992
KEYPLAN BY CAMPUS PLANNING & DEVELOPMENT

BUILDING	ADDRESS 2176 Health Sciences Mall, V6T 1Z3		CONSTRUCTION DATE 1961/1967	
	FLOOR BASEMENT	SCALE 1" = 30'	KEYPLAN DATE 01 DEC 92	DRAWN AI
MEDICAL SCIENCES BLOCK C (PHARMACOLOGY, THERAPEUTICS, BIOCHEMISTRY)				DIG

523-3

525-3

\\KEYPLANS\523-3\523-3-A0.DWG



BLDG. NO. 523-3
CONSTRUCTION DATE 1961

BLDG. NO. 525-3
CONSTRUCTION DATE 1967

* DENOTES LAST REVISION

No. DATE PROJ. No. DWG. No. BY

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KEYPLAN BY CAMPUS PLANNING & DEVELOPMENT



BUILDING MEDICAL SCIENCES BLOCK C
(PHARMACOLOGY, THERAPEUTICS, BIOCHEMISTRY)

ADDRESS 2176 Health Sciences Mall, V6T 1Z3

FLOOR GROUND

SCALE 1" = 30'

CONSTRUCTION DATE 1961/1967

KEYPLAN DATE 02 DEC 92

DRAWN AI

DIG

523-3

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\\KEYPLANS\523-3\523-3-A2.DWG

* DENOTES LAST REVISION

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CONSTRUCTION DATE	1961/1967
KEYPLAN DATE	02 DEC 92
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PAGE 3 OF 6

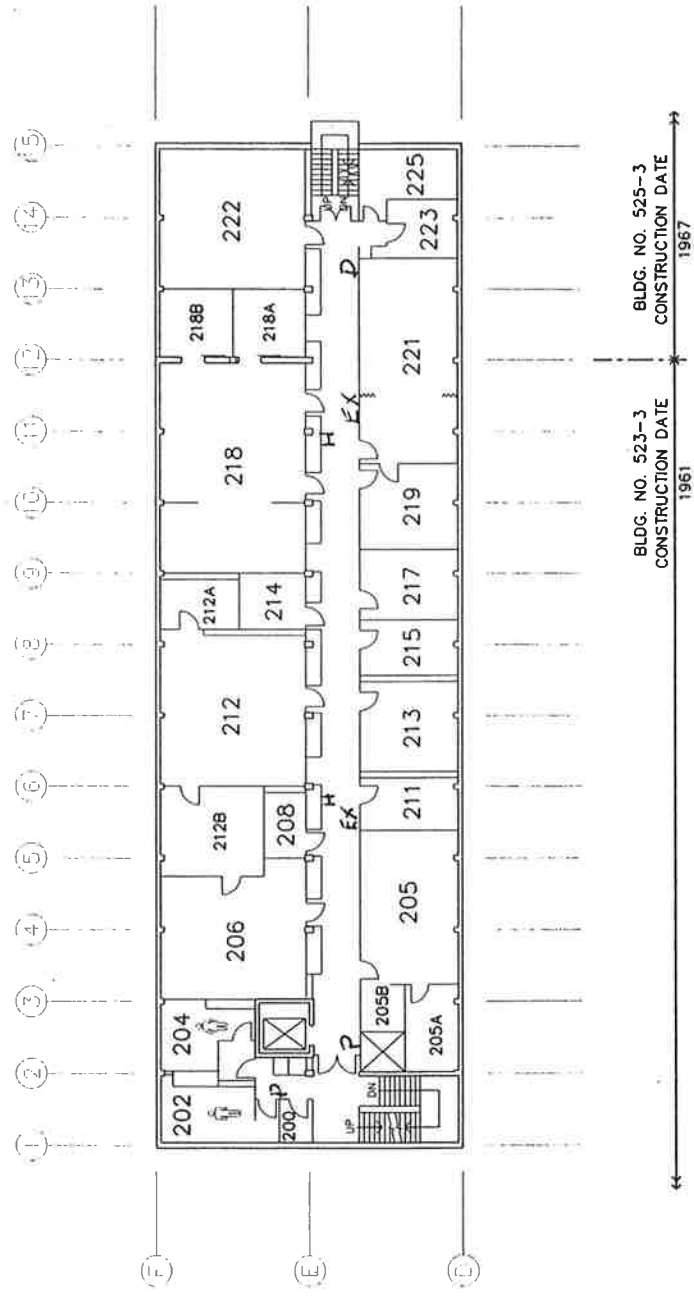
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KEYPLAN BY CAMPUS PLANNING & DEVELOPMENT



MEDICAL SCIENCES BLOCK C
(PHARMACOLOGY, THERAPEUTICS, BIOCHEMISTRY)

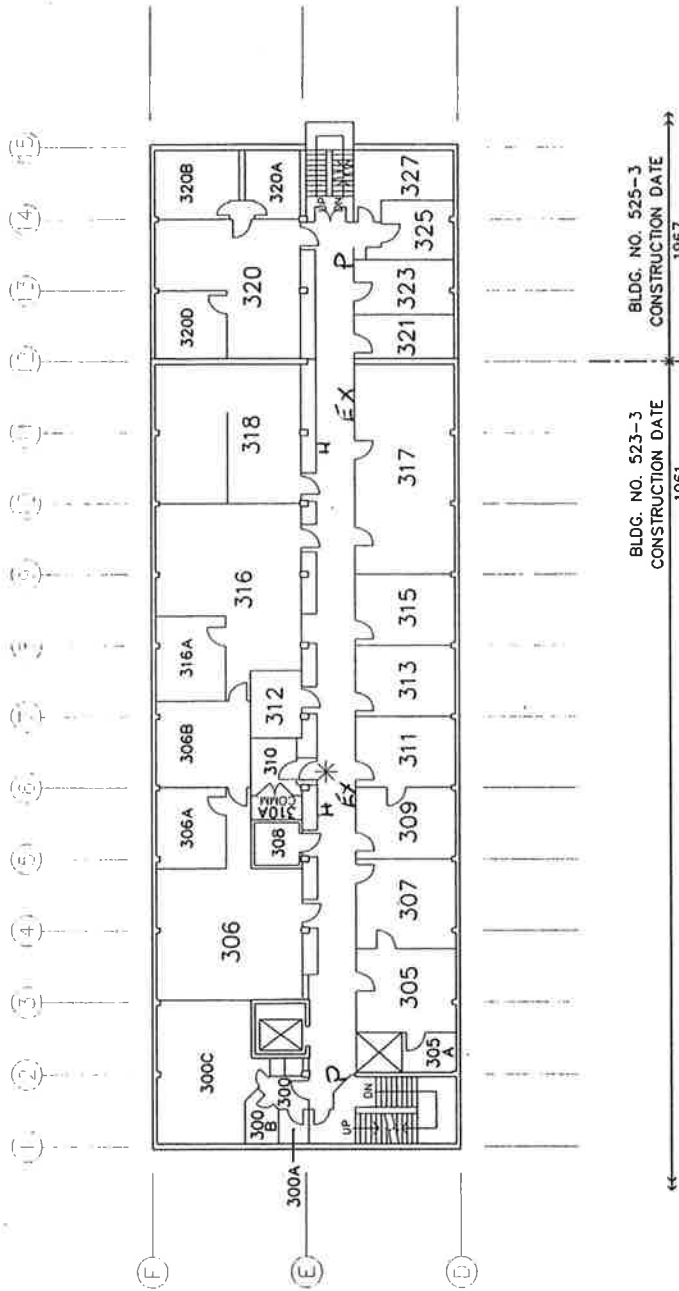
ADDRESS 2176 Health Sciences Mall, V6T 1Z3

FLOOR SECOND SCALE 1" = 30'



BLDG. NO. 523-3
CONSTRUCTION DATE 1961

BLDG. NO. 525-3
CONSTRUCTION DATE 1967



BLDG. NO. 523-3
CONSTRUCTION DATE
1961

BLDG. NO. 525-3
CONSTRUCTION DATE
1967

523-3

525-3

\\KEYPLANS\523-3\523-3-A3.DWG

* DENOTES LAST REVISION

No.	DATE	PROJ. NO.	DWG. NO.	BY
01	06 MAR 02		SITE CHECK	DCB
CONSTRUCTION DATE 1961/1967				
KEYPLAN DATE 02 DEC 92				
DRAWN AI				
DIG				

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KEYPLAN BY CAMPUS PLANNING & DEVELOPMENT

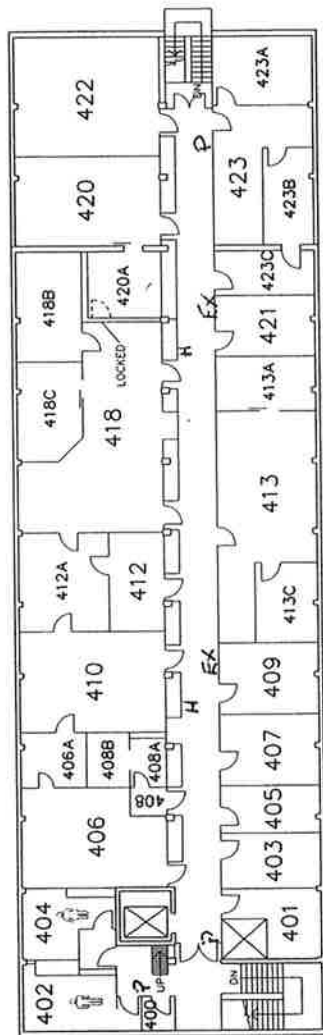


BUILDING
MEDICAL SCIENCES BLOCK C
(PHARMACOLOGY, THERAPEUTICS, BIOCHEMISTRY)

ADDRESS 2176 Health Sciences Mall, V6T 1Z3
FLOOR THIRD
SCALE 1" = 30'

PAGE 4 OF 6

525-3



BLDG. NO.	523-3	BLDG. NO.	525-3
CONSTRUCTION DATE	1961	CONSTRUCTION DATE	1967

BLDG. NO. 525-3
CONSTRUCTION DATE
1967

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KEYPLAN BY CAMPUS PLANNING & DEVELOPMENT

BUILDING
MEDICAL SCIENCES BLOCK C
(PHARMACOLOGY, THERAPEUTICS, BIOCHEMISTRY)

PAGE 5 OF 6

2176 Health Sciences Mall, V6T 1Z3

FOURTH	SCALE 1" = 30'
--------	-------------------

* DENOTES LAST REVISION

NO.	DATE	PROJ. NO.	DWG. NO.	BY
CONSTRUCTION DATE 1961/1967				
KEYPLAN DATE		02 DEC 92		DIG
		DRAWN		AI





EMERGENCY PREPAREDNESS

HSE TOOL #04



WHAT CAN YOUR UNIT DO TO PREPARE THEMSELVES FOR A DISASTER...

1) Assign responsibilities

- First aid attendants – individuals with First Aid training who feel comfortable undertaking first aid responsibilities
- Fire wardens – individuals with fire warden and extinguisher training who feel comfortable responding to a small fire
- Fire director – one fire director must be appointed for each building, it is usually coordinated through the building safety committee

2) Determine a safe, external EMERGENCY meeting place

- Communicate the established meeting place to all personnel

3) Gather departmental supplies

- Put together supplies and resources that you feel would be useful in an emergency (i.e., blankets, radios, water, toilet paper, etc.)

4) Develop a phone list

- Maintain a list of emergency numbers, an out of area contact and personal contacts for all the individuals in your area. Keep a copy of the phone list in the emergency kits

WHAT DEPARTMENT PERSONNEL CAN DO TO PREPARE THEMSELVES FOR A DISASTER...

1) Encourage personnel to develop personal emergency kits

- Be personally prepared for 72 hours
- Have kits for work, home and car

2) Encourage family preparedness

- Establish out of area contacts for your family in case of a disaster
- Develop a plan with your family – what are everyone's responsibilities during and after an earthquake
- Communicate expectations or priorities (work/home) in case of an emergency
- Collect supplies and assemble emergency kits for your home

**For groups of 12, HSE can provide a FREE Emergency Preparedness Seminar
Contact the Emergency Preparedness Coordinator @ 822-1237**



EMERGENCY PREPAREDNESS

HSE TOOL #04



Emergency Kits

Shelter

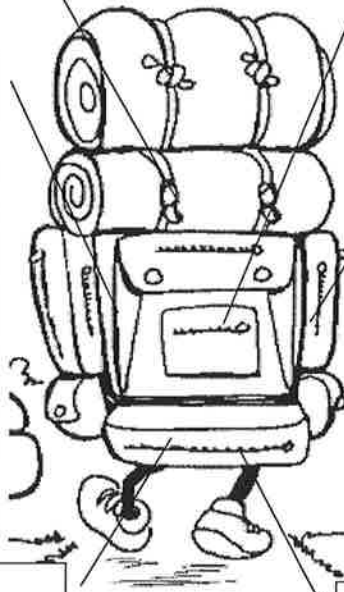
- Tarps
- Sheets
- Tent
- Blanket

Equipment

- Radio
- Dust mask
- Flashlight
- Spare batteries
- Knife

Other

- Rope and duct tape
- Garbage bags
- Signal flares
- Tools (wrench, hammer, nails, screwdriver, pliers)
- Personal items (book, cards, candy, pen and paper)
- Spare house and vehicle keys
- First aid kit
- Whistle
- Home kits also need to take into consideration pets, children, etc.



Personal

- Toothbrush and paste
- Deodorant, soap, toilet paper
- Personal documents, identification
- Medication, personal prescription
- Spare prescription glasses
- Quarters for pay phone
- Sunscreen
- Entertainment (i.e., cards)
- Keep sakes (i.e., photos)

Food

- Water (4L/person/day)
- Non perishable food
- Can opener
- Water purification tablets or chlorine bleach and medicine dropper

Clothing

- Sturdy shoes
- Jacket
- Hat and gloves
- Socks, underwear
- Pants, sweater
- Rain gear

**For more information contact EMERGENCY PLANNING
@ 822-1237**



IN CASE OF EARTHQUAKE

HSE TOOL # 11



In the event an earthquake strikes –

1. *Remain calm – reassure others.*
2. *If indoors, stay there! If outside – stay there!*
3. *Take cover, and protect the head, face, and torso.*
4. *Move away from large windows and objects which may fall.*

After the shaking stops –

1. *Assess your immediate surroundings for dangers. Evacuate if necessary.*
2. *Check for injuries. Administer first aid to the most seriously injured.*
3. *Check building for structural damage. Evacuate if necessary.*
4. *Check utilities (e.g. gas, power). Shut off if necessary.*
 - **NEVER TOUCH DOWNED POWER LINES.**
 - **ONLY SHUT OFF GAS IF YOU SMELL IT OR SUSPECT A LEAK**
5. *Send a runner to the next closest unit to exchange information.*
6. *Be alert for fire hazards. Put out small fires, if it is safe to do so!*
7. *Do not light a match or turn on a light switch. Use a flashlight!*
8. *Clean up hazardous materials and debris, if it is safe to do so.*
9. *Wear sturdy shoes and protective gloves if there is debris.*
10. *Put all telephone receivers back on hooks.*
11. *Do not use telephone unless absolutely necessary.*
12. *Turn on battery operated radio (or car radio) for emergency bulletins.*

Assist others -

1. *Ensure all building occupants are accounted for. Take a head count.*
2. *Initiate rescue efforts if necessary (e.g. for trapped persons). Do not enter severely damaged buildings. In that case, leave rescue to trained professionals!*
3. *Move injured people from hazardous areas into unaffected areas.*
4. *Set up emergency care (e.g. shelter, feeding, first aid). Calm people.*
5. *Ensure people take routine medication. In an emergency it's easy to forget!*
6. *Check water supplies. Draw a moderate amount of cold water and store in emergency containers.*
7. *Gather emergency supplies and tools.*
8. *Check to see if sewage lines are intact before flushing toilets.*

Stay safe -

1. *Stay out of danger areas. Your safety (and life) comes first!*
2. *Respond to instructions of emergency personnel.*
3. *Be prepared for additional earthquake aftershocks.*
4. *Open doors carefully and watch for falling objects!*

Communicate –

1. *Notify your out-of-town contact that you are O.K.*
2. *Work together in teams to carry out emergency response efforts.*



IN CASE OF EARTHQUAKE

HSE TOOL # 11



Emergency Response

Right after an earthquake, you will need to access first aid and emergency supplies quickly. Note the location of emergency supplies here, and the names and phone numbers of people who can help you in an emergency. For example, list your local first aid attendant, his/her phone number, and the location of the first aid kit. You can use the following checklist to identify emergency preparedness steps you have already taken.

I know....

- ☐ The location of the department's first aid kit(s).
- ☐ The location of at least 2 fire extinguishers near my office.
- ☐ The name(s) of local first aid attendant(s) for this department.
- ☐ First aid and CPR.
- ☐ What to do during and after an earthquake.
- ☐ How to use a fire extinguisher.
- ☐ Where our department's emergency assembly area is located.
- ☐ Where our department's emergency supplies are located.
- ☐ What the role of our department is, during an emergency, to assist the University to respond and recover.

I have...

- ☐ Backed up essential computer files, documents and research.
- ☐ Secured computers and equipment to prevent them from falling.
- ☐ Moved heavy objects off high shelves and overhead fixtures to prevent them from falling.
- ☐ Removed unnecessary boxes and/or debris to reduce tripping and/or fire hazards.
- ☐ Moved objects and furniture away from emergency exits stairwells.
- ☐ A family plan in the event there is an emergency when I am not home.
- ☐ An out of town contact.
- ☐ Made plans with my family and my employer in the event an emergency keeps me at work.

I will....

- ☐ Assemble an emergency supply "grab and go" bag for the office / home / school.
- ☐ Stockpile emergency water at the office / home / school.
- ☐ Put a pair of sturdy shoes under my bed.
- ☐ Check the batteries in my flashlight(s).
- ☐
- ☐
- ☐

I can....

- ☐ (E.g. Do first aid.)
- ☐
- ☐
- ☐

Our department should...

- ☐
- ☐
- ☐

Contact the Department of Health, Safety & Environment for more information and training in Emergency Preparedness (822-1237, Disaster Planning).

FIRST AID SERVICES AT UBC

The UBC “2-4444” Mobile First Aid System

Vancouver Fire and Rescue Services (VFRS) provides 24-hour Mobile First Aid coverage to all university employees, students and visitors. This service is provided free-of-charge.

Dialing **822-4444** (or **2-4444** on a campus phone) will summon the Mobile First Aid Unit to the patient's location. The Mobile Unit is staffed by a trained Level 3 first aid attendant.

At the site, the Mobile First Aid attendant will have several options:

- 1). The patient may be treated on site (and allowed to return to work)
- 2). The patient may be transported (in the Mobile Unit) to the Central First Aid Station
 - if the treatment requires more sophisticated equipment or a period of time for patient monitoring or rest
 - the Central First Aid Station is located at UBC Student Health Services
- 3). The patient may be transported and admitted to the UBC Hospital Emergency Ward
 - if deemed necessary by the responding attendant, or if requested by the patient
 - transport may be done using the Mobile Unit or by a BC Ambulance unit

As a result of the “2-4444” system, all UBC faculties, departments and areas are compliant with WCB Occupational First Aid regulations.

NOTE: It is the responsibility of faculties/ departments / areas to ensure that every worker is made aware of the location of first aid and how to call for assistance.

This is to be done by posting first aid information conspicuously throughout the workplace, and effectively communicating this information to the workers.

Local / Departmental First Aid Stations

As a supplement to the “2-4444” Campus Mobile First Aid Service, local first aid stations and attendants have been established in a variety of locations on campus, on a voluntary basis. In order to ensure prompt and effective First Aid treatment at these locations:

It is strongly recommended that all local First Aid Stations meet the following criteria:

1. All first aid treatments are to be administered by a qualified first aid attendant (possessing, at minimum, a current WCB ‘Level One’ First Aid - CPR certification (or equivalent)).
2. First Aid stations are to be equipped with a suitable first aid kit. First Aid kits must be maintained, inventoried and re-stocked regularly.
3. A Treatment Record Book must be present at all first aid stations. In order to protect workers in case of future complications, *all treatments, however minor*, are to be recorded.
4. Accident/ Incident Forms are to be promptly filled out and submitted (where appropriate).
5. Accident Investigations are to be promptly performed and submitted (where appropriate).
6. A copy of the Treatment Record sheets must be submitted, *on a monthly basis*, to:
 - The Departmental Safety Program Administrator
 - The Local / Area Safety Committee (Chair)
 - The Department of Health, Safety and Environment.

Roles and Responsibilities of Campus First Aid Attendants

According to the Worker's Compensation Board, the purpose of first aid is to provide workers with prompt, easily accessible and appropriate first aid treatment and to keep a record of each treatment. The role of the first aid attendant is to

- promptly provide workers with a level of care within the scope of the attendant's training
- positively affect the outcome of work-related illnesses and injuries that occur on the job
- objectively record observed and reported signs and symptoms of injuries and illnesses, and
- refer to medical attention injuries and illnesses recognized as being serious or beyond the scope of the attendant's training.

When called upon to treat an ill or injured person on campus, First Aid Attendants must:

1. Promptly administer appropriate First Aid treatment

If you feel you lack the training, knowledge or resources to appropriately treat the injury, here are your options:

1. **Call 2-4444** - to have a WCB Level 3 first aid attendant dispatched to your location.
 - the attendant will respond using the Mobile First Aid Vehicle
 - the attendant may treat the person on site, or may transport the patient to the Central First Aid Station (or to UBC Hospital, if necessary).
 - there is no cost for using the "2-4444" Mobile First Aid system.
2. **Refer the patient to the UBC Central First Aid Station -**
 - it is located at *UBC Student Health Services* (2211 Wesbrook Mall, Rm. M334).
 - the Central First Aid Station is staffed by a nurse (WCB Level 2 or greater).
 - it is recommended that another person drive or accompany the patient to the Central First Aid Station.
 - the Mobile First Aid Vehicle (summoned by calling 2-4444) can also transport the patient to the Central First Aid station

3. Refer the patient to his or her family physician –

NOTE: *If you suspect that the injury or illness may be severe, do not hesitate to call 9-1-1.*

2. Enter treatment information into First Aid Treatment Record book -

- all first aid treatments, *no matter how minor*, must be recorded in the first aid station's Treatment Record Book.
- these records are kept to protect the worker in the unlikely event of future complications due to the injury.
- all referrals (to 2-4444, Central First Aid, or to a physician) must also be recorded
- a copy of the Treatment Record sheets must be submitted, *on a monthly basis*, to:
 - The Departmental Safety Program Administrator
 - The Local / Area Safety Committee (Chair)
 - The Department of Health, Safety and Environment.

3. Have the patient report the injury or illness to his or her supervisor (where applicable).

4. Assist in filling out a WCB Accident/Incident Form (where applicable).

Department of Health, Safety & Environment

Snow Policy

The following has been drawn up in order that all HS&E staff have a clear understanding of how this department will administer the University policy on snow should the need occur.

UBC Policy:

The University will remain open during snow storms but may cancel or reschedule classes on a university-wide basis and/or curtail non-essential services in response to the conditions.

Purpose:

To provide a procedure for the staff of Health, Safety and Environment in the event of extreme snow conditions.

