

Environmental Health, and Safety

1.0 Policy

Caltech is committed to conducting activities in a manner that promotes the safety and health of faculty, staff, postdoctoral scholars, students, and visitors; applies sound practices in environmental stewardship; and minimizes risk to Caltech property. Activities at Caltech are to be conducted in accordance with the following guiding principles:

- The responsibility for implementing and maintaining a safe environment rests on all faculty, staff, postdoctoral scholars, students, and visitors at Caltech.
- Faculty, supervisors, and managers are responsible for establishing good environmental health and safety practices in their laboratories, classrooms, and workplaces and for providing safe equipment and facilities for faculty, staff, postdoctoral scholars, students, and visitors.
- All faculty, staff, postdoctoral scholars, students, and visitors are expected to keep
 themselves informed of conditions affecting their health and safety, participate in safety
 training, follow proper environmental, health and safety policies and procedures, and report
 accidents and potentially unsafe or illegal conditions or practices promptly to their
 supervisor or manager or other appropriate office.
- Caltech activities must comply with all applicable federal, state, and local environmental, health and safety laws and regulations.

2.0 Roles and Responsibilities

Caltech has the responsibility to establish environmental, health and safety policies and procedures, and provide resources to ensure compliance with environmental and safety laws.

All managers and supervisors, both academic and administrative, at campus and JPL, are responsible for conducting operations in accordance with all applicable laws and regulations and Caltech policies, practices, and programs.

Caltech performs these functions through the following committees and administrative and management structure:

2.1 Institute Environmental Health and Safety Committee

Caltech's Institute Environmental Health and Safety Committee ("IEHSC") is responsible for recommending campus wide environmental, health and safety policies to the president.

The IEHSC is responsible for making recommendations regarding the allocation of Institute resources so as to maintain environmental (e.g., air emissions, soil contamination, water discharges, hazardous waste management) and workplace health and safety compliance. In addition, the committee monitors developments through the campus Environmental Health, and Safety Office to ensure that Institute policies are observed, remain current, and are consistent with the anticipated changes in regulatory requirements.

2.2 Campus Environmental Health, and Safety Office

The Environmental Health, and Safety Office ("EH&S"), which reports to the associate vice president for facilities, is responsible for providing technical, regulatory, and related advisory services to the campus community. EH&S works in partnership with the academic divisions and administrative departments to develop and implement safety programs that provide technical guidance and training support relevant to the operations of the laboratories and workplace, are practical to carry out, and comply with the law. This includes general orientation in prudent laboratory practices, emergency response procedures, occupational safety, and familiarity with Institute environmental, health and safety policies and procedures. EH&S also initiates site reviews to assess potential hazards and determine effective controls, and coordinates hazardous waste training and hazardous waste disposal. EH&S, working closely with the Office of the General Counsel, reviews legislation, recommends policies, provides regulatory agencies with required data and reports, and investigates and reports environmental, health and safety incidents.

2.3 Campus Division Chairs and Department Heads

The Caltech campus consists of divisions conducting research and educational activities, and administrative departments supporting the operations of Caltech. It is the responsibility of each division chair and department head to ensure that their units conduct operations in accordance with applicable laws and regulations and implement Caltech's environmental, health and safety policies and procedures. Division chairs and department heads maintain responsibility for day-to-day management and implementation of their environmental, health and safety programs.

Division chairs and department heads may designate an individual with the authority to implement, manage, and enforce environmental, health and safety compliance programs within the division or administrative office. With guidance and assistance from EH&S, the responsible individual (i.e., the division chair, department head or their designee) shall manage the environmental, health and safety activities in the division or department.

2.4 JPL Office of Safety and Mission Success

The Office of Safety and Mission Success at JPL ("JPL OSMS") establishes and leads the Environmental, Health and Safety and Mission Assurance Programs for projects, programs and major tasks. JPL OSMS appropriately manages risks and enhances the probability of mission

safety and success. In this capacity, JPL OSMS is an independent organization, reporting directly to the JPL director. JPL OSMS continually assesses risk and provides infrastructure to ensure that JPL maintains compliance with the JPL Prime Contract and applicable federal, state, and local environmental, health and safety requirements. JPL OSMS applies knowledge, innovation, and independence to achieve successful missions that inspire the world while safeguarding JPL's people, assets and reputation.

