7-12-89

IRB BRANCH REVIEW - TSS

Record Number(s)

246690

IN 6/16/89 OUT 7/12/89

EFFICACY

FILE OR REG. NO. 35975-4

PETITION OR EXP. PERMIT NO.

DATE DIV. RECEIVED 6/14/89

DATE OF SUBMISSION 6/7/89

DATE SUBMISSION ACCEPTED 6/16/89

TYPE PRODUCTS(S): I, D, H, F, N, Rx S

DATA ACCESSION NO(S). none

PRODUCT MGR. NO. 16

PRODUCT NAME(S) SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR

COMPANY NAME Montana Department of Livestock

SUBMISSION PURPOSE provide report on use of collar in Montana in 1988

CHEMICAL & FORMULATION 1.04% Sodium Fluoroacetate solution in Livestock Protection Collar

1/3

Efficacy Review: SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR, 35975-4
Montana Department of Livestock (MDL)
Helena, MT 59620

200.0 INTRODUCTION

200.1 Uses

A 1.09% Sodium Fluoroacetate (Compound 1080) solution enclosed in a two-pouched rubber vessel which is attached to Velcro^{R} bands which hold the pouches in place in the throat regions of sheep or goats subject to predatory attacks by coyotes. For use only in Montana.

200.2 Background Information

See efficacy reviews of 9/30/86, 4/21/87, and 5/21/87, along with other information in product jacket. The current submission consists of a report on the use of the collar in Montana in 1988.

201.0 DATA SUMMARY

The report consists of a series of ten questions, each of which is followed by 1-3 answering sentences. Responding to the ninth question, MDL states

> "The use of LP Collars in Montana was too limited to make meaningful conclusions on parameters that affect the effectiveness on the collars."

As this conclusion succinctly summarizes the value of the information contained in the report, I will refrain from lengthy discussion of the data in this review. Instead, I will summarize the results briefly.

MDL reports that its toxic collar was purchased by only six applicators in only three counties. These persons purchased a total of 45 collars for an average of 7.5 collars per applicator. These collars were used in the field for 1185 collar days for an average of 26.3 days per collar. Two collars and the sheep wearing them were lost. Three collars were detected as having been punctured. All of these were thought to have been punctured by coyotes. One dead coyote was found that was suspected of having been taken by a collar. This coyote had stained teeth suggesting the presence of the marker dye (Rhodamine B) that is used in toxic collar solution. No nontarget species were found that were thought to have been taken by the collar.

As 5 collars (11% of the total used) were reported to have been either lost or punctured by coyotes, it appears that 40 collars (89%) were intact in known locations at the end of 1989. The report does not state that such was the case, however.

Each lost or punctured collar was said to have met its fate within its first week of deployment.

MDL notes that disposal of punctured collars was performed according to use restrictions and took place on applicator's properties. No incidents of misuse were reported.

It appears that some very small target flocks were used in Montana in 1988. MDL notes that 2 of the 3 collars punctured were on animals in target flocks of less than 10 animals. If such flocks were comprised of collared lambs and their (uncollared) mothers, the total number of collars in a target flock of less than 10 animals could not have exceeded 6 (three sets of twin lambs).

202.0 CONCLUSIONS

Collar use in Montana in 1988 was too limited to permit evaluation of the success of MDL's program. MDL might be asked whether it detected any incidents of use contrary to labeling (particularly contrary to the "USE RESTRICTIONS"). MDL should be requested to provide data obtained from individual sites in addition to summarized results. The current report presents no data regarding what occurred at individual sites. While totals and averages are useful, they do not tell the entire story.

William W. Jacobs
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July 12, 1989