CSUDH ENVIRONMENTAL HEALTH & SAFETY

Hazard Review Evaluation

Department:	
Submittal Date:	
Principal Investigator:	
Location (s):	*(Building/Room Number)*
Lab Phone:	**(XXX) – XXX – XXXX**
Emergency Contact:	*(Name and Phone Number)*
Date (s) of Project:	

☐ **Working Alone** ☐ **Working Independently**

Student Name (s) or Class:

Lab work to be performed:

Chemicals or Biological agents to be used:

Equipment/Instrumentation to be used:

Chemical Hazards: Working with any materials in these hazard classes requires a "buddy system"

❍ **Pyrophoric Chemicals** (ex.: Lithium Reagents: RLi (R = alkyls, aryls, vinyls); Metal carbonyls: Lithium carbonyl, Nickel tetracarbonyl; Metal hydrides: Potassium Hydride, Sodium hydride, Lithium Aluminum Hydride; Nonmetal hydrides: Arsine, Boranes, Diethylarsine, diethylphosphine, Germane, Phosphine, phenylphosphine, Silane; Elements: Phosphorus, Cesium, Lithium, Potassium, Sodium, Sodium Potassium Alloy (NaK)), or listed as OSHA Hazard Class Pyrophoric
❍ **Water Reactive Chemicals** (ex.: Aluminum Carbide, Calcium, Calcium carbide, Lithium aluminum hydride, Potassium, Sodium), or listed as OSHA Hazard Class "substances which, in contact with water, emit flammable gases"
❍ **Potentially Explosive Chemicals** (ex.: Azide Metal (M-N3), Nitrate (-ONO2), Nitro (-NO2), Nitrite (-ONO), Peroxide (-O-O-), Ammonium nitrate, Ammonium perchlorate, Benzoyl peroxide, Dinitrophenol, Nitrocellulose, Picric acid (trinitrophenol), Urea nitrate), or listed as OSHA Hazard Class Explosive or Self-reactive
❍ **Explosive Salts** (ex.: Perchlorate salts (ClO_4^-)), or listed as OSHA Hazard Class Explosive or Self-reactive
❍ **Acutely Toxic Chemicals** (ex.: Carbon Monoxide, Cyanide salts, Digoxin, 2,4-Dinitrophenol, Methyl mercaptan, Nitric oxide,Phosgene, Potassium cyanide, Sodium Azide, Sodium cyanide, any chemical with LD50 (oral)< 50 mg/kg) or listed as OSHA Hazard Class Acutely Toxic Category 1 or 2
❍ **Peroxide Forming Chemicals** (ex.: Isopropyl Ether, Methyl Isobutyl Ketone, Tetrahydrofuran, Acrylonitrile, Methyl Methacrylate, Styrene), or listed as OSHA Hazard Class Peroxide
❍ **Strong Corrosives** (ex., Hydrochloric acid, Hydrofluoric acid, Nitric acid, Perchloric acid, Phenol, Sulfuric acid, Potassium hydroxide, Sodium hydroxide), or listed as OSHA Hazard Class Corrosive
❍ **Strong Oxidizing Agent** (ex.: Ammonium perchlorate, Ammonium permanganate, Bromine, Calcium chlorate, Calcium hypochlorite, Chromic acid, Hydrogen peroxide, Oxygen), or listed as OSHA Hazard Class Oxidizer
❍ **Strong Reducing Agents** (ex.: Lithium, Lithium aluminum hydride, Magnesium, Potassium, Sodium, Sodium borohydride)
❍ **Regulated Carcinogens** (ex.: Acrylonitrile, Benzene, Formaldehyde, Gallium Arsenide, Inorganic Arsenic, Paraformaldehyde), or listed as OSHA Hazard Class Carcinogen
❍ **Other:**

Biological Hazards: Working with any materials in this hazard class requires a "buddy system"

❍ **Select Agents** (ex. Botulinum neurotoxin, Tetrodotoxin, Yersinia pestis) https://www.selectagents.gov/sat/list.htm
❍ **Other:**

Process Hazards: Specify source when necessary

❍ Use of machines such as a microtomes [identify specific equipment]
❍ Procedures involving high-pressure equipment [identify specific equipment]
❍ Transferring large quantities [e.g., 10 liters or more] of hazardous materials
❍ Handling animals that could cause serious injury
❍ High voltage, high current
❍ Other:

Health and Safety Requirements:

Can the person rescue themselves in case of an emergency? ☐ Yes ☐ No
Identify the "Buddy" and confirm they are available before beginning work:
The CSUDH Emergency Procedures poster is posted in the laboratory. The names and phone numbers for the lab and building contacts are up to date

Filled by EHS

Degree of Risk

☐ Low Risk ☐ Medium Risk ☐ High Risk

	Optional Recommendations	Required Recommendations
Administrative Controls		
Engineering Controls		
PPE		

I have reviewed the *Hazard Review Evaluation* with EHS for this procedure and hazards involved in the work, the consequences resulting from a worst-case scenario, the possibility of an accident that would prevent a lab student (s) from calling for help, the lab student (s) training and experience and the time the work is to be conducted (during normal business hours versus at night or on weekend/holidays). This lab student (s) has permission to work alone in the laboratory.

PI Signature: Date:

EHS Approval

CHO Signature: Date:

Duration Approval for: