

NOV 02 2016

Column E Explanation

This form is intended as an aid to complete the Column E explanation. It is not an official form and its use is voluntary. Annual Reports and explanations should NOT include PII information such as names (principal investigators and research staff), addresses, protocols, meeting notes (either in part or in full), the animals room numbers, grant information, veterinary care programs, and the like. A Column E explanation must be written so as to be understood by lay person as well as scientists.

1. Registration Number: 33-R-0113
2. Number 160 of animals used in this study.
3. Species (common name) Chinchilla of animals used in this study.
4. Explain the procedure producing pain and/or distress. Explanations should include a brief description of the procedure, but also explain what the animal's experience, examples of which may include, but are not limited to: Neurological signs, seizures, tremors, paralysis, lethargy, inappetence, respiratory signs, GI distress, vomiting, and diarrhea.

Animals were subjected to noise exposure in a sound booth. The noise exposure was one of two types for each animal; none received both. One exposure was of 6 hours duration with the noise centered at 4 kHz and generated by a TDTGNS 40x white noise generator. Each animal was exposed at a level of 105 dB SPL for the 6 hours. The other exposure was an impulse noise exposure that consisted of 155 dB SPL impulse noise repeated 150 times over a 75 second time period.

5. Attach or include with the reason(s) for why anesthetics, analgesics and tranquilizers could not be used. (For federally mandated testing, see Item 6 below).
The chinchillas experienced noise exposure. Sedation was not used because levels of sedation cannot be adequately monitored during the noise exposure without violating the chamber and thus the exposure. In addition, as this study was a continuation of previous work where sedation was not used, the ability to make scientific comparisons would be jeopardized by the addition of a new variable. Sedation can deactivate acoustic reflexes of the middle ear and alter noise exposure in an unpredictable manner. The noise exposure was considered possibly unpleasant but not so distressing as to warrant the risks associated with sedation. This model mimics the human model in which humans exposed to this level of noise do not receive sedatives.

6. What, if any, federal regulation require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g. APHIS, 9 CFR 113.102):

NA

Agency _____ CFR _____