ATTACHMENT 1: APHIS Form 7023 Site Information for FY 2018
Registration Number: 58-R-0007
Customer ID Number: 872

Category E Explanation   **1 9 NOV 2018**

1. **Number of animals used Category E in this study:**

    70 Albino Guinea Pigs

2. **Explain the procedure producing pain and/or distress. What is the explanation for why anesthetics, analgesics and tranquillizers could not be used?**

    This study involves establishing a dose response curve and a time course of increased acetylcholinesterase expression following injection of (b) (4) peptide in mice. The experiments are designed to mimic precisely the conditions of (b) (4) exposure that humans have and will experience. The investigator is developing a novel therapeutic procedure for rescuing people from (b) (4) exposure and it is essential to demonstrate that the (b) (4) peptide can both protect and rescue mammals from (b) (4) exposure. The animals experience neurological signs that humans would under the same conditions. The DFP, or any other (b) (4) would have a different effect on an anesthetized animal and, more importantly, it would not be possible to visually observe the endpoint. Unfortunately there are no pre-death endpoints that can reliably predict death from (b) (4)