

US EPA ARCHIVE DOCUMENT

9/29/82

CASE NO. 92

NALED

PN 115 12/22/81

REF: 034401

also (1,2-difluoro-2,2-dichloroethyl) o

BRANCH EEB - DISC 4 TOPIC 51 3540

FURTHER INFORMATION - RELATIONSHIP NOT IDENTIFIED

FIGURE/PLATE IN 00074679

CONTENT CAT 1

Goode, J.F.; White, A.C.; Cartney, S.; et al. (1967) Field Observations on the Effects of Ultra-low Volume Application of Dieldrin on Fish and Wildlife in South Florida. (Unpublished study received Nov 14, 1967 under unknown appn. no.; prepared in cooperation with U.S. Fish and Wildlife Service, Div. of Fishery Services and Div. of Wildlife Services and U.S. Dept. of the Air Force, submitted by Chevron Chemical Co., Richmond, Calif.; OPL:128668-4)

SUBST. CLASS = 6.

OTHER SUBJECT DESCRIPTIONS

PRIM: EEB -55-75154

SEC: EEB -40-513541

EEB -40-513542

EEB -40-513543

EEB -40-513545

EEB -40-513547

DIRECT RVT (LSE) =

(PH) START DATE

END DATE

REVIEWED BY: *Kyle Barbehead*

TITLE: *Wildlife Biologist*

ORG: *HEB-EEB*

LOC/TEL: *OML-1121/557-1121*

SIGNATURE: *[Signature]*

DATE: *29 Sept 82*

APPROVED BY:

TITLE:

ORG:

LOC/TEL:

SIGNATURE:

DATE:

BEST AVAILABLE COPY

DATA EVALUATION RECORD

1. Chemical: Naled
2. Formulation: Ortho Dibrom 14
3. Citation: Goode, J.P.; White, A.C.; Carter, E.; et al. (1967) Field observations on the Effects of Ultra-low volume Application of Dibrom on Fish and Wildlife in South Florida. (Unpublished study received Nov. 14, 1967 under unknown admin. no.; prepared in cooperation with U.S. Fish and Wildlife Service, Div. of Fishery Services and Div. of Wildlife Services and U.S. Dept. of the Air Force, submitted by Chevron Chemical Co., Richmond, Calif.; CDL: 128668-A) I.D.#00074679.
4. Reviewed by: Kyle Barbehenn, Wildlife Biologist
Ecological Effects Branch
Hazard Evaluation Division (TS-769)
5. Date reviewed: September 28, 1982
6. Test type: Field study
7. Reported results: "On the basis of this test, it is concluded that ULVC Dibrom, applied at the rate of 0.6 ounces per acre, will not significantly affect either fish or wildlife of the type found in the test area.
8. Reviewer's Conclusions: Within the limitation of the study, the author's conclusions appear to be reasonable. This study does not fulfill any guideline requirements for naled.

Materials/Methods

Test Procedures: A ULV aerial application of 0.6 oz Dibrom 14/acre (0.06 lb. ailed) was made in an area of mangrove, marshes and poorly drained land in South Florida. Application to the area was verified by chemical sensitive cards but the actual amount reaching the surface was not determined. A brief pre-treatment survey of fish and wildlife was made by a variety of nonquantitative methods. Fish and rodents were collected before and after treatment for determination of brain cholinesterase levels.

Statistical Analysis: N/A

Discussion/Results: Observations immediately after application were limited to about an hour before darkness and overnight flushing of tidal creeks and scavenging by crabs could have reduced evidence of mortality. Four fingernail-size blue crabs were found dead in a shallow area but there was no other evidence of mortality to aquatic insects, fish, birds, or mammals. A slight increase in brain cholinesterase levels was found in both fish and rodents but the significance of this is unknown.

Reviewer's Evaluation:

Procedure: The methods used should have sufficed to detect any massive mortality.

Statistical Analysis: N/A

Discussion/Results: The conclusions regarding fish, birds and mammals are probably reasonable but there remain some uncertainty regarding effects on crustaceans. Since the amount of pesticide deposited is unknown, one can not judge how typical this application was and the ability to extrapolate is limited.

Conclusions:

Validation Category: Supplemental

Category rationale: Some useful information was gained but the study is not comprehensive.

Category Repairability: None