

INSTRUCTIONS FOR COMPLETION OF THE **ACORP APPENDIX 3 – BIOSAFETY** **(ACORP APP. 3 INSTRUCTIONS)** VERSION 4

These instructions provide detailed guidance on completing Appendix 3 of the ACORP, and are referenced to the numbers of the items in the appendix. **ONLY** complete this appendix if it is relevant to the protocol being submitted for review. The PI may use the ACORP Appendix 3 template provided in the RAMS application by using the link available in question 11 of section M.

Regulatory documents mentioned in the instructions are abbreviated as follows:

Guide – Guide for the Care and Use of Laboratory Animals, 8th ed., 2011
OLAW FAQs – Frequently Asked Questions – PHS Policy on Humane Care and Use of Laboratory Animals (<http://grants.nih.gov/grants/olaw/faqs.htm>)

General Instructions:

Answer each question by completing the table provided or entering the requested information at the ►. Enter “N/A” for any item that does not apply to this protocol. The sections of the form will expand as needed.
To check an item, type “X” inside the () provided.
Define each abbreviation the first time it is used.

Header for Every Page: The header information for this appendix is pre-populated to match header for the Main Body of the ACORP to which it applies, to identify each page of this Appendix with that ACORP:

PI's last name: The PI's name is prepopulated
Protocol No. Assigned by the IACUC – This is a unique identifier for each protocol that is automatically generated by the system to the protocol as a whole

Official Date of Approval – This is the date of final and unequivocal approval by the IACUC, as defined in the PHS Assurance, which determines the due dates of the first annual continuing review and the triennial *de novo* review, as applicable. The IACUC committee will enter this date into the form when a decision is made.

1. **Summary of All Materials Administered to Animals on this Protocol.** Include ALL materials administered to animals on this protocol, such as, but not limited to, radioisotopes, chemicals, drugs (standard clinical agents as well as test agents, and all controlled substances listed in Item X.1 of the main body of the ACORP), infectious agents, biomaterials, prosthetic devices, and cells, tissues, or body fluids. For each material, enter “X” in the () for each of the descriptions that applies to the nature of the material. Some materials may fall into more than one category, and will be addressed in more than one corresponding Item below.
2. **Summary of How Materials will be administered.** Provide the details of how each of the materials will be administered and what the effects of the administration are expected to be. Specify where in the ACORP further details about the administration of each material are provided, indicating whether the details are in the Main Body of the ACORP or an Appendix (enter the Appendix number), and entering the letter or number of the Item. Indicate whether the animals will be anesthetized, sedated, or chemically tranquilized for the administration of each material.

OLAW requires that only pharmaceutical grade compounds be administered to animals unless the use of non-pharmaceutical grade compounds is justified by scientific necessity and the lack of availability of an acceptable veterinary or human pharmaceutical grade compound (*OLAW FAQs*,

F.4). Complete listings of the compounds approved by the FDA for administration to humans or animals are available on-line: <http://www.fda.gov/Drugs/InformationOnDrugs/ucm129662.htm> for humans, and <http://www.fda.gov/AnimalVeterinary/Products/ApprovedAnimalDrugProducts/UCM042847> for animals. Mark with a * each material, diluent, or vehicle to be administered to the animals on this protocol that is not pharmaceutical grade. For each of these, provide the justification for using a non-pharmaceutical grade compound, and describe how it will be ensured that the grade, purity, sterility, pH, pyrogenicity, osmolality, stability, formulation, and pharmacokinetics of the material will be suitable for use in the animals (*Guide*, p. 31). Note that OLAW specifically advises that cost-savings alone do not adequately justify the use of non-pharmaceutical grade compounds in animals.

3. **Anesthesia, Sedation, or Tranquilization.** Anesthesia, sedation, or tranquilization may be important to ensure the safety of the personnel when administering hazardous materials. Complete 3.a. and 3.b. below:

- a. For each material to be administered with the animals under anesthesia, sedation, or chemical tranquilization -- identify the anesthetic, sedative, or chemical tranquilizer, and detail the dose and volume, and route of administration to be used. These agents should also be listed in Item 1 of this appendix.
- b. For each material to be administered without anesthetizing, sedating, or chemically tranquilizing the animals, explain why these are not necessary, or cannot be provided, and describe any alternate methods of restraint that will be used.

4. **Toxic Agents.** Examples include toxic chemical and pharmacologic agents, many cancer therapeutic agents with cytotoxic properties, known or suspected mutagens, carcinogens, teratogens, and DNA-binding agents. List in this table each agent that is marked as a "toxic agent" in the table in Item 1, above, and enter "X" in the () for each property that applies:

- a. Mark as "mutagen" each agent that is a suspected or known mutagen.
- b. Mark as "carcinogen" each agent that is a suspected or known carcinogen.
- c. Mark as "teratogen" each agent that is a suspected or known teratogen.
- d. For each agent, indicate its status as a "select agent" (www.selectagents.gov/Regulations.html):
 - It is not on the CDC-USDA list of "select agents" that might have uses in bioterrorism
 - It is a "select agent", but the quantities to be used on this protocol fall below the threshold minima specified by select agent legislation, so the use of this agent is not subject to the requirements of that legislation.
 - It is a "select agent" that requires registration/approval before work with it may begin. "Select agent" legislation requires registration with CDC and/or USDA, and VA requires that VACO approval for the use of this agent be secured, before studies with it begin. Ask your research office to contact the VACO Biosafety Officer for specific instructions about registering and securing approval. Enter the information requested below the table with regard to the registration and approval. Copy the lines shown for each additional agent to be documented.
- e. Mark as "Other" each agent that has toxic properties other than the ones listed (e.g., corrosive agents, poisons, etc.) and specify the properties

