



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 1 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

CONCURRENCES:

J. Hallmark, Provost/ VPAA

G. Barnes, VPBF

Deans

D. Topliff, ASE
E.W. Henderson, ESS
A. Spaulding, GS&R

J. Mallard, Interim Dean, FAH
N. Terry, CoB
D. Nelson, NHS

Document Custodian: Jim Rogers

APPROVAL:

August 15, 2010

Jim Rogers, Associate Dean of AR-EHS

Date

August 15, 2010

Angela Spaulding, Dean of the Graduate School and Research

Date

August 15, 2010

James Hallmark, Provost/VPAA

Date

AR-EHS-0030

EFFECTIVE DATE 07/01/2010



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 2 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

CONTENTS



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 3 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

Purpose

West Texas A&M University (WTAMU) policy requires an approved Application for Vertebrate Animal Use (AVAU) for non-agricultural use as specified in this standard operating procedure and submission of an application and approval for all activities involving the use of animals (Appendix A: AVAV Application Instructions, and Appendix B: Application for Vertebrate Animal Use). “Use” includes activities such as research, teaching, public service; intramurally or extramurally funded grants or contracts regardless of source or amount. “Use” also includes animals being bred, conditioned, or held for future use.

The AVAU is a form that allows the investigator to communicate to the Institutional Animal Care and Use Committee (IACUC) reasons for and methods of animal use. The investigator shall follow the conditions set forth in the AVAU. In the event that the investigator requires additions or changes, including extension or renewal of activities to the research activity that include regulated activities, the investigator must submit the Animal Care and Use Protocol Amendment (Appendix C) to the IACUC committee for approval prior to implementing those changes.

The IACUC is charged with overseeing all aspects of animal care and use at WTAMU. The IACUC will review approved IACUC research projects biannually using the IACUC Committee Review Checklist (Appendix D). The IACUC may approve, require modification of, or withhold approval from a project. Animal use in the absence of IACUC approval is a serious violation of University policy and a violation of federal law.

The WTAMU Chief Executive Officer/Institutional Official for the University research efforts as defined under 40CFR 2.31 shall be the Dean of the Graduate School and Research. All AVAU’s and IACUC Committee reviews, comments, and committee meeting minutes will be submitted to the Dean of the Graduate School and Research. The Dean of the Graduate School and Research shall assign each approved AVAU a specific number indicating the sequential AVAU approved and the month and year approved using the following format.

001-01-10 (Indicating approved AVAU #1 in January, 2010).



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

Based on the IACUC committee's recommendations for approval, the Dean of the Graduate School and Research will issue a letter of approval to initiate the requested research activities to the investigator using the designated letter of approval (Appendix E). The investigator and IACUC committee will use the assigned AVAU number on all future correspondence, applications, amendments, and review reports.

Agricultural animal use is addressed in AR-EHS-0033 WTAMU Institutional Animal Care and Use for Activities under the CREET multi-agency agreement. All agricultural activities that do not fall within the CREET guidelines and over-site will be addressed by this procedure (AR-EHS-0030).

1.1 Policy on Use of Animals and Lab Animal Care Facilities

The use of animals is essential to the teaching, extension, and research missions of West Texas A&M University. Significant benefits to the health and welfare of both animals and humans have resulted from animal use in research, and continued use is crucial to future advancements. Without the use of animals, adequate instruction of students in many programs such as agriculture, the biological sciences, and veterinary medicine would not be possible. However, those who utilize animals are morally and legally obligated to care for them properly and use them humanely. Each faculty member, staff member, or student involved in the use of animals is directly responsible for promoting and protecting their welfare within the instructional, extension, and research programs of the University. Those who use animals should assume this responsibility through precept and example. The following policy provides guidance for the proper care and humane use of animals within University programs.

- Animals should be used in teaching, research, and extension programs only as required to demonstrate principles, obtain new information, and achieve results which will ultimately benefit society. Whenever feasible, mathematical models, in vitro biological systems, demonstrations, and computer and audiovisual aids should augment, complement, or possibly replace animal use entirely, thereby reducing the number of animals needed. The procurement, care, and use of animals shall be in accordance with the regulations and terms



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

of the federal Animal Welfare Act and the Health Research Extension Act of 1985 and subsequent revisions.

- All research projects and educational or extension activities using vertebrate animals under the jurisdiction or control of WTAMU shall be reviewed and approved by the Institutional Animal Care and Use Committee (IACUC). In its reviews, the Committee will apply standards and guidelines set forth in the Animal Welfare Act, the Health Research Extension Act of 1985, and subsequent revisions.
- The housing, care, feeding, and observation of all animals must be supervised by individuals trained in such matters. Managers of animal care facilities are expected to meet the guidelines set forth in the Guide for the Care and Use of Laboratory Animals (for biomedical research projects) or the Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching (for agricultural research projects), or other guides as adopted by the Institutional Animal Care and Use Committee. These guides are available from the Killgore Research Center.
- Animal use shall be planned and conducted so as to avoid or minimize pain and distress to the animals. Procedures involving animals must be performed by, or be closely supervised by, a faculty or staff member who is skilled in the procedure. Students taking part in such procedures must be appropriately instructed and supervised. If any experimental or demonstrative procedure or its consequences have the potential to induce significant and/or lasting pain, distress, or suffering, appropriate methods of tranquilization, anesthesia, and analgesia must be used. Any painful or distressful procedure, regardless of whether it can or cannot be obviated, must be reviewed and approved in advance by the Institutional Animal Care and Use Committee.
- Procedures for euthanasia must be performed in a manner consistent with the latest recommendations of the American Veterinary Medical Association Panel on Euthanasia,



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

and all proposed methods must be approved in advance by the Institutional Animal Care and Use Committee.

- Any faculty member, staff member, or student of the University who has reason to know or believe that this policy is being violated may submit a written request to the Chairman of the Institutional Animal Care and Use Committee for review of the procedure or situation in question. The Committee will examine all pertinent facts regarding the alleged policy violation. If the allegation is substantiated, the Committee will report the violation to the appropriate administrative officials. The University will take all steps possible to prevent retaliation against the person requesting the review.

2. Guidelines on Activities Requiring IACUC Approval

According to policy set by the WTAMU Board of Trustees, “All research projects and educational or extension activities using vertebrate animals under the jurisdiction or control of WTAMU shall be reviewed and approved by the Institutional Animal Care and Use Committee (IACUC).” The following provides additional clarification of Board of Trustees policy.

2.1 Animal use activities that require IACUC approval

- Activities using animals owned by WTAMU.
- Activities in which an employee of WTAMU assumes responsibility for a non-WTAMU-owned animal in a teaching or research capacity.
- Clinical trials involving non-WTAMU-owned animals.
- Activities using wild animals for teaching or research, when animals are manipulated in any way.

2.2 Animal use activities that do NOT require IACUC approval



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- Activities in which the animal is under the control of the owner or an owner-designated handler (except in the case of clinical trials).
- Activities in which a veterinarian is providing routine clinical services to a privately owned animal, herd, or farm or to wild animals.
- Field studies, as defined in Animal Welfare Act regulations (“...any study conducted on free-living wild animals in their natural habitat, which does not involve an invasive procedure, and which does not harm or materially alter the behavior of the animals under study.”).

Although IACUC review and approval are not required for these activities, the IACUC is willing to conduct standard review as requested. The IACUC recommends that these activities receive some type of administrative review for potential legal, liability, and public relations concerns.

3. Application for Vertebrate Animal Use

The application form can be found at <http://www.wtamu.edu/academics/iacuc-federal-regulations.aspx> and must contain the following.

- Identification of the species and the approximate numbers of animals to be used.
- A rationale for involving animals and for the appropriateness of the species and numbers of animals to be used.
- A complete description of the proposed use of the animals.
- A description of the procedures designed to assure that discomfort and pain to animals will be limited to that which is unavoidable for the conduct of scientifically valuable research, including provision for the use of analgesic, anesthetic, and tranquilizing drugs where indicated and appropriate to minimize discomfort and pain to animals.
- A description of any euthanasia method to be used.

The person submitting an AVAU must be the principal investigator (PI) and have faculty rank. PIs are responsible for animal use by their students and staff. The PI heading a research group or teaching a course must have an approved application on file for each project or course under his/her supervision. Collaborators, technicians, and students must care for and use animals according to the



protocols described in the approved applications. Deviations should be reported to the IACUC. PIs must become familiar with laws, rules, and regulations governing animal care and use as well as policies governing the review of animal care and use.

4. Application Processing

Most Applications for Vertebrate Animal Use, AVAU, are processed in approximately six weeks. On occasion, an individual protocol may require a longer period of time because of the nature of the proposed use or other complicating factors. Therefore, it is prudent to submit the forms to the IACUC as soon as the need is anticipated. The IACUC cannot expedite the review of an application because the investigator failed to submit it in time to meet various deadlines. It is the responsibility of the principal investigator to submit an AVAU with sufficient lead-time to meet all University and agency deadlines.

