



1.0 PURPOSE

This document outlines requirements for safety information which must be available in each Boise State University laboratory.

2.0 RESPONSIBILITIES

2.1 Environmental Health and Safety

- Maintain campus level written programs and provide updates as necessary.

2.2 Principal Investigator (Laboratory Supervisor)

- PI or designee must ensure appropriate laboratory safety information is up-to-date and available to all laboratory workers.
- Must ensure laboratory workers have read and understand contents

2.3 Laboratory Worker

- Know the location of the safety information for their lab.
- Must read and understand the contents

3.0 SAFETY INFORMATION

3.1 Written Programs

Each laboratory must make applicable written programs available and accessible to Laboratory Workers. Electronic access is adequate, except for emergency response programs, if all Laboratory Workers have computer access.

3.1.1 [Biosafety Policy](#)

All laboratories handling biological materials or sources of bloodborne pathogens

3.1.2 [Bloodborne Pathogen \(BBP\) Exposure Control Master Plan](#)

All laboratories handling biological materials

3.1.3 [Chemical Hygiene Plan](#)

All laboratories handling chemicals

3.1.4 Emergency Operations Plan – Annex B

All laboratories must retain a hard copy of Appendix E or a similar BSU, college, or department specific document.

3.1.5 Fire Prevention Program

All laboratories

3.1.6 Hazardous Energy Control Program

All laboratories where Laboratory Workers are performing *set up, adjustment, repair, service, or installation work* on equipment, machinery, processes and circuits involving potentially hazardous energy which could cause injury or death.

3.1.7 Hazardous Waste Management Manual

All laboratories using chemicals

3.1.8 Radiation Material Management Manual

All laboratories handling radioactive materials or using radiation generating equipment such as x-ray machines and lasers.

3.2 Chemical Information

3.2.1 Chemical Inventory

A current chemical inventory of the laboratory is necessary to inform laboratory workers of the current stock and potential hazards present in the area. It is also needed by emergency responders in case of a fire, chemical spill, or other incident. An inventory template is available from EHS.

3.2.2 Material Safety Data Sheets

Material safety data sheets (MSDS) must be readily available to laboratory workers at all times. An MSDS is required for every chemical in the laboratory. This includes the same chemical from multiple manufacturers as well as various concentrations of the chemical. MSDS must be kept for 30 years after the product is no longer used. This includes MSDS replaced by an updated version. MSDS for chemicals no longer in use or replaced by a newer version should be kept in a separate section or they may be archived in some manner as long as an access procedure is in place. MSDS must be organized alphabetically or by another laboratory defined system to facilitate ease of access.

3.2.3 Storage Location

A chemical inventory and all MSDS must be stored near the main laboratory exit or outside the laboratory in a non-laboratory location. This is necessary to allow easy retrieval during an emergency evacuation. If this information is stored outside of the laboratory, it must be accessible to Laboratory Workers at all times. Electronic copies may be used, but hard copies must still be available and maintained due to access requirements (i.e. power or server outage).

3.3 Laboratory Specific Procedures

Procedures for laboratory specific processes, protocols, and experiments must be available and maintained. Each procedure must outline potential hazards, hazard controls, and steps of the task.

EHS developed a tool to communicate laboratory hazards, safety information, and operating procedures called a Safety Information and Operating Procedures (SIOP). It can be used to communicate and share information regarding broad safety topics to specific equipment procedures. Additional information is available in the [Chemical Hygiene Plan](#) and [SIOP website](#).

3.4 Forms

Each laboratory must have hard copies of certain forms to ensure timely reporting in emergency situations where computer or network access is not available. Each laboratory must maintain copies of the [Incident/Accident Injury Report](#) and [Supervisor's Accident Report](#). Laboratories which use chemicals must have a copy of [Spill Investigation Report](#) available.

3.5 Emergency Response Information

Each laboratory must maintain a copy of the Emergency Response Plan – Appendix E or a similar college/department document near the main laboratory exit or outside the laboratory in a non-laboratory location. This is necessary to allow easy retrieval during an emergency evacuation. If this information is stored outside of the laboratory, it must be accessible to Laboratory Workers at all times.

Each laboratory must maintain a current emergency contact list posted near the main laboratory entrance and laboratory phones. The contacts must include applicable laboratory and college/department contacts, emergency response numbers, Security, and EHS. An [emergency contact list template](#) is available on the EHS website. The template includes links to chemical manufacturers and technical information for spill response. A similar college or department document may be used in its place.

3.6 Laboratory Signage

Laboratories must have signage posted on or near the main entrance that clearly identifies potential laboratory hazards and entry requirements. They are to remind laboratory staff and inform visitors of this information and aid the fire department or other emergency responders. The signage must also include the lab's emergency contact information, principal investigator, room number, and physical address. It may include general contact information as well.

EHS works with the laboratories to update signage on a regular basis. Laboratories must notify EHS of changes in laboratory hazards, entry requirements, and emergency contacts. The [Laboratory Signage Update Form](#) is available on the EHS website.


An [explanation of the symbols](#) is available on the BSU EHS website or by contacting EHS.

3.7 Laboratory Assessments


EHS recommends laboratories maintain electronic or paper copies of annual laboratory safety assessments conducted by EHS for review by Laboratory Workers.

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College of Engineering
Address: 1020 Manitou Street **BOISE STATE**


Principal Investigator: Dr. Picketstein




FLAMMABLE
GAS




LASER
RADIATION




HIGHLY
TOXIC




BIOHAZARD




CAUTION
RADIATION
WARNING




NO OPEN-TOED
FOOTWEAR




NO FOOD OR DRINK



EYE PROTECTION
REQUIRED



RESTRICTED
ACCESS



GLOVES REQUIRED

TO REPORT ANY EMERGENCY SITUATION DIAL 9 1 1			
CONTACT	NAME	LOCATION	PHONE
FOR ENTRY OR ADVISE	Dr. Picketstein	MEC - 613	555-5555
FOR ENTRY OR ADVISE			
EMERGENCY CONTACT	Dr. Picketstein	MEC - 613	555-5555
NON-EMERGENCY (24 HOUR)	UNIVERSITY SECURITY		426-1453

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3.8 Training Documentation

Each laboratory must maintain Laboratory Worker training documentation ranging from general laboratory safety (i.e. online training) to the review of specific laboratory procedures. Roster templates are available on the [EHS website](#) to document training or meeting attendance and SIOF or procedure review.

4.0 LABORATORY SAFETY BINDER(S)

EHS recommends each laboratory maintain the majority, if not all, of the required safety information in a binder or binders for ease of Laboratory Worker access. They may include the above mentioned items as well as any other safety related materials or information. If multiple binders are used, each must be clearly labeled indicating its contents. Binders may be stored in separate locations for access purposes. These locations must be communicated to the Laboratory Workers.

5.0 DEFINITIONS

Laboratory

DBS 111 (02) (b)

Laboratory is a place equipped for experimental study in a science or for testing and analysis (7-1-97)

OSHA 1910.1450(b)

Laboratory means a facility where the "laboratory use of hazardous chemicals" occurs. It is a workplace where relatively small quantities of hazardous chemicals are used on a non-production basis.

Laboratory use of hazardous chemicals means handling or use of such chemicals in which all of the following conditions are met:

- (i) Chemical manipulations are carried out on a "laboratory scale;"
- (ii) Multiple chemical procedures or chemicals are used;
- (iii) The procedures involved are not part of a production process, nor in any way simulate a production process; and
- (iv) "Protective laboratory practices and equipment" are available and in common use to minimize the potential for employee exposure to hazardous chemicals.

