



**Location:** \_\_\_\_\_

Location : \_\_\_\_\_

Department: \_\_\_\_\_

Facility: \_\_\_\_\_

Room: \_\_\_\_\_

**Roster:** \_\_\_\_\_

Laboratory Supervisor / PI                      Email: \_\_\_\_\_

**Notes:** \_\_\_\_\_



## Inspection:

### 01. General Safety

A hazard/risk assessment has been conducted to identify potential risks associated with laboratory equipment, materials and procedures. Methods to minimize those risks have been implemented.

- Yes
- No
- N/A
- Corrected Onsite
- Not Observed
- Recommendations

Notes:

A laboratory-specific safety manual (SOPs) defining laboratory policies, safe practices, and procedures is available and accessible to everyone in the lab. Individuals working in the laboratory agree to follow laboratory defined policies, practices, and procedures.

- Yes
- No
- N/A
- Corrected Onsite
- Not Observed
- Recommendations

Notes:

A current Michigan Tech emergency response poster is posted at the entrance to the laboratory. The poster template can be found through EHS.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Hazard symbols and warnings are posted as required for radiation, biohazard, high voltage, laser, unattended operations, and other hazards.

- Yes
- No
- N/A
- Corrected Onsite



Recommendations

Notes:

All laboratory refrigerators, freezers, and microwaves are labeled with appropriate hazard signage. Food storage and preparation are prohibited.

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Appropriate personal protective equipment is worn in the laboratory. Gloves, lab coats, and other potentially contaminated PPE are removed before leaving the laboratory.

Yes

No

N/A

Corrected Onsite

Not Observed

Recommendations

Notes:

A sink is available for hand washing in areas where hazardous materials are used.

Yes

No

N/A

Recommendations

Notes:

Work areas are well lit with all lights in working order.

Yes

No

N/A

Corrected Onsite

Recommendations



Notes:

A First Aid kit is available to deal with minor injuries that may be sustained in the laboratory. Contents are not expired. No aspirin or other pain relievers.

- Yes
- No
- N/A
- Corrected Onsite
- Not Observed
- Recommendations

Notes:

All laboratory furniture (chairs, shelves, benches, cabinets, etc.) is in good condition, is appropriate for use in the laboratory (cleanable, non-porous materials), and is capable of supporting anticipated loads.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Is breathing protection required in the facility? This includes N95 respirators and dust masks.

- Yes (see sub questions)
- No

Notes:

Respirator users are registered with the University's respiratory protection program through EHS. (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:



All reusable PPE that is exposed to skin is disinfected prior to being used by another person.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Doors controlling access to the laboratory are closed at all times and locked when the laboratory is not occupied. Access is limited to individuals authorized to work in the laboratory.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Laboratory has appropriate ventilation for the work being performed (chemical fume hood, snorkel, canopy hood, biosafety cabinet, etc.).

- Yes
- No
- N/A
- Lab Corrected
- Recommendations

Notes:

The laboratory supervisor ensures that personnel are trained and proficient in the performance of laboratory procedures and the use of laboratory equipment, instruments and tools including ensuring that employees who work in areas with hazardous materials or chemicals have completed Michigan Tech's Hazard Communication training and other relevant SafetySkills/Citi modules. Training is documented.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations



Notes:

## 02. Housekeeping

If necessary, an appropriate container is available for the disposal of broken glass.

- Yes
- No
- N/A
- Corrected Onsite
- Not Observed
- Recommendations

Notes:

Access to exits and safety equipment is unobstructed. Floors, aisles, work areas, and entry/exits routes are uncluttered with no tripping hazards.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

If necessary, an appropriate container is available for the disposal of sharps.

- Yes (see sub questions)
- No
- N/A
- Corrected Onsite
- Not Observed
- Recommendations

Notes:

Sharps containers are collected and sent for disposal every 180 days. (sub question)

- Yes
- No

Notes:



The laboratory is well maintained, with work and storage areas clean and organized for safe and efficient use. Materials, including scrap and debris, shall be piled, stacked, or placed in a container in a manner that does not create a hazard to an employee. Storage areas shall be kept free from accumulations of materials that constitute a hazard from fire, explosion, or pest harborage.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Universal wastes are collected in containers that prevent a release to the environment, are labeled according to MDEQ rules, dated with the date the first item was placed in the container, and are sent for recycling within 365 days of the date.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

## **03. Fire Safety**

Are open flames utilized in the laboratory or shop?