5. Application for Multiple Projects, Co-submission and Re-review

Under certain circumstances, it may be possible to cover vertebrate animal use for more than one project under a single AVAU. For example, resubmission of a grant within one year of approval of an AVAU to the same or another funding agency which may involve changes in title, size of project, or contain other changes, but for which the scope of animal use (procedures, numbers, duration) does not significantly change, does not require another AVAU. Co-submission of the same proposal to two or more granting agencies requires only one Application for Vertebrate Animal Use and a copy of each proposal. Resubmission of an unfunded proposal will not require re-review as long as it is not significantly revised over the previous submission and the previous submission was within the last 12 months. A renewal of a previously funded project does not require animal use re-review as long as it has not been significantly revised and has been reviewed by the Committee within the last three years.



6. Overseas and Field Research and IACUCs from Other Institutions

While the IACUC does not conduct inspections of field and overseas research sites, the use of vertebrate animals at those sites by PIs is expected to be in accordance with University policy. That portion of vertebrate animal use conducted at WTAMU in collaboration with outside researchers must be reviewed by the WTAMU IACUC, even if it has already been reviewed by an IACUC or similar committee at the collaborating institution.

WTAMU investigators participating in vertebrate animal research conducted at other sites which has been reviewed and approved by IACUCs at other institutions may not be required to submit an application to the WTAMU IACUC. However, the WTAMU IACUC requires investigators to submit a copy of the IACUC approval from the other reviewing institution. The WTAMU IACUC must be allowed to assess, whether or not an application is required under these circumstances.

With regard to collection of tissue samples (i.e. biopsies, blood, etc.), if samples are collected expressly for the purposes of an WTAMU investigator's research or teaching projects, that investigator must file an application for vertebrate animal use with the WTAMU IACUC. For example, clinically necessary biopsies and blood samples may be split for research purposes without IACUC review, but no clinically unnecessary sample may be taken without IACUC review and approval. This policy also applies to field studies in which samples are collected expressly for the purposes of an investigator's research or teaching projects and to studies covered by government permits. The IACUC must review these projects.

7. Preparation and Review of Blanket Protocols

Principal Investigators (PIs) may wish to seek "blanket" approval for animal use where procedures can be described, but specific treatments and/or animal numbers are not yet determined. The potential advantage of this approach is that only an amendment would need to be filed, once the additional details are known. However, the process for approving amendments that involve significant changes requires essentially the same steps as a new submission; therefore, there may



not be significant time savings in review. On the other hand, if amendments include only non-significant changes, then those changes would generally be approved quickly.

If a PI has special need for rapid turnaround time on review of an Application for Vertebrate Animal Use (AVAU), s/he should contact the Killgore Research Center.

The Institutional Animal Care Use Committee requires a complete description of the animal-use activity. This description includes not only the procedures performed with/on animals, but also details of the experimental treatments: specific drugs, dosages (volume and mg/kg), and routes of administration; dietary manipulations; justification of animal numbers based on the experimental design; etc.

The above information may be supplied in some combination of AVAU and amendment form, and must be reviewed and approved by the IACUC before an animal activity begins.

If details of animal use are not available at the time of initial AVAU submission, then the AVAU should indicate specifically what additional information will be provided as an amendment.

For each amendment submitted, the IACUC Chair decides whether the proposed changes are “significant.” This decision is based on the IACUC Guideline, “Review Procedures for Significant Changes in an Approved AVAU.”

7.1 AVAU Duration, Annual Reports and Renewal

The AVAU is approved for three years. The PI is required to submit an annual report updating any changes that may have occurred during the year. The IACUC administrator distributes the form for updates at the appropriate time. After three years, the AVAU must be re-written and undergo the entire review process again.

If significant changes are anticipated in an on-going project, a Protocol Amendment Form (Appendix C) must be submitted to the Killgore Research Center prior to initiation of these changes. However, total approval time for a single Application for Vertebrate Animal Use may not



exceed three years. Consult the Killgore Research Center (phone 806-651-2270, e-mail AR-EHS@mail.wtamu.edu for information).

Applications can be obtained from the IACUC website. The application form must be TYPED. Each section must be answered in specific detail or noted "not applicable." It is not sufficient to answer a question by simply referring to a more detailed paper or reference or attached document. All applications require an original signed application form. Syllabi are needed for teaching activities. Submit all applications through the Killgore Research Center (WTAMU Box 60215, Canyon, TX 79016, e-mail AR-EHS@mail.wtamu.edu). After review and approval, the Chair of the IACUC will send the approval information to the principal investigator for submission to the appropriate offices or federal agencies.

8. Tracking of IACUC Approval and Approved Animal Numbers

All use of vertebrate animals at WTAMU requires prior IACUC approval of the Application for Vertebrate Animal Use (AVAU). All animals must be accounted for in the AVAU, including all neonates (e.g., pre-weanling animals euthanized to standardize litter size or to cull unwanted genotypes or sex, and animals that are expected to die as a result of a harmful genotype). Use of prenatal, pre-hatch, embryonic, or larval stage animals does not require listing in the AVAU.

In accordance with federal regulations and WTAMU policy, the AVAU requires the principal Investigator to provide a rationale for the numbers of animals to be used. It is implicit from these requirements that there be an institutional mechanism to ensure that the animal use is approved and that the number of animals used is consistent with information in the approved protocol.

Each department must have written procedures in place for monitoring and documenting animal use. Procedures must include methods to ensure that animal use is covered by an active IACUC-approved protocol and that the numbers of animals used do not substantially exceed those approved in the protocol. Animal resource units also should have procedures that allow retrieval of animal use numbers, by category of use, for completion of the annual reports.



9. General References on Animal Care and Use

Regulations and guidelines addressing the proper handling of vertebrates can be found at <http://www.wtamu.edu/academics/iacuc-federal-regulations.aspx> and are summarized below.

Animal Welfare Act, 7 U.S.C. 2131-2159; 9CFR 2.22,2.80, and 37102(g).

The Guide for the Care and Use of Laboratory Animals. Institute of Laboratory Animal Resources, Commission on Life Sciences, National Research Council, National Academy Press, Washington, D.C. 1996.

Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching. Federation of Animal Science Societies, Savoy, IL, 1999.

1993 Report of the AVMA Panel on Euthanasia. J Amer Vet Med Assoc, 202(2): 230-249. Jan 15, 1993.

Public Health Service Policy on Humane Care and Use of Laboratory Animals. Office of Laboratory Animal Welfare, National Institutes of Health, Office of the Director, Rockville, MD, 1996.

10. Animal Use and Care Committee

The Institutional Animal Care and Use Committee ascertains the acceptability of proposed research involving animals and monitors the resultant research. The committee is selected by the Chief Executive Officer of the research facility (WTAMU Dean of the Graduate School and Research), as specified in 9CFR2.31, at the beginning of the academic year. Appointments will be for three years. No more than three members shall be from the same administrative unit of the facility (9CFR2.31(b)(4)). The 2010-2011.(academic year) committee is comprised of the following members.

- A. Chair, elected by membership: Jim Rogers, Interim.
- B. One veterinarian: Mark Ballinger (Palo Duro Animal Hospital).
- C. Two representatives unaffiliated with University: Mark Ballinger, Todd Montadon (TPWD).



- D. One representative from non-science discipline: Harry Hueston.
- E. Four representatives from science disciplines with experience in animal research (2009-2012): Ray Matlack, Richard Kazmaier, Jim Rogers and Maxine DeButte-Smith.
- F. Dean of Graduate School and Research: Angela Spaulding.

11. IACUC Meetings

The IACUC shall meet once every six months to review the research facility's program for human care and use of animals, using title 9, chapter 1, subchapter A-Animal Welfare, as a basis for evaluation (9CFR2.31(c)(1)). The IACUC meetings will be called by the Dean of the Graduate School and Research and will typically be held in June and December of each year.

12. IACUC Inspections

The IACUC shall inspect, at least once every six months, all of the research and animal facilities, including animal study areas, using title 9, chapter 1, subchapter A-Animal Welfare, as a basis for evaluation, provided, however, that animal areas containing free-living wild animals in their natural habitat need not be included in such inspections (9CFR2.31(c)(2)).

13. IACUC Meetings and Inspection Reports

The IACUC shall prepare reports of its evaluations conducted as required by paragraphs (c) (1) and (2) of section 9CFR2.31 and submit the reports to the Institutional Official of the research facility (Dean of the Graduate School and Research)(9CFR2.31(c)(3). The IACUC may determine the best means of conducting the evaluations, providing

- (1) No committee member wishing to participate in the evaluation is excluded.
- (2) The IACUC may use subcommittees composed of a least two Committee members and may invite *ad hoc* consultants is assist in the evaluations.
- (3) The IACUC remains responsible for the reports required under the Act.
- (4) The reports shall be reviewed and signed by a majority of the IACUC members and must include any minority views.
- (5) The reports shall be updated at least once every six months upon completion of the required semi-annual evaluations and shall be maintained by the research facility and made available to APHIS and to officials of funding Federal agencies for inspection and copying upon request.
- (6) The IACUC review and inspection reports must contain a description of the nature and extent of the research facility's adherence to title 9, chapter I, subchapter A-animal Welfare, and must state the reasons for each departure.



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 14 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (7) The reports must distinguish significant deficiencies for minor deficiencies.
- (8) A significant deficiency is one which, with reference to Subchapter A, and, in the judgment of the IACUC and the Institutional Official, is or may be a threat to the health or safety of the animals.
- (9) If program deficiencies are noted, the reports must contain a reasonable and specific plan and schedule with dates for correcting each deficiency.
- (10) Any failure to adhere to the plan and schedule that results in a significant deficiency remaining uncorrected shall be reported in writing within 15 business days by the IACUC, through the Institutional Official, to APHIS and any Federal Agency funding that activity.

