

# Cal Poly SLO Campus Faculty/PI Laboratory Safety Handbook

A practical introduction to Cal Poly Environmental Health & Safety resources for new faculty

**WELCOME | PLAN | AUTHORIZE | TRAIN | MANAGE**

## Welcome to Cal Poly!

Environmental Health & Safety is here to help faculty establish safe, effective teaching and research environments. EH&S can consult during laboratory planning, help evaluate hazards and controls, identify training and institutional authorization needs, support RSS setup and self-inspections, advise on hazardous waste, and help address questions as research or program activity changes. Early coordination can prevent delays and make safety easier to build into the work from the start.



## Safety Leadership and PI Responsibility

Faculty and Principal Investigators set the tone for safety and are responsible for the spaces and activities under their direction. This includes identifying hazards, establishing safe work practices, providing appropriate training and supervision, correcting unsafe conditions, and maintaining a work environment that protects faculty, students, staff, research personnel, and visitors.

EH&S is a campus partner and technical resource. Faculty are encouraged to contact EH&S early and often for consultation on laboratory startup, research changes, hazard assessments, engineering and administrative controls, SOP development, training, institutional authorizations, RSS, inspections, waste management, incident follow-up, and questions about applicable requirements. However, EH&S support does not replace the PI's day-to-day responsibility for safe laboratory operations, personnel supervision, and the condition of the laboratory space.

- Integrate safety into research planning, purchasing, experimental design, meetings, and mentoring.
- Clearly communicate expectations and ensure personnel are competent before independent work.
- Encourage personnel to report hazards, incidents, and near misses without fear of retaliation.
- Stop or modify work when hazards are not adequately controlled.
- Maintain current authorizations, procedures, inventories, inspections, and training records.

## 1. Setting Up a New Laboratory

Cal Poly EH&S provides a New Labs resource that outlines the initial steps for establishing a laboratory. Complete these steps before hazardous work begins.

1. Contact EH&S early to register the new laboratory and discuss planned activities, anticipated hazards, facility needs, training, and possible institutional authorizations. You can initiate your lab registration using this [Online Form](#).
2. Complete the online RSS Laboratory Hazard Assessment Tool.
3. Review the Research Safety Training page to determine required PI and laboratory personnel training.
4. Identify whether the planned work requires a Biological Use Authorization, Radiation Use Authorization, laser registration, or other specialized review.
5. Establish research-specific SOPs, emergency procedures, training documentation, and waste management practices.
6. Confirm that required engineering controls, emergency equipment, personal protective equipment, and facility support are available and functional.

**New Labs:** Startup requirements and links for new research laboratories. [Online Resources](#)

**Laboratory Safety:** Chemical Hygiene Plan, SOP resources, nanomaterial safety, and laboratory safety contacts. [Online Resources](#)

## 2. Risk and Safety Solutions (RSS)

Risk and Safety Solutions is Cal Poly's safety management system. RSS supports workplace and laboratory hazard assessments, inspections, chemical inventories, Safety Data Sheets, and hazardous waste management.

### What the PI should establish

- An RSS group that accurately reflects the laboratory and its responsible personnel.
- Correct room and location assignments.
- Appropriate roles for the PI, delegates, laboratory managers, and members.
- A current chemical inventory and access to Safety Data Sheets.
- Completed hazard assessments and recurring laboratory self-inspections.
- Access to RSS WASTE for personnel who generate or manage hazardous waste in the lab or space.

Keep laboratory membership, room assignments, chemical inventories, hazard assessments, and self-inspection information current. Contact Erin Winett at [egwinett@calpoly.edu](mailto:egwinett@calpoly.edu) for RSS programming questions or assistance.

**Risk & Safety Solutions:** RSS modules, FAQs, login information, and support. [Online Resources](#)

### 3. Training and Supervision

All faculty, staff, students, and visitors who work at Cal Poly or at Cal Poly-owned properties must complete [Injury and Illness Prevention Program training](#). Additional training is based on job duties and hazards and is at the discretion of the manager of the work (EHS is available for training consult).