- Yes (see sub questions)
- No

Notes:

All combustible materials have been removed from within a 2 foot diameter of the work area, and no flammable materials are above an open flame. (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:



Alternative options to using open flames have been evaluated and ruled out. Alternative options include glass bead sterilization, autoclaving, and/or using pre-sterilized, single-use equipment. (sub question)

Yes

No

Recommendations

Notes:

If using flammable liquids, the smallest possible volume (maximum of 50ml) is used and contained in a compatible container with a tight fitting lid. (sub question)

Yes

No

N/A

Recommendations

Notes:

All open flame soldering, brazing, or welding and all open flame glass blowing/glass manipulation is done either in an EHS/Facilities Management approved area or under an individually granted hot work permit. (sub question)

Yes

No

N/A

Recommendations

Notes:

Are flammable materials present and/or stored in the laboratory?

Yes (see sub questions)

No

Notes:

Flammable gasses, liquids, and solids are not stored near exits or under staircases. This includes cabinets that contain flammable materials. (sub question)

Yes

No

N/A

Corrected Onsite





- Not Observed
- Recommendations

Notes:

Temperature sensitive flammables are stored in a flammable rated refrigerator and/or freezer. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Flammables are stored in an unmodified flammable cabinet when required. Storage does not exceed cabinet capacity. Nothing is stored on top of a free-standing cabinet. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

An appropriate fire extinguisher for the hazards present in the laboratory is available. Fire extinguisher has a current inspection tag and is sealed. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Paper, boxes, and other combustible materials are properly stored and not in excessive amounts.

- Yes
- No
- N/A
- Corrected Onsite



Recommendations

Notes:

Fire sprinkler heads are unobstructed. All furniture and other materials (including cardboard boxes) must be at least 18 inches below the the plane of the sprinkler heads throughout the entire room.

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

All concerns about fire safety have been addressed.

Yes

No

N/A

Notes:

## **04. Electrical Safety**

Electrical panels have a 36 inch clearance in front of the panel. Breakers and disconnects are labeled.

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Electrical outlets within 6 feet of sinks and other wet areas are protected by a ground fault circuit interrupter.

Yes

No

N/A

Recommendations

Notes:



Battery terminals are protected to prevent electrical shocks or potential shorts.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Extension cords are used appropriately and only for temporary applications (90 days continuous use).

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Power cords on equipment and tools are in good condition (no exposed wires or frayed cords). Electrically powered tools and equipment are grounded or double insulated.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Power strips are only used with computers or other low amperage equipment. Power strips are not "daisy chained" or plugged into an extension cord.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

All concerns about electrical safety have been addressed.

- Yes
- No



Notes:

## 05. Chemical Safety

Are chemicals used in the laboratory?

Yes (see sub questions)

No

Notes:

A current chemical inventory listing the chemicals used in the laboratory is available. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

An eyewash and/or emergency shower are available when required. They are inspected regularly and freely accessible (not behind closed doors). (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Anyone working with chemicals in the laboratory is trained to use MSDSonline to access Safety Data Sheets (SDSs). (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:



A spill kit is available for cleanup of hazardous materials. Its location is posted in the laboratory. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Chemical containers, including working solutions and those with non-hazardous contents, are correctly labeled with (i) full name of the chemical (abbreviations are acceptable only with a posted legend), (ii) concentration, (iii) hazardous words/pictogram. Recommended additional information: date and responsible person. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Chemicals are well organized and correctly and safely stored. Chemical containers and storage shelves are in good condition. Hazardous liquids are stored below eye level. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Waste chemicals are collected at the point of generation, in a compatible leak-proof containers. Containers are closed. All RCRA waste labels have the word "hazardous waste" and the contents spelled out. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations



Notes:

Does the laboratory require a Chemical Hygiene Plan?

Yes (see sub questions)

No

Notes:

There is a written chemical hygiene plan detailing the policies and procedures using chemicals in the laboratory. (sub question)

Yes

No

Corrected Onsite

Not Observed

Recommendations

Notes:

All employees in the laboratory have reviewed the Chemical Hygiene Plan. This is documented. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

The Chemical Hygiene Plan includes written Standard Operating Procedures (SOPs) for chemical procedures in the laboratory. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

All concerns about chemical safety have been addressed (also see section 7. Chemicals Requiring Special Precautions).