Procedure:

In the event of deteriorating conditions during working hours the Director may make a decision to send staff home early. Under these conditions, staff will be paid for that day.

In the event of deteriorating conditions overnight, Health Safety and Environment will normally remain open and employees will be expected to come to work. Should any employees choose to stay at home due to concerns about weather conditions they may arrange with their supervisors to make up the time by either taking a vacation day, making up the time at a later date or taking the day off without pay. Employees who decide not to come to work must contact their supervisor as soon as possible to communicate their decision.

Employees who have made a diligent effort to come to work but arrive late due to severe weather conditions will receive their normal pay for the day.

In the event that the weather conditions should necessitate the closure of the department, this information will be communicated by supervisors to their respective staff. Every effort will be made to communicate the decision to close by 7:00 am.

Department of Health, Safety & Environment

The Department staff provide emergency response and act as a resource for the University community. The Department is also responsible for liaising between the University and the Vancouver Fire Department. In order to become familiar with the varied services that the Department offers to the community, we suggest you spend some time with each group in the Department. This orientation process may be spread over two months. Please work with your supervisor to develop an orientation plan.

Departmental Program Supervisors

1. Administration	(Mumtaz Lakhani, 2-0994)
2. Asbestos Management	(Gail Townsley, 2-1885)
3. Biosafety	(Bruce Anderson, 2-7596)
4. Chemical Safety	(Ligia Gheorghita, 2-5909)
5. Diving Safety	(Pierre Tanguay, 2-2990)
6. Environmental Programs	(Mark Aston, 2-9527)
7. Environmental Audits	(Donna Ashick, 2-8762)
8. Emergency Preparedness Program	(Judi Van Swieten 2-1237)
9. Occupational Hygiene	(Dave Bell, 2-2643)
10. Personal Security	(Paul Wong, 2-6210)
11. Radiation Safety	(Craig Smith, 2-7052)
12. Health Promotion Program	(Gerry Latham, 2-3162)

Courses offered by the Department:

You are encouraged to attend most of the courses offered by the Department. Please find out from your supervisor the courses that will be useful to you. The following courses are offered:

1. Diving Safety Seminar
2. Introduction to Laboratory Safety
3. Laboratory Biosafety Seminar
4. Laboratory Chemical Safety Course
5. Introduction to Chemical Safety Course
6. Radionuclide Safety and Methodology
7. Safety Committee Training
8. Occupational First Aid Level 1
9. Transportation of Dangerous Goods
10. Personal Security Workshop
11. Pollution Prevention Workshop

Occupational Hygiene

The Occupational Hygiene Program involves the recognition, evaluation and control of workplace environmental health hazards, such as chemical or noise exposures, which may cause illness, impaired health, or significant discomfort to UBC faculty, staff and students. Occupational Hygiene also acts as a resource and provides training to the 90 campus Local Safety Committees.

Services include:

- Developing work procedures (e.g. confined space entry, roof top entry)
- Laboratory fume hood safety testing
- Indoor air quality evaluation
- Risk assessment
- Respiratory protection
- Safety Program Seminars and other training

Personal Security Program

The Personal Security Program is responsible for providing personal security awareness and training to the University community.

Services include:

- Investigation and addressing of any security issues to minimize risk for all faculty, staff and students
- Providing a liaison with different campus groups regarding personal security issues
- Reporting on activities to the Personal Security Advisory Committee

University of British Columbia Emergency Phone Numbers

Police, Fire Ambulance 911
First-Aid 822-4444
Campus Security 822-2222
RCMP (non-emergency 8am – 4pm) 224-1322
Trouble Calls 822-2173

*Off Campus employees should familiarize themselves with local emergency numbers.

Departmental Phone Numbers

Administration:..... 822-2029
Asbestos Management..... 822-1885
Biosafety:..... 822-7596
Chemical Safety:..... 822-5909
Disaster Preparedness:..... 822-1237
Diving Safety:..... 822-2990
Ergonomics Programs:..... 822-9040
Environmental Programs:..... 822-3101
Environmental Services Facility:.. 822-1281
Occupational Hygiene:..... 822-2643
Personal Security:..... 822-6210
Radiation Safety:..... 822-7052
Health Promotion/WCB Claims:.. 822-8759

The Department of Health, Safety and Environment

Our Mission

To integrate a safe, healthy and environmentally responsible culture into the working and learning experience at UBC.

Strategic Goals

To develop and continuously improve effective University health and safety and return to work programs, which ensure compliance with legislation, fewer accidents and a safe and healthy work environment.

To develop an environmental management system for the University that will ensure compliance with legislation, demonstrate due diligence, and establish a process of continuous improvement, resulting in environmental stewardship.

To evaluate and enhance our customer service by measuring the effectiveness of our activities and improving our professional expertise.

To provide the University community with required education and training in health, safety and environmental programs, ensuring a workforce able to work safely and responsibly.

Health, Safety & Environment
Suite 50-2075 Westbrook Mall
Vancouver, British Columbia
V6T 1Z1 Canada
(604) 822-2029 (Telephone)
(604) 822-6650 (Facsimile)
www.safety.ubc.ca



Department of Health, Safety and Environment

Program Brochure 2001

The University of British Columbia
January 2001

Biosafety Program



The Biosafety Office provides evaluations of the potential risks in research projects involving biohazardous materials, training in biosafety, and certification of laboratories and research protocols. All research projects must be reviewed and approved by the Biosafety Officer and the University Biosafety Committee prior to release of funding.

The office also acts as a resource on issues of biosafety, including laboratory design and equipment selection.

Services include:

- Laboratory Biological Safety Course and mandatory annual Biological Safety Cabinets (BSC) certification
- Laminar Flow Hood (LFH) tests and certification
- Biosafety Training Manual Biosafety Seminars and Presentations

Radiation Safety Program



The Radiation Safety Program oversees the safe use of radiation sources in research, teaching and the workplace at UBC. The Radionuclide Safety and Methodology course provides an introduction to the safe handling of radioactive sources and is mandatory for all faculty, staff and students prior to commencing work with radioactive materials.

Services include:

- Licensing the use of radioactive materials
- Personnel monitoring
- Thermoluminescent dosimeters administration
- Thyroid monitoring
- Emergency response to radiation incidents
- Facility compliance inspections

Environmental Program



Environmental Programs assists members of the University community in ensuring environmental compliance and emergency preparedness.

Services include:

- Reducing and disposing hazardous waste
- Environmental compliance auditing
- Training on disaster preparedness for the workplace and home
- Development of an Environmental Management System for the University
- Storage Tank Audits
- Training on Environmental Responsibilities
- Publication of the "Waste Watchers" Newsletter

Environmental Services Facility (ESF)

ESF is responsible for the safe collection, storage and proper disposal of chemicals (including lab chemicals, paints, thinners, photochemicals, oils, batteries) and bio-hazardous wastes on campus.

Services include:

- Information on proper handling and disposal of hazardous materials
- Pick-up of chemical, bio-hazardous and other special waste
- Procedures for the handling and disposal of all hazardous wastes.
- Solvent, Silver and Photochem recovery programs
- Chemical exchange program

Asbestos Management



The Asbestos Management Program's mandate is to control the hazards of exposure to airborne asbestos fibres by the identification and elimination or the containment of asbestos containing materials (ACM).

Services include:

- Inspections, inventory and documentation of asbestos-containing materials in UBC facilities
- Planning support for Plant Operations and Campus Planning and Development Personnel during renovation and maintenance projects

Health Promotions Program

UBC typically has up to 200 employees absent from work per day for work related and non-work related injuries or illness. The Health Promotion Program (HPP) provides support for those employees who are off due to injury or illness.

HPP encompasses four program areas:

1. Workers' Compensation Board (WCB) claims administration and return to work coordination for employees who have been injured at the workplace
2. Income Replacement Plan (IRP) (long term disability) claims administration and return to work coordination for employees who have a long term illness/disability which prevent them from working
3. Return to work coordination for employees who have been away due to non-claim illness/injury
4. Prevention and minimization of injuries and health issues at the workplace

Services include:

- WCB claims administration and coordination
- IRP claims administration and coordination
- Return To Work (RTW) for all employees returning to work after an injury or long term disability
- HPP assistance to employees requiring information on prevention of injury in the workplace.
- Health Promotion education and initiatives, focused on the health and well being of the Faculty and Staff community at UBC

Ergonomics Program

The goal of the UBC program is to prevent and reduce injuries as well as improve worker comfort and efficiency. To succeed at this goal, departments will be trained and enabled to integrate ergonomic principles within their health and safety program activities. Along with worker consultation, ergonomic risk identification and assessments will take place beginning with high risk groups. From the assessments, risk controls will be introduced and evaluated to ensure success.

Chemical Safety Program



The Chemical Safety Program at UBC promotes the safe handling and storage of chemicals. Information, advice and guidance on regulations and the recognized safe practices for handling hazardous materials are provided to the University community.

Services include:

- Laboratory Chemical Safety Training
- Workplace Hazardous Materials Information System (WHMIS)
- Material Safety Data Sheets (MSDS)
- Hazardous Materials Spill response
- Transportation of Dangerous Goods
- Laboratory inspections

Diving Safety Program



The Diving Safety Program provides diving safety training to registered scientific divers at the University and monitors scientific diving activities occurring under University auspices.

The program offers registered researchers the following services:

- Free diver training in such areas as: basic and advanced diving techniques, rescue diving, dive-site emergency management, First Aid/CPR and research diving techniques
- Regular exchange of underwater safety and research information, through membership in The Canadian Association for Underwater Science (CAUS)
- Facilitated underwater research opportunities at other academic or research institutions, through CAUS reciprocity agreements
- Access to a library of information on scientific diving and diving safety

Emergency Preparedness

Emergency Preparedness workshops cover basic principles of emergency preparedness, with a focus on two key areas: preparing individuals for 72 hours of self-reliance, and prevention activities to reduce injuries and damage to property in the event of a major disaster or emergency. Emphasis is placed on compiling emergency supplies on an individual basis, while developing response strategies as a department. Workshops include information on natural and technological disasters and can be tailored to suit the needs of your department or building. Topics and times are flexible and all workshops are free of charge, interactive and hands-on.

Introduction to Emergency Social Services

Have you ever wondered who will look after people following a major disaster? Have you ever thought you'd like to help, but don't think you have the necessary skills? ESS is a volunteer organization located throughout B.C. Based on the principle of Neighbours Helping Neighbours, this free two hour workshop will give you an overview of the ESS program at UBC as well as information which will help you prepare yourself and your family so you will be able to respond quickly in a time of need.

Judi Van Swieten, Disaster Planning Coordinator
604-822-1237 swieten@safety.ubc.ca
2001 Course Dates: Upon Request

Fire Safety Training

Fire Safety Wardens and directors may take a workshop that outlines the responsibilities of wardens, provides information on basic fire safety, and gives participants the opportunity to practice basic fire response using fire extinguishers. The first part of the workshop is delivered on site at your department/building, and includes a guided tour of your facility to highlight fire safety issues and equipment. The second part is delivered at UBC Fire Hall #10, and covers fire extinguishers, including a "hands-on" session on their use. Training may be scheduled by calling either Judi Van Swieten or the Office of Fire Prevention at UBC Fire Hall #10 (Vancouver Fire & Rescue Services) at (604) 665-6066.

Judi Van Swieten, Disaster Planning Coordinator
604-822-1237 swieten@safety.ubc.ca
2001 Course Dates: Upon Request

Fire Extinguisher Training

In addition to the Fire Safety Training, the Fire Department offers a 1.5 hour course on the use and handling of fire extinguishers. It includes a practical session as well as a theoretical component. This course is free of charge.

