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12-21-88

IRB BRANCH REVIEW - TSS

Record Number(s)

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IN 12/2/88 ^{CUT} 12/21/88

EFFICACY

FILE OR REG. NO. 39508-2

PETITION OR EXP. PERMIT NO. _____

DATE DIV. RECEIVED 12/2/88

DATE OF SUBMISSION 9/7/88

DATE SUBMISSION ACCEPTED 12/2/88

TYPE PRODUCTS(S): I, D, H, F, N, R, ^xS _____

DATA ACCESSION NO(S). none

PRODUCT MGR. NO. 16

PRODUCT NAME(S) SODIUM MONOFLUOROACETATE (COMPOUND 1080) IN THE LIVESTOCK PROTECTION COLLAR

COMPANY NAME New Mexico Department of Agriculture

SUBMISSION PURPOSE Evaluation of certification and training program

CHEMICAL & FORMULATION 1.04% Sodium Monofluoroacetate (Compound 1080) in Livestock Protection Collar

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Efficacy Review: SODIUM MONOFLUOROACETATE (COMPOUND 1080) IN THE LIVESTOCK
PROTECTION COLLAR, 39508-E
New Mexico Department of Agriculture
Las Cruces, NM 88003

200.0 INTRODUCTION

200.1 Uses

A 1.04% Sodium Monofluoroacetate (Compound 1080) solution enclosed in a two-pouched rubber vessel which is attached to Velcro bands which hold the pouches in place in the throat regions of sheep or goats subject to predatory attacks by coyotes.

200.2 Background Information

See efficacy reviews of 3/21/88 and 10/21/88, along with EPA's letters of 4/11/88 and 11/4/88. The submission under review is a package from the Certification and Training Branch. All of the items in this package were included in the package that was the subject of the efficacy review of 10/21/88. The comments from that review were relayed to NMDA in EPA's letter of 11/4/88 except for those pertaining to the applicator certification examination. Comments on the examination are more appropriately addressed in a review of the certification program.

201.0 DATA SUMMARY

See efficacy review of 10/21/88. The comments from that review with regard to the certification examination are repeated below under "CONCLUSIONS".

202.0 CONCLUSIONS

1. We take issue with the correctness of the answers given in the key for your applicator certification test for the following items:

a. Multiple Choice Item 7

As Compound 1080 is highly soluble in water, it is also true that 1080 is "not insoluble in water".

b. Multiple Choice Item 17

We suspect that price of collars (about \$16-20 each) and availability of labor for moving and collaring sheep would be important factors, along with the feasibility of alternate control methods, to be considered before deciding to use the collar. Therefore, we believe that "D. All of the above" is the best answer for this item.

c. Multiple Choice Item 18

The answer ("Bury immediately") given as correct for this question is contradicted by your label which states

"Return damaged, irreparable and/or leaking collars to the New Mexico Department of Agriculture at Las Cruces for disposal."

d. Multiple Choice Item 27

The LD₅₀ of 1080 for the coyote is about 0.12 mg/kg body weight, with the LD₉₉ probably being below 0.20 mg/kg body weight. A 30-pound coyote has a mass of about 13.5 kg. One cc of collar solution should have a mass of about 1 gram (or 1000 mg) as the solution is primarily water. It would take about 1.6 mg of 1080 to kill a typical 30-kg coyote and probably less than 3 mg each to kill virtually all 30-kg coyotes. As the solution is about 1% 1080, each cc should contain 10 mg of 1080, or enough to kill several 30-kg coyotes. The answer given as correct for this item actually corresponds to the total amount of solution in a small collar.

e. Multiple Choice Item 32

The answer in the key is clearly wrong as use of collars is prohibited in open range (restriction 8).

f. True or False Item 52

Use restriction 2 permits use of collars by noncertified applicators if done under the direct supervision of a certified applicator.

William W. Jacobs
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