Yes

No



Notes:

## 06. Compressed Gases and Cryogenic Liquids

Chemicals in the gas phase are used in the facility (supplied by cylinders, gas generators, or storage tanks).

Yes (see sub questions)

No

Notes:

Specific gases are listed on the emergency response poster. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

All gas lines, including those fed from compressed and liquid cylinders or from gas generators, are labeled (in English), compatible with the gases they carry, appropriately connected or welded, and adequately supported. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

The room where cylinders are used has appropriate ventilation. The space has been evaluated by EHS to determine if an oxygen sensor or a specific gas sensor is required. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:



Compressed gas cylinders are properly segregated, securely stored, upright, and capped when not in use. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

In service compressed gas cylinders have the correct, non-modified, regulator for the gas being used, have accessible shutoff controls, and have no Teflon tape on the CGA or other compression fittings. (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:

Flammable gas cylinders are located at a minimum of 20 feet from a flammable cabinet or other flammable storage (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:

All gas cylinders are labeled with an appropriate tag showing that they are either full, in use, or empty (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:

Highly toxic gases are contained in a properly designed cabinet or stored and used under an appropriate engineering control. (sub question)

- Yes
- No
- N/A





Corrected Onsite

Recommendations

Notes:

Cryogenic liquids (liquid nitrogen, helium, argon, hydrogen, oxygen) are used in the laboratory.

Yes (see sub questions)

No

Notes:

Appropriate personal protective equipment is available and used when handling cryogenic liquids. Written procedures are available. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

The room where dewars or cylinders are used has appropriate ventilation. The space has been evaluated by EHS to determine if an oxygen sensor is required. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

Dewars are labeled with the cryogenic liquid name and “warning extreme cold/frostbite hazard” or similar warning. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:



Dewars are rated for the cryogenic liquids used in the laboratory. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:

All concerns about compressed gases and cryogenic liquids have been addressed.

- Yes
- No

Notes:

## **07. Chemicals Requiring Special Precautions**

Controlled substances are used in the laboratory.

- Yes (see sub questions)
- N/A
- Recommendations

Notes:

Use records of controlled substances are readily available. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Controlled substances are properly secured with two levels of security. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:



The laboratory Principle Investigator holds the correct and current federal and state licenses. (sub question)

Yes

No

Recommendations

Notes:

Elemental mercury (including thermometers, barometers, or other mercury containing devices) is present in the laboratory.

Yes (see sub questions)

N/A

Recommendations

Notes:

All mercury-containing devices are enclosed or stored in secondary containers. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Alternative devices that do not contain mercury are used whenever possible. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

A mercury spill kit is immediately available. (sub question)

Yes

No

Corrected Onsite

Recommendations



Notes:

Elemental mercury is listed on the emergency response poster. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Peroxide forming chemicals are used in the laboratory.

Yes (see sub questions)

N/A

Recommendations

Notes:

Potential peroxide forming chemicals are disposed of when expired. (sub question)

Yes

No

Corrected Onsite

Not Observed

Recommendations

Notes:

Peroxide forming chemicals are stored in opaque or amber containers. (sub question)

Yes

No

N/A

Recommendations

Notes:

Peroxide test strips or other peroxide tests are available for testing reagents. Testing schedules established and documented. (sub question)

Yes

No



Corrected Onsite

Recommendations

Notes:

Potential peroxide forming chemicals are dated when received and again when opened. (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

Temperature sensitive peroxide forming chemicals are stored at appropriate temperatures. Back up power for storage is available. (sub question)

Yes

No

N/A

Recommendations

Notes:

Hydrofluoric acid is used in the laboratory.

Yes (see sub questions)

N/A

Recommendations

Notes:

The laboratory has calcium gluconate or other appropriate first aid readily available. All laboratory workers are familiar with first aid for hydrofluoric acid victims. A paper SDS is available for first responders. (sub question)

Yes

No

Corrected Onsite

Not Observed

Recommendations

Notes:



Designated hydrofluoric acid areas labeled or clearly delineated? (sub question)

Yes

No

Corrected Onsite

Recommendations

Notes:

Perchloric acid is used in the laboratory.