Melanie Lam, First Aid Coordinator
604-822-2029 melanie@safety.ubc.ca
2001 Course Dates: Upon Request

Occupational First Aid-Level 1

The first few minutes after an accident are the most critical. Occupational First Aid teaches you how to keep Basic Life Support systems working. You will learn how to open an airway, provide breathing for a victim, keep the heart circulating blood, and control deadly bleeding. Certification is issued by Workers' Compensation Board and is valid for two years. This course is offered frequently and includes CPR-Level A training as well.

NOTE: All participants will be charged a fee for attending this course.

Melanie Lam, First Aid Coordinator
604-822-2029 melanie@safety.ubc.ca
2001 Course Dates: Twice Monthly

Our Mission

To integrate a safe, healthy and environmentally responsible culture into the working and learning experience at UBC.



The Department of Health, Safety and Environment

Department of Health, Safety and Environment

Health, Safety and Environment offers these regularly scheduled training programs for University faculty, staff and students. Special arrangements may be made for non-UBC personnel. Other courses which are periodically available include: WHMIS, safety supervision courses, back-talk, ergonomic assessment, respirator training and WCB Claims Management. If you have a specific safety training request, please contact the appropriate Safety Officer.

Consult our website: www.safety.ubc.ca for more information regarding course information, dates and times and for registration purposes.

Training Brochure 2001

Health, Safety & Environment
Suite 50-2075 Westbrook Mall
Vancouver, British Columbia
V6T 1Z1 Canada
604-822-2029 (Telephone)
604-822-6650 (Facsimile)
www.safety.ubc.ca

o:/derisk/forma/coursebrochure 2001

The University of British Columbia
January 2001

Transportation of Dangerous Goods

Regulations require that departments which ship or receive dangerous goods must have personnel with current TDG training and certification. This one day course is designed to familiarize receivers and shippers with the requirements of the Transportation of Dangerous Goods and IATA Regulations. Participants will learn to properly package, label and prepare documents for transporting dangerous goods. Formal certification will be issued upon successful completion. NOTE: All participants will be charged a fee for attending this course.

Chemical Safety Officer
604-822-5909 chemical@safety.ubc.ca

2001 Course Dates:

TDG Road April 17, Nov 26

TDG Air April 19, Dec 4

TDG Radioactive Jan 25, May 3, Nov 14

TDG Receivers TBA

For all faculty, staff and students working with hazardous chemicals, it is **mandatory** to take one of the following chemical courses:

Introduction to Chemical Safety Course

This course covers safe chemical use, handling, storage, emergency response and waste disposal procedures. The six hour classroom format satisfies the requirement that all faculty, staff and students who work with hazardous materials must attend a chemical safety course. It is intended for anyone who handles hazardous materials.

Chemical Safety Officer

2001 Course Dates: Jan 17 & 24, Oct 11 & 16

Laboratory Chemical Safety Course

This course covers safe chemical use, storage, handling and disposal, laboratory inspections, emergency response and spill management. A half-day practical session provides hands-on experience with fire extinguisher use and spill clean-up. The course is intended for people who handle chemicals in a laboratory, especially lab technicians, store keepers and safety committee representatives.

Chemical Safety Officer

2001 Course Dates: May 15 & 17, Aug 21 & 23

Laboratory Biological Safety Course

This course deals with topics essential for people working with biohazards of all types at the university. Human error and poor laboratory practice can compromise the best laboratory safeguard designed specifically to protect the laboratory worker. The primary factor in the prevention of laboratory accidents and laboratory associated infections is a fully trained faculty and staff. This course is mandatory for all faculty, staff and students prior to commencing work with Biohazardous Materials Risk Group Level II and higher. The 9 hour course includes a half hour exam.

Bruce Anderson, Biosafety Officer

604-822-7596 anderson@safety.ubc.ca

2001 Course Dates: Feb 13 & 14, May 1 & 2.

Nov 6 & 7

Radionuclide Safety and Methodology

This course provides a comprehensive introduction to the safe handling of radioactive sources at UBC. The fundamentals of radiation physics are briefly covered, with emphasis placed on health hazards, record keeping, legal requirements, purchase of isotopes, spill management and waste handling. Includes a 2 hour practical and one hour exam. This course is **mandatory** for all faculty, staff and students prior to commencing work with radioactive materials.

Craig Smith, Radiation Safety Officer

604-822-7052 smith@safety.ubc.ca

2001 Courses Begin: Jan 8, Mar 12,

May 23, Sept 10

Asbestos Awareness Course

This course will give the participant an awareness of the hazards of asbestos, typical materials used on the UBC campus, how to interpret the asbestos labelling system and how asbestos is managed by the university. This course is available on demand by Local Safety Committees and interested departments.

Gail Townsley, Supervisor, Asbestos Management

604-822-1885 townsley@safety.ubc.ca

2001 Course Dates: Upon Request

Diving Safety Seminars

These seminars address basic and advanced diving techniques, rescue diving and emergency management, underwater research methodologies, and a variety of specialized topics. These seminars are intended for University faculty, staff and students who carry out diving as part of their working responsibilities or use diving as a research tool.

Pierre Tanguay, Diving Officer

604-822-2990 tanguay@safety.ubc.ca

2001 Course Dates: TBA

Safety Committee Training

This two day course is intended for Safety Committee members and supervisors. Topics include the University Safety Policy and Program, roles and responsibilities, accident prevention, effective safety committee operations, safety inspections, accident investigation, safety training and the role of the WCB. Upon completion of the course, participants will be able to participate fully in the safety programs of their respective department.

David Bell, Occupational Hygiene Officer

604-822-2643 bell@safety.ubc.ca

2001 Course Dates: May 29 & 30, Sep 18 & 19,

Dec 11 & 12

Personal Security Workshop

This 90 minute workshop is designed to meet the specific needs of the University Community. It raises awareness of personal security in an office environment which includes discussion about encountering strangers in the workplace, leaving work at night, and how to respond to these and similar situations. Participants are encouraged to express concerns about their own work environments and devise strategies to improve their personal security on campus.

Paul Wong, Personal Security Coordinator

604-822-6210 wong@safety.ubc.ca

2001 Course Dates: Upon Request

Spill Reporting Training

This one hour workshop/course is intended to explain the complex UBC Spill Reporting Procedures. Personnel handling hazardous materials should be aware of the procedures to follow when a spill has occurred. Students will learn about what constitutes a "reportable spill" and the wide range of regulatory requirements to report the spill to the appropriate authority.

Donna Ashick, Environmental Audit Officer

604-822-8762 ashick@safety.ubc.ca

2001 Course Dates: Upon Request

Environmental Responsibilities at UBC

This course is intended to inform Administrative Heads of Unit (or their designates) about individual and institutional environmental responsibilities at UBC. The components of this two hour session include: legal responsibilities; UBC policies and programs in place to meet those responsibilities; and sustainability at UBC. This course is expected to be offered online in mid-2001.

Mark Aston, Manager, Environmental Programs

604-822-9527 aston@safety.ubc.ca

2001 Course Dates: TBA

Pollution Prevention Workshop

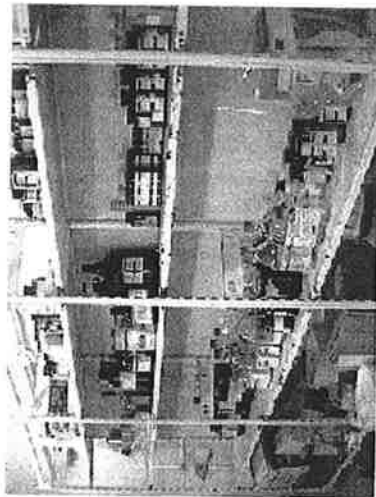
This three hour workshop is intended to inform faculty and staff about pollution prevention practices that can be implemented in academic laboratories. This introductory program includes topics such as: laboratory waste management, source reduction, recycling, on-site treatment of hazardous waste, and proper waste disposal. The workshop is intended for all faculty, staff, and students working with hazardous chemicals or generating hazardous waste which require special treatment or disposal procedures.

Stephen Lee, Environmental Programs Officer

604-822-9280 lee@safety.ubc.ca

2001 Course Dates: TBA

Chemical Conservation Program



Chemical Exchange Program

The Chemical Exchange Program was created to reclaim perfectly useable chemicals from being disposed of. Labs having surplus or unused chemicals are encouraged to submit an itemized list to ESF using the facility's Chemical Waste Inventory form (call 822-6306). A list of available chemicals is published monthly and sent to all waste generators who use ESF. The cost for purchase and delivery for any chemicals on the list is FREE!! For more information, or to be added to our mail list of recipients for a monthly copy of our Chemical Exchange Inventory, contact Ron Aarnodt at 822-6306.

Solvent Recovery Program

UBC typically uses large volumes of organic solvents that ultimately require special waste disposal. ESF provides a solvent recovery program

that re-distills certain frequently used solvents such that their purity is suitable for most laboratory applications. This program has been expanding since 1994, having increased its volume of solvents recycled by 39% in 1997 alone. Today, the program successfully distills and redistributes Acetone, Methanol, Hexane, Xylene, and Varsol back to program participants for a fraction of the price of new solvents. For more information on how to participate in this program, call 822-1285.



Silver Recovery from Photochemical Waste

Legislation now states that photographic wastes that contain more than

5 ppm of silver are considered special wastes. In the future, this legislation may change to an even stricter 1 ppm, which may impact photographic waste streams significantly. ESF has developed a program that not only collects and treats this caustic and toxic waste for safe sewer disposal, but also recovers the silver for reuse by a silver refinery. For more



Other ESF Pollution Prevention Strategies

ESF has an extensive Pollution Prevention Program, which was created to increase awareness of environmental issues linked to the use of hazardous substances. A hazardous waste manual of updated disposal procedures is available by contacting the facility. As well, ESF provides seminars, training, and workshops that deal with various topics, such as pollution prevention and hazardous waste management. ESF is also involved in research and development of new and improved methods of dealing with hazardous waste, such as heavy metals, cyanide treatment, and finding new solvents to recover. A quarterly newsletter called Waste Watchers is published that is designed to create awareness regarding environmental issues.

For an extensive library of Material Safety Data Sheets (MSDS), refer to the links on the Department of Health, Safety and Environment's homepage at www.safety.ubc.ca. At this site, you can find all the pertinent information on common chemicals used on campus. The ESF has a regular pickup schedule for the removal of hazardous waste. To view this schedule, visit www.safety.ubc.ca or call Bang Dang at 822-1285 for any questions.





Environmental Services Facility

The Environmental Services Facility (ESF), located on the UBC Point Grey campus, is involved in the recycling, treatment, classification, transportation, and disposal of hazardous waste. ESF deals with over 350 waste generators and handles approximately 64 tonnes of solid waste and 30,000 L of liquid waste per year. This waste includes hazardous chemicals, PCB containing materials, solvents, oil, batteries, biohazardous waste, and photographic waste. Where possible, hazardous waste is diverted to ESF's Chemical Conservation Program, which includes Solvent Recovery, Chemical Exchange, and Silver Recovery from Photochemical Waste. Otherwise, wastes are either stored, incinerated, or neutralized on site. ESF also provides Hazardous Waste Management and Pollution Prevention training, and is involved with research and development for new hazardous waste disposal and treatment procedures.



