



TECHNICAL FILE

C-1516

E. I. DU PONT DE NEMOURS AND COMPANY
Haskell Laboratory for Toxicology
and Industrial Medicine
P.O. Box 50, Elkton Road
Newark, Delaware 19714-0050

DU PONT CENTRAL RESEARCH AND DEVELOPMENT

cc: M.S. Bogdanffy

June 19, 1992

Timothy S. Bingman, D.A.B.T.
Engineering Function, Du Pont
1370 Washington Pike
Bridgeville, PA 15017

Dear Tim:

Sorry for delay in not getting back to you. Following are my comments on the proposal entitled, "Bioavailability of Lead: Selection of Dosing Methods and Animal Model from Soil", by J.B. Henegham and N. Misllea.

Phase I:

Since this is an approach to examine several variables, it is unclear why five different lead concentrations are needed; three would be sufficient. A similar approach should be used for the controlled chemical variable studies.

Task 2:

In this case, animals would receive the three dose levels. Analysis for lead would take place on the high and low samples, and if a difference occurred then it would be worthwhile to analyze the mid-dose group.

Task 3:

Animal model variation study: there is a need to provide adequate details in the section including the lead dose(s), number of animals, reason(s) for selecting the time course identified, and how the information in Task 2, controlled chemical variables studies, fit into its design.

Page 2

June 19, 1992

Another item is the animal species issue. The justification for pigs, if selected, for the species of choice could limit the expansion of these studies since it is unlikely that the same number of experiments could be performed in the same time or economic frame as with rats. In addition, if additional studies would be needed, the limited number of facilities which could handle these animals could impact the efficiency of such a study. With this in mind, consideration of a pig to rat conversion or scaling effort would allow the work to be conducted in rats without loss of data collected on the pigs. Also, costs of use and disposal of contaminated pigs could require funds that could otherwise go to experiments with rats.

If you would like to discuss this further, don't hesitate to call me.

Yours truly,



Neil D. Krivanek
Staff Toxicologist

NDK:jmg

DUP040011290