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: 52-R-0007
- 2. Number of animals used in this study: 21
- 3. Species (common name) of animals used in the study: rhesus monkeys
- 4. Explain the procedure producing pain and/or distress.

Twenty one rhesus monkeys were used as part of our program to evaluate drug dependence liability of new compounds. These rhesus monkeys are physically dependent on morphine. Periodically, they are allowed to go into spontaneous withdrawal, or withdrawal is precipitated by opioid antagonists. During this short period of time they experience moderate to severe stress. Once in withdrawal, the monkeys are injected with the investigational compound, or morphine, or saline and then observed to assess their withdrawal state. On completion of the observation period, all withdrawal signs and symptoms are relieved by an injection of morphine. It is important to note that while these experiments are repetitive in nature, a new investigational chemical is being tested on each occasion. Many of these chemicals are opioid in nature and quickly relieve the withdrawal signs and symptoms.

 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 the test results. (For federally mandated testing, see Item 6 below).

The distress produced by this procedure is the end-point being measured. As indicated above, many of the compounds being tested quickly relieve these symptoms. The experiment is terminated immediately after the observation period by the administration of morphine which also relieves the withdrawal signs.

 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 CFR 113.102)

The results from our testing are used by both the FDA and the DEA in making decisions concerning the Controlled Substances Act.