#### Common research training requirements

| Activity                           | Typical Requirement                                                             | Frequency                                            |
|------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------|
| PI of an academic research wet lab | PI orientation with EH&S; Laboratory Safety Fundamentals                        | Orientation once; laboratory safety annual/refresher |
| Work in a wet lab or vivarium      | Laboratory Safety Fundamentals; refresher; Chemical Hygiene Plan and SOP review | Initial and annual reviews as listed                 |
| Biohazardous materials             | IBC compliance training and protocol-specific requirements                      | As specified by authorization                        |
| Lasers                             | CSU Laser Safety                                                                | Biennial                                             |
| Radioactive materials              | Radiation Safety and laboratory-specific SOP                                    | Annual and when SOP changes                          |
| Respirator use                     | Respiratory Protection Training and EH&S coordination                           | Annual                                               |

Online training does not replace laboratory-specific instruction. The PI must ensure that personnel understand local hazards, procedures, emergency actions, waste practices, and equipment before they work independently.

**Research Safety Training:** Current training matrix for research and laboratory activities. [Online Resources](#)

### 4. Chemical and Laboratory Safety

The campus Chemical Hygiene Plan may serve as the laboratory safety plan for areas using hazardous chemicals. Departments may use their own plan if it is at least as protective as the campus plan. Faculty should develop laboratory-specific SOPs when general campus procedures do not adequately address a material, process, or piece of equipment.

- Maintain an accurate chemical inventory in RSS and ensure Safety Data Sheets are accessible.
- Label and store chemicals appropriately and segregate incompatibles.
- Evaluate ventilation and other engineering controls before beginning work.

- Provide suitable personal protective equipment and enforce its use.
- Confirm access to eyewashes, safety showers, spill supplies, and emergency information.
- Develop procedures for highly hazardous materials, unattended operations, incidental spills, exposures, and emergency shutdowns.
- Inspect the laboratory and correct deficiencies promptly.

## 5. Hazardous Waste Management

All waste generated in laboratories and research environments must be evaluated and managed appropriately. Cal Poly uses the WASTE module in RSS for laboratory and research hazardous waste. EH&S can consult on waste determinations, compatible container selection, compliant labeling, accumulation areas, storage, spill planning, pickup, and disposal. EH&S also provides containers for accumulating hazardous waste.

### Generator responsibilities

- Ensure the laboratory or shop is included in RSS and appropriate roles are assigned.
- Designate a Satellite Accumulation Area for hazardous chemical waste.
- Create a compliant RSS WASTE label when waste accumulation begins<sup>1</sup>.
- Use compatible containers, keep them closed except when adding waste, and place liquid waste in secondary containment.
- Segregate incompatible wastes and store all containers safely.
- Inspect waste containers at least weekly for labels, leaks, closure, compatibility, and condition.
- EH&S provides hazardous waste accumulation containers and related supplies. Request them through the [Online Waste Container Delivery Form](#).
- Request pickup when containers are full and monitor applicable accumulation time limits.
- Train all personnel involved in hazardous material and waste handling.
- Include waste management practices in laboratory procedures and instructional manuals.
- Review hazardous materials annually and dispose of excess or expired materials appropriately.

#### When unsure, ask before disposing.

Do not place hazardous laboratory waste in sinks, drains, regular trash, or recycling. Contact [hazwaste@calpoly.edu](mailto:hazwaste@calpoly.edu) or 805-756-6678 for consultation on waste determinations, labels, containers, storage, spill planning, or pickup.

**Hazardous Waste and Materials:** Waste management requirements and service information. [Online Resources](#)

**Hazardous Waste FAQs:** Detailed generator responsibilities and common disposal questions. [Online Resources](#)

**Faculty & Staff Hazardous Waste Management Guide:** One-Sheet program summary for managing hazardous waste in labs and workshops. [Online Resource](#)

---

<sup>1</sup> Some teaching laboratory spaces within the Bailey College of Science and Mathematics have dedicated technicians who collect waste and use department specific labeling procedures.

## 6. Institutional Authorizations

Some activities require institutional review and authorization before work begins. Contact EH&S and the applicable institutional program early (before starting work and before purchasing hazardous materials) so staff can help identify the correct review pathway, forms, training, facility controls, and documentation. Faculty and PIs are responsible for ensuring approval is in place and that work remains within the approved scope.

