157761
RECORD NO.

SHAUGHNESSEY NO. REVIEW NO.

EEB REVIEW

DATE: IN 09/09/85 OUT 1-22-91

FILE OR REG. NO 49849-EUP-1

PETITION OR EXP. NO

DATE OF SUBMISSION: 8-22-85

DATE RECEIVED BY EFED: 9-5-85

RD REQUESTED COMPLETION DATE: 11-22-85

EEB ESTIMATED COMPLETION DATE: 11-22-85

RD ACTION CODE/ TYPE OF REVIEW: 743

TYPE PRODUCT(S): Rodenticide

ACCESSION NUMBER(S):

PRODUCT MANAGER: Miller (16)

PRODUCT NAME(S): Compound 1080

COMPANY NAME: USDA, Forest Service

PURPOSE OF SUBMISSION: Submission of Efficacy Data for two lower concentrations of 1080

SHAUGHNESSEY NO.	CHEMICAL AND FORMULATION	%A.I.

ECOLOGICAL EFFECTS BRANCH

100.0 Purpose of Submission

The United States Department of Agriculture (USDA) has submitted a draft final report for the study titled, "Efficacy of Two Lower Concentrations of 1080 Bait, 0.022% and 0.035%, Compared to the Standard 1080 Bait, 0.112%, for Controlling Black-tailed Prairie Dog Populations." The study was conducted under Experimental-Use Permit No. 49840-EUP-1. The study was initiated to determine if reduced bait concentrations would be efficacious in controlling (i.e., at least a 90% reduction in the pest population) the numbers prairie dogs.

101.0 Study Results

The following is the abstract provided with the study:

" A radio telemetry study was conducted in South Dakota during the fall of 1984 on black-tailed prairie dogs (Cynomys ludovicianus) to compare the efficacy of two lower concentrations of 0.022% and 0.035% to the standard concentration 0.112% on sodium fluoroacetate (1080) bait. Starting on September 1984, transmitters were attached to 176 prairie dogs on 15 treated plots and on five control plots. Prairie dog movements were monitored before, during and after treatment. Pretreatment, black-footed ferret (Mustela nigripes) surveys were conducted on each plot but no evidence of black-footed ferrets was observed. Of the 151 prairie dogs with functional transmitters at the time of treatment, 126 were recorded dead, one survived, and the remaining 24 were presumed killed by treatment. Most prairie dogs died underground. All 20 radio-equipped prairies dogs on the control areas survived treatment, one lost its transmitter 4 days posttreatment, and the rest were active daily on the surface 8-11 days posttreatment. Telemetry efficacy estimates for the 1080 treatment levels 0.022%, 0.035% and 0.112% were 100%, 100% and 98%, respectively. Closed hole activity estimates indicated no significant differences between the three 1080 treatment levels..."

102.0 Adequacy of the Study

The EEB believes the study was done in accordance with good field study procedure and is indicative of the efficacy of the lower bait concentrations.

103.0 Conclusions

The EEB has completed a cursory review of the submitted study and believes that the results are indicative of the