

University of Pittsburgh Safety Manual	EH&S Guideline Number: 03-013	
Subject: CHEMOTHERAPEUTIC- ANTINEOPLASTIC WASTE DISPOSAL	Effective Date 6/25/13	Page 1 of 3

GUIDELINES FOR CHEMOTHERAPEUTIC/ANTINEOPLASTIC WASTE DISPOSAL

Chemotherapeutic/antineoplastic wastes include spent or excess cytotoxic compounds, liquid and solid waste from cell cultures treated with such agents, expended personal protective equipment, and spill cleanup materials. Some examples of chemotherapy/antineoplastic agents include adriamycin (doxorubicin), bleomycin, cisplatin, cyclophosphamide, etoposide, fluorouracil, streptozotocin, taxol and vincristine. Internet resources for chemotherapy, genotoxic, and antineoplastic agents include <http://www.bccancer.bc.ca/HPI/DrugDatabase/DrugIndexPro/default.htm> and <http://toxnet.nlm.nih.gov/>.

1. Chemotherapeutic wastes that are mingled with biohazardous wastes are classified as chemotherapeutic wastes and must be managed as such. Chemotherapeutic/antineoplastic wastes must be disposed separately from biohazardous or regular municipal waste according to state regulations.
2. Solid chemotherapeutic wastes **cannot** be disposed in the regular trash or in biohazard bags.
3. Liquid chemotherapeutic wastes **cannot** be disposed down the drain or sanitary sewer.
4. Chemotherapeutic waste containers are yellow and white, puncture-proof and leak-proof, and are labeled "Chemotherapeutic Waste." Containers are available through the UPMC Purchasing Warehouse, or the University's Biological Sciences stockroom, and scientific suppliers. The chemotherapeutic waste containers may be listed as "chemotherapy sharps containers."
5. **Oakland Campus: Chemotherapeutic/Antineoplastic Disposal Guidelines**
 - 5.1 Unused portions of chemotherapy agents (powders and liquids) are disposed through the EH&S chemical waste disposal program.
 - 5.1.1 An orange chemical waste label must be completed and placed on the container.
 - 5.1.2 EH&S picks up chemical waste on a regular basis. Contact EH&S at 412-624-9505 for the schedule, locations, and with questions regarding chemical waste disposal.
 - 5.2 Used liquid chemotherapeutic waste must be collected in leak proof containers which are constructed from glass or plastic with tight fitting lids. This liquid waste includes spent chemotherapeutic waste, as well as liquid cell culture waste from cells treated with chemotherapeutic agents.

University of Pittsburgh Safety Manual	EH&S Guideline Number: 03-013	
Subject: CHEMOTHERAPEUTIC- ANTINEOPLASTIC WASTE DISPOSAL	Effective Date 6/25/13	Page 2 of 3

- 5.2.1 When the collection container is $\frac{3}{4}$ full, an absorbent such as Green Z (available from the Biological Sciences stockroom or from http://safetec.com/portfolio_item/green-z-spill-control-solidifiers/) should be added to thicken the liquid waste. Absorbent is used to protect custodians and waste handlers from exposures to spills and splashes.
- 5.2.2 The waste container should be capped and placed in a chemotherapeutic waste container.
- 5.3 Solid chemotherapeutic waste, including items such as contaminated plastic ware from cell cultures treated with chemotherapy agents, should be collected in bags and then placed in chemotherapeutic waste containers.
- 5.3.1 Solid waste does **not** include syringes used to inject animals with chemotherapeutic agents.
- 5.3.2 Empty used syringes can be disposed in sharps containers and do not require special handling.
- 5.3.3 Empty all syringes of remaining chemotherapeutic agent per section 5.1.
- 5.4 When the chemotherapy waste container is full, it should be sealed and placed in a standard biohazard box.
- 5.5 The box should be labeled with the name of the investigator and a phone number.
- 5.6 "Chemotherapeutic waste" should be written on the box, and the box should be placed in the normal biohazard waste pickup area.

6. Hillman Cancer Center (HCC) laboratories: Chemo/Antineoplastic Disposal Guidelines

NOTE: The use of chemotherapeutics in patient areas is at all times governed by the UPMC Presbyterian Shadyside Waste Management Plan.

- 6.1 Unused portions of chemotherapy agents (powders and liquids) are disposed through the EH&S chemical waste disposal program.
- 6.1.1 An orange chemical waste label must be completed and placed on the container.

University of Pittsburgh Safety Manual	EH&S Guideline Number: 03-013	
Subject: CHEMOTHERAPEUTIC- ANTINEOPLASTIC WASTE DISPOSAL	Effective Date 6/25/13	Page 3 of 3

- 6.1.2 The container should be disposed of during the regularly-scheduled biweekly chemical waste collections at the chemical waste room on the HCC loading dock. Contact EH&S at 412-624-9505 with questions regarding the HCC chemical waste collection schedule and chemical waste disposal.
- 6.2 Liquid chemotherapeutic waste should be collected in leak proof containers with tight fitting lids, which are constructed from glass, plastic or other materials compatible with the waste to be disposed of. When possible the original shipping container should be re-used to collect/accumulate liquid waste products during the research process.
- 6.3 Liquid waste should be accumulated until the container is approximately 3/4 full. Green Z universal absorbent, or other absorbent which the manufacturer has certified suitable to be used with chemotherapeutic agents, should be added to the container to absorb the liquid.
- 6.4 Waste containers with the absorbent added should then be placed inside the chemotherapeutic disposal containers.
- 6.5 Items that have come in contact with chemotherapeutic agent, including but not limited to spill cleanup materials, pipettes, glassware not intended for reuse, personal protective equipment, and paper towels should be collected in the chemotherapeutic waste disposal containers.
- 6.6 Full disposal containers should be sealed, labeled with the researchers name and lab number, and placed in the corridor for removal.
- 6.7 Sealed chemotherapeutic waste disposal containers, which have been placed in the corridor, will be removed by Environmental Services personnel and transferred to the designated chemotherapeutic waste area. Infectious and chemotherapeutic waste streams are maintained separately and are not co-mingled.
- 6.8 Not all chemotherapeutic agents are classified as Hazardous Waste. However, chemotherapeutic agents are always considered chemotherapeutic waste, and should not be disposed of via the chemical waste disposal program.