

UCR LABORATORY WASTE DISPOSAL REQUIREMENTS

In case of a spill, contact EH&S at x: 2-5528 or UCPD at x: 2-5222 during non-business hours. Disposal using sinks, intentional evaporation and trash cans is against the law.

	Radioactive Waste	Hazardous Chemical Waste	Mixed & Combined Waste	Medical Waste			Universal & Electronic	Animal Carcasses	Non-Hazardous Waste	
										
Description	Unwanted radioactive material, including Thorium & Uranium compounds	Any unwanted or inherently waste-like material that because of its concentration, quantity, physical or chemical characteristics (ignitability, corrosivity, toxicity & reactivity) is considered hazardous by the State of California.	Waste with more than one category of hazard as follows: <ul style="list-style-type: none"> Radioactive: any quantity Chemical: > 1% ignitable, corrosive, water/air reactive, or toxic; > 0.1% highly toxic or carcinogenic chemicals; specifically regulated (PCB>50 ppm, Cr(IV)>5 ppm, Ag>5 ppm, V>0.025% etc.) Biohazardous: any quantity 	Unwanted prescription or over the counter human & veterinary drugs, if NOT a "controlled substance ¹ " or radioactive material.	Waste that is produced as a result of the diagnosis, treatment or immunization of humans or animals or research pertaining to the diagnosis, treatment or immunization of humans or animals.	Sharp or pointed objects contaminated with biohazardous waste that can cut or pierce.	All biologically contaminated waste that could potentially cause harm to human/animal health or environment.	All used batteries, mercury lamps, and equipment containing a circuit board.	Animal carcasses/tissues & unrecognizable human specimens/tissues from medical or pathology labs that are not biohazardous, radioactive or contaminated with hazardous chemicals.	Uncontaminated trash, non-infectious liquids.
Examples	Gloves, protective coverings, LSC vials, contaminated items.	Any toxic, flammable, corrosive or regulated material, aqueous waste with a pH less than 5 or greater than 9, solutions with heavy metals, organic/inorganic waste solutions & solids from research & teaching labs.	Radioactive & chemical waste, radioactive & biohazardous waste, chemical & biohazardous waste, liquid scintillation cocktails, radioactively contaminated lead bricks & pigs, thorium nitrate, uranium oxalate.	Aspirin, antacids, cold remedies.	Unrecognized human specimens/ tissue, animal tissue/ carcasses & body parts, body fluids, blood or blood products (absorbed).	All hypodermic needles, syringes, blades, scalpels, razors, root canal files, contaminated broken glassware or pointed objects, slides, glass Pasteur pipettes & tips.	Human/animal cell cultures of infectious agents, waste from production of bacteria/ viruses/ spores, transgenic plants, recombinant DNA.	Used alkaline, NiCad, or silver batteries, fluorescent/mercury vapor lamps, thermostats containing mercury, Cathode Ray Tubes, PC monitors, computers, cell phones.	Animal carcasses.	Paper, food, clothes, uncontaminated glass/ gloves/ blood/ urine, plastic ware/pipettes/ tips, tubes, autoclaved red bags with visible autoclaved indicator.
Use the UC WASTE program at: https://ehs.ucop.edu/waste				Label with words "Biohazardous Waste & Biohazard Symbol"			No Waste Label Required			
Storage & Labeling	<ul style="list-style-type: none"> Use containers compatible with materials being collected Use containers with positive closures (screw caps) & close when not in immediate use Place containers with liquid waste in secondary containers with a capacity of 110% that of largest container Do not allow contamination of the outside surfaces of waste containers Do not overfill containers before submitting them for disposal 	<ul style="list-style-type: none"> Use chemicals compatible with containers that have positive closures (screw caps) Close containers when not in immediate use Place containers with liquid waste in secondary containers with a capacity of 110% that of largest container Do not allow contamination of the outside surfaces of waste containers Submit waste for disposal within 180 days of the start date of accumulation 	Follow container requirements for the hazardous components present in the following order: <ul style="list-style-type: none"> Radioactive Chemical Biohazards 	Use tight, rigid container labeled "Incinerate Only."	<ul style="list-style-type: none"> Use only red biohazard bags labeled "Biohazardous Waste" for solid or liquid waste² Double bagging is strongly recommended Do not fill more than ¾ full Orange bags are illegal in California 	Use only red "Sharps" containers labeled as "Biohazardous."	<ul style="list-style-type: none"> Use only labeled red biohazard bags for solid or liquid waste² Double bagging is strongly recommended Orange bags are illegal in California Use containers compatible with collected materials & with positive closures (screw caps) 	<ul style="list-style-type: none"> Must be stored in such a manner as to avoid damage to the waste Batteries can be stored in a robust container (plastic or fiber) Must not be stored longer than 9 months 	<ul style="list-style-type: none"> Double bag in heavy plastic bags No single container greater than 50 pounds 	<ul style="list-style-type: none"> Solids: ordinary trash containers Liquids: drain disposal
