UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

August 10, 1977

CASWELL FILE

SUBJECT:

Sergeant's Sentry IV Flea & Tick Collar for Cats EPA File Symbol 778-UE Caswell # 586, 508

FROM:

Toxicology Branch Registration Division

TO:

Franklin Gee Product Manager # 16

## Recommendations:

The following studies and information are required in order to assess the hazard associated with the proposed use pattern:

- 1. Acute oral  $LD_{50}$  formulation
- 2. Acute dermal  $LD_{50}$  formulation
- 3. Skin sensitization each active
- 4. Teratology each active
- 5. Neurotoxicity each active
- 6. Subacute dermal cat study; submission of the following:
  - organ weights & organ body weight ratios
  - histopathology
  - daily records with respect to animal behavior and dermal irritation

## Review:

1. Toxicological Evaluation of Antiflea Collar in Cats - (International Research and Development Corporation, Report # 77-25, 3/11/77, Acc. # 227632, submitted by Miller-Morton Co. on 4/12/77).

Twelve male and twelve female mixed breed cats, weighing 1.90-5.25~kg(M), 2.35-3.30~kg(F), were divided into 4 groups of 6 animals (3M + 3F) each. Cats were dewormed as necessary and vaccinated against feline distemper and rabies. Group designations for the study were:

Group		Number of Collars Worn
I		l - placebo
II		1 - active
III		2 - active
Ï۷	* * * * * *	4 - active

The antiflea collars were supplied by A. H. Robbins and were identified as "No. 21, D-2882, LS 26422, Cat, 6-18-76." Collars were worn for 16 consecutive weeks. Cats were observed daily for changes in general behavior and local irritation around the neck area. Body weights were recorded weekly. The following parameters were measured initially, at week 2, 4, 8, 12 and 16 (termination).

## **Hematology**

Hb WBC RBC

PCV Differential WBC

Biochemistry

Glucose BUN SGOT

Alkaline Phosphatese

Urinalysis

Volume pH Specific Gravity

Color Appearance Albumin

Glucose Bilirubin Occult Blood

Microscopic Exam

Plasma and RBC ChE activities were determined initially, at 3 and 7 days, at week 2, 3, 4, 5, 6, 7, 8, 12 and 16.

## Results:

Analysis of the data cannot be completed at this time due to the absence of the following data:

- organ weights and organ body weight ratios
- histopathology
- daily records with respect to animal behavior and dermal irritation.

William Treear William Greear

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