

RADIATION SAFETY

I. REFERENCES

- A. Code of Federal Regulations, Title 10, Chapter 20
- B. California Code of Regulations, Title 17, Chapter 5, Subchapter 4
- C. UCSD Radiation Safety Website <http://blink.ucsd.edu/menu/rad>
- D. California Radioactive Materials License No. 1339-37
- E. American National Standards Institute (ANSI) Guide Z136.1, "Safe Use of Lasers".
- F. ANSI Guide Z136.3 "Safe Use of Lasers in Health Care Facilities".
- G. UCSD Laser Safety Website <http://blink.ucsd.edu/go/lasersafety>

II. POLICY

All radioactive materials and all equipment capable of producing ionizing and/or non-ionizing radiation shall be handled in accordance with the provisions of the above references and all other applicable regulations. In the absence of clear regulatory oversight, publications from the International Commission on Radiological Protection (ICRP), International Commission on Non-Ionizing Radiation Protection (ICNIRP), National Council on Radiation Protection (NCRP), the American National Standards Institute (ANSI) and the National Council on Radiation Protection and Measurements (NCRP) shall be used as a guide by the Environment, Health and Safety Office (EH&S) in determining safe work requirements.

III. PROCEDURES

Detailed procedures and standards are available in the EH&S Office. In general, these procedures are to ensure that work with radioactive materials and with devices capable of producing radiation, ionizing and non-ionizing, is conducted in such a manner as to protect health, maintain radiation doses As Low As Reasonably Achievable (ALARA), and to minimize danger to life and property. This policy is written to be consistent with the facilitation of legitimate research and inquiry.

IV. RESPONSIBILITY

A. Ionizing Radiation

1. Radiation Safety and Surveillance Committee

Members of the Radiation Safety and Surveillance Committee (RSSC) are responsible for approving and monitoring the use of radioactive materials and radiation producing devices at UCSD facilities. The current membership and additional information about the RSSC may be found at the [Radiation Safety Website http://blink.ucsd.edu/menu/rad](http://blink.ucsd.edu/menu/rad).

Radiation Safety Officer

The Radiation Safety Officer (RSO), acting under the guidance of the Director of EH&S and the RSSC, is assigned responsibility for surveillance of departmental activities involving ionizing radiation, for maintaining a positive association between the University and governmental regulatory agencies, and for maintaining records in conformity with policies and standards in the above references. These activities include, but are not limited to the following:

- a. Providing radiation safety instruction and guidance to Principal Investigators and users of radioactive materials or radiation producing devices.
 - b. Providing feedback in the form of survey or audit reports and guidance to Principal Investigators and/or users to assure the use of correct procedures in the handling of radioactive materials or radiation producing devices at UCSD within regulatory compliance.
 - c. Taking corrective action when deemed necessary by the RSSC to assure use of radioactive materials or radiation producing devices at UCSD is within regulatory compliance.
2. Principal Investigator

The Principal Investigator (PI) is responsible for the appropriate use of radiation under his/her control. Use is deemed appropriate when within all applicable rules and regulations and radiation doses are ALARA. The PI must also provide adequate training to users under his or her control.

3. User

All persons who use radioactive materials or radiation producing devices as part of their job are required to read and understand the [UCSD Radiation Safety Manual](#). All such use shall be in accordance with this reference.

B. Non-Ionizing Radiation

1. Environment, Health and Safety (EH&S)

EH&S is responsible for surveillance of departmental activities involving non-ionizing radiation, for maintaining a healthy association between the University and governmental regulatory agencies, and record-keeping in conformance with policies and standards in the above references. These activities include, but are not limited to the following:

- a. Providing safety instruction and guidance to PIs and users of equipment capable of producing non-ionizing radiation.
- b. Overseeing all uses of non-ionizing radiation at UCSD facilities.

- c. Providing feedback in the form of survey or audit reports and guidance to Principal Investigators and/or users to facilitate the use of correct procedures in the use of non-ionizing radiation producing devices.
- d. Taking corrective action to assure use of non-ionizing radiation producing devices at UCSD is within regulatory compliance.

2. Laser Safety Committee

Members of the Laser Safety Committee (LSC) are responsible for setting policies and procedures for the safe use of lasers at UCSD facilities. The current membership and additional information about the LSC may be found in the UCSD [Laser Safety Website](http://blink.ucsd.edu/go/lasersafety) <http://blink.ucsd.edu/go/lasersafety>.

3. Laser Safety Officer

The Laser Safety Officer (LSO) is responsible for surveillance of departmental activities involving laser radiation, for maintaining a healthy association between the University and governmental regulatory agencies, and record-keeping in conformance with policies and standards in the above references. These activities include, but are not limited to the following:

- a. Providing safety instruction and guidance to PIs and users of laser equipment.
- b. Overseeing all uses of laser radiation at UCSD facilities.
- c. Providing feedback in the form of survey or audit reports and guidance to Principal Investigators and/or users to facilitate the use of correct procedures in the use of laser devices.
- d. Taking corrective action to assure use of laser devices at UCSD is within regulatory compliance.

4. Principal Investigator

The Principal Investigator is responsible for the appropriate use of non-ionizing and laser radiation producing equipment under his/her control. The PI must also provide adequate training to users under his/her control.

5. User

All persons who use non-ionizing and laser radiation producing devices as part of their job must be trained in the proper use of the equipment and safety requirements. Users are also responsible for appropriate use of laser and non-ionizing radiation producing equipment and must comply with all health and safety requirements.