2.5 JPL Environmental, Health and Safety Program Management

The JPL Occupational Safety Program Office, the JPL System Safety Program Office, and the JPL Environmental Affairs Program Office are chartered with establishing and leading programs related to occupational safety, systems safety, and environmental compliance, respectively, and are tasked with appropriately sharing in the management of risks and enhancing the probability of mission safety and success. These JPL program offices, working closely with the Office of the General Counsel, review legislation, recommend policies, provide regulatory agencies with required data and reports, and investigate and report environmental, health and safety incidents. Each of the environmental, health and safety program management offices has office-specific policies that are detailed in JPL Rules!

2.6 Campus and JPL Manager and Supervisor Responsibilities

Managers are responsible for ensuring that areas under their management have adequate resources for environmental, health and safety programs, practices and equipment. Managers are also responsible to ensure that those areas under their management are in compliance with Caltech's environmental, health and safety policies, practices, and programs.

Supervisors, including principal investigators ("PIs"), with guidance and assistance from the environmental, health and safety offices listed above, are responsible for implementing environmental, health and safety policies, practices, and programs, ensuring that workplaces, including laboratories and equipment, are safe and well-maintained, training and informing employees, students, and visitors about workplace-specific hazards and safety procedures, providing personal protective equipment, correcting violations, investigating incidents and complaints, overseeing proper storage and disposal of hazardous materials, enforcing policies (including appropriately disciplining employees and students who violate environmental and safety requirements), and appropriately documenting training, activities and processes.

Faculty are responsible for the safety of work undertaken in their laboratories. Faculty members may designate a qualified individual, known as a Safety Coordinator, and empower that individual to assist in the day-to-day safety activities within their research groups, however faculty members remain fully responsible for the safe conduct of work in their laboratories.

2.7 All faculty, staff and students

All faculty, staff, postdoctoral scholars, and students at campus and JPL are responsible for:

- Keeping themselves informed of conditions affecting their health and safety,
- Participating in safety training programs as required by the governing organization's policy and their supervisors,
- Performing work in a safe and prudent manner,
- Adhering to health and safety practices in their workplaces, classrooms, and laboratories, and
- Advising of or reporting potentially unsafe practices, illegal activities or serious hazards in the workplace, classroom or laboratory, and cooperatively participating in the investigation and/or remediation of any incidents.

The success of Caltech's environmental, health and safety management activities requires the active involvement of individuals through participation in training, compliance with established environmental, health and safety procedures, and reporting hazards and potential violations.

It is the responsibility of all faculty, staff, postdoctoral scholars, and students at Caltech to disclose fully any activity that may result in a violation of environmental, health or safety laws or regulations, and to cooperatively participate in the investigation and remediation of any incidents.

2.8 Visitors and Contractors

Visitors and those who do business with Caltech either at Campus or JPL, such as contractors, consultants and vendors, are responsible for performing their work in a manner that protects Caltech from environmental, health and safety risks, and complies with all applicable federal, state, and local laws and regulations and all applicable environmental, health and safety policies, practices and programs.

3.0 Reporting

In matters of actual or potential regulatory enforcement action, investigations, or employee complaints, the appropriate environmental, health and safety office will work closely with the Office of the General Counsel to coordinate Caltech's response to external regulatory agencies concerned with workplace health, safety, and environmental compliance.

Any questions or concerns regarding compliance should be brought to the attention of the appropriate manager or supervisor, or to the appropriate environmental, health and safety office. Alternatively, concerns can be raised with the appropriate division chair or vice president at campus, or the OSMS director at JPL. In addition, concerns can be raised anonymously for campus through the anonymous hotline (626) 395-8787 or

(888) 395-8787 or online at <u>Caltech Hotline</u> or, for JPL, through the JPL OSPO 24-hour Immediate Mishap and Close Call Reporting line (IMACC) (818) 354-2141, or the Occupational Safety Program Office (OSPO).

4.0 Sanctions

All faculty, staff, postdoctoral scholars, and students should be vigilant in complying with all environmental, health and safety requirements, and to properly conduct their activities at Caltech.

Local, state, and federal laws and regulations establish civil and criminal penalties for violations of environmental, health and safety laws and regulations, including substantial fines and possible imprisonment.

Caltech views compliance with all laws, regulations, and Institute guidelines as conditions of employment. Individuals who violate this policy may be subject to disciplinary action up to and including termination of employment, student expulsion, or being permanently excluded from Caltech-controlled premises.