Suite 50-2075 Wesbrook Mall
Vancouver, BC
Canada V6T 1Z1
Fax: 822-6650
<http://www.safety.ubc.ca>

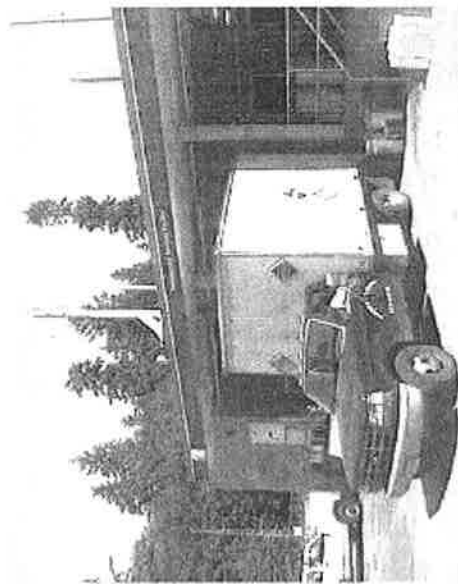
Ron Aamodt 822-6306 aamodt@unixg.ubc.ca
Bang Dang 822-1285 bang@unixg.ubc.ca
Andy Trinh 822-1281 trinh@unixg.ubc.ca
Stephen Lee 822-9280 lee@safety.ubc.ca

Environmental Services Facility



Environmental Services Facility (ESF)

For the Recycling,
Treatment, Classification,
Transportation,
Storage and
Disposal of Hazardous Waste



May 2001
Department of Health, Safety and
Environment





CHEMICAL STORAGE AND HANDLING

HSE TOOL # 02



All UBC personnel who work with hazardous materials must be aware of requirements for their use, handling, storage and disposal.

(BC Occupational Health and Safety Regulation; federal Workplace Hazardous Materials Information System (WHMIS) legislation)

1. CHEMICAL INVENTORY

Inventories of hazardous materials are required to be updated annually. The **required categories** of information in a chemical inventory include the following:

- Department
- Location (Building and Room Number)
- Principal Investigator
- Chemical Name (per supplier label)
- Quantity (kg or L)
- WHMIS Class (primary hazard)
- Location of Material Safety Data Sheets (MSDS)

2. MATERIAL SAFETY DATA SHEETS (MSDS)

MSDS must be readily available to users of hazardous materials, and **should be read before using any such materials**. MSDS must be updated at least every 3 years. MSDS may be available in hard copy or on an accessible, working computer system. Some MSDS web sites are provided below. See HSE Website: www.safety.ubc.ca for more information.

Site Name	Site Address
Canadian Centre for Occupational Health & Safety*	http://www.ccohs.ca/
University of Vermont, site one	http://siri.uvm.edu/msds/
University of Vermont, site two	http://www.siri.org/msds/index.html
Utah University	http://www.enviro-net.com/technical/msds/
Northwest Fisheries Science Center	http://research.nwfsc.noaa.gov/msds.html
Fisher Chemical Catalogue**	http://www.fisher1.com/fb/itv?7..f97.4...1...
Acros Fine Organic Chemicals Catalogue**	http://www.fisher1.com/fb/itv?7..f97.10...1...

* MSDS from this address are free for all UBC personnel with UBC Internet addresses

** At these sites, search for chemicals in the Fisher and Acros Chemical Catalogues. Once you find the chemical, click on it, and then scroll down to the MSDS icon.

3. CHEMICAL STORAGE

Chemicals must be stored safely and incompatible materials must be segregated. Refer to the **UBC Chemical Storage Guidelines** poster for more details.

4. LABELLING

All WHMIS Controlled products must have a legible label. The three types of labels are listed on the next page, showing when they are applied and the information required on them.



CHEMICAL STORAGE AND HANDLING

HSE TOOL # 02



i) Supplier Label (*for laboratory use*)

Found on original container. The minimum requirements are:

- chemical name
- hazard information
- handling information
- first aid information (often missing on US supplier containers)
- reference to MSDS being available (often missing on US supplier containers)

ii) Workplace Labelling (*on secondary containers, or supplier containers to replace damaged or missing label*)

Recommended for containers in use for more than 1 week. Minimum requirements are:

- chemical name
- safe handling information
- statement that an MSDS is available

iii) Other Means of Identification (*on secondary containers*)

Recommended only for containers in use for less than 1 week. Minimum requirements are:

- Identifier
 - the chemical name as it appears on the supplier label is preferable,
 - a name known to all users and workers in the area may be used,
 - a chemical formula may be used only if the name of the chemical is virtually unknown, or
 - well-known acronyms may be used only if that identifier is normally used on supplier labels or literature (e.g. TRIS).
- WHMIS label (pictogram), used to identify the known or expected hazards of the material

5. TRAINING

All individuals working with, or supervising those who work with, hazardous materials must have WHMIS education and site-specific training (WCB). Education is available through the HSE Chemical Safety Course and on-site training.



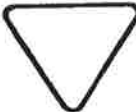




6. RESOURCES

- Departmental WHMIS Co-ordinator
- UBC Chemical Safety Officer (822-5909)
- HSE Website: www.safety.ubc.ca for the Laboratory Chemical Safety and Hazardous Waste Disposal Manuals

Samples of inventory sheets, MSDS and labels are available from the Chemical Safety Officer (822-5909).

RESTRICTED PRODUCT LABELS

Signal Words, Shapes and Pictograms

SIGNAL WORD	SYMBOL — SYMBOLE	MOT-INDICATEUR
Degree of Hazard		Degré du risque
1. Danger		1. Danger
2. Warning		2. Avertissement
3. Caution		3. Attention
Nature of Primary Hazard		Nature du risque primaire
1. Poison		1. Poison
2. Corrosive		2. Corrosif
3. Flammable		3. Inflammable
4. Explosive		4. Explosif

Sample Label

May cause blindness if swallowed. Avoid contact with the eyes. Cannot be made non-poisonous. Use only in well-ventilated area. Keep away from heat and open flame.

4 litres (141 fl oz)



FIRST AID TREATMENT: Contains methyl alcohol. In case of contact with eyes, flush thoroughly. If swallowed, induce vomiting by placing fingers or spoon at back of throat. Call physician immediately. Keep patient warm.

INTERNET ADDRESSES FOR MATERIAL SAFETY DATA SHEETS

Fisher Chemicals

[http://www2.fishersci.com/chemical/msdsinfo.jsp;\\$sessionid\\$JGQWT0IAAARZ2CWIZEEQAAA](http://www2.fishersci.com/chemical/msdsinfo.jsp;$sessionid$JGQWT0IAAARZ2CWIZEEQAAA)

- Select the appropriate catalogue; select first letter of the chemical
- Choose the form or type of the chemical you are looking for
- Click on the MSDS icon at the bottom of the page.

Sigma-Aldrich

<https://www.sigma-aldrich.com/saws.nsf/Pages/Aldrich?EditDocument>

- Register as a user on the site by following directions towards registration site
- If already a registered user login and go to MSDS location

VWR Scientific products

www.vwrsp.com/catalog/index.cgi?parent_id=100001

- click on letter; click on chemical; click on specific item
- scroll down to catalogue information where button for MSDS is located; click on MSDS button

J.T. Baker, Inc

www.jtbaker.com

Mallinckrodt Laboratory Chemicals

www.mallchem.com/cgi-bin/pasi.pl?Begin

Matheson Tri-Gas, Inc

www.mathesongas.com/msds/

- Enter Chemical name into search; click on specific item; click on MSDS button at right of screen

Canadian Centre for Occupational Health and Safety (CCOHS)

www.ccohs.ca

- Once at the site, click on CCINFOWEB in left-hand column
- Click on MSDS in table on right side of page (accessible to those with UBC IP addresses)

<p><i>See HSE Website @ www.safety.ubc.ca for additional information. Addresses and information may not be valid.</i></p>





SUMMARY OF INCIDENT / ACCIDENT REPORTING INSTRUCTIONS

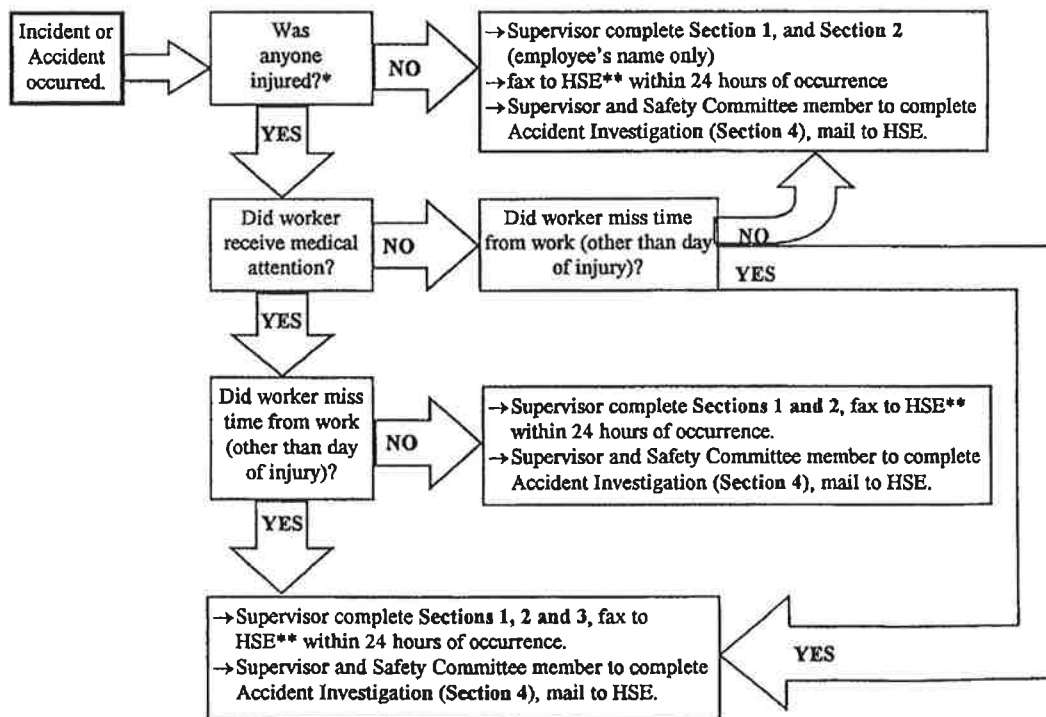
UBC's Faculty & Staff Incident/Accident Report must be completed for every incident or accident, even if there were no injuries sustained*. Any event that occurred that involved injury to a person or damage to property, or had the potential to do so, must be reported to Health, Safety & Environment within 24 hours of occurrence. Use the flow chart below as a guide to completing the form.

For serious accidents which:

- ◊ resulted in death or critical condition with a serious risk of death, or
- ◊ involved an explosion, major structural failure or collapse of a building, scaffolding, hoist, tower temporary construction support system, or excavation, or
- ◊ involved the release of a toxic or hazardous substance, or
- ◊ involved a diving accident,

then notify 9-1-1 and Health, Safety & Environment at 822-2029 immediately and seal the area (do not begin a clean-up as on site evidence must be preserved).

In cases where an injury occurred, the employee should complete the Worker's Report of Injury Form 6A (available from supervisor or administrator).



**Note: If the injured person is a student or visitor to campus, complete the UBC Student & Visitor Incident/Accident Report instead.*

****Dept of Health, Safety & Environment, 50-2075 Wesbrook Mall, General Services Administration Building.
Phone: WCB Claim Assistant 822-8759 or HSE Main Office 822-2029. Fax: 822-1637.**

HSE 06/97



UBC FACULTY & STAFF INCIDENT / ACCIDENT REPORT

Appendix E

****Fax page to HSE 822-1637 within 24 hours of injury.**** This form replaces the WCB Claim Form 7 (Employer's Report of Injury) and previous versions of the UBC Incident/Accident and Accident Investigation Reports. This form is to be completed by employee's supervisor. UBC Employees must complete the WCB Form 6A (Worker's Report of Injury to Employer). Do not distribute page 1 (yellow), except to Health, Safety & Environment (HSE), as it contains confidential information that must be collected to initiate a WCB claim.