Furthermore, the IACUC shall

- (1) Review and, if warranted, investigate concerns involving the care and use of animals at the research facility resulting from public complaints received and from reports of noncompliance received from laboratory or research facility personnel or employees.
- (2) Make recommendations to the Institutional Office regarding any aspect of research facility's animal program, facilities, or personnel training.
- (3) Review and approve, require modifications in (to secure approval), or withhold approval of those components of proposed activities related to the care and use of animals, as specified in paragraph (d) of this section.
- (4) Review and approve, require modifications in (to secure approval), or withhold approval of proposed significant changes regarding the care and use of animals in ongoing activities.

IACUC Proposed Activity Reviews

Prior to the IACUC review each member shall (per 9CFR2.31 (d) (2))

- (1) Be provided a list of proposed activities to be reviewed.
- (2) Have available access to written descriptions of all proposed activities that involve the care and use of animals.
- (3) Request a full committee review of those activities.
- (4) If full committee review is not requested, at least one member of the IACUC, designated by the chairman and qualified to conduct the review, shall review those activities and shall have the authority to approve, require modifications in (to secure approval), or request full committee review of any of those activities.



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (5) If full committee review is requested for a proposed activity, approval of that activity may be granted only after review, at a convened meeting of a quorum (majority) of the IACUC and with approval vote of a majority of the quorum present.
- (6) No member may participate in the IACUC review or approval of an activity in which that member has a conflicting interest (e.g. is personally involved in the activity) except to provide information requested by the IACUC, nor may a member who has a conflicting interest contribute to the constitution of a quorum.

IACUC Committee Review Checklist

The IACUC Committee review checklist is attached at Appendix D and addresses the following requirements of 9CFR2.31(d);

- (i) Procedures involving animals will avoid or minimize discomfort, distress, and pain to animals.
- (ii) The principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animal and has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available.
- (iii) The principal investigator has provided written assurance that the activities do not unnecessarily duplicate previous experiments.
- (iv) Procedures that may cause more than momentary or slight pain or distress to the animals will
 - (A) Be performed with appropriate sedatives, analgesics, or anesthetics, unless withholding such agents is justified for scientific reasons, in writing, by the principal investigator and will continue for only the necessary period of time.
 - (B) Involve, in their planning, consultation with the attending veterinarian or his or his designee.
 - (C) Not include the use of paralytics without anesthesia.
- (v) Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly euthanized at the end of the procedure or, if appropriate, during the procedure.
- (vi) The animals' living conditions will be appropriate for their species in accordance with part 3 of subchapter A 9CFR2.31 and contribute to their health and comfort. The housing, feeding, and nonmedical care of the animals will be directed by the attending



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 16 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

veterinarian or other scientist trained and experienced in the proper care, handling, and use of the species being maintained or studied.

- (vii) Medical care for animals will be available and provided as necessary by a qualified veterinarian.
- (viii) Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures.
- (ix) Activities that involve surgery include appropriate provision for pre-operative and post-operative care of the animals in accordance with established veterinary medicine and nursing practices. All survival surgery will be performed using aseptic procedures, including surgical gloves, masks, sterile instruments, and aseptic techniques. Major operative procedures on non-rodents will be conducted only in facilities intended for that purpose which shall be operated and maintained under aseptic conditions. Non-major operative procedures and all surgery on rodents do not require a dedicated facility, but must be performed using aseptic procedures. Operative procedures conducted at field sites need not be performed in dedicated facilities, but must be performed using aseptic procedures.
- (x) No animal will be used in more than one major operative procedure from which it is allowed to recover, unless
 - (A) Justified for scientific reasons by the principal investigator, in writing.
 - (B) Required as routine veterinary procedure or to protect the health or well-being of the animal as determined by the attending veterinarian.
 - (C) In other special circumstances as determined by the Administrator on an individual basis. Written requests and supporting data should be sent to the Animal and Plant Health Inspection Service, Animal Care, 4700 River Road, Unit 84, Riverdale, Maryland 20737-1234;
- (xi) Methods of euthanasia used must be in accordance with the definition of the term set forth in 9CFR part 1 Section 1.1 of Subchapter A, unless a deviation is justified for scientific reasons, in writing, by the investigator.

IACUC Authorization to Suspend and to Re-approve Activities

The IACUC shall

- (1) Be authorized to suspend and activity involving animals in accordance with the specifications set forth in paragraph (d) (6) of 9CFR2.31 as follows.



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

The IACUC may suspend an activity that it previously approved if it determines that the activity is not being conducted in accordance with the description of that activity provided by the principal investigator and approved by the committee. The IACUC may suspend an activity only after review of the matter at a convened meeting of a quorum of the IACUC and with the suspension vote of a majority of the quorum present;

- (2) If the IACUC suspends an activity involving animals, the Institutional Official, in consultation with the IACUC, shall review the reasons for suspension, take appropriate corrective action, and report that action with a full explanation to APHIS and any Federal agency funding that activity.
- (3) Proposed activities and proposed significant changes in ongoing activities that have been approved by the IACUC may be subject to further appropriate review and approval by officials of the research facility. However, those officials may not approve an activity involving the care and use of animals if it has not been approved by the IACUC.

14. Personnel Qualifications

Training will be provided to all scientists, research technicians, animal technicians, and other personnel involved in animal care, treatment, and use conforming to those requirements outlined in 9CFR2.32. The committee will assure that personnel are qualified to perform their specific duties. The training and instruction will be made available, and the qualifications of personnel reviewed, with sufficient frequency to fulfill WTAMU's responsibility as specified in 9CFR Subpart A and as specified in this SOP. The training shall include, as appropriate the following:

- (1) Humane treatment of animal maintenance and experimentation, including
 - i. The basic needs of each species of animal.
 - ii. Proper handling and care of the various species of animals used by the facility.
 - iii. Proper pre-procedural and post-procedural care of animals.
 - iv. Aseptic surgical methods and procedures.
- (2) The concept, availability, and use of research methods that limit the use of animals or minimize animal distress.
- (3) Proper use of anesthetics, analgesics, and tranquilizers for any species of animals used by the facility.
- (4) Methods whereby deficiencies in animal care and treatment can be reported by any employee of the facility. No facility employee, committee member, or laboratory personnel shall be discriminated against or be subject to any reprisal for reporting violations of any regulation or standards under the Act and this SOP.



- (5) Utilization of services (e.g. National Agricultural Library, National Library of Medicine) available to provide information.
 - i. On appropriate methods of animal care and use.
 - ii. On alternatives to the use of live animals in research.
 - iii. That could prevent unintended and unnecessary duplication of research involving animals.
 - iv. Regarding the intent and requirements of the Act and this SOP.

15. Attending Veterinarian and Adequate Veterinary Care

Each research facility shall have an attending veterinarian who shall provide adequate veterinary care to its animals in compliance with this section.

- (1) Each research facility shall employ an attending veterinarian under formal arrangements. In the case of a part-time attending veterinarian or consultant arrangements, the formal arrangements shall include a written program of veterinary care and regularly scheduled visits to the research facility.
- (2) Each research facility shall assure that the attending veterinarian has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.
- (3) The attending veterinarian shall be a voting member of the IACUC, provided, however, that a research facility with more than one Doctor of Veterinary Medicine (DVM) may appoint to the IACUC another DVM with delegated program responsibility for activities involving animals at the research facility.

Each research facility shall establish and maintain programs of adequate veterinary care that include

- (1) The availability of appropriate facilities, personnel, equipment, and services to comply with the provisions of this subchapter.
- (2) The use of appropriate methods to prevent, control, diagnose, and treat diseases and injuries and the availability of emergency, weekend, and holiday care.
- (3) Daily observation of all animals to assess their health and well-being, provided, however, that daily observation of animals may be accomplished by someone other than the attending veterinarian, and provided, further, that a mechanism of direct and frequent communication is required so that timely and accurate information on problems of animal health, behavior, and well-being is conveyed to the attending veterinarian.
- (4) Guidance to principal investigators and other personnel involved in the care and use of animals regarding handling, immobilization, anesthesia, analgesia, tranquilization, and euthanasia.



- (5) Adequate pre-procedural and post-procedural care in accordance with current established veterinary medical and nursing procedures.

16. Record Keeping Requirements

The research facility shall maintain the following IACUC records.

- (1) Minutes of IACUC meetings, including records of attendance, activities of the Committee, and Committee deliberations.
- (2) Records of proposed activities involving animals, proposed significant changes in activities involving animals, and whether IACUC approval was given or withheld.
- (3) Records of semiannual IACUC reports and recommendations (including minority views), prepared in accordance with the requirements of Sec. 2.31(c)(3) of this subpart, and forwarded to the Institutional Official.

Every research facility shall make, keep, and maintain records or forms which fully and correctly disclose the following information concerning each live dog or cat purchased or otherwise acquired, owned, held, or otherwise in their possession or under their control, transported, euthanized, sold, or otherwise disposed of by the research facility. The records shall include any offspring born of any animal while in the research facility's possession or under its control.

- (1) The name and address of the person from whom a dog or cat was purchased or otherwise acquired, whether or not the person is required to be licensed or registered under the Act.
- (2) The USDA license or registration number of the person if he or she is licensed or registered under the Act.
- (3) The vehicle license number and state and the driver's license number and state of the person, if he or she is not licensed or registered under the Act.
- (4) The date of acquisition of each dog or cat.
- (5) The official USDA tag number or tattoo assigned to each dog or cat under Sec. 2.38(g) of this subpart.
- (6) A description of each dog or cat which shall include.
 - a. The species and breed or type of animal.
 - b. The sex.
 - c. The date of birth or approximate age.
 - d. The color and any distinctive markings.
- (7) Any identification number or mark assigned to each dog or cat by the research facility.

In addition to the information required to be kept and maintained by every research facility concerning each live dog or cat under paragraph (a) of this section, every research facility transporting, selling, or otherwise disposing of any live dog or cat to another person, shall make and maintain records or forms which fully and correctly disclose the following information.

- (1) The name and address of the person to whom a live dog or cat is transported, sold, or otherwise disposed of.
- (2) The date of transportation, sale, euthanasia, or other disposition of the animal.



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 20 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (3) The method of transportation, including the name of the initial carrier or intermediate handler or, if a privately owned vehicle is used to transport the dog or cat, the name of the owner of the privately owned vehicle.
- (4) The USDA Interstate and International Certificate of Health Examination for Small Animals (APHIS Form 7001/VS Form 18-1) and Record of Acquisition and Dogs and Cats on Hand (APHIS Form 7005/VS Form 18-5) are forms which may be used by research facilities to keep and maintain the information required by paragraph (b) of this section.
- (5) The USDA Interstate and International Certificate of Health Examination for Small Animals (APHIS Form 7001/VS Form 18-1) and Record of Disposition of Dogs and Cats (APHIS Form 7006/VS Form 18-6) are forms which may be used by research facilities to keep and maintain the information required by paragraph (c) of this section.

One copy of the record containing the information required by paragraphs (b) and (c) of this section shall accompany each shipment of any live dog or cat sold or otherwise disposed of by a research facility, provided, however, that, except as provided in Sec. 2.133 of this part, information that indicates the source and date of acquisition of any dog or cat need not appear on the copy of the record accompanying the shipment. One copy of the record containing the information required by paragraphs (b) and (c) of this section shall be retained by the research facility.

All records and reports shall be maintained for at least three years. Records that relate directly to proposed activities and proposed significant changes in ongoing activities reviewed and approved by the IACUC shall be maintained for the duration of the activity and for an additional three years after completion of the activity. All records shall be available for inspection and copying by authorized APHIS or funding Federal agency representatives at reasonable times. APHIS inspectors will maintain the confidentiality of the information and will not remove the materials from the research facilities' premises unless there has been an alleged violation, they are needed to investigate a possible violation, or for other enforcement purposes. Release of any such materials, including reports, summaries, and photographs that contain trade secrets or commercial or financial information that is privileged or confidential will be governed by applicable sections of the Freedom of Information Act. Whenever the Administrator notifies a research facility in writing that specified records shall be retained pending completion of an investigation or proceeding under the Act, the research facility shall hold those records until their disposition is authorized in writing by the Administrator.

[54 FR 36147, Aug. 31, 1989, as amended at 58 FR 39129, July 22, 1993; 60 FR 13895, Mar. 15, 1995]



17. Annual Report

The reporting facility shall be that segment of the research facility or that department, agency, or instrumentality of the United States that uses or intends to use live animals in research, tests, experiments, or for teaching. Each reporting facility shall submit an annual report to the AC Regional Director for the State where the facility is located on or before December 1 of each calendar year. The report shall be signed and certified by the CEO or Institutional Official, and shall cover the previous Federal fiscal year.

The annual report shall:

- (1) Assure that professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by the research facility.
- (2) Assure that each principal investigator has considered alternatives to painful procedures.
- (3) Assure that the facility is adhering to the standards and regulations under the Act, and that it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the IACUC. A summary of all such exceptions must be attached to the facility's annual report. In addition to identifying the IACUC-approved exceptions, this summary must include a brief explanation of the exceptions, as well as the species and number of animals affected.
- (4) State the location of all facilities where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes.
- (5) State the common names and the numbers of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs. Routine procedures (e.g., injections, tattooing, blood sampling) should be reported with this group.
- (6) State the common names and the numbers of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.
- (7) State the common names and the numbers of animals upon which teaching, experiments, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used shall be attached to the annual report.
- (8) State the common names and the numbers of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.



18. Miscellaneous

Information as to business: furnishing of same by research facilities.

Each research facility shall furnish to any APHIS official any information concerning the business of the research facility which the APHIS official may request in connection with the enforcement of the provisions of the Act, the regulations, and the standards in this subchapter. The information shall be furnished within a reasonable time and as may be specified in the request for information.

Access and inspection of records and property.

Each research facility shall, during business hours, allow APHIS officials to:

- (1) Enter its place of business.
- (2) Examine records required to be kept by the Act and the regulations in this part.
- (3) Make copies of the records.
- (4) Inspect the facilities, property, and animals, as the APHIS officials consider necessary to enforce the provisions of the Act, the regulations, and the standards in this subchapter.
- (5) Document, by the taking of photographs and other means, conditions and areas of noncompliance.

The use of a room, table or other facilities necessary for the proper examination of the records and for inspection of the property or animals shall be extended to APHIS officials by the research facility.

Publication of names of research facilities subject to the provisions of this part.

APHIS will publish lists of research facilities registered in accordance with the provisions of this subpart in the Federal Register. The lists may be obtained upon request from the AC Regional Director.

Inspection for missing animals.

Each research facility shall allow, upon request and during business hours, police or officers of other law enforcement agencies with general law enforcement authority (not those agencies whose duties are limited to enforcement of local animal regulations) to enter its place of business to inspect animals and records for the purpose of seeking animals that are missing, under the following conditions.

- (i) The police or other law officer shall furnish to the research facility a written description of the missing animal and the name and address of its owner before making a search.
- (ii) The police or other law officer shall abide by all security measures required by the research facility to prevent the spread of disease, including the use of sterile clothing, footwear, and masks where required, or to prevent the escape of an animal.



Confiscation and destruction of animals.

If an animal being held by a research facility is not being used to carry out research, testing, or experimentation, and is found by an APHIS official to be suffering as a result of the failure of the research facility to comply with any provision of the regulations or the standards set forth in this subchapter, the APHIS official shall make a reasonable effort to notify the research facility of the condition of the animal(s) and request that the condition be corrected and that adequate care be given to alleviate the animal's suffering or distress, or that the animal(s) be destroyed by euthanasia. In the event that the research facility refuses to comply with this request, the APHIS official may confiscate the animal(s) for care, treatment, or disposal as indicated in paragraph (e)(2) of this section, if, in the opinion of the Administrator, the circumstances indicate the animal's health is in danger.

In the event that the APHIS official is unable to locate or notify the research facility as required in this section, the APHIS official shall contact a local police or other law officer to accompany him or her to the premises and shall provide for adequate care when necessary to alleviate the animal's suffering. If, in the opinion of the Administrator, the condition of the animal(s) cannot be corrected by this temporary care, the APHIS official shall confiscate the animal(s).

Confiscated animals may be placed, by sale or donation, with other registrants or licensees that comply with the standards and regulations and can provide proper care, or they may be euthanized. The research facility from which the animals were confiscated shall bear all costs incurred in performing the placement or euthanasia activities authorized by this section.

Handling.

Handling of all animals shall be done as expeditiously and carefully as possible in a manner that does not cause trauma, overheating, excessive cooling, behavioral stress, physical harm, or unnecessary discomfort.

Physical abuse shall not be used to train, work, or otherwise handle animals.

Deprivation of food or water shall not be used to train, work, or otherwise handle animals, provided, however, that the short-term withholding of food or water from animals, when specified in an IACUC-approved activity that includes a description of monitoring procedures, is allowed by these regulations.

Identification of dogs and cats.

All live dogs or cats, including those from any exempt source, delivered for transportation, transported, purchased or otherwise acquired, sold, or disposed of by a research facility, shall be identified at the time of such delivery for transportation, purchase, sale, disposal, or acquisition in one of the following ways.

- (i) By the official tag or tattoo which was affixed to the animal at the time it was acquired by the research facility, as required by this section.



WEST TEXAS A&M UNIVERSITY

Index No. AR-EHS-0030
Page No. 24 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (ii) By a tag, tattoo, or collar, applied to the live dog or cat by the research facility and which individually identifies the dog or cat by number.

All official tag or tattoo numbers shall be correctly listed in the records of purchase, acquisition, disposal, or sale which shall be maintained in accordance with Sec. 2.35.

Unweaned puppies or kittens need not be individually identified while they are maintained as a litter with their dam in the same primary enclosure, provided the dam has been individually identified.

The official tag shall be made of a durable alloy such as brass, bronze, or steel, or of a durable plastic. Aluminum of a sufficient thickness to assure the tag is durable and legible may also be used. The tag may be circular in shape and not less than 1 1/4 inches in diameter, or oblong and flat in shape and not less than 2 inches by 3/4 inch, and riveted to an acceptable collar.

Each tag shall have the following information embossed or stamped on so that it is easily readable.

- (i) The letters "USDA."
(ii) Numbers identifying the State and dealer, exhibitor, or research facility (e.g., 39-AB).
(iii) Numbers identifying the animal (e.g., 82488).

Official tags shall be serially numbered and shall be applied to dogs or cats in the manner set forth in this section in as close to consecutive numerical order as possible. No tag number shall be used to identify more than one animal or shall be reused within a 5-year period.

Research facilities may obtain, at their own expense, official tags from commercial tag manufacturers.* At the time the research facility is registered, the Department will assign identification letters and numbers to be used on the official tags.

*A list of the commercial manufacturers who produce these tags and are known to the Department may be obtained from the AC Regional Director. Any manufacturer who desires to be included in the list should notify the Administrator.

Each research facility shall be held accountable for all official tags acquired. In the event an official tag is lost from a dog or cat while in the possession of a research facility, the facility shall make a diligent effort to locate and reapply the tag to the proper animal. If the lost tag is not located, the research facility shall affix another official tag to the animal in the manner prescribed in this section and record the tag number on the official records.

When a dog or cat wearing or identified by an official tag arrives at a research facility, the facility may continue to use that tag to identify the dog or cat or the tag may be replaced as indicated in



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 25 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

paragraph (g)(1) of this section. All tags removed by a research facility shall be retained and disposed of as indicated in this section.

Where a dog or cat to which is affixed or which is identified by an official tag is euthanized, or dies from other causes, the research facility shall remove and retain the tag for the required period, as set forth in paragraph (g)(11) of this section.

All official tags removed and retained by a research facility shall be held until called for by an APHIS official or for a period of 1 year.

When official tags are removed from animals for disposal, the tags must be disposed of so as to preclude their reuse for animal identification. No animal identification number shall be used within any 5-year period following its previous use.

Health certification.

No research facility, including a Federal research facility, shall deliver to any intermediate handler or carrier for transportation, in commerce, or shall transport in commerce any dog, cat, or nonhuman primate unless the dog, cat, or nonhuman primate is accompanied by a health certificate executed and issued by a licensed veterinarian. The health certificate shall state that

- (i) The licensed veterinarian inspected the dog, cat, or nonhuman primate on a specified date which shall not be more than 10 days prior to the delivery of the dog, cat, or nonhuman primate for transportation.
- (ii) When so inspected, the dog, cat, or nonhuman primate appeared to the licensed veterinarian to be free of any infectious disease or physical abnormality which would endanger the animal(s) or other animals or endanger public health.

The Secretary may provide exceptions to the health certification requirement on an individual basis for animals shipped to a research facility for purposes of research, testing, or experimentation when the research facility requires animals not eligible for certification. Requests should be addressed to the Animal and Plant Health Inspection Service, Animal Care, 4700 River Road, Unit 84, Riverdale, Maryland 20737-1234.

The U.S. Interstate and International Certificate of Health Examination for Small Animals (APHIS Form 7001/VS Form 18-1) may be used for health certification by a licensed veterinarian as required by this section.

Holding of animals.

If any research facility obtains prior approval of the AC Regional Director, it may arrange to have another person hold animals, provided that

- (1) The other person agrees, in writing, to comply with the regulations in this part and the standards in part 3 of this subchapter, and to allow inspection of the premises by an APHIS official during business hours.



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 26 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (2) The animals remain under the total control and responsibility of the research facility.
- (3) The Institutional Official agrees, in writing, that the other person or premises is a recognized animal site under its research facility registration. APHIS Form 7009/VS Form 18-9 shall be used for approval.

Holding period.

Research facilities that obtain dogs and cats from sources other than dealers, exhibitors, and exempt persons shall hold the animals for five full days, not including the day of acquisition, after acquiring the animal, excluding time in transit, before they may be used by the facility. Research facilities shall comply with the identification of animals requirements set forth in Sec. 2.38(g) during this period.

Compliance with standards and prohibitions.

Each research facility shall comply in all respects with the regulations set forth in subpart C of this part and the standards set forth in part 3 of this subchapter for the humane handling, care, treatment, housing, and transportation of animals, provided, however, that exceptions to the standards in part 3 and the provisions of subpart C of this part may be made only when such exceptions are specified and justified in the proposal to conduct the activity and are approved by the IACUC.

No person shall obtain live random source dogs or cats by use of false pretenses, misrepresentation, or deception.

No person shall acquire, buy, sell, exhibit, use for research, transport, or offer for transportation, any stolen animal.

Each research facility shall comply with the regulations set forth in Sec. 2.133 of subpart I of this part.

[54 FR 36147, Aug. 31, 1989, as amended at 58 FR 39129, July 22, 1993; 59 FR 67612, Dec. 30, 1994; 60 FR 13895, Mar. 15, 1995; 63 FR 62926, Nov. 10, 1998]



**Appendix A
NON-AGRICULTURAL USE
AVAU APPLICATION INSTRUCTIONS**

**West Texas A&M University
IACUC Guideline
Non-Agriculture
7/31/04**

Specific Instructions by AVAU Sections

The following are specific, page-by-page instructions on completing the AVAU form. Numbers refer to the numbered items of the AVAU form. The form can be downloaded into MS Word, WordPerfect, or PDF. Handwritten forms will be returned.

Cover Page:

ID#: The IACUC will assign a specific number, unique to each protocol. Do not write in this space.

Title of Project: This can be grant title, course title, a pilot project, etc.

Submitted to: Give the name of the funding agency to which the proposed study will be submitted. Also provide the deadline for submitting proposals to the specific agency.

New, Renewal: Check appropriate box. Renewal applications should provide previous IACUC protocol number.

The AVAU form has two major sections: the Confidential Section and the Non-Confidential Section. Both sections must be completed. The Confidential Section is not subject to release under the Freedom of Information Act.

Confidential Section:

1)

a. There are occasions in which the PI will not require animals to remain in a research setting such as those animals used in field studies and client-owned animals that will remain with their owners throughout the study. Locations of field studies must be specific.

b. For animals that will remain at the research facility, provide the name of the facility and the room number.

c. List locations where procedures will be performed. Location of surgery areas should also be included here. (Examples: 1. Rat ovariectomy, ANNS room 216. 2. Oral dosing of cats, KRC,



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

room 186G.) Procedures performed in investigator's laboratory or at an off-campus site should be listed in 1d.

d. Provide the location of the investigator's lab or the off-campus site and the duration of the animal's stay. Facilities must be inspected prior to animal use by two IACUC members.

e. Transportation of animals must conform to all federal regulations and guidelines. Transporting animals from their domiciliary area requires proper containment of the animal in a secure cage, pen, etc. with appropriate supplies, as necessary, for trip. Method of transport (hand-carry, car, airplane, etc.) must be listed.

2) All PIs and other individuals listed on the AVAU form who work with animals unsupervised must undergo WTAMU IACUC training. For individuals involved in animal care and use, years of experience with the animal listed and years of experience performing the procedures described must be included.

3) Complete #3 if individuals have been consulted in regards to the proposed animal activity. This will avoid releasing information in non-confidential sections of the form, such as Section G.

Assurance: Several assurances are required of the PI as set forth by federal regulations and guidelines. Review carefully to be sure that these assurances are being met. Contact the IACUC Office (phone: 806-651-2270, e-mail: AR-EHS@mail.wtamu.edu) or the IACUC Chairperson if you have questions. Contact Academic and Research Environmental Health and Safety (phone 806-651-2270) for more information regarding Occupational Health & Safety issues.

Your **signature** indicates that you have read and agree to comply with the assurances. The AVAU will not be processed if it is not signed.

There must be a **page break** after the Confidential Section. The Non-Confidential Section must be started at the top of a new page.

Non-Confidential Section:

Section A. Animal Care and Use

1. The purpose and importance of the animal use activity should be written in language that can be understood by laypersons and non-scientists. The purpose and importance should demonstrate a correlation to the procedures and/or manipulations. For those teaching a class, summarize the class and expected goals for the students. Abbreviations and acronyms must be defined.
2. Procedures and manipulations that are being performed on the animals must be described in detail from the time the animals enter the study until they are euthanized or otherwise terminated from the study. Again, language must be used that can be understood by laypersons or non-scientists. Surgery should be described in Section E.
3. Explain why live vertebrate animals must be used in the proposed activity. Address why computer models, visual aids, or other non-animal techniques cannot be used.



4. Explain why the species selected is a good choice for the proposed activity.
- 5a. **Species and strain:** Latin name is not necessary, but the common name must be provided. In field studies be sure to indicate non-target species as such.
Age and/or weight: Give either, or both if known. Alternately, ranges may be used.
Source: Self-explanatory. Do not give specific vendor names!
Categories of use: Based on the proposed activities that may cause pain or distress

Category A: Experiments involving either no living materials or use of plants, bacteria, protozoa, unhatched eggs, cell culture or invertebrate animal species. **NO REVIEW REQUIRED**

Category B: Animal use activities which involve only breeding, conditioning, or holding.

Category C: Animal use activities which involve no pain, distress greater than an injection, or use of pain relieving drugs. Routine procedures (e.g. injections, blood sampling, physical examinations, food/water deprivations for a few hours) fall into this category.

Category D: Animal use activities which involve accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs are used. Procedures, which would generally call for the use of anesthetics, analgesics or tranquilizers in human beings, fall into this category.

Category E: Animal use activities which involve accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs are not used. An explanation of the procedures producing pain or distress in the animals and reasons such drugs were not used shall be included in Section A of the AVAU.

Total number of animals: Include the maximum number of animals that are needed for the three-year life of this specific protocol. Do not use ranges of numbers such as 10 to 15. (Field studies using observations and trapping for population counts may use expected ranges of captures and should be discussed in the application.)

- b. Check the appropriate answer
- c. Check the appropriate answer
- d. Check the appropriate answer
- e. Explain how it was determined to use the number of animals shown in 5a. The numbers should be based on experimental design. Tables or flow charts can be used to show treatment groups and number of animals. Example: 10 animals in each group, 3 treatments (treatment A, treatment B, and control), and two replicates of each treatment. $10 \times 3 \times 2 = 60$ (should be same number as "total" in 5a). Explanation should include, when appropriate, a statistical



justification for group size.

Section B: Invasive Sample Collection

Only include those sample collections that are invasive. Example: Fecal collection from floor dropping does not need to be listed here. Fecal collection by fecal loop needs to be described here.

Section C: Substance Administration

This section should be used to address substance administration. Complete Sections D and F for anesthetics, analgesics, tranquilizers and euthanasia agents.

1. Contact AR-EHS (806-651-2270) for additional information. Contact the IACUC Chairperson for information on mouse antibody production testing, rat antibody production testing, and hamster antibody production testing.
2. Self-explanatory.
3. Self-explanatory.
4. Self-explanatory.

1. Section D: Potential Pain and Distress

Proper use of animals including the avoidance of discomfort, distress, and pain when consistent with sound scientific practices is imperative. Unless the contrary is established, PIs should consider that procedures that cause pain or distress in human beings may cause pain or distress in other animals.

1. a. Scientific justification must be provided on why pain relieving drugs or therapies are not acceptable in the proposed activity for animal use.

b. The plan for checking the animal's condition must be thoroughly outlined, including specific information on the provisions for euthanasia should it become necessary.

c. If animals cannot be euthanized, explain how the information derived from allowing the animals to die without intervention contributes to the proposed animal use purpose and importance.
2. a. All drugs including anesthetics, analgesics, antibiotics, paralytics, etc. that will be given to animals should be listed here. Painful procedures in which paralytics are used also must include anesthetics. Refer to the *IACUC Guidelines on Intra- and Post- Operative Monitoring and Record Keeping*.



- b. Describe how it will be determined that animals are sufficiently anesthetized and how vital signs are being monitored.
 - c. Describe how the animal's recovery from anesthesia will be monitored.
 - d. Describe how it will be determined that analgesics are working.
3. Restraint: It is important that any restraint device be suitable in size and design for the animal being held. Prolonged restraint should be avoided unless essential to the study's objectives. The restraint device must be correctly operated to minimize stress and avoid injury to the animals. Any drugs used to facilitate restraint should be listed in Section D. Whenever possible the animals should be conditioned to the restraint device.
4. Exceptions to standards: Contact the Killgore Research Center (phone: 806-651-2270, e-mail: AR-EHS@mail.wtamu.edu) or the IACUC chairperson for questions. Federal regulations, guidelines, and standards for laboratory animals can be found in the *Guide for the Care and Use of Laboratory Animals*, the *Animal Welfare Act Regulations*, the *Public Health Service Policy on the Humane Care and Use of Laboratory Animals* and the *Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*.

2. Section E: Surgery

1. Check the appropriate box. In non-survival surgery the animal is not allowed to recover from anesthesia, but is instead euthanized.
2. Explain how long the animals are maintained for the proposed animal use after surgery.
3. Aseptic technique must be used for all survival surgeries. Major surgical procedures on non-rodent species must be conducted in facilities intended for that purpose unless otherwise approved by the IACUC.
4. Appropriate procedures for post-operative care of the animals, in accordance with established veterinary medicine and nursing practices, must be provided. Refer to the *IACUC Guidelines on Intra- and Post- Operative Monitoring and Record Keeping*.
5. This section should be used to address multiple survival surgery. A second surgery that is terminal does not require justification. Major surgery means surgical intervention that penetrates and exposes a body cavity or any procedure that produces permanent impairment of physical or physiological functions. Complete this information in D.

Section F: Euthanasia/Disposition

1. Self-explanatory.
2. The American Veterinary Medical Association (AVMA) has set forth guidelines on euthanasia; the panel has determined that cervical dislocation and decapitation should be used only "when



scientifically justified by the user.” The WTAMU IACUC has determined that exceptions to the AVMA guidelines will be considered by the IACUC on a case-by-case basis.

3. If animals will not be euthanized, information on final disposition must be provided (i.e., transferred to another protocol, adopted, sold for slaughter, etc.). For animals entering the food chain, be sure to adhere to established drug withdrawal periods.

Section G: Alternatives

1. A literature search should include key words that are likely to address the issue of alternatives. In many databases, a literature search with keywords such as “*in vitro* models,” “alternative,” “animal models,” etc. will provide information on the use of non-animal alternatives in research.
2. List any other service used for information concerning alternatives to the proposed animal use procedures. Although the literature search is recommended, other methods may serve as a basis for obtaining information on alternatives.
3. This can include awareness of the literature due to attendance at various seminars, etc. It also can include one’s own expertise in the field of the proposed animal use activity.
4. Provide a written narrative of how it was determined that alternatives to the proposed animal use activity do not exist. Use the information obtained from 1-3 in Section G to assist in writing this summary.



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 33 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

Appendix B
APPLICATION FOR VERTEBRATE ANIMAL USE

WEST TEXAS A&M UNIVERSITY
APPLICATION FOR VERTEBRATE ANIMAL USE
(Non-Agricultural)
(revised 7/31/04)

ID# _____ (Committee Use Only)

NOTE: BEFORE COMPLETING THIS FORM, READ [INSTRUCTIONS here](#).

If this application covers a clinical study involving privately owned animals, please attach a copy of the client consent form. If this application covers animal use for teaching, please attach a copy of the course syllabus.

Only typed forms will be accepted.

Title of project: _____

Submitted to (Name of Funding Agency, if applicable): _____

Agency Deadline: _____

If this project has been approved previously by the Committee, please indicate the ID# of the previous application _____ and expiration date: _____

A COPY OF THIS APPROVED PROTOCOL WILL AUTOMATICALLY BE SENT TO THE ANIMAL HOUSING FACILITY NAMED IN THE CONFIDENTIAL SECTION OF THIS DOCUMENT.

DO NOT WRITE BELOW THIS LINE. APPLICATION CONTINUES ON NEXT PAGE.

Please retain a copy and, AS APPROPRIATE, submit a copy with your application to various University offices through which applications must be routed, or send a copy directly to the review group or project officer in the Funding Agency for your project.

Date of Review: _____

____ Approved ____ Approved with modification (Attached) ____ Not Approved

This institution has an Animal Welfare Assurance on file with OLAW .

Chairman, Institutional Animal Care and Use Committee



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 34 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

EXPIRATION DATE: _____

CONFIDENTIAL

INFORMATION ON PAGES 2 AND 3 IS CONSIDERED PRIVATE AND NOT SUBJECT TO RELEASE UNDER THE PUBLIC RECORDS ACT. PLEASE PROVIDE THE APPROPRIATE INFORMATION IN THE SPACES PROVIDED BELOW, BUT DO NOT INCLUDE THIS INFORMATION IN ANY OTHER PORTION OF THE APPLICATION. THE REST OF THE APPLICATION IS CONSIDERED PUBLIC AND IS SUBJECT TO RELEASE.

Principal Investigator (PI) _____ Phone Number _____
Department _____ Box Number _____
E-mail address: _____ Fax Number _____

Lab Contact (Technician) and phone number: _____

After-hours emergency contact and phone number: _____

- 1) a. Will animals be housed? Yes No
b. Where will animals be housed?
c. Where will procedures (including surgeries) be performed?
d. Will animals be maintained at any time in Investigator's lab or any off-campus site?
e. For animals that are transported away from the animal facility to an investigator's lab or to any off-campus site, describe containment of animals and method of transport.

2) List all personnel in your research group who will care for and work with the animals without direct (in-lab) supervision; include the PI. For each person:

- Indicate their role in the project.
• List animal-related experience and training, for procedures being performed, in sufficient detail to allow the IACUC to determine that individuals are qualified; listing of degrees is not sufficient. Provide specific information for those performing euthanasia, and if applicable, for those performing anesthesia and/or surgery. FOR SECTION



WEST TEXAS A&M UNIVERSITY

Index No. AR-EHS-0030
Page No. 35 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

G (Animal use categories D and E)

3) If applicable, list experts in the area of investigation with whom you have consulted. Provide name, position, and briefly describe area of expertise:

PRINCIPAL INVESTIGATOR ASSURES:

- That she/he will abide West Texas A&M policies for the care and use of animals; the provisions of the ILAR Guide for the Care and Use of Laboratory Animals; and all federal, state and local laws and regulations governing the use of animals in research; and that he/she understands that emergency veterinary care will be administered to animals showing evidence of pain or illness, in addition to routine veterinary care as prescribed for individual species in the Standard Operating Procedures;
That all manipulations involving live animals will be performed under her/his supervision or that of another qualified individual listed on this protocol;
That all personnel having direct animal contact, including the investigator, have been trained in humane and scientifically acceptable procedures in animal handling, administration of anesthetics, analgesics, and euthanasia to be used in this project, and have completed the WTAMU Animal Welfare training module, or are under the direct (in-lab) supervision of a trained individual; and that employees will be allowed adequate time to attend training sessions;
That personnel with animal or animal tissue contact participate in the Occupational Health and Safety Program;
That this proposed animal use does not unnecessarily duplicate previous activities;
That she/he will obtain approval from the IACUC before initiating any changes in this study, including changes in personnel or location of animal use;
That she/he will notify the IACUC and the attending veterinarian regarding any unexpected study results that adversely impact the animals, including any unanticipated pain or distress, morbidity or mortality.

