



THE UNIVERSITY OF TENNESSEE
Institutional Animal Care and Use Committee
Performance Standard

Post-Weaning Pig Housing in (b) (7) (F)

IACUC Reviewed and Approved: 4/5/2022

1.0 Scope and Application

According to *The Guide for the Care and Use of Laboratory Animals* (8th Edition)¹ “Performance standard means a standard or guideline that, while describing a desired outcome, provides flexibility in achieving this outcome by granting discretion to those responsible for managing the animal care and use program, the researcher, and the IACUC. The performance approach requires professional input, sound judgment, and a team approach to achieve specific goals. It is essential that the desired outcomes and/or goals be clearly defined and appropriate performance measures regularly monitored in order to verify the success of the project. Performance standards can be advantageous because they accommodate the consideration of many variables (such as the species and previous history of animals, facilities, staff expertise, and research goals) so that implementation can be best tailored to meet the recommendations in the Guide.”

Swine are housed at (b) (7) for multiple purposes, including use for instruction in undergraduate courses in swine management and for both AWA and non-AWA covered studies. *The Guide for the Care and Use of Laboratory Animals* (8th Edition) states “there is no ideal formula for calculating an animal’s space needs based only on body size or weight” and this should be considered when adopting the species-specific guidelines provided in *The Guide*. In congruence with the “must” statement in *The Guide*, this “Performance Standard for Swine Housing” ensures that, at a minimum, animals must have enough space to express their natural postures and postural adjustments without touching enclosure walls or ceiling, be able to turn around, and have ready access to food and water. In addition, there must be sufficient space to comfortably rest away from soiled areas. To allow flexibility in housing accommodation while ensuring the welfare of the animals, the following minimums for housing density may be applied to research and teaching studies housing swine in floor pens (b) (7). This Performance Standard does not apply to sows and piglets housed in farrowing crates or newly weaned piglets housed in floor pens in the sow room (Protocol 1756 “Sow and Pig Care for ANSC 250, 483, and 493”) prior to sale or transfer to another research or teaching protocol.

2.0 Summary of Method

Swine (ranging from weanling piglets to swine up to an average of 35 kg) are typically housed in 8’ x 8’ floor pens in the (b) (7) facility. Animals are monitored for health and well-being at least twice daily by facility staff or study personnel. Food and water is provided ad libitum unless otherwise stated in the IACUC-approved protocol. Based on recommendations provided in *The Guide* and the *Guide for the Care and Use of Agricultural Animals in Research and Teaching* (Ag Guide, 4th ed.)² animals up to 40 kg may be housed at a minimum density of 5.3 square feet per animal or a total of no more than 12 animals per 8 x 8 pen for a period of up to 12 weeks. Typically the census decreases by 6 animals per pen on a weekly basis as pigs are removed for use in studies, thus housing density decreases over time. If animals exceed 40 kg, housing density will be decreased to no more than 8 pigs per enclosure (8.0 square feet per animal).

Veterinary evaluation has confirmed that the growth and behavior of young swine housed under these conditions meets the Performance Standard for Swine Housing described above.

3.0 References

1. National Research Council. 2011. Guide for the Care and Use of Laboratory Animals: Eighth Edition. Washington, DC: The National Academies Press.
2. Guide for the Care and Use of Agricultural Animals in Research and Teaching (Ag Guide). 2020 Fourth Edition. Champaign, IL: American Dairy Science Association, the American Society of Animal Science, and the Poultry Science Association