

Quick Management Guide : Who to call for questions or disposal?

	<p>Radioactive</p>	<p>Radiation Safety Office www.rso.wsu.edu</p>	<p>335-8916</p>
<p style="background-color: #FF8C00; color: white; text-align: center;">Biosafety</p>	<p>Questions: -pathological -infectious -genetically modified -recombinant DNA -animal carcasses or tissues -human blood, fluids, or tissues</p> <p>Biohazard Waste Disposal:</p>	<p>Biosafety Officer Lorraine McConnell www.bio-safety.wsu.edu/biosafety</p> <p>Animal Care and Animal Lab Facilities Support Mike Kluzik</p> <p>Environmental Health & Safety www.ehs.wsu.edu</p> <p>Materials and Resources Management and WSU Incinerator Requires designated Biohazard containers and specific labeling.</p>	<p>335-4462 lormcc@wsu.edu</p> <p>335-9553 mkluzik@wsu.edu</p> <p>335-3041 ehs@wsu.edu</p> <p>335-9075 See pages (2-5)</p>
	<p>Sharps Wastes</p>	<p>Handle and dispose of as Biohazard Wastes Requires designated Sharps containers and specific labeling</p>	<p>335-9075</p> <p>See page (4)</p>
	<p>Glass Wastes</p>	<p>Not contaminated— Collect in designated glass waste containers and dispose of in trash.</p>	<p>See page (6)</p>
<p style="background-color: #ADD8E6; color: white; text-align: center;">Glass Wastes</p>	<p>Glass Wastes</p>	<p>Contaminated— Radioactive Biohazardous Chemical</p> <p>Use designated glass containers</p>	<p>Handle and dispose of according to what contamination is present. See page (6)</p>
	<p>Chemical Wastes</p>	<p>Environmental Health & Safety</p> <p>Requires specific labeling and a form for collection. The form may be completed on-line or submit a paper copy.</p>	<p>335-3041 On-line at www.ehs.wsu.edu See pages (7-10)</p>
<p style="background-color: #90EE90; color: white; text-align: center;">Nonhazardous, (noncontaminated) materials for reuse, sale, recycle or trash</p>		<p>Compost Facility (Animal bedding) Material & (Re-use or sale) Resources Management University Recycling (Recycle) Solid Waste Collection (Trash)</p>	<p>335-3288 335-8619 335-7434 335-7434</p>

Waste Identification:www.bio-safety.wsu.edu/biosafety

- Principal investigators and supervisors are responsible for identifying biohazard waste (i.e., human and animal, blood, tissue, contaminated materials, recombinant DNA, infectious agents, oncogenic viruses, animal carcasses and parts, chemical carcinogens in tissue mediums, HEPA filters from bio-safety cabinets and BL-III facility exhaust ducts) and disposing of them properly.

**Autoclaving or other Treatment**

- If autoclaving or some other form of treatment will render the material non-hazardous, the material should be placed in a clear autoclaving bag (Central Stores # 60919) without the biohazard symbol and stored inside a box labeled as biohazard until it is treated.
- The bag is removed from the box when autoclaving.
- After autoclaving, label the bag with a green autoclave label (Central Stores #54587), and dispose of as solid waste.
- **Autoclaving animal carcasses and tissues is not allowed.** These must be handled and disposed of as biohazards.
- **Do not throw away any autoclaved material that is in red or orange bags or has the biohazard symbol on the bag.** These must be disposed of as biohazard waste.

**Packaging**

- Purchase biohazard disposal boxes, bags and labels from Central Stores (two box sizes: items #49954(small) and #49955(large)).
- Double bag waste and seal with duct tape or twist ties prior to boxing. Place the biohazard bags in biohazard boxes and tape the lid closed.

Labeling

If needed, affix a Biohazard label (Central Stores # 50169) to each biohazard box.



Label each box with the following information:

- Responsible researcher's name, phone number, building and room number where waste was generated.
- A description of the waste and any infectious agents in the box (e.g. rat carcasses, *Yersinia pestis*), etc.
- The area number of the supporting organizational unit: CAHE-03, Graduate Schol-16, Liberal Arts-10, Natural Sciences-07, Pharmacy-15, Vet Med-11.
- Clearly identify materials that threaten the health of wild or domestic animals in case of accidental release.
- Clearly identify when the material contains recombinant DNA

Collection will not occur unless labeled properly

Disposal

- When box is full, tape shut and transfer to approved storage area. (See page 5 for storage locations and pick-up schedules)
- Total weight of full box not to exceed 40 lb.
- **Contact WSU Materials & Resources Management at (5-9075)** for pick-up, when handling large animals, or for items that do not fit in the large biohazard box, i.e., (filters used in bio-safety cabinets).
-Contact WADDL at 335-9696 for advice on whether a specific species can be dropped off for disposal (i.e. cattle for rendering).