1	Date & Time of Incident/Accident (yr/mth/day) ____/____/____ : ____ am/pm		OR		Period of Exposure Resulting in Industrial Disease From: (y/m/d) _____ To: _____		Location of Accident (Bldg, rm #) _____			
	Name of Person First Reported to: _____ Date (y/m/d) and Time Reported _____ am/pm				Supervisor of worker involved: _____ Phone # _____ Date (y/m/d) and Time Reported _____ am/pm					
Worker's Department _____			Worker's Job Title _____		Was First Aid Given? (include First Aid Report) _____		Name of First Aid Attendant _____			
Describe fully what happened and remedial actions taken. If more space is required, attach an additional page. Attach additional information, diagrams or photos where possible.										
								Body Part Injured: <input type="checkbox"/> Left <input type="checkbox"/> Right		
Was the Accident: <input type="checkbox"/> No medical treatment, no time loss – complete only sections 1, section 2 (employee's name only) and 4. <input type="checkbox"/> Medical treatment (visit doctor, no days off work) – complete sections 1, 2 and 4. (Include Employee's Report Form 6A.) <input type="checkbox"/> Lost Time (days off work) – complete sections 1, 2, 3 and 4. (Include Employee's Report Form 6A.)										
2	<input type="checkbox"/> Mr. <input type="checkbox"/> Dr. <input type="checkbox"/> Miss <input type="checkbox"/> Ms. <input type="checkbox"/> Mrs.		Employee's Name (Family/Given) _____							
	Worker's Home Address: Street Name/No. _____ Town/City _____		Postal Code _____	Telephone Number _____	Social Insurance No. _____	Birthdate (y/m/d) _____				
BC Care Card No. _____	Weight <input type="checkbox"/> lb <input type="checkbox"/> kg	Height <input type="checkbox"/> in <input type="checkbox"/> cm	Date Joined UBC (y/m/d) _____	Started Present Job (y/m/d) _____	Employment Status <input type="checkbox"/> Full time, on-going <input type="checkbox"/> Temporary <input type="checkbox"/> Part time <input type="checkbox"/> Seasonal <input type="checkbox"/> Casual <input type="checkbox"/> Other _____					
Name of Doctor or Hospital Visited _____		Address _____					Date _____			
Name of Witness(es) _____		Address / Phone # _____					Do witnesses confirm worker's statement? <input type="checkbox"/> Yes <input type="checkbox"/> No			
1. _____										
2. _____										
Were the worker's actions at the time of injury for the purpose of the University's business? <input type="checkbox"/> Yes <input type="checkbox"/> No, If no, explain _____										
Were the activities part of the worker's regular work? <input type="checkbox"/> Yes <input type="checkbox"/> No, If no, explain _____										
Is there any reason to feel that the injury did not occur as stated? <input type="checkbox"/> No <input type="checkbox"/> Yes, If yes, explain _____										
Are you aware of any previous pain or disability in the area of the present injury? <input type="checkbox"/> No <input type="checkbox"/> Yes, If yes, explain _____										
Was any person not employed by UBC responsible for the injury? <input type="checkbox"/> No <input type="checkbox"/> Yes, Give details, name & address of person. _____										
3	If Time Loss, complete this section: (If NO time loss, skip this section and go to Sect. 4) Show normal work week by entering hours worked / day.							Worker's Exact Gross Wage (provide one only) Hourly Employee: \$ _____ / hour	Worker's exact gross earnings for 3 months prior to injury: \$ _____	
		Sun	Mon	Tue	Wed	Thu	Fri	Sat	Monthly Employee: \$ _____ / month	Period used: From: _____ To: _____
	Week 1								Date and time last worked after injury. _____	Normal Work Hrs: _____
	Week 2								(y/m/d) ____/____/____ : ____ am/pm	From: _____ To: _____
									(y/m/d) ____/____/____	Number of days in sick bank: _____
Does the worker work a fixed shift rotation? If Yes, describe: <input type="checkbox"/> Yes <input type="checkbox"/> No Shift Start Date (y/m/d) ____/____/____ Describe: _____								Has Employee returned to work: <input type="checkbox"/> Yes <input type="checkbox"/> No (y/m/d) ____/____/____		
								Additions to wages (provide details) (ie shift premiums, holiday pay, meals . . .)		

→ Fax this yellow page to HSE at 822-1637 **within 24 hours** of occurrence and mail original to Health, Safety & Environment, 50-2075 Wesbrook Mall, Zone 1. Include Employee's Report (Form 6A) & First Aid Report (Form 7A).

→ Complete the next page (blue) after faxing yellow page to HSE.

→ **DO NOT DISTRIBUTE THIS PAGE AS IT CONTAINS CONFIDENTIAL INFORMATION.** Questions? Call HSE Claims Assistant (822-8759).

Date Report Completed (y/m/d) _____

Supervisor's Signature _____

Supervisor's Name (PRINT) _____

HSE
5/97



UBC FACULTY & STAFF INCIDENT / ACCIDENT REPORT

Appendix E

Complete this blue page after yellow page 1 has been faxed to HSE. The incident/accident must be investigated by a team consisting of the worker's supervisor and a member of the Local Safety Committee as soon as possible after the incident or accident. This page is to be distributed as described in Section 4.

1	Date & Time of Incident/Accident (y/m/d) ____/____/____ : ____am/pm	OR	Period of Exposure Resulting in Industrial Disease From: (y/m/d) To: _____	Location of Accident (Bldg, rm #) _____
	Name of Person First Reported to: _____ Date (y/m/d) and Time Reported: ____/____/____ : ____am/pm	Supervisor of worker involved: _____ Phone # _____ Date (y/m/d) and Time Reported: ____/____/____ : ____am/pm		
Department	Job Title	Was First Aid Given? (include First Aid Report)	Name of First Aid Attendant	
Describe fully what happened and remedial actions taken. If more space is required, attach an additional page. Attach additional information, diagrams or photos where possible.				
				Body Part Injured: <input type="checkbox"/> Left <input type="checkbox"/> Right
Was the Accident: <input type="checkbox"/> No medical treatment, no time loss – complete only sections 1, section 2 (employee's name only) and 4. <input type="checkbox"/> Medical treatment (visit doctor, no days off work) – complete sections 1, 2 and 4. (Include Employee's Report Form 6A.) <input type="checkbox"/> Lost Time (days off work) – complete sections 1, 2, 3 and 4. (Include Employee's Report Form 6A.)				

4	Accident Investigation (use reverse of page if more space is required). Was the accident site visited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Mark factors having a bearing on the occurrence. More than one item may apply:		
<input type="checkbox"/> not using protective devices <input type="checkbox"/> removing or making safety devices inoperative <input type="checkbox"/> lack of or inadequate guards & safety devices <input type="checkbox"/> hazardous personal attire <input type="checkbox"/> incorrect work method <input type="checkbox"/> unaware of safe method <input type="checkbox"/> using inappropriate tools or equipment <input type="checkbox"/> operating or using equipment without authority <input type="checkbox"/> not familiar with work at hand <input type="checkbox"/> not aware of existence of hazard <input type="checkbox"/> lack of pre-job planning <input type="checkbox"/> inadequate coordination between work groups	<input type="checkbox"/> lack of, or inadequate warning system <input type="checkbox"/> failure to warn or signal as required <input type="checkbox"/> material or equipment failure <input type="checkbox"/> defects of tools, equipment etc. <input type="checkbox"/> failure to secure against unexpected movement <input type="checkbox"/> close clearance or congestion hazards <input type="checkbox"/> protruding object hazards <input type="checkbox"/> hazardous arrangement, placement or storage <input type="checkbox"/> taking an unsafe position or posture <input type="checkbox"/> operating or working at an unsafe speed <input type="checkbox"/> servicing moving, energized or otherwise hazardous equipment	<input type="checkbox"/> unexpected movement hazard <input type="checkbox"/> riding hazardous moving equipment <input type="checkbox"/> poor housekeeping hazards <input type="checkbox"/> fire or explosion hazard <input type="checkbox"/> inadequate illumination <input type="checkbox"/> excessive noise <input type="checkbox"/> hazardous atmospheric conditions <input type="checkbox"/> weather conditions <input type="checkbox"/> horseplay, distracting, startling, teasing, etc. <input type="checkbox"/> condition impaired, tired, alcohol, drugs, etc. <input type="checkbox"/> inadequate emergency response, equipment, procedures. <input type="checkbox"/> other factors (describe them)
Describe why the above factors were chosen:		
Describe the corrective actions to be implemented to prevent recurrence:		
Person(s) responsible for planned corrective actions	Date to complete (Y/M/D)	Date Completed (Y/M/D)
The above review, counseling instructions and/or other action to prevent recurrence has been initiated and has been distributed as follows: <ul style="list-style-type: none"> • Original to Health, Safety & Environment • Copy to Department Head • Copy of page 2 to Safety Committee • Post page 2 at work site 		
THE FIRST PAGE (sec. 1, 2 & 3) IS CONFIDENTIAL AND IS ONLY COLLECTED BY HSE TO INITIATE A WCB CLAIM AS REQUIRED BY LAW. DO NOT DISTRIBUTE SECTIONS 2 & 3 OTHER THAN TO HSE.		
Signature of Supervisor	Safety Committee Member	Date (Y/M/D)
Reviewed by (Safety Committee Members)	Date (YMD)	Comments and/or Further Action



UBC Student & Visitor Incident/Accident Report

This report is to be completed by, or on behalf of, Visitors to UBC Campus and UBC Students who have been injured on UBC premises.

The personal information below should pertain to the injured/involved party.

		Date of Report (m/d/y) ____/____/____
Last Name	First Name	Telephone:
Street Address	City	Postal Code
Status: <input type="checkbox"/> Visitor <input type="checkbox"/> Student <input type="checkbox"/> Other _____	Severity of Injury: <input type="checkbox"/> First Aid only <input type="checkbox"/> Medical treatment (doctor, hospital) Mode of Transportation to Medical Facility:	
Department Visited	Date and Time of Incident/Accident (m/d/y) ____/____/____ : ____ am / pm	
Describe the exact location of accident. (Include building name and room number, or if outside describe area in detail.)		
Describe the events leading up to and including the incident/accident in the words of the injured party, if possible. Include details of any injuries (Use reverse if necessary):		
Eye Witness: <input type="checkbox"/> Yes <input type="checkbox"/> No (Please provide witness' name and telephone number, if possible.)		
Incident/Accident Reported to: Name:	Title:	Phone #
If this report is completed by someone other than the injured/involved party, please provide the following information:		
Your Name	Tel #	Relationship to injured party
<u>Distribute Report as follows:</u> 1) Original to Department* , with copies to: 2) Building Safety Committee, if incident occurred within or near building 3) Health, Safety & Environment (50-2075 Wesbrook Mall, Vancouver, V6T 1Z1. Fax: 822-6650) 4) Risk and Insurance Manager, (3 rd flr 2075 Wesbrook Mall, Vancouver. Fax 822-1224)		
Reviewed by (Safety Committee Members)	Date (m/d/y)	Comments and/or Further Action

If you have any questions, please call Health, Safety & Environment at 822-8759 or 822-2029.

Dec 1998

***NOTE: The Department in which the injury occurred is responsible for ensuring that the accident is investigated by the department's accident investigator(s). The Department must review and implement the resulting recommendations and take corrective action.**

Policy #7

UNIVERSITY SAFETY

Approved: March 1994

RESPONSIBLE VICE PRESIDENT
Vice President Administration & Finance

Purpose

To articulate the University's objective of providing a safe, healthy and secure environment for all members of faculty and staff, students and visitors, and to delineate responsibility for achieving it.

Policy

The University aims to provide a safe, healthy and secure environment in which to carry on the University's affairs. All possible preventive measures are taken to eliminate accidental injuries, occupational diseases and risks to personal security.

Compliance with the Worker's Compensation Act, WHMIS and related legislation is the minimum standard acceptable. All students and members of faculty and staff are encouraged to strive to exceed these minimum legal standards and to eliminate unnecessary risks.