I have read, understand, and will comply with the assurance statements.

Signature of P.I. _____ Date _____

Any deviation from an approved protocol or violations of pertinent policies, guidelines or laws could result in immediate suspension of this project.



ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

SECTION A. Animal Care and Use (Completion of this section is required for all applications)

- 1. Describe in non-scientific terms the purpose and importance of this animal use activity.
2. Describe in non-scientific terms how animals will be used. Include all manipulations and procedures. This description should allow the IACUC to understand what happens to an animal from the time of acquisition to the endpoint of the activity.
3. What is the rationale for using animals for this activity? (Can this study be done without using animals?)
4. Describe the appropriateness of the species to be used.
5. a. Provide the following information for all animals. No animal should be listed more than once; count each in highest proposed category of use.

Table with 5 columns: Species and strain (include common name)*, age and/or weight**, Source***, category of use****, total number requested for 3 years

*For field studies involving capture methods, anticipated non-target (by catch) species should also be indicated by species or in aggregate as "miscellaneous."

**Give ranges if the specific information is unknown.

***Please choose from the following sources: commercial vendor, client-owned (teaching hospital, non-university farms), random source, university-owned teaching and research herds or flocks, rental or stock animals, purpose-bred, collected from wild, animals in natural habitat, other (define). DO NOT USE VENDOR OR COLLABORATOR NAMES.

****See WEBSITE



WEST TEXAS A&M UNIVERSITY

Index No. AR-EHS-0030
Page No. 37 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- b. Is this a laboratory exercise for purposes of teaching students? ___ Yes ___ No
c. Do you have data from prior studies that is sufficient to calculate the sample size? ___ Yes ___No
d. How did you determine the number of animals to be used in this study?
___ PI's decision (no outside resources)
___ CVM Population Medicine Statistics Consultant
___ Contractual Agreement with Grantor
___ Other. Please specify:

e. Using the specifics of your experimental plan (or demonstration or course syllabus, as applicable), demonstrate how the numbers of animals required to achieve your scientific (or teaching) objectives for this project (i.e., the numbers given in Sec. A.5.a) were calculated. Include details of numbers of animals per group, control groups, treatment groups, pilot studies, and potential experimental failure. Information may be provided in the form of a table or flow chart. (Note: You must submit an amendment to exceed this allotment of animals.)

SECTION B. Invasive sample collection from live animals (blood/urine/feces/tissue/other [define])

Table with 6 columns: Species, sample, site(s) of sample collection, method(s), volume(s), frequency of collection

Provide details for any sample collection procedures that may not be clear from the table or Section A.2.



ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

SECTION C. Substance Administration

Anesthetics, analgesics, tranquilizers and euthanasia agents should be listed in Sections D and F. Dietary manipulations should be described in detail in Section A.2, and Section D.8, if applicable.

1. Will anything be administered to animals? YES NO. If YES, list specific agents below and provide dosage information (mg/kg body weight and volume), unless provided in Section A.2.

Radioisotopes? List/dosage:

Pathogenic or viable organisms? List/dosage:

Toxic chemicals? List/dosage:

Carcinogens? List/dosage:

*Transplantable tumors? List/dosage:

*Biological materials such as tissue, sera, or cell lines? List/dosage:

Recombinant DNA? List/dosage:

*Others not listed above? List/dosage:

*If materials have been derived or passed through rodent species, product must be free of infectious agents (Mouse Antibody Production [MAP]/Rat Antibody Production [RAP]/Hamster Antibody Production [HAP] testing are diagnostic assays used as indicators of viral contamination of rodent products).

2. For each of the above, describe in detail the precautions taken to protect people and animals in the environment, including handling practices for contaminated excreta, bedding and toxic metabolites.

3. Describe the effects of these agents on the experimental animal. Potential for pain or distress should be addressed in Section D.

4. Safety plan approved by WTAMU Environmental Health and Safety?

Yes # No

Radiological approval needed?

Yes # No

Does the safety plan reflect the location of this experiment and the experimental protocol?

Yes No If no, contact WTAMU Environmental Health and Safety, phone 806-651-2134.



2.1. SECTION D. Potential Pain and Distress

Use this section to discuss all procedures or conditions that may be accompanied by pain, distress, or discomfort. Include discussion of infectious or spontaneous disease studies and transgenic animals, even if clinical signs or abnormal phenotypes are not expected.

1. List each procedure or condition with potential for pain, distress, or discomfort, and give the species and number of animals affected. Describe the clinical signs or abnormalities that are expected or possible.

2. Describe the monitoring plan for pain and distress, including frequency and duration of checking for health or behavioral abnormalities.

3. Describe how pain, distress, and discomfort will be minimized, consistent with scientific objectives. (Use Section D.6 to describe use of anesthetics, analgesics, tranquilizers, or other palliative therapies.) Include the actions to be taken, and the specific criteria/endpoints for euthanasia, if applicable. (Examples include not eating for >24 hours, loss of >15% of normal body weight, self-mutilation, non-weight bearing for >24 hours, etc. In some cases, it may be appropriate to euthanize animals at the first sign of clinical abnormality.)

4. If painful or distressful procedures or conditions will NOT be relieved with anesthesia, analgesia, tranquilization, other palliative therapies or humane endpoints, provide scientific justification.

5. If death is intended to serve as an experimental endpoint (i.e., if animals must be allowed to die from an experimental condition or procedure), provide scientific justification.



ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

6. If painful or distressful procedures or conditions are relieved with anesthesia, analgesia, tranquilization, or other palliative therapies:

a) For each species to be used, list procedure or condition in which anesthesia, analgesia, tranquilization or other palliative therapies will be used. Provide drug, dose, route, frequency of administration, and anticipated duration of therapeutic effect. Include all medications, such as pre- and post-anesthetics, antibiotics, paralytics, etc. (If applicable, describe surgery in next section.)

Table with 6 columns: Species, procedure or condition, agent, Dosage, route, frequency, Duration. The table is currently empty.

b) Describe monitoring procedures to ensure adequacy and safety of anesthesia or tranquilization.

c) Describe monitoring procedures for recovery from anesthesia or tranquilization.

d) How will adequacy of post-operative/post-procedural analgesia or other pain-relieving therapies be ensured?

7. Physical restraint (more than one hour): Describe physical restraint methods. How will potential distress be minimized (e.g., sedation, acclimation/training)?

8. Describe trapping or other capture methods used in field studies, unless discusses in Section A.2. Explain how pain, distress, and discomfort are minimized.



WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

9. Exceptions to standards: Describe and justify any exceptions to federal regulations or standards, and give the species of animal and number to be used. (Examples of exceptions: use of an animal in more than one protocol involving a major operative procedure from which it is allowed to recover; deprivation of food or water; maintaining animals at temperatures and/or humidities outside the ranges specified by the standards; not cleaning and/or sanitizing at required frequencies; not providing diurnal lighting as required; not meeting space requirements; exceptions from the exercise plan for dogs.)

SECTION E. Surgery

Surgery and postoperative monitoring and records must be in accordance with IACUC guidelines. Refer to the IACUC Guidelines on Intra and Post Operative Monitoring and Record Keeping. ([website pending](#) Go to “Policies.”) Contact the University Attending Veterinarian (see committee information on WTACCESS) for additional information or forms. Be sure personnel qualifications for those performing surgery and postoperative care are adequately described in the Confidential Section, number 2.

1. Will surgery be survival or non-survival?

Survival Non-Survival (animal does not recover from anesthesia prior to euthanasia)

2. Describe in detail the surgical procedure(s) for each species to be used. Include description of presurgical preparation and method of closure, if applicable.

3. If the animal will recover from anesthesia, how long will the animal be maintained after recovery?

4. Describe in detail the postoperative care, including any specialized care. (Use of analgesics should be described in Section D, above.

5. Will individual animals undergo more than one surgical procedure? Yes No

If yes, provide scientific justification. (Multiple major survival surgeries should be justified in Section D.9.)



ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

SECTION F. Euthanasia/Disposition

- 1. Provide the following information for all planned/experimental euthanasia of animals. (Death must be confirmed for all methods.) Complete Section F.4 if animals will not be euthanized.

Table with 3 columns: Species, Method/agent, dosage, route. The table is currently empty.

- 2. Justify methods that vary from those recommended by the most recent report of the American Veterinary Medical Association Panel on Euthanasia. Decapitation and cervical dislocation require justification.

