

University of California, Irvine

MEDICAL WASTE MANAGEMENT PLAN

NAME OF FACILITY: University of California, Irvine
ADDRESS OF FACILITY: 4600 Health Sciences Road
Irvine, CA 92697-2725
PHONE NUMBER OF FACILITY: (949) 824-6200
TYPE OF FACILITY: Education And Research
CONTACT PERSON: Kirk Matin

The University of California, Irvine generates approximately 5,500 lbs.(large quantity generator) of medical waste per month. Any medical waste that is generated requires disposal, storage, treatment and disposal per the Medical Waste Management Act (MWMA). All medical waste tracking documents and treatment records will be maintained on-site and available for review for a period of 3 years.

The University of California, Irvine has developed this plan to maintain compliance with State and Local laws and regulations. This plan will assist in the designation of waste that is managed as regulated medical waste, segregation of medical waste from non-medical waste, packaging, storage, treatment, disposal, contingency measures for emergency situations and staff training.

The University of California, Irvine's medical waste haulers are:

- Stericycle, Inc., 2775 E. 26th St., Vernon, CA 90023.
- Thermal Combustion Innovators, Inc. (TCI), 241 W. Laurel St., Colton, CA 92324

Stericycle, Inc. and/or Thermal Combustion Innovators, Inc. come at least once a week to collect medical waste generated by the University of California, Irvine. Their telephone numbers are: Stericycle, Inc. (800) 983-9324, Thermal Combustion Innovators, Inc. (909) 370-0730.

Definition of Medical Waste:

Medical waste is composed of waste that is generated or produced as a result of any of the following actions:

1. Diagnosis, treatment or immunization of human beings or animals.
2. Production or testing of biologicals (i.e. serums, vaccines, antigens, and antitoxins).
3. Accumulation of properly contained home-generated sharps waste that is brought by patients or family members of patients, or by a person authorized by the enforcement agency.
4. Removal of a regulated waste from a trauma scene by a trauma waste management practitioner.

Biohazardous waste means any of the following:

1. Laboratory waste, including, but not limited to, all of the following:
 - a. Human or animal specimen cultures from medical and pathology laboratories.
 - b. Cultures and stocks of infectious agents from research and industrial laboratories.
 - c. Wastes from the production of bacteria, viruses, spores, discarded live and attenuated vaccines used in human health care or research, discarded animal vaccines, including Brucellosis and Contagious Ecthyma, as identified by the department, and culture dishes and devices used to transfer, inoculate, and mix cultures.

2. Human surgery specimens or tissues removed at surgery or autopsy, which are suspected by the attending physician and surgeon or dentist of being contaminated with infectious agents known to be contagious to humans.
3. Animal parts, tissues, fluids, or carcasses suspected by the attending veterinarian of being contaminated with infectious agents known to be contagious to humans.
4. Waste, which at the point of transport from the generator's site, at the point of disposal, or thereafter, contains recognizable fluid blood, fluid blood products, containers or equipment containing blood that is fluid, or blood from animals known to be infectious with diseases which are highly communicable to humans.
5. Waste containing discarded materials contaminated with excretion, exudate, or secretions from humans or animals that are required to be isolated by the infection control staff, the attending physician and surgeon, the attending veterinarian, or the local health officer, to protect others from highly communicable diseases or diseases of animals that are highly communicable to humans.
6. Waste which is hazardous only because it is comprised of human surgery specimens or tissues which have been fixed in formaldehyde or other fixatives, or only because the waste is contaminated through contact with, or having previously contained, chemotherapeutic agents are incinerated at a medical waste incinerator.
7. Waste which is hazardous only because it is comprised of pharmaceuticals, is incinerated at a permitted medical waste incinerator.

Sharps means any device having acute rigid corners, edges or protuberances capable of cutting or piercing (i.e., hypodermic needles, hypodermic needles with syringes, blades, needles with attached tubing, syringes contaminated with biohazardous waste, acupuncture needles, root canal files, broken glass items such as Pasteur pipettes and blood vials contaminated with biohazardous waste).

Large quantity generator means a facility that generates 200 pounds or more of medical waste in any month in a 12-month period.

At the University of California, Irvine, the primary types of wastes are:

1. Human blood and blood products including blood as well as serum, plasma, and other blood products. All liquid blood and blood products are managed as medical waste.
2. Contaminated sharps are hypodermic needles, syringes, pipettes, broken glass, and scalpel blades. These items are considered infectious wastes because of the possibility of contamination with bloodborne pathogens.

Treatment and Disposal Methods:

The University of California, Irvine has a contract with Stericycle, Inc. and/or Thermal Combustion Innovators, Inc., a registered medical waste management company to pick up and dispose of medical waste generated once a week. Medical waste generated is placed in a red biohazard bag and placed inside the biohazardous container in the secured storage area.

Vendor	Pickup Location	
	Building	Room
Stericycle, Inc.	Gottchalk Medical Plaza Beckman Laser Institute	Dumpster Area C626
Thermal Combustion Innovators, Inc.	Environmental Health and Safety	144 / 148

The University of California, Irvine also has a certified medical waste autoclave for treatment of solid medical waste located at Hewitt Hall Room 3345.

The University of California, Irvine utilizes CDC ABSA approved disinfectant solutions to disinfect liquids from laboratory procedures (refer to the EH&S Medical Waste Guideline “Biomedical Waste List Of Disinfectants”).