Yes (see sub questions)

N/A

Recommendations

Notes:

Perchloric acid digestions are only done in appropriate hoods that include wash down capabilities. (sub question)

Yes

No

Recommendations

Notes:

Perchloric acid is stored in glass containers with non-metal secondary containers. Waste solutions are managed as RCRA hazardous wastes. (sub question)

Yes

No

Notes:

Pyrophoric chemicals are used in the laboratory

Yes (see sub questions)

N/A

Recommendations

Notes:

Training is provided by the PI or other experienced trainer for specific activities using pyrophoric chemicals. This training is documented. (sub question)



- Yes
  - No
  - Not Observed
  - Recommendations
- Notes:

Written Standard Operating Procedures are available for the specific activities using pyrophoric chemicals. (sub question)

- Yes
  - No
  - Recommendations
- Notes:

Concentrated phenol is used in the laboratory.

- Yes (see sub questions)
- N/A
- Recommendations

Notes:

Low molecular weight polyethylene glycol (PEG300 or PEG 400) is available for first aid. Laboratory workers are familiar with the appropriate first aid procedure for phenol contact. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:

Ethidium bromide is used in the laboratory.

- Yes (see sub questions)
- N/A
- Recommendations

Notes:

Ethidium bromide preparation, use, and waste collection location are clearly delineated. (sub question)

- Yes



- No
  - N/A
  - Corrected Onsite
  - Recommendations
- Notes:

## 08. Biological Safety

Biological materials are used in this laboratory. Examples include infectious agents, viruses, recombinant DNA.

- Yes (see sub questions)
- No

Notes:

All cultures, stocks, potentially infectious, and genetically modified materials are decontaminated/inactivated prior to disposal. (sub question)

- Yes
- No
- N/A
- Recommendations

Notes:

All disposable sharps (needles, scalpels, glass pipettes) are discarded into designated puncture-resistant containers specifically designed for sharps disposal. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

All procedures involving biological materials are performed in a manner that minimizes splashes and/or creation of aerosols. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations





Notes:

Gloves are changed when they are contaminated or their integrity is compromised. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Gloves used for work with biological materials are discarded as biological waste. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Materials to be decontaminated outside the immediate laboratory (autoclaved) are placed in a durable leak-proof container and secured for transport. (sub question)

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Needles are not bent, sheared, broken, recapped, removed from syringes or otherwise manipulated by hand before disposal. (sub question)

Yes

No

N/A

Recommendations



Notes:

Safe work procedures are included in the biosafety manual for the use, storage, transport, and/or disposal of potentially infectious and genetically modified materials. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Work surfaces and equipment are cleaned and decontaminated after completion of work and after any spill or splash of biological material. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

This a biosafety level 2 (BSL-2) laboratory.

- Yes (see sub questions)
- No

Notes:

As a BSL-2 laboratory, is there a current IBC protocol in place? (sub question)

- Yes
- No
- N/A

Notes:

Biological Safety Cabinets are located away from doors and windows that can be opened, heavily traveled laboratory areas and other possible airflow disruptions. (sub question)

- Yes



No  
 N/A  
 Recommendations  
Notes:

Biological safety cabinets are certified and properly installed so that fluctuations of laboratory air supply and exhaust do not interfere with proper function. (sub question)

Yes  
 No  
 N/A  
 Recommendations  
Notes:

Animals and plants not directly associated with work in the laboratory are not permitted (sub question)

Yes  
 No  
 N/A  
 Corrected Onsite  
 Recommendations  
Notes:

Durable leak-proof containers are used for collection, handling, processing, storage, and transport of all biohazardous material. (sub question)

Yes  
 No  
 N/A  
 Recommendations  
Notes:

If available, immunizations are offered for agents handled or potentially present in the laboratory. (sub question)

Yes  
 No  
 N/A  
 Recommendations



Notes:

Incidents involving potential exposure to bio-hazardous materials are reported to the laboratory supervisor, evaluated, and treated according to procedures described in the biosafety manual. (sub question)

Yes

No

N/A

Recommendations

Notes:

The laboratory supervisor ensures that personnel are properly trained and proficient in appropriate laboratory procedures and practices before working independently with BSL-2 agents or materials. (sub question)

Yes

No

N/A

Recommendations

Notes:

Vacuum lines are protected with liquid disinfectant traps and HEPA filters (sub question)

Yes

No

N/A

Recommendations

Notes:

All biological safety concerns are covered by the questions in this section.