- 3. If these animals are not to be euthanized as part of your protocol, what will become of them?

SECTION G. Consideration of Alternatives

Are there procedures or conditions that may potentially cause more than momentary or slight pain or distress? (By definition, this includes all Category D and E studies.)

If yes, there must be a written narrative description of the methods and sources [e.g. biological abstracts, Index Medicus, Current Research Information Service, and/or the Animal Welfare Information Center operated by the National Agricultural Library (phone 301/504-6212)] which were consulted to determine the availability of alternatives (reduction, refinements, replacement).

"Alternative" refers to methods, models, and approaches that result in the reduction of the number of animals used, that incorporate refinements of procedures which result in the lessening of pain or distress to animals, or that provide for the replacement of animals with non-whole animal systems or the replacement of one animal species with another, particularly if the substituted species is non-mammalian or invertebrate.

- 1. Literature search for alternatives: list the databases, years searched in each database, keywords used, and date the search was performed (or attach the summary sheet with this information). Keywords should include those likely to yield information on alternatives to the potentially painful or distressful procedures or conditions that are part of this protocol.



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 43 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

2. Other information services utilized (list):

3. Other methods or sources used (briefly describe). Names of consultants should be listed in the confidential section of this application, item number 3.

4. Summarize how the above methods and sources have helped you identify alternatives or determine that alternatives are not available.



WEST TEXAS A&M UNIVERSITY

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

Index No. AR-EHS-0030
Page No. 44 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

Appendix C
APPLICATION FOR VERTEBRATE ANIMAL USE

Animal Care and Use Protocol Amendment (Non-Agriculture)
West Texas A&M University
Institutional Animal Care and Use Committee

Use this form to make a change to an animal care and use protocol. Return completed form to Killgore Research Center-IACUC, WTAMU Box 60215, Canyon, TX 79016, fax 806-651-2733, phone 806-651-2270, e-mail AR-EHS@mail.wtamu.edu. Only typed forms will be accepted. For assistance see the [IACUC website](#).

Principal Investigator: _____ Protocol number: _____

3. Phone: _____ Box: _____ E-mail: _____

4. Protocol title: _____

Which type(s) of changes in protocol are being proposed? Check all that apply.

5.

- | | | | |
|------------------------------|-------|-----------------------------------|-------|
| Change in personnel | _____ | Change in number of animals | _____ |
| Change in animal species | _____ | Addition/deletion of procedure | _____ |
| Change in surgical procedure | _____ | Change in anesthesia or analgesia | _____ |
| Change in animal housing | _____ | Change in euthanasia method | _____ |
| Change in funding source | _____ | Change in project title | _____ |



WEST TEXAS A&M UNIVERSITY

Index No. AR-EHS-0030
Page No. 45 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

6. Change in veterinary care ___
Change in hazardous substance use ___

7. Change in category of animal use ___

8. Other
(Describe): _____

9.

Describe all proposed change(s) in detail. If change(s) proposed add any procedures that have the potential to cause animal pain or distress, then you must describe the methods and sources by which alternatives to these procedures have been sought. Please review the original protocol and confirm that all principal investigator assurances apply to proposed change(s). (Attach additional sheets if necessary.)

Justify the need for these proposed changes. (Attach additional sheets if necessary.)

Signature of Principal Investigator

Date

IACUC Chair's Action:

- The changes proposed are not significant and do not require IACUC review. The changes may be implemented and this form is included in the record for this protocol for information only.
The changes proposed are considered significant and do require IACUC review. This form and the original protocol review form along with any attachments and comments are forwarded to the primary reviewer. A copy of this form is sent to each IACUC member to permit an opportunity to request additional information or convened IACUC review. In all other respects, the IACUC review of changes is the same as review of an original protocol.

IACUC Chair Signature

Date Approved



Appendix D
WTAMU IACUC Committee Review Checklist

IACUC REVIEW FOR VERTEBRATE ANIMAL USE (Non-Agricultural)
(Revised 11/05/2009)

ID# _____ (Committee Use Only)

The committee will review the following conditions for each IACUC submitted for review:

- (i) Procedures involving animals will avoid or minimize discomfort, distress, and pain to animals; (YES, NO) Comment:
- (ii) The principal investigator has considered alternatives to procedures that may cause more than momentary or slight pain or distress to the animal, and has provided a written narrative description of the methods and sources, e.g., the Animal Welfare Information Center, used to determine that alternatives were not available; (YES, NO) Comment:
- (iii) The principal investigator has provided written assurance that the activities do not unnecessarily duplicate previous experiments; (YES, NO) Comment:
- (iv) Procedures that may cause more than momentary or slight pain or distress to the animals will: (YES, NO) Comment:
 - (A) Be performed with appropriate sedatives, analgesics or anesthetics, unless withholding such agents is justified for scientific reasons, in writing, by the principal investigator and will continue for only the necessary period of time; (YES, NO) Comment:
 - (B) Involve, in their planning, consultation with the attending veterinarian or his or his designee; (YES, NO) Comment:
 - (C) Not include the use of paralytics without anesthesia. (YES, NO) Comment:
- (v) Animals that would otherwise experience severe or chronic pain or distress that cannot be relieved will be painlessly euthanized at the end of the procedure or, if appropriate, during the procedure; (YES, NO) Comment:
- (vi) The animals' living conditions will be appropriate for their species in accordance with part 3 of subchapter A 9CFR2.31. and contribute to their health and comfort. The housing, feeding, and nonmedical care of the animals will be directed by the attending veterinarian or other scientist trained and experienced in the proper care, handling and use of the species being maintained or studied; (YES, NO) Comment:



WEST TEXAS A&M UNIVERSITY

Index No. AR-EHS-0030
Page No. 47 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and Research EH&S

ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

- (vii) Medical care for animals will be available and provided as necessary by a qualified veterinarian; (YES, NO) Comment:
(viii) Personnel conducting procedures on the species being maintained or studied will be appropriately qualified and trained in those procedures; (YES, NO) Comment:
(ix) Activities that involve surgery include appropriate provision for preoperative and post-operative care of the animals in accordance with established veterinary medicine and nursing practices. All survival surgery will be performed using aseptic procedures, including surgical gloves, masks, sterile instruments, and aseptic techniques. Major operative procedures on non-rodents will be conducted only in facilities intended for that purpose which shall be operated and maintained under aseptic conditions. Non-major operative procedures and all surgery on rodents do not require a dedicated facility, but must be performed using aseptic procedures. Operative procedures conducted at field sites need not be performed in dedicated facilities, but must be performed using aseptic procedures; (YES, NO) Comment:
(x) No animal will be used in more that one major operative procedure from which it is allowed to recover, unless: (No exemptions Requested) _____ ! If exemptions are requested:
(D) Justified for scientific reasons by the principal investigator, in writing; (YES, NO) Comment:
(E) Required as routine veterinary procedure or to protect the health or well-being of the animal as determined by the attending veterinarian; or (YES, NO) Comment:
(F) In other special circumstances as determined by the Administrator on an individual basis. Written requests and supporting data should be sent to the Animal and Plant Health Inspection Service, Animal Care, 4700 River road, Unit 84, Riverdale, Maryland 20737-1234; (YES, NO) Comment:
(xi) Methods of euthanasia used must be in accordance with the definition of the term set forth in 9CFR part 1 Section 1.1 of Subchapter A, unless a deviation is justified for scientific reasons, in writing, by the investigator. (YES, NO) Comment:

DO NOT WRITE BELOW THIS LINE. APPLICATION CONTINUES ON NEXT PAGE.

Please retain a copy and, AS APPROPRIATE, submit a copy with your application to various University offices through which applications must be routed, or send a copy directly to the review group or project officer in the Funding Agency for your project.

Date of Review: _____

IACUC COMMITTEE MEMBER _____

____ Approved ____ Approved with modification (Attached) ____ Not Approved



WEST TEXAS A&M UNIVERSITY

**ACADEMIC AND RESEARCH
ENVIRONMENTAL HEALTH AND SAFETY**

Index No. AR-EHS-0030
Page No. 48 of 48
Issue No. 1
Date: April 16, 2012
Document Sponsor Academic and
Research EH&S

WTAMU Institutional Animal Care and Use (Non-Agricultural Use)

Appendix E IACUC Letter of Approval

MMDDYYYY

P.I
Address
Canyon, TX 79016

We are pleased to inform you that your application # _____ submitted to the West Texas A&M University Institutional Animal Care and Use Committee (IACUC) for your study titled, "TITLE", has been reviewed and found to meet the requirements found Animal Welfare Act and the Health Research Extension Act of 1985 and WTAMU Standard Operating Procedure ES0-033 Institutional Animal Care and Use (Non-Agricultural Use) and approved by the WTAMU IACUC. This approval is extended to you for one year. Should data collection proceed past one year, or should you make changes in the methodology as it affects animal subjects, you must resubmit the study to the IACUC. The WTAMU IACUC will conduct a compliance review, on or before six months, to evaluate your compliance with the approved plan and requirements under the referenced laws, regulations and policies.

Thank you for your cooperation with the IACUC and we wish you well with your research project.

Sincerely,

Dr. Angela Spaulding, Chair WTAMU IACUC
Dean, Graduate School and Research