Procedure Summary

The University

It is the responsibility of the University acting through administrative heads of units to:

- provide a safe, healthy and secure working environment;
- ensure regular inspections are made and take action as required to improve unsafe conditions;
- ensure that health, safety and personal security considerations form an integral part of the design, construction, purchase and maintenance of all buildings, equipment and work processes;
- provide first aid facilities where appropriate;
- support supervisors and safety committees in the implementation of an effective health, safety and security program;
- ensure compliance with WCB and other applicable legislation;
- establish department or building safety committees;
- communicate with the university community or affected groups about events or situations when potentially harmful conditions arise or are discovered;
- ensure adequate resources are available to implement appropriate procedures.

The Supervisor

It is the responsibility of supervisory staff to:

- formulate specific safety rules and safe work procedures for their area of supervision;
- ensure that all employees under their supervision are aware of safety practices and follow safety procedures;
- provide training in then safe operation of equipment;
- inspect regularly their areas for hazardous conditions;
- correct promptly unsafe work practices or hazardous conditions;
- be responsive to concerns expressed about personal security and investigate any accidents, incidents or personal security concerns which have occurred in their area of responsibility;
- report any accidents or incidents involving personal security to the appropriate University authority;
- participate, if requested, on department or building safety committees.

Individual Students and Members of Staff and Faculty

It is the responsibility of individual students and faculty and staff to:

- observe safety rules and procedures established by supervisory staff, administrative heads of unit and the University;
- be safety-conscious in all activities, be they work, study or recreation;
- report as soon as possible any accident, injury, unsafe condition, insecure condition or threats to personal security to a supervisor or administrative head of unit;
- use properly and care for adequately personal protective equipment provided by the University;
- participate, if elected or appointed, on departmental or building safety committees.

Detailed Procedures

The University Health and Safety Committee works to achieve these objectives by providing education and reviewing policies and procedures.

Department/Area/Building Safety Committees carry out the safety programs within their areas and make recommendations to ensure that the safety objectives of the University can be achieved. (Terms of Reference for these committees available through the Department of Health, Safety and Environment).

The Department of Health, Safety and Environment and the Department of Parking and Security Services assist departments to implement and maintain effective health, safety personal security programs, liaise with the regulatory authorities on behalf of the University and support the activities of the University's Safety Committees.

For more information, please consult with the Department of Health, Safety and Environment and/or the Department of Parking and Security Services.

Definitions

An administrative head of unit is a Director of a service unit, a Head of an academic department, a Director of a centre, institute or school, a Principal of a college, a Dean, an Associate Vice President, the Registrar, the University Librarian, a Vice President or the President.

A supervisor is a person, not necessarily an administrative head of unit, who has been delegated supervisory responsibility for others working or studying at UBC.



Summary: Policy # 6 – Environmental Protection Compliance

HSE TOOL # 06



THE POLICY

“UBC will act responsibly and demonstrate accountable management of the property and affairs of UBC in protecting the environment. All individuals in the University community share the responsibility for protecting the environment. Administrative heads of unit are responsible for ensuring compliance with legislation and UBC procedures both on and off campus.”

RESPONSIBILITIES AS DEFINED BY THE POLICY

The responsibilities of the University community as defined under the Environmental Protection Compliance Policy and its associated procedures include:

ALL INDIVIDUALS IN THE UNIVERSITY COMMUNITY *(including faculty, staff and students):*

- ♦ To protect the environment and comply with environmental legislation.

PRINCIPAL INVESTIGATORS

- ♦ To follow UBC procedures and to instruct personnel under their supervision regarding applicable policies, programs and procedures.
- ♦ To ensure that individuals working in environmentally sensitive areas or with potentially hazardous materials are given appropriate supervision, instruction and training prior to undertaking these activities.
- ♦ To apply to the Environmental Programs Advisory Committee for a certificate of environmental protection for off-campus activities that have unknown or potentially harmful impacts by researchers.

ADMINISTRATIVE HEADS OF UNITS *(including a Head of an academic department; Director of a centre, institute, school, or service unit; Principal of a college; a Dean; an Associate Vice President; the Registrar; the University Librarian; a Vice President or the President):*

- ♦ To ensure compliance with environmental legislation within their unit.
- ♦ To communicate compliance goals to persons working or studying within their unit.
- ♦ To provide plans in response to non-compliances identified by environmental audits.
- ♦ To establish monitoring systems and procedures to handle and report accidents and incidents that may affect the environment and to prevent and reduce environmental impacts.
- ♦ To ensure training of persons working or studying within their unit in relevant environmental issues and procedures for recognizing, responding to and reporting accidents that may affect the environment.
- ♦ To notify affected individuals (including the Environmental Programs Manager and the appropriate Vice President) when potentially harmful conditions arise or are discovered and keep them aware of corrective actions.

LEGAL RESPONSIBILITIES

All faculty and staff must be aware of UBC's environmental responsibilities. There are over 80 federal and 60 British Columbia environmental statutes with penalties for violation, including fines and/or imprisonment. Examples of legislation which may impact UBC activities include: the *BC Waste Management Act*, the *Transportation of Dangerous Goods Act*, the *Fisheries Act*, and the *GVRD Air Pollution Control Bylaw*, the *GVRD Sewer Use Bylaw*, the *Pesticide Control Act* and the *Canadian Environmental Protection Act*.

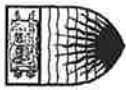
The four main categories of environmental offenses are as follows:

1. **Reporting:** Individuals are required by law (e.g., *BC Spill Reporting Regulations*) to report spills of certain substances IMMEDIATELY. Substances (and quantities) that must be reported when spilled are specified in the *Spill Reporting Regulations* and include flammable, poisonous, radioactive, and waste substances, as well as others. The penalties for failure to report can be severe. The spill must be reported to the appropriate authorities and the Department of Health, Safety and Environment (HSE). For further information on spill reporting procedures, contact HSE at 822-2029.
2. **Pollution:** Parties held responsible for a source of contamination may be ordered to clean it up, or pay the cost of doing so. At UBC, we should be particularly focused on ensuring that contaminants from research, teaching and operations are not disposed of down drains into the municipal waste stream or into the atmosphere. Research activities that occur in the outdoors must ensure that no contaminants are released into the environment.
3. **Information:** UBC is obliged to assist regulatory officers and provide accurate and timely information to government authorities. Should you be required to provide information to a government authority regarding an environmental matter or be the subject of an inspection by a government agency, contact the Manager of Environmental Programs immediately at 822-9527.
4. **Regulation:** The required permits, licenses, or certificates must be in place for activities carried out at UBC. Individuals must comply with the terms and conditions of any such license, permit or certificate. HSE requires a copy of all permits granted to a department by regulatory agencies. In addition, compliance with all statutes is mandatory.

Individuals within organizations, as well as the organizations themselves, can be held liable for environmental offences. Individuals who may be held responsible for violations are loosely defined as parties having "charge, management and control" of an activity or substance (i.e., primarily agents, officers and directors). Those in charge of an activity must be able to show that they have taken all precautions that could "reasonably" be expected to ensure that:

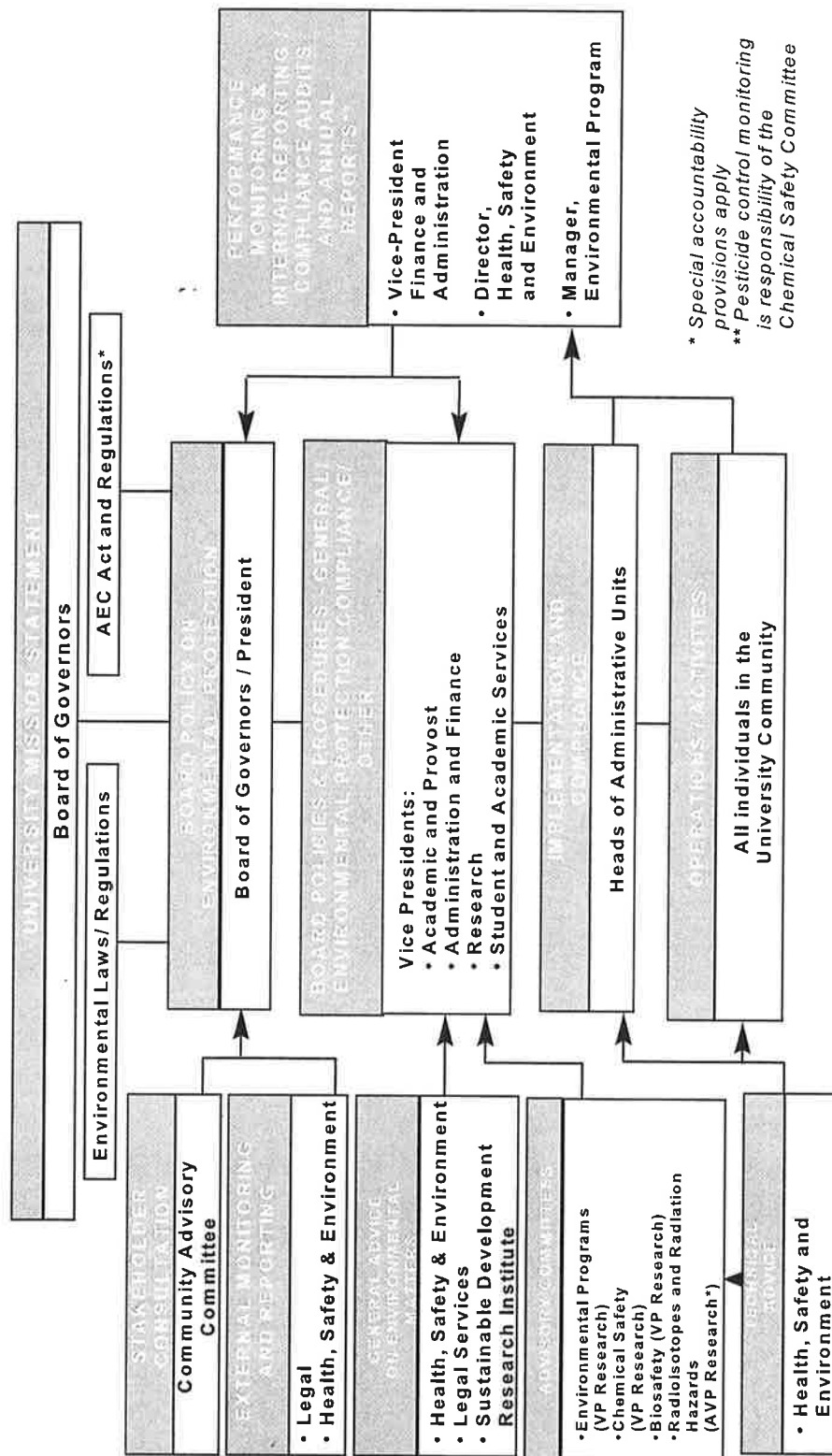
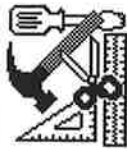
- ♦ an incident does not take place (i.e., ensure that regulations, policies, procedures, and best management practices are followed and that appropriate training has been provided), and
- ♦ the impact of an incident is minimized (i.e., ensure that contingency plans and appropriate training are in place and followed for reporting and spill cleanup).

Please share this information with all faculty and staff. Although regulations are complex, following UBC policies/procedures and ensuring that all employees are trained in applicable procedures will minimize exposure to liability. A copy of the Environmental Protection Compliance Policy (#6) is included in the UBC Policy Handbook or on the UBC website @ www.policy.ubc.ca/policy6.htm. Information on UBC's procedures, training courses, and Draft Environmental Conformance Plan is available from HSE at 822-3101. If you have any questions, or require any further assistance, please contact the Environmental Programs Manager at 822-9527.