Human Blood and Body Fluids

Refer to departmental bloodborne pathogen plan or contact EH&S regarding disposal. Contact a public health specialist at EH&S at 335-3041.

Containers

- Sharps include items such as hypodermic syringes and needles, cannulas, scalpels, and lancets.
- They must be disposed of in such a way that they don't pose a risk to others.
- Do not recap, separate, or cut needles.
- Place sharps when empty into horizontal entry sharps containers.
- Sharps containers are available in three sizes from Central Stores
 - 4 quart, catalog #51244
 - 8 quart, catalog #51245
 - 5 gallon, catalog #50053



Labeling

- Label, handle, and dispose of as biohazardous waste. This includes sharps contaminated with biohazardous materials as well as non-biohazardous materials.
 - Sharps with radioactive contamination, call the Radiation Safety Office
- When sharps container is full, tape shut, and place in double-lined biohazard box for disposal.
- If necessary, affix a biohazard label on the box exterior.
- Label box with: Responsible researcher's name, Building and Room number, phone number, date, and biohazard information.

Collection

- Take the taped and labeled boxes to the temporary storage area designated for your building , or **call Materials and Resources Management at 5-9075** to determine the pickup point and to schedule for collection. (see page 5)

Storage Locations and Pickup Schedules for Biohazards and Sharps

Contact Material & Resources Management WSU Incinerator for pickup; telephone **335-9075**. Routine pickup is available Monday through Friday.

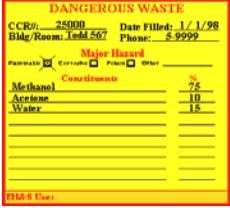

Pickup Locations for Biohazardous Wastes and Sharps			
Building	Schedule for Pickup	Pickup Location	Local Contact
Bohler	Call 335-9075	Schedule	Bohler 51, 335-0238
Bustad	Daily	Bustad 155-H (SE corner, inside the roll-down door to the loading dock)	Bustad 155N, 335-9696
Child Care Center	Call 335-9075	Schedule	335-7980
Coliseum	Call 335-9075	Schedule	335-2667
Eastlick	Tuesday and Thursday	Give to technician in Eastlick G-66A. Stored in G-63.	Eastlick G81, 335-3313
Experimental Animal Laboratory	Tuesday and Thursday	East loading dock	Clark 117, 335-8095
Foods Science and Human Nutrition	Call 335-9075	Schedule	FHN 232, 335-4016 FHN 248, 335-1108 FHN 340, 335-5465
Fulmer	Call 335-9075	Fulmer Annex 23, next to loading dock, give to clerk	Fulmer 23, 335-3325
Intramural and Recreation	Call 335-9075	Schedule	335-6639
Johnson Hall	Call 335-9075	Johnson 65, next to north interior wall	
Johnson Tower	Tuesday	In cooler on Johnson Tower loading dock	Johnson Tower 117D, 335-5529
Laboratory Animal Resource Center	Call 335-9075	Inside NW loading dock by the interior double door, next to west wall	335-6246
McCoy	Daily	Green locked metal storage cabinet #1 on north end of west loading dock. Get key from central services manager in McCoy 150.	McCoy 335-0748
P.E. Gibb Pool	Call 335-9075	Schedule	335-3791
Dodgen Research Facility Nuclear Radiation Center	Call 335-9075	Schedule	335-8641, 335-8916
Veterinary Teaching Hospital	Daily	Room 1 / Room 1211	335-0711
Wegner	Daily	Wegner 138 along SE wall. Contact technician in Wegner 334.	Wegner 334, 335-4026 Wegner 124A, 335-8355

Non-contaminated glass wastes:

- Are those without biohazards, chemicals, or radioactive isotopes present.
- Must be placed in one of two types of puncture resistant containers.
 1. Plastic box with a plastic liner commercially designed for glass disposal (**Central Stores catalog #54190**)
 2. Metal box with an inner liner of a disposable cardboard box. If the metal container is leak-proof, a plastic liner may be used in lieu of a cardboard box.
- There must be no failure of the integrity of the container during transport which could expose laboratory or service personnel to cutting or puncture hazards. Custodians and solid waste handlers are not required to dispose of any glass not placed in containers as described in this section.
- Label containers with words “Glass Waste”, building and room number, and a statement that the box contains non-contaminated waste glass. Do not fill over 40 pounds.
- When full, securely close the inner liner with twist ties or tape. Notify the custodian that the container needs to be emptied. If laboratory employees dispose of the container, a disposal procedure must be added to the Laboratory Safety Manual that addresses all of the above.

**Contaminated Glass Waste:**

- Glass contaminated with biological materials can be autoclaved or treated to remove any biological hazard and disposed of as above. If not practical to treat, dispose of as biohazard waste. (**see pp 2-5**)
- Glass contaminated with radioactive materials must be placed in a plastic lined cardboard box which is labeled for radiation hazard.
- Glass contaminated with other chemicals must be completely emptied at least to less than 3% of the original volume. Containers holding chemicals designated as Acutely Hazardous are required to be triple rinsed prior to disposal. All rinseates must be collected for disposal as dangerous waste. (**See pp 7-10**).
- Contact EH&S for assistance with which containers may be legally disposed of when empty.

<p>1. Identify what must be collected</p>	<ul style="list-style-type: none"> ✓ Most laboratory chemicals, their mixtures, and solutions. Even very dilute solutions may have to be collected. ✓ Expired chemicals that no longer have a use. ✓ Pesticides, herbicides, paints, automotive and maintenance wastes. ✓ Oils, cleaning wastes, batteries, some light bulbs, and aerosol cans.
<p>2. Label Correctly</p> 	<ul style="list-style-type: none"> ✓ State regulations require that containers be labeled as “Dangerous Waste” with constituents, percentages, and a primary hazard identified ✓ Containers must be labeled when waste is first added to the container. ✓ Labels may be printed from the EH&S website or obtained free from Central Stores (catalog #60939) ✓ Use proper chemical names, not abbreviations.
<p>3. Collect and store safely</p> 	<ul style="list-style-type: none"> ✓ Use containers that are compatible with the waste material ✓ Don't completely fill container. Leave some headspace to allow for expansion. ✓ Keep closed to prevent evaporation of waste. ✓ Don't combine mercury wastes with any other waste. ✓ Store Safely. Use secondary containment if available.
<p>4. Notify EH&S, or your Building coordinator to have wastes removed</p>	<p>See list of Building coordinators who can assist you (pg 9)</p> <p>Or submit an on-line request at: www.ehs.wsu.edu/ccr/ccr.asp</p> <p>Or fill out a paper request form (Central Stores #47860) and mail to EH&S at mailstop 1172</p>

Building Coordinators who can assist you with chemical waste removal

- Your building may have a centralized waste accumulation area.
- Procedures may vary for each building. Ask your building coordinator what their standard procedure is. For example in Fulmer Hall you may simply transfer your labeled container to the building coordinator, who completes the collection request and places the waste container in the storage area for collection by EH&S.
- If your building does not have a centralized waste accumulation area, complete a CCR on-line or a paper copy and send it to EH&S at mailstop 1172.

Bustad Hall, Veterinary Hospital, ADBF Lon Smith Gisela Bailey Vaughn Sweet	5-0140 5-0140 5-6053	Bustad 260 Bustad 260 Bustad 302B
McCoy Hall Darrel Nelson (VCAPP)	5-5701	
Wegner Hall Pat Ager (Pharmacy)	5-4026	Wegner 334
Fulmer Hall Gary Johnson	5-3325	Fulmer 23
Clark Hall Operators alternate each month Schedule posted on Clark 131 door		
Animal Sciences Dave DeAvila Jan Vierck	5-1203 5-5280	AS 218 Clark 131
Engineering Complex Jon Grimes Tom Weber	5-8550 5-8938	Dana 46 Sloan 132
Eastlick/ Abelson/Heald Glenn Miller	5-3313	Eastlick G81
Facilities Operations Dennis Rovetto	5-9087	Motor Pool

- **Don't pollute**
Chemical wastes should not be evaporated, poured down the drain, or disposed of in the garbage without prior coordination with EH&S.
- **Contact EH&S at 335-3041 for assistance** in determining what is regulated and must be collected. EH&S personnel will review your chemical processes and return a written report which lists what must be collected, and what may be disposed of as solid waste/trash or may be acceptable for drain discharge.
- **Chemical Cleanouts** -- EH&S will assist your department in removing legacy and left-over chemicals and helping to prepare laboratory space for re-occupancy. **Call 335-3041 to schedule.**

Some example regulatory limits

Chemical	DW (mg/L)	Pullman limits (mg/L)
Arsenic	5.0	1.00
Benzene	0.5	0.13
Cadmium	1.0	0.11
Chloroform	6.0	
Chromium hexavalent		0.25
Chromium total	5.0	1.00
Copper		1.00
Lead	5.0	0.40
Mercury	0.2	0.05
Nickel		1.00
Non-polar fats, oils, grease		50
pH		6-9 s.u.
Sodium Chloride(aq)	10%	
Toluene		1.50
Zinc		1.00

Usually only some dilute aqueous buffers and chemical solutions may qualify to be discharged to the drain. **Some example limits are shown in the table**

Note that Pullman limits may be in addition to or stricter than Washington State and Federal limits

EH&S does not charge for collecting chemical wastes

- **Notify EH&S and the Radiation Safety Office** prior to leaving the university in order to ensure chemicals and wastes left behind are properly managed. The following form (**BPPM 60.38.2**) should be routed to your department and to EH&S and the Radiation Safety Office prior to leaving the university for more than 90 days.

DEPARTURE NOTICE FACULTY AND STAFF		Washington State University Pullman, WA 99164	
To: (check one or both)		<input type="checkbox"/> Radiation Safety Mail Code 1302	<input type="checkbox"/> Environmental Health Service Mail Code 1172
The following user of radioactive materials and/or hazardous chemical substances is planning to depart WSU on the date indicated below. See 60.38 for additional instructions.			
Name of Departing User		Department/College	
Title of User	User Telephone	Location(s) of Hazardous Materials	
Reason for Intended Departure, e.g., termination, sabbatical, leave w/o pay		Expiration Date of Current Appointment	
		Date of Intended Departure	
The user's name currently appears on : (check all that apply)			
<input type="checkbox"/> Radioactive Materials List	<input type="checkbox"/> Hazardous Chemicals List	<input type="checkbox"/> Biohazardous Materials List	
Title of Appointing Authority	Name of Appointing Authority	Signature of Appointing Authority	Date
		X	
Distribution:			
<ul style="list-style-type: none"> • Route to Environmental Health Services and/or the Radiation Safety Office as applicable. • Retain a copy in departmental files. • Attach a copy to the Personnel Action Form, Time Report, or Leave Report sent to Human Resource Services to process the departure, mail code 1014. 			

- **If you will be Shipping Hazardous Materials** please contact the WSU Hazardous Materials Transportation Supervisor for additional information: Brady Allen bral@wsu.edu 335-4529



- In an effort to minimize wastes and the associated hazards and costs, EH&S coordinates a chemical recycling program.
- EH&S reviews unused and unopened chemicals for recycling alternatives. A stock of unused chemicals, available for recycling to University personnel, is maintained on campus.
- The list of chemicals can be found on the EH&S website at: www.ehs.wsu.edu/hazwaste/recycle.htm.
- To request free delivery of a chemical on the recycling database, e-mail EH&S from the website or call 335-3041. If you have surplus chemicals that you would like to recycle, submit them to EH&S using the waste reporting process described earlier. EH&S will collect these chemicals and determine whether they are acceptable for recycling.

Free Chemicals

WSU Chemical Recycling Program

- ◆ Receive Free Chemicals
- ◆ Donate Chemicals
- ◆ Free Pickup & Delivery

Call 335-3041
<http://www.ehs.wsu.edu/recycle.htm>



- Washington State University uses an Environmental Management System (EMS) to continuously improve environmental programs.
- The EMS system documents how environmental policies, procedures, priorities, measurable outcomes, and audits are developed, communicated, and implemented at WSU.
- The EMS uses a proactive pollution prevention approach to comply with regulatory requirements using creative and cost effective methods that can often result in a substantial cost savings.
- WSU is committed to developing and implementing an EMS that will:
 - address the University’s operations and facilities;
 - be utilized to plan, design, construct, and operate WSU facilities;
 - provide a framework to monitor its progress and ensure continual improvement to meet environmental regulations;
 - be utilized to meet sustainability and pollution prevention goals which follow the hierarchy of prevention, recycling/reuse, treatment, and disposal; and
 - be documented, implemented, maintained, and communicated to its employees and the public.
- Every member of the WSU community can play an active role by being aware of the environmental impacts that result from their work activities. If you can help identify or suggest a way for WSU to prevent pollution by modifying a facility or changing a procedure, please contact Environmental Health and Safety at 335-3041.

- If you have not been trained or equipped to clean up the spill, notify co-workers and evacuate the immediate area.
- **Call 911** to report the spill.



- (except radioactive)** –contact Radiation Safety Office directly during normal work hours at 335-8916)
- (except mercury)**– contact EH&S directly at 335-3041 during normal work hours).
- **Do not attempt to clean up mercury spills, as this may spread the contamination.**

- Keep passers-by from entering the contaminated area.

- **Provide the following information**

- Location of the spill
- Quantity and type of material(s), (e.g., chemical, biological, or radioactive isotope)
- Name of person(s) causing the spill
- Name and phone number of a person who is familiar with the properties of the chemical (e.g., principal researcher or other personnel)

- Make arrangements to meet the responding agency with as much information as you have. The sooner information is accessible, the sooner the emergency can be resolved.
- EH&S and RSO help provide clean-up and monitoring services to ensure the workplace is free of contaminants prior to re-occupancy.

Laboratories may clean up their own spills under certain conditions. See the following websites for guidance.

- Biohazards: www.bio-safety.wsu.edu/biosafety/web_training.asp
- Radioactive: www.rso.wsu.edu
- Chemical: www.ehs.wsu.edu SPPM S70.45

In general, a laboratory will train its employees to clean up small, relatively non-hazardous spills and will utilize 911 for larger, more toxic and/or more time-consuming spills.

- A detailed spill response procedure shall be in the lab safety manual.
- The spill is in your normal work area.
- The employees involved in the clean up have been trained to recognize the hazards associated with the spill,
- And trained to use the appropriate clean-up materials,
- And the employees involved wear appropriate protective equipment.

Contact Biosafety Officer
Lorraine McConnell

www.bio-safety.wsu.edu/biosafety
lorrmcc@wsu.edu 335-4462

Contact Radiation Safety Office *www.rso.wsu.edu 335-8916*

Contact EH&S *www.ehs.wsu.edu 335-3041*

Dwight Hagihara, Director	hagihara@wsu.edu	335-3041
Michele Freeman (Training)	mrfreeman@wsu.edu	335-5508
Russ Schaff (Capital Services)	schaffr@wsu.edu	335-5604

**•Contact Environmental Services for questions concerning:
chemical wastes, chemical recycling, chemical spill response and
cleanup, pollution prevention, waste minimization, and management
of contaminated sites**

John Reed, Manager	johnreed@wsu.edu	335-9565
Fred Miller	millerfl@wsu.edu	335-5381
Don Keon	hwt@wsu.edu	335-9561
Larry Klingler	lklingler@wsu.edu	335-3563
Jason Sampson	sampsonj@wsu.edu	335-9564

**•Contact Occupational Health & Safety for questions concerning:
biohazards and bloodborne pathogens, laboratory safety, animal
safety, general safety and health programs, accident prevention,
hazard communication, respiratory protection, and ergonomics.**

Ed Havey, Manager	havey@wsu.edu	335-5311
Mike Kluzik	mkluzik@wsu.edu	335-9553
Jeff Battaglia	jeff-battaglia@wsu.edu	335-6429
Chris Baylon	baylon@wsu.edu	335-9130
Pat Cruver	pat-cruver@wsu.edu	335-4360
Sarah Greer	slgreer@wsu.edu	335-0948
Dennis Sasse	dsasse@wsu.edu	335-5251

**•Contact Public Health/Air & Water Quality for questions
concerning:**

**food service sanitation, drinking water quality, sewage disposal,
swimming pool safety, outdoor air pollution, outdoor water
pollution and wetlands.**

Gene Patterson, Manager	gpatters@wsu.edu	335-5510
Marty O'Malley	martyo@wsu.edu	335-6152

Contact Hazardous Materials Shipping

Brady Allen Transportation Supervisor bral@wsu.edu 335-4529