Disposal Guidelines	<p>To reduce disposal costs:</p> <ul style="list-style-type: none"> Identify contents accurately Segregate by half-life: less than 15 days, 15 - 90 days, greater than 90 days Segregate by form: sharps, dry solid, stock vials, aqueous liquids, organic liquids, filled scintillation vials, bulked scintillation cocktails, lead containers/ shielding, other Do not place lead containers/ shielding, stock vials or uncontaminated shipping containers with dry-solid waste Label the "sharps" container as "Radioactive Material" <p>If the waste contains ANY hazardous chemicals, the container must be treated as a chemical waste as well.</p>	<p>Separate solids, liquids, gases & segregate waste into categories:</p> <ul style="list-style-type: none"> Aqueous acids less than pH 5 (do not mix strongly oxidizing & organic acids) Alkaline solutions greater than pH 9 Alkali metals & materials that react strongly with water Strong oxidizers Non-halogenated organic solvents Heavy metal solutions & salts Mercury salts & solutions Other toxic materials Peroxide forming chemicals Cyanides <p>Empty containers</p> <ul style="list-style-type: none"> A container is empty if no material drips out while the container is in any orientation at any temperature for any length of time Paint over, remove or completely deface labels Always remove lid & discard separately Place containers directly into dumpster 	<p>Avoid mixing wastes of different types & radioisotopes.</p> <p>Optimize waste disposal options:</p> <ul style="list-style-type: none"> Identify contents accurately Avoid combining waste hazard categories Eliminate hazardous characteristics when possible Autoclave/ disinfect biohazardous component when practical 	Tape closed in rigid container	<ul style="list-style-type: none"> Decontaminate with 10% bleach (30 minutes contact time), then release to sewer with abundant water if no chemicals or radiologicals are present Solid medical waste must be autoclaved in an approved autoclave or package for collection by EH&S Red bags must have indicator or autoclave tape to ensure proper decontamination prior to disposal as well as a label with the generator's building name and room number Recognizable human tissue/ specimens must be incinerated 	<ul style="list-style-type: none"> Use an approved sharps container Do not overfill Close when full Pipettes & pipette tips can be disposed of in a cardboard box with a red biohazard bag inside (when the box is full: seal the bag, tape the box closed, place in double red biohazard bags, autoclave with indicator tape & place in trash or call EH&S for pickup) 	<p>Decontaminate with 10% bleach (30 minutes contact time), then release to sewer with abundant water if no chemicals or radiologicals are present.</p> <ul style="list-style-type: none"> Solid biohazardous wastes must be autoclaved in an approved autoclave or package for collection by EH&S Red bags must have indicator or autoclave tape to ensure proper decontamination prior to disposal as well as a label with the generator's building & room number 	<ul style="list-style-type: none"> Universal waste containers must be labeled with the words "Universal Waste" or, in the case of batteries, "Used Batteries" All types of universal waste must also be labeled with the Accumulation Start Date Submit a WASTE Request for Pick Up to EH&S when a container has been accumulating waste for 9 months 	<ul style="list-style-type: none"> Avoid including paper, wood or plastic products with waste Arrange transport to storage freezer Recognizable human specimens/ tissues must be cremated Red bags must have indicator or autoclave tape to ensure proper decontamination prior to disposal Contact Biology at 827-3600 for more information 	<ul style="list-style-type: none"> Sharp objects (uncontaminated broken glass, Pasteur pipettes & tips, blades) must be placed in a hard-sided container Non-hazardous materials in scientific containers should not be placed in the trash unless any hazard labels are clearly blacked out Contact Building Services at 827-4219 for more information

FOR WASTE PICK UP REQUESTS OR DETAILED INFORMATION: www.ehs.ucr.edu/programs Questions? Call (951) 827-5528

¹ For Disposal of Controlled Substances contact EH&S (<http://ehs.ucr.edu/controlledsubstances> or call 951-827-5528). For a Department of Justice, Drug Enforcement Agency schedule of controlled substances, visit: www.deadiversion.usdoj.gov/schedules UCR Research Integrated Safety Committee Approved

² All red bags must be stored in rigid, leak proof containers with a tight fitting hood and labeled with the biohazard symbol on the top and four sides