Buildings generating medical waste include:

Building	Waste Type Generated				
	Medical	Sharps	Pathology	Chemotherapy	Pharmaceutical
101 Theory	X	X			
Beckman Laser Institute	X	X			
Biological Sciences I	X	X	X		
Bonney Research Laboratory	X	X			
California Institute for Technology	X	X			
Faculty Research Facility	X	X			
Gillespie Neuroscience Research Facility	X	X			
Gottchalk Medical Plaza	X	X		X	X
Hewitt Hall	X	X			
Irvine Hall	X	X			
McGaugh Hall	X	X	X		
Medical Sciences	X	X	X		
Medical Surge I	X	X			
Medical Surge II	X	X			
Natural Sciences I	X	X			
Natural Sciences II	X	X			
Plumwood House	X	X			
Reines Hall	X	X			
Social Ecology II	X	X			
Sprague Hall	X	X			
Student Health Center	X	X			X
Engineering Tower	X	X			
Qureshey Research Laboratory	X	X			

Separation of Regulated and Non-regulated Medical Wastes

1. Regulated medical waste is separated at the point of generation. If the medical waste contains hazardous or radioactive materials, it is identified and subjected to the appropriate handling.
2. Regulated medical waste is discarded into red biohazard bags and secondary containers that are leak proof and puncture-resistant, or into sharps containers. Red bags labeled biohazardous waste or biohazard with the international symbol and labels are used for identification of medical waste. The

secondary containers/trash cans must also be marked with a label “biohazardous waste” or biohazard and the universal symbol for biological hazards.

3. Regulated medical waste is separated by waste type;

Waste Type	Treatment
Medical Waste	Autoclave
Sharps Waste	Autoclave
Pathology Waste	Incineration
Pharmaceutical Waste	Incineration
Trace Chemotherapy Waste	Incineration

Packaging:

Medical waste is contained from the point of origin to the point at which it is no longer infectious. The packaging is appropriate for the type of waste involved; it must endure handling, storage, transportation, and treatment.

Liquid medical waste can be placed in capped or tightly sealed bottles or flasks.

Biohazardous waste may be placed in a red biohazard bag, but the following precautions are maintained:

1. Bags are able to pass ASTM dart test for thickness and durability, and be certified by the manufacturer. These criteria will be used to purchase them.
2. Sharps are placed in impervious, rigid, puncture-resistant containers made of rigid plastic or similar materials.
3. Bags are not to be loaded beyond capacity, weight or volume and are protected from coming into contact with sharp external objects.
4. Refer to the Medical Waste Guidelines for detailed packaging and labeling of Medical Waste, Sharps Waste, Pathology Waste, Pharmaceutical Waste and Chemotherapy Waste.

Handling and Transportation:

When medical waste is to be moved about for treatment or storage, special handling or packaging is necessary to keep bags intact and to ensure containment of the waste. The following precautions are maintained:

1. Carts and recyclable containers that are used repeatedly for transport and treatment of medical waste are disinfected after each use.
2. Containers are covered with the lids during transportation.
3. When handling or transporting bags of medical waste, care is taken to prevent tearing the bags.
4. Medical waste picked up by EH&S employees from laboratories for treatment and disposal shall be transported in a locked vehicle under the physical control of an EH&S employee, while in route to the EH&S Building.

Storage:

1. Medical waste will not be stored for more than seven (7) days, unless it is stored at or below 0 degrees Centigrade (32 degrees Fahrenheit) at an onsite location for no more than 90 days. Prior to storage it is packaged securely enough to ensure containment of the waste and to prevent penetration by rodents and vermin.
2. Medical waste is discarded into rigid, leak resistant, clearly marked containers with lids that are puncture resistant and leak-proof. Red bags and/or labeling are used to designate medical waste. The containers are also marked with the universal symbol for biological hazards.
3. The final storage area for medical waste remains locked, entered only by authorized personnel.
4. The final storage area has a warning signs stating "CAUTION BIOHAZARDOUS WASTE STORAGE AREA-UNAUTHORIZED PERSONS KEEP OUT" in English and Spanish, legible from twenty-five (25) feet.
5. Storage containers for biohazardous waste may be any color, and are rigid, leak resistant, and clearly marked.

Emergency Action Plan:***Equipment Breakdown Or Failed Monthly Biological Indicator Testing:***

- Request an EH&S online Biomedical Waste Pickup <http://www.ehs.uci.edu/programs/enviro/>.

In case of a failed monthly biological indicator testing:

- Contact EH&S (949-824-6200) immediately.
- Discontinue utilizing the Autoclave until permission from EH&S is provided.

Non-Emergency Routine Clean-up Procedures (Small Spill Release):

Releases of small quantities which pose no safety or health threat, do not adversely affect the environment and are unlikely to grow in severity, do not require the involvement of the University of California, Irvine EH&S Emergency Response Team (ERT) and may be cleaned up by trained personnel with appropriate personal protective and spill equipment. These personnel should:

- Ensure they are wearing proper protective equipment;
- Eliminate or stop the source of the spill;
- Prevent the material from spreading;
- Disinfect and absorb the material using spill wipes;
- Dispose of contaminated debris and PPE in designated waste containers; and
- Report spill to the area supervisor.

Minor and/or Major Response Procedures (Large Spill Release):

In the event of any release, the observer should immediately evacuate the area and call the EH&S ERT during normal business hours or call 911. Procedures for all types of releases are similar.

1. If an employee has been contaminated, emergency decontamination is initiated by the affected person or by a co-worker aiding the affected person in using the safety shower/eyewash.

