

DEC 01 2011

### Column E Explanation

This form is intended as an aid to completing the Column E explanation. It is not an official form and its use is voluntary. Names, addresses, protocols, veterinary care programs, and the like, are not required as part of an explanation. A Column E explanation must be written so as to be understood by lay persons as well as scientists.

1. Registration Number: **22-V-0003**

2. Number \_\_\_\_\_ of animals used in this study: **28**

3. Species (common name) \_\_\_\_\_ of animals used in the study: **Hartley guinea pigs**

4. Explain the procedure producing pain and/or distress.

The animals are exposed to very loud sound stimuli (up to 145 dB) and/or exposed to 100, 10-ms electrical stimulations of the orbicularis muscle (per training session) that causes these muscle to contract (eliciting an unconditional blink – which is required for eyeblink conditioning).

5. Provide scientific justification why pain and/or distress could not be relieved. State methods or means used to determine that pain and/or distress relief would interfere with test results. (For Federally mandated testing, see Item 6 below)

Although these stimuli may be momentarily painful and aversive, they are either extremely very short in duration (10 ms) despite multiple presentations (eyeblink) or involve a single 4 min maximum duration exposure. In both cases, an awake behaving animal is required because anesthesia will not allow for the behavior to be emitted (eyeblink procedure) and will influence how the cochlea hair cells respond to the sound stimuli.

6. What, if any, federal regulations require this procedure? Cite the agency, the code of Federal Regulations (CFR) title number and the specific section number (e.g., APHIS, 9 CFR113.102):

Agency \_\_\_\_\_ CFR