### **Institutional authorizations are required for activities involving:**

- Biosafety Level 2 or higher
- Non-exempt recombinant DNA or synthetic nucleic acid molecules
- Prions and prion-like proteins
- Live animals
- Human subject research
- Select agents and toxins
- Controlled substances and precursor chemicals
- Class 3B or Class 4 lasers and laser systems
- Sealed or unsealed radioactive materials
- Ionizing radiation-generating devices, including X-rays and accelerators
- Drones
- Use of dichloromethane

The type of review, approving body, training, and ongoing requirements vary by activity. Begin with the New Labs resource and contact EH&S for consultation before acquiring regulated materials or equipment, modifying facilities, or starting the work.

### **New Labs: startup steps, training, and authorization resources**

## 7. Emergency Preparedness and Incident Reporting

Every person working in the laboratory should know how to summon help, evacuate, use emergency equipment, and report an incident. Laboratory-specific emergency procedures include incidental spill cleanup, identify shutdown steps that can be performed safely, and clarify when personnel must evacuate rather than attempt cleanup.

- Call 911 for severe injuries, fires, significant releases, or immediate threats to people or the environment.
- Report work-related injuries or illnesses promptly to the supervisor.
- Staff can contact the Work Injury Nurse Triage line at 1-866-658-7064 unless immediate emergency care is required. For medical emergencies, call 911.
- For non-emergency situations, *students* can seek care at the Campus Health Center. For medical emergencies, call 911.
- Know the locations of eyewashes, safety showers, fire extinguishers, spill supplies, exits, and emergency contact information.
- Report hazards, unsafe conditions, incidents, and near misses so corrective actions can be taken.

## 8. Other EH&S Programs

Laboratory and research safety are part of a broader campus safety system. EH&S supports many other programs including but not limited to ergonomics, respiratory protection, personal protective equipment, electrical and machine safety, hearing conservation, heat illness prevention, indoor air quality, asbestos and lead, fall protection, confined spaces, lockout/tagout, fire safety, first aid and AEDs, and environmental protection.

Contact EH&S for help determining which programs apply, arranging consultation or training, reviewing workplace conditions, and connecting with the appropriate campus resource.

[Explore the Cal Poly EH&S Programs Page](#)

## 9. EH&S Contacts and Resource Directory

| Program or need                                                                   | Primary contact  | Phone / email                                                                                                        |
|-----------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------|
| EH&S General Assistance / Facilities Help Center                                  | EH&S             | 805-756-5555<br><a href="mailto:environmental-health-safety@calpoly.edu">environmental-health-safety@calpoly.edu</a> |
| Laboratory, Chemical Safety, Laser, Radiation, & Biosafety                        | Roxane Strobel   | 805-756-3044<br><a href="mailto:rstrobel@calpoly.edu">rstrobel@calpoly.edu</a>                                       |
| Hazardous & Biohazardous Waste, Water Resources Protection, Air Compliance, & RSS | Erin Winett      | 805-756-6678<br><a href="mailto:egwinett@calpoly.edu">egwinett@calpoly.edu</a>                                       |
| Occupational Safety                                                               | Melonee Cruse    | 805-756-6664<br><a href="mailto:mecruse@calpoly.edu">mecruse@calpoly.edu</a>                                         |
| Fire & Life Safety                                                                | Mike Landvogt    | 805-756-6628<br><a href="mailto:mlandvogz@calpoly.edu">mlandvogz@calpoly.edu</a>                                     |
| EH&S Manager                                                                      | Christina Juarez | 805-756-6674<br><a href="mailto:cdjuarez@calpoly.edu">cdjuarez@calpoly.edu</a>                                       |
| EH&S Director                                                                     | Nilay Gami       | <a href="mailto:ngami@calpoly.edu">ngami@calpoly.edu</a>                                                             |

## Quick Links

[New Labs](#) | [RSS](#) | [Hazardous Waste](#) | [Report a Safety Concern](#) | [EH&S Programs](#) | [EH&S Contacts](#)

This handbook summarizes Cal Poly Environmental Health & Safety webpages as of July 2026. Requirements may vary by activity. Coordinate with EH&S and follow current program documents, authorizations, and laboratory-specific procedures.