5. **Infectious Agents.** These include, for example, bacteria (including rickettsia), viruses, fungi, protozoa, and prions. Copy into the table the name and BSL number of each agent that is marked as an “infectious agent” in the table in Item 1, above, and provide the information requested,

- a. Specify the ABSL level of the minimum measures that will be applied in handling each agent. The practices, safety equipment, and facilities that correspond to each ABSL level are described in Biosafety in Microbiological and Biomedical Laboratories, 5th edition (December 2009), available at www.cdc.gov/biosafety/publications/bmbl5/.

ABSL1 is the recommended minimum for BSL1 agents.
 ABSL2 is the recommended minimum for BSL2 agents.
 ABSL3 is the recommended minimum for BSL3 agents.
 ABSL4 is the recommended minimum for BSL4 agents.

If the handling of any agent is to be according to an ABSL level less than the BSL level of the agent, enter the justification for this as requested below the table

- b. Indicate whether an antibiogram, anti-viral drug sensitivity screen, or other appropriate drug sensitivity panel is available for each of these agents, to assist physicians in selecting proper therapy if human infection occurs. If “Yes”, describe briefly.
- c. For each agent, indicate its status as a “select agent” (www.selectagents.gov/Regulations.html):
 - It is not on the CDC-USDA list of “select agents” that might have uses in bioterrorism
 - It is a “select agent”, but the quantities to be used on this protocol fall below the threshold minima specified by select agent legislation, so the use of this agent is not subject to the requirements of that legislation.
 - It is a “select agent” that requires registration/approval before work with it may begin. “Select agent” legislation requires registration with CDC and/or USDA, and VA requires that VACO approval for the use of this agent be secured, before studies with it begin. Ask your research office to contact the VACO Biosafety Officer for specific instructions about registering and securing approval. Enter the information requested below the table with regard to the registration and approval. Copy the lines shown for each additional agent to be documented.

6. **Biological Agents.** These include, for example, antigens, serum, cell lines, tissue, and nucleic acid. List in the table each agent that is marked as a “biological agent” in the table in Item 1, above, and describe how the material will be screened to make sure that it does not harbor other agents that could infect other laboratory animals or personnel.

7. **Radioactive Agents.** List in the table each agent that is marked as a “radioactive agent” in the table in Item 1, above, and specify the radioactive isotope involved. Identify the individual who has been given permission to utilize the isotope(s) indicated, and identify the committee that has approved the use (e.g., Radiation Safety Committee or other equivalent committee).

8. **Recombinant nucleic acid and recombinant infectious agents.** These include both isolated recombinant nucleic acid and recombinant infectious agents. List in the table each agent that is marked as “contains recombinant nucleic acid” in the table in Item 1 (Recombinant infectious agents should also be marked as “infectious agents” in the table in Item 1, and addressed in Item 5, above.), and indicate which of the following conditions applies:

- This work is subject to, and will be conducted according to, the animal research guidelines included in the latest version of the publication, *NIH Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines)*, and the Biosafety Committee and veterinarian will be consulted to ensure compliance.
- The recombinant constructs are exempt from the animal research guidelines included in the latest version of the publication, *NIH Guidelines*.

9. **Potential for Pain or Distress.** Include any of the agents listed in Item 1 that is expected to have effects that are potentially painful or distressing to the animals (include even if measures will be taken to prevent animals on this protocol from actually experiencing the pain or distress). Focus on the effects of the agents, and not on the potential pain or distress associated with the procedures involved in administering them, which are addressed elsewhere in the protocol. Describe the nature of the potential pain and/or distress expected, and describe the measures that will be taken to alleviate that potential pain and/or distress. These measures may include not only administration of pharmacological anesthetics, analgesics, tranquilizers, or sedatives, but also appropriate special husbandry procedures (describe in Appendix 6). Any agents that will be administered to alleviate potential pain and/or distress should also be listed in the table in Item 1 of this appendix.

10. **Protection of Animal Facility Staff from Hazardous Materials.** This table addresses specifically the protection of members of the staff of the Animal Facility from the hazardous agents to be used on this protocol. (Make sure that protection of the research personnel from the risks associated with each of these agents is addressed in Item G of the main body of the ACORP.)

a. Complete the table.

“Hazardous Agents” – include each agent listed in Item 4, 5, 6, 7, of this Appendix.

“Approving Committee or Official” – identify the specific committee or official (e.g., Safety, Biosafety, or Radiation Safety) that has approved the use of the hazardous agent on this protocol.

“Institution (VA or affiliate)” – indicate “VA” or give the name of the affiliate institution that is represented by the approving committee.

“Animal Facility Staff Members at Risk” – identify by name each individual member of the animal facility staff who is at risk of exposure to the hazardous agent (e.g., via contact with treated animals, or with contaminated bedding).

b. Include what information will be posted, and where, and summarize any specific training to be provided.

11. **Signatures.** Provide the applicable signatures on the signature pages (Item Z.3) of the main body of this ACORP.