WVU IACUC POLICY:
Hazardous Chemicals used with Animals

The purpose of this policy is to outline Principle Investigator (PI) responsibilities to safeguard animal care staff and others working with potentially hazardous chemicals or drugs in the vivarium. This policy is meant to be a guide to be used when you create a specific SOP for the specific chemical you will be using in animals.

PI's must comply with 1-4, 6 and 7. Numbers 5 and 6 apply to OLAR.

Please attach your specific hazardous chemical SOP and a completed PI form (found at the end of this SOP) to your IACUC protocol application for each hazardous compound.
It is highly recommended that you get these SOPs approved by EH&S or HSC Safety Office (see contacts below) before submission with your IACUC protocol.

1. Concentrated stock solution storage and handling should not occur within a vivarium. Dilution of compounds for use of animals should occur under appropriate conditions in the PI's Lab. Only working dilutions and quantities of hazardous compounds should be transported to the vivarium. Exceptions to this must be approved by the Health Science Center Safety Office or Environmental Health & Safety (for non-Health Sciences Center research) and the OLAR Director or Director's designee. Please detail in your IACUC SOP only what you will be bringing into the vivarium and how it will be transported.

2. In the vivarium, the PI is responsible for identifying the proper procedures for their personnel to use when working with animals using these compounds. Risks to personnel include: excretion of the unchanged compound or its hazardous metabolites, or manipulation of the compound if it is added to water or food for the animal. Considerations for improved personnel protection include: glove composition (check suitability by brand at http://www.labsafety.com/refinfo/ezfacts/ezf166.htm), single or double gloving, and other disposable Personal Protective Equipment (PPE) considerations. The Health Sciences Center Safety Office or Environmental Health & Safety (the rest of the WVU system) should be contacted if guidance is needed. Leftover compounds in the vivarium are the responsibility of the PI to dispose of when the study is complete. In any vivarium, as with elsewhere, all containers with compounds should be labeled with the PI name and compound’s complete identity, including the expiration date. The containers also need to be capped and unbreakable (e.g. Nalgene) if they are stored in the vivarium to refill water bottles, etc. Please detail handling/storage procedures and requirements.

3. All drug/chemical hazards must be identified on the cage (and water bottle if used) as to the compound, emergency contact phone number and dates of use. OLAR should be notified when you are using the compound so they can insure you start with a clean cage to minimize cage changes during the exposure period. Please detail how/where the chemical(s), emergency contact information and dates will be identified on the cage/water bottle.

4. Compounds that require respiratory protection because they are potential volatile hazards when administered must be injected in a fume hood or a hard ducted Class II Type B2 hood only, and such projects must be situated where this is possible. Fixatives must be used only in a fume hood or down-draft table in the vivarium. Dumping chemical contaminated cages should only occur after leaving the cages in the ventilated rack without animals for a minimum of 2 days after the animal is removed, or leaving individual cages open in a designated externally exhausted fume hood (Class II A2 or Class II B1/B2) for a similar period. Please detail where the chemical(s) will be used/administered and how bedding will be disposed of in the SOP.
5. Compounds that represent only a relatively nonvolatile environmental hazard to personnel (nitrosamines in water, heavy metals in water or food, etc.), must have:
   - the cages bagged in the room (OLAR)
   - a hazard sticker affixed to the bag where it is clearly visible with the name of the compound and PI name
   - a plan for the material to be handled by dirty side cagewash personnel wearing Tyvek equivalent overalls, N-95 or PAPR protection, double nitrile gloves and using a HEPA filtered certified dump station. Care should be taken not to raise dust during the dumping process.
   - All such cages will be washed 2 times in the cage (or tunnel) washer as a separate load with no water recycled (tunnel washer-dump tanks between loads) from other cages before these cages can enter the general circulation again.

Please address all these points in your specific SOP.

6. For each compound, a spill procedure must be described after consultation with the (M)SDS and/or the Health Sciences Center Safety Office or Environmental Health & Safety (for non-Health Sciences Center research). This procedure will be used to clean all hoods each time handling of exposed cages is accomplished, regardless of whether overt contamination was encountered. Please detail the spill procedure in your specific SOP. The PI is responsible for providing this spill procedure to OLAR so they can post the procedure in the appropriate room(s) if they need to clean up a spill or address a case of change station contamination from bedding.

7. It is the responsibility of the PI to ensure all staff have received documented training on the following:
   - Recording chemicals and general use of the Departmental Chemical Hygiene Plan
   - Proper chemical related work procedures and observing existing standard operating procedures
   - PPE, usage, handling and maintenance (as necessary)
   - Proper hazardous materials spill procedures
   - A log of such training is required
   - Please detail this training in your specific SOP.

For additional information and assistance to determine if a chemical is considered hazardous you may contact:

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<thead>
<tr>
<th>Kimberly Bryner</th>
<th>Joyce Moore</th>
<th>Frank Ali or Dr. Jeff Wimsatt</th>
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<tbody>
<tr>
<td>HSC Health and Safety Specialist</td>
<td>Environmental Health and Safety, Main Campus</td>
<td>Office of Lab Animal Resources</td>
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<tr>
<td><a href="mailto:kbryner@hsc.wvu.edu">kbryner@hsc.wvu.edu</a></td>
<td><a href="mailto:joyce.moore@mail.wvu.edu">joyce.moore@mail.wvu.edu</a></td>
<td><a href="mailto:fali@hsc.wvu.edu">fali@hsc.wvu.edu</a></td>
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<td>304-293-3968</td>
<td>304-293-5810</td>
<td>304-293-1813/2721</td>
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PI form

(One form per hazard unless members of the same class are given together; if a volatile and nonvolatile are
given together, then follow the volatile protocol, but list both below). Please remember to submit this
form along with a completed SOP for each hazardous chemical.

Chemical name (also common name if known):

Chemical Category: ☐ Volatile or ☐ Non-volatile

Specific glove type, respiratory and other PPE required if not standard:

URL link(s) to MSDS (or attached) per chemical:

Notified OLAR and Proper cage signage and dates of use ☐ Yes ☐ No

Spill (and hood) and surfaces clean-up agent and procedure(s):

I acknowledge my responsibility to meet the requirements of the hazardous substances SOP provided, for
use of such compounds in animals. This includes adequate personnel training.

Signature: __________________________________________________________

PI Name: _____

PI contact phone number: _____