ENVIRONMENTAL ACCOUNTABILITY FRAMEWORK

HSE TOOL # 17



UBC Department of Health, Safety and Environment
Environmental Programs

10/28/99
07-Accountability Framework#17

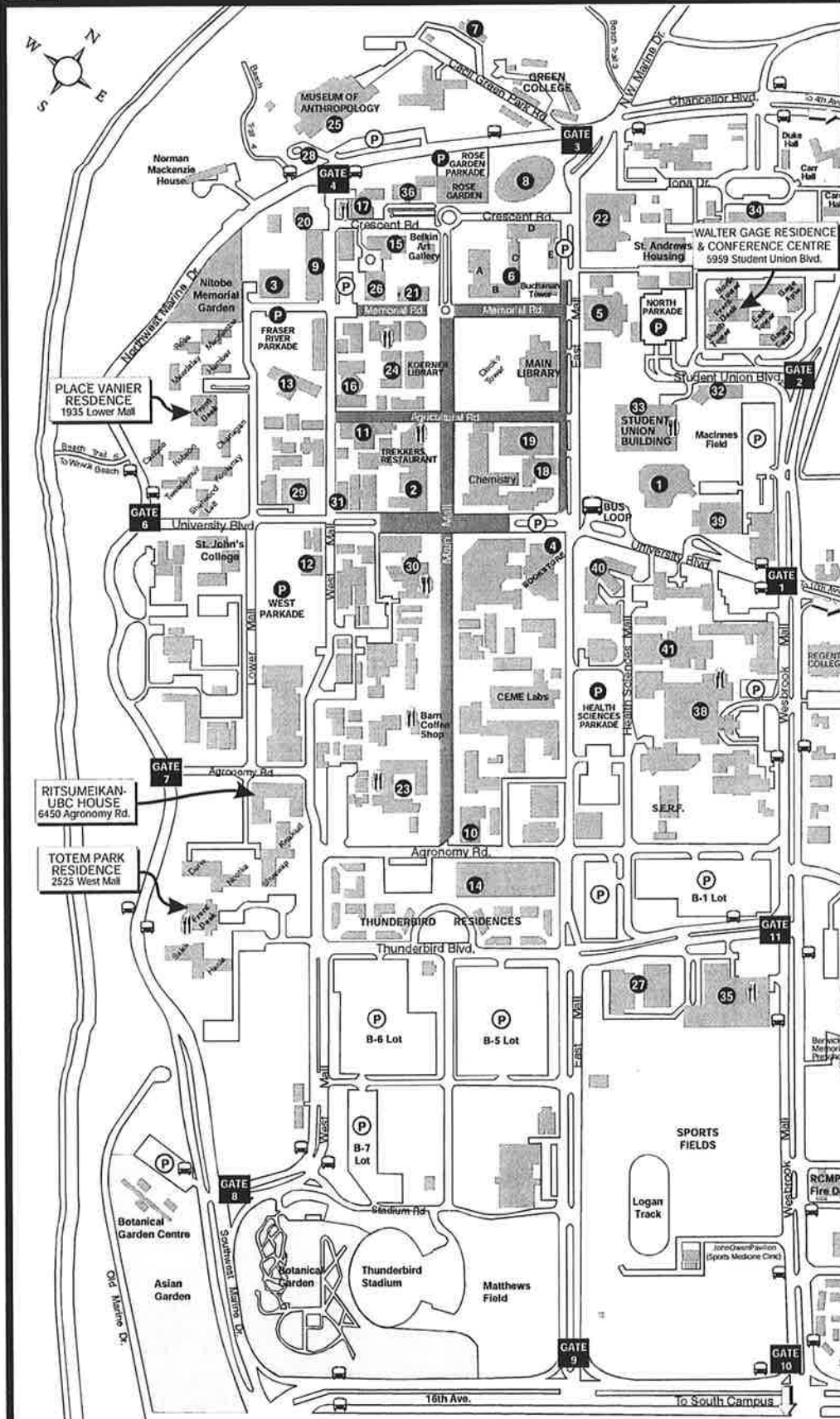


THE UNIVERSITY OF BRITISH COLUMBIA

CAMPUS MAP

A
B
C
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E
F
G
H
I
J

- Legend**
- Visitor Parking: P
 - Parkades: P
 - Ticket Dispenser or Meter Parking Lots: P
 - Pedestrian zone: (shaded area)
1. Aquatic Centre
 2. Angus (Henry) Building (Commerce)
 3. Asian Centre
 4. Bookstore
 5. Brock Hall (Student Services)
 6. Buchanan Building (Arts)
 7. Cecil Green Park House
 8. Chan Centre for the Performing Arts
 9. Choh Bldg (Inst. of Asian Research)
 10. CICS/Computer Science
 11. Computer Science Building
 12. Continuing Studies
 13. First Nations Longhouse
 14. Forestry Building
 15. Frederic Wood Theatre
 16. Geography Building
 17. Graduate Student Centre
 18. Hebb Theatre
 19. Hennings Building
 20. International House
 21. Lasserre Building
 22. Law (Curtis) Building
 23. MacMillan Building
 24. Mathematics Building
 25. Museum of Anthropology
 26. Music Building
 27. Osborne Centre (Gymnasium)
 28. Parking & Campus Security Offices
 29. Ponderosa Building
 30. Scarfe Building (Education)
 31. Social Work, School of (Jack Bell Bldg)
 32. Student Recreation Centre (SRC)
 33. Student Union Building (SUB)
 34. Theology, Vancouver School of
 35. Thunderbird Winter Sports Centre
 36. University Centre
 37. University Village
 38. Vancouver Hospital (UBC Site)
 39. War Memorial Gymnasium
 40. Westbrook Building
 41. Woodward/IRC



1 2 3 4 5 6 7 8

UBC Personnel Safety & Environmental Orientation and Training Record

Purpose: The University's goal is to provide a safe, healthy and secure working environment and to ensure that its activities do not impact negatively on the environment. UBC's Safety (#7) and Environmental Protection Compliance (#6) Policies require administrative heads of unit to ensure that all persons working or studying within their unit are aware of safety practices, follow safety procedures, and are appropriately trained in relevant environmental issues and procedures for preventing, responding to, and reporting incidents that may affect the environment.

All department members should be made aware of their personal responsibilities under UBC Policies and receive site specific orientation for fire evacuation, accident reporting, earthquake preparedness, first aid, and emergency response. In addition, personnel who handle or are in contact with hazardous materials or waste may have specific training requirements. Supervisors are required to organize the training plan with new personnel during their first week at UBC to ensure that the relevant topics noted below are covered.

This document is a tool for recording the orientation and training of University personnel*. It should be tailored to reflect your department's hazards and needs. Documentation is essential in demonstrating due diligence.

Instructions: Training records must be maintained for each individual by the department. When an item has been completed, the individual records the training date and signs beside the item as a confirmation of training. *See next page for description of training components.*

Name: _____ Start Date: _____
 Position: _____ Supervisor: _____
 Department: _____ Safety Committee Rep: _____

GENERAL

Read UBC Environmental Compliance Policy (#6)

Yes ☐

NA ☐

Date Completed _____

Signature _____

Read UBC Safety Policy (#7)

☐

☐

SITE SPECIFIC

Read Department Safety Program Manual

☐

☐

Fire Safety / Evacuation Orientation

☐

☐

Emergency & First Aid Contacts

☐

☐

Incident / Accident Reporting Procedures

☐

☐

Emergency / Earthquake Preparedness

☐

☐

WHMIS Training

☐

☐

Hazardous Waste Handling / Disposal

☐

☐

Spill Response / Reporting

☐

☐

Equipment Usage

☐

☐

HEALTH, SAFETY & ENVIRONMENT COURSES

Introduction to Chemical Safety

☐

☐

Diving Safety Seminar

☐

☐

Laboratory Biological Safety Course

☐

☐

Laboratory Chemical Safety Course

☐

☐

Radioisotope Safety Course

☐

☐

Occupational First Aid Level 1

☐

☐

Transportation of Dangerous Goods – Road

☐

☐

Transportation of Dangerous Goods – Air

☐

☐

OTHER:

☐

☐

OTHER:

☐

☐

UBC POLICIES: Safety Policy (#7) & Environmental Protection Compliance Policy (#6) – All new personnel must read and become familiar with their own personal responsibilities under these policies. Supervisory staff must also be familiar with their responsibilities under these policies.

LOCAL SAFETY PROGRAM MANUAL – Each Department is expected to customize the Generic Safety Program Manual provided by Health, Safety & Environment for department usage. All new personnel should read through the Department's Safety Program Manual and know where it is located.

FIRE SAFETY / EVACUATION ORIENTATION – All personnel should be shown the location of the fire alarms, extinguishers, emergency exits, the fire evacuation plan, and department meeting place.

EMERGENCY & FIRST AID CONTACTS – All new personnel must be informed of the site-specific contact numbers for fire, first aid treatment, security issues, and hazardous materials spills response. The front inside cover of the UBC Phone Book provides this information for UBC campus. Hospitals and other off-campus sites will have different contact numbers.

INCIDENT/ACCIDENT REPORTING PROCEDURES – All new personnel must be told how to report unsafe conditions and activities that have resulted in injuries, release of hazardous materials, or damaged property.

EMERGENCY / EARTHQUAKE PREPAREDNESS – All new personnel should read pages 2 and 3 of the UBC Phone Book for UBC specific procedures for bomb threats, earthquakes, and other emergencies. Supervisors can also distribute the pamphlet "Are you ready for an earthquake on campus?" available through Health, Safety And Environment. Earthquake preparedness courses are also offered through the MOST program.

WHMIS TRAINING – Personnel who work with or in proximity to a controlled product must be instructed in the WHMIS (Workplace Hazardous Materials Information System) method of identifying hazardous materials.

HAZARDOUS WASTE MANAGEMENT – New personnel who work with hazardous materials should be trained in the site-specific procedures for handling and disposing of hazardous waste. In addition, the successful completion of Health, Safety and Environment courses are a requirement for using biohazardous and radioactive materials.

SPILL RESPONSE / REPORTING – Personnel who work with hazardous materials should read the spill response and reporting procedures in the Department Safety Program Manual and should be trained in site-specific procedures.

EQUIPMENT USAGE – New personnel should be trained in the use of any equipment they will be using, especially those with inherent hazards or used to control hazards, e.g. autoclaves, fume hoods.

HEALTH, SAFETY AND ENVIRONMENT COURSES

The following courses are taught or coordinated by the Department of Health, Safety & Environment.

- ◆ **Diving Safety Seminars** – intended for University faculty, staff and students who carry out diving as part of their working responsibilities.
- ◆ **Environmental Responsibilities at UBC** – intended to inform administrative heads about individual and institutional environmental responsibilities at UBC.
- ◆ **Introduction to Chemical Safety Course** – intended for anyone who handles chemicals as part of their working responsibilities.
- ◆ **Laboratory Chemical Safety Course** – intended for people who handle chemicals, especially lab technicians, store keepers and safety committee representatives.
- ◆ **Laboratory Biological Safety Course** – mandatory course for all faculty, staff and students prior to working with biohazardous materials in Risk Group Level II and higher. Recommended course for individuals who use Level I biohazards or who work in a lab where others use biohazards.
- ◆ **Occupational First Aid Level I** – intended for department first aid attendants or for personal interest.
- ◆ **Personal Security Workshop** – intended to raise awareness of personal security in the UBC environment for members of the University community.
- ◆ **Radionuclide Safety and Methodology** – mandatory course for all faculty, staff and students prior to commencing work with radioactive materials. Recommended course for individuals who work in a lab where others use radioisotopes.
- ◆ **Safety Committee Training** – intended for Safety Committee members and supervisors.
- ◆ **Transportation of Dangerous Goods (Air & Road)** – mandatory course for all receivers and shippers of dangerous goods.