Yes

No

Notes:

## **09. Physical and Mechanical Safety**

Written lockout procedures are available or referenced when repairing and servicing equipment. Employees who perform these tasks can verbally explain where to find the written lockout policy.



- Yes
- No
- N/A
- Recommendations

Notes:

Emergency stop buttons mounted on equipment and walls are accessible. Deadman and similar safety switches are functioning correctly.

- Yes
- No
- N/A
- Recommendations

Notes:

Confined spaces are properly identified and labeled.

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Compressed air nozzles are equipped with a safety tip that reduces dead end pressures below 30 PSI.

- Yes
- No
- N/A
- Recommendations

Notes:

Are any of the following stationary power tools present: table saw, band saw, grinder, or drill press?

- Yes (see sub questions)
- No

Notes:



Impact safety glasses with side shields are always worn, including under face shields. (sub question)

Yes

No

N/A

Notes:

Gloves are not worn around rotating equipment, including stationary grinders and buffers, drill presses, or lathes. (sub question)

Yes

No

N/A

Notes:

Stationary power tools will not automatically fire up after a power outage. (sub question)

Yes

No

N/A

Notes:

Table saws have functional blade guards, spreader bars, and anti-kickback fingers in place. A push stick is available. (sub question)

Yes

No

N/A

Notes:

Vertical saw blades are completely covered except at the point of operation. Blade is appropriately tensioned and the guard feed rolls. (sub question)

Yes

No

N/A

Notes:



Bench style grinders are appropriately mounted. The gap between the work rest and the wheel is 1/8" or less; the gap between the tongue guard and the wheel is 1/4" or less. (sub question)

Yes

No

N/A

Notes:

Drill presses are appropriately mounted. Keys or chucks are spring loaded to eject key. Material is clamped or secured when possible to prevent rotation. (sub question)

Yes

No

N/A

Notes:

All ladders are in good condition and rated for the weight of the user and their equipment. Ladders used for servicing equipment are fiberglass.

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Pinch points, rotating shafts, and other mechanical hazards are appropriately guarded.

Yes

No

N/A

Corrected Onsite

Recommendations

Notes:

Is there any noise hazard producing equipment?

Yes (see sub questions)

No



Notes:

Hearing protection is provided for work with noise hazard equipment. (sub question)

Yes

No

N/A

Recommendations

Notes:

All equipment safety concerns are covered by the questions in this section.

Yes

No

Notes:

## **10. Field Safety**

“Do researchers conduct any off-campus, outdoor field research, including in forests, fields, wetlands, waterways, within traffic zones, urban locations or archaeological sites?

Yes (see sub questions)

No

Notes:

Researchers have consulted Field Safety information posted on the EHS website (sub question)

Yes

No

N/A

Recommendations

Notes:

The implementation of a “buddy” system has been evaluated. If working alone, provisions for regularly checking in with a responsible supervisor have been established. (sub question)

Yes

No

N/A





Recommendations

Notes:

There are established check-in and check-out procedures for tracking who is in the field and who has returned. (sub question)

Yes

No

N/A

Recommendations

Notes:

Appropriate two-way communication devices such as radios, cell phones, or SPOT transmitters are carried in the field. (sub question)

Yes

No

N/A

Recommendations

Notes:

An appropriate first aid kit is carried in the field. Wilderness researchers have received appropriate advanced first aid training. (sub question)

Yes

No

N/A

Recommendations

Notes:

All researchers can demonstrate vehicle-specific competency before, operating: vehicles with trailers, vehicles off-road, ATV/UTVs, tractors, snowmobiles, or other specialty equipment. Operators follow all safety protocols recommended by the manufacturer (seat belt use, use of a helmet, speed limits, passenger limits, terrain limits, etc.) . (sub question)

Yes

No

N/A

Recommendations



Notes:

Researchers have addressed safely transporting, using, and disposing of chemicals. A spill response plan has been developed. Chemical first aid procedures have been addressed. (sub question)

Yes

No

N/A

Recommendations

Notes:

All appropriate permits and permissions have been obtain to access and conduct research at the site. (sub question)

Yes

No

N/A

Recommendations

Notes:

High visibility clothing is worn in traffic zones, along highways, and when working around heavy equipment. (sub question)

Yes

No

N/A

Recommendations

Notes:

All fieldwork involving vertebrate animals has an approved and active IACUC protocol. (sub question)

Yes

No

N/A

Recommendations

Notes:



Researchers have received appropriate training on how to recognize, protect themselves from, and respond to, temperature-related illnesses (hypo- and hyperthermia). (sub question)

Yes

No

N/A

Recommendations

Notes:

Do researchers conduct Field Research on or near water (oceans, lakes, streams, wetlands), on frozen waterways or using boats?

Yes (see sub questions)

No

Notes:

All snorkeling and SCUBA diving operations have been approved by Environmental Health and Safety. (sub question)

Yes

No

N/A

Recommendations

Notes:

Researchers working on ice-covered bodies of water have received appropriate instruction and training. (sub question)

Yes

No

N/A

Recommendations

Notes:

When using boats, all researchers can demonstrate boat specific competency for the type (motorized, non-motorized, sail) and size they are operating. (sub question)

Yes

No

N/A

Recommendations



Notes:

All boats are equipped to meet local, State, and Federal rules and regulations. (sub question)

Yes

No

N/A

Recommendations

Notes:

When using boats, the total weight of the passengers, equipment, and other gear does not exceed what is stated on the boat's capacity plate. (sub question)

Yes

No

N/A

Recommendations

Notes:

Personal Flotation Devices are worn when working on lakes, ponds, fast-moving streams, or other areas where drowning is possible. (sub question)

Yes

No

N/A

Recommendations

Notes:

## **11. Radiation Safety**

Are radioactive materials used in the laboratory

Yes (see sub questions)

No

Notes:

Wipe test surveillance for contamination in the laboratory is conducted on a regular basis. Records of the surveys are kept. (sub question)

Yes



- No
  - Corrected Onsite
  - Lab Corrected
  - Recommendations
- Notes:

A current inventory of radioactive materials is available, showing the amount available for use as well as amounts stored as waste. (sub question)

- Yes
  - No
  - Corrected Onsite
  - Recommendations
- Notes:

Areas in the laboratory where radioactive materials are used and stored are clearly demarcated and labeled. (sub question)

- Yes
  - No
  - Corrected Onsite
  - Recommendations
- Notes:

A survey meter is available in the laboratory to monitor for potential contamination and is calibrated annually. (sub question)

- Yes
  - No
  - Corrected Onsite
  - Recommendations
- Notes:

Radioactive materials are safely and securely stored (including materials available for use, materials in use, and materials for disposal or decay in storage). (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations



Notes:

Researchers in the laboratory have received instruction in the proper use of the survey meter and can demonstrate its use. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:

The total amount of radioactive materials stored in the laboratory does not exceed the amount listed on the license. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:

Waste disposal records are available for both liquid and solid waste. (sub question)

- Yes
- No
- Corrected Onsite
- Recommendations

Notes:

Is there any equipment in the laboratory that produces or emits radiation. Examples include imaging, x-ray, lasers.

- Yes (see sub questions)
- No
- N/A
- Corrected Onsite
- Recommendations

Notes:

Has the use of the equipment been evaluated by EHS? (sub question)

- Yes



- No
  - N/A
  - Corrected Onsite
  - Recommendations
- Notes:

All lab personnel have received appropriate training for the radiation producing equipment. (sub question)

- Yes
  - No
  - N/A
  - Corrected Onsite
  - Recommendations
- Notes:

Appropriate signage is posted on the door for the radiation producing hazards present in the lab. (sub question)

- Yes
  - No
  - N/A
  - Corrected Onsite
  - Recommendations
- Notes:

Maintenance records for the equipment are readily available. (sub question)

- Yes
  - No
  - N/A
  - Corrected Onsite
  - Recommendations
- Notes:

All appropriate PPE is available and used when handling the equipment. (sub question)

- Yes
- No
- N/A
- Corrected Onsite
- Recommendations



Notes:

## **12. Other Hazards**

All safety concerns have been addressed by the inspection questions above.

Yes

No

N/A

Notes: