Use of Antineoplastics (chemotherapeutic agents)

Purpose:
To provide guidance for the use of Antineoplastics (chemotherapeutic agents) in the laboratory and animal facility environment. Antineoplastic chemicals are commonly used in cancer research at UW-Madison.

Precautions:
The following information can be used to complete the Safety section of your animal protocol.

1. **Chemical hazard agents** – (Identify the category of the chemical):
   - Mutagen
   - Carcinogen
   - Reproductive Hazard/Teratogen
   - Toxicant/Toxic Agent

2. **Containment preparation** – (Containment equipment required for the preparation of the chemical): (Select other and include the following information)
   - Other - if powder form is used then that preparation will be done in a fume hood and safety glasses will be worn in addition to standard PPE.

3. **Containment animals** – (Containment equipment required for chemical administration and handling animals after exposure to the chemical): (Select the following)
   - Ducted Biosafety Cabinet (BSC)
   - Fume Hood
   **NOTE:** For Rodents: Microisolators or other containment type housing is recommended.

4. **PPE needed** - (for handling live animals, carcasses or animal waste/dirty bedding): (Select all of the following)
   - Exam gloves – nitrile
   - Safety glasses/goggles
   - Lab coat or disposable gown

5. **Waste Disposal**: (disposal of animal waste/dirty bedding from animals after exposure to the chemical) (Select both options and include additional information for Other)
   - Bag animal waste/dirty bedding and place sealed bag in secondary container and place secondary container in regular trash.
- Other: Signage is required on each individual cage containing the chemical health hazard symbol and "Agent, End date and Disposal method". *Cage signage available at www.ehs.wisc.edu

- **NOTE**: For Clinical studies include instructions for precautions clients should take while handling waste from their pet.

6. **Carcass disposal**: *(Select the following)*
   - Pick up by EH&S for incineration.
     **NOTE**: For Veterinary Clinical studies, please describe how the carcass is handled if pet is in owner’s care.

7. **Chemical human risk**: *(Add the following)*
   - Most antineoplastic chemotherapeutic agents are potentially toxic as mutagens, teratogens, cytotoxic or carcinogens. Pregnant and lactating women should avoid exposure to antineoplastic chemotherapeutic agents and animals that have been administered antineoplastic chemotherapeutic agents.

References:
“Guidelines, Recommendations and Regulations for Handling Antineoplastic Agents” Centers for Disease Control and Prevention, May 2011.
http://www.cdc.gov/niosh/topics/antineoplastic/pubs.html#b

“Occupational Exposure to Antineoplastic Agents” Centers for Disease Control and Prevention, May 2011.
http://www.cdc.gov/niosh/topics/antineoplastic/