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6/12/86

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SHAUGHNESSEY NO.

REVIEW NO.

EEB REVIEW

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FILE OR REG. NO GEN/GRRES

PETITION OR EXP. NO.

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RD ACTION CODE/TYPE OF REVIEW 350

TYPE PRODUCT(S) : I, D, H, F, N, R, S Insecticide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. G. Otakie/W. Miller (16)

PRODUCT NAME(S) Naled (Dibrom)

COMPANY NAME Adirondack Park Agency/State of New York

SUBMISSION PURPOSE Ecological questions from Adirondack Park Agency; primarily concerns wetlands labeling

SHAUGHNESSEY NO. CHEMICAL, & FORMULATION % A.I.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

12 JUN 1986

MEMORANDUM

SUBJECT: Response to questions submitted by the Adirondack Park Agency concerning the insecticide Naled.

FROM: Thomas M. Armitage, Fisheries Biologist
Ecological Effects Branch
Hazard Evaluation Division (TS-769-C)

Thomas M. Armitage
6-11-86

THRU: Raymond W. Matheny, Head-Section 1
Ecological Effects Branch
Hazard Evaluation Division (TS-769-C)

Raymond W. Matheny
6-11-86

THRU: Michael W. Slimak, Chief
Ecological Effects Branch
Hazard Evaluation Division (TS-769-C)

M. Slimak

TO: William Miller, PM16
Registration Division (TS-767-C)

The Ecological Effects Branch (EEB) has reviewed questions submitted by the Adirondack Park Agency concerning use of the insecticide Naled on lands adjacent to wetlands. With one exception (question #5c) all of the submitted questions require legal interpretation of the label statement and EPA's legal definition of wetlands. These questions do not require the provision of scientific information. They should be referred to the Office of General Council.

Question #5c asks for scientific information leading to the conclusion that Naled should not be applied to wetlands. Naled is very highly toxic to fish and aquatic invertebrates. Toxicity data are listed below. Because of its toxicity to non-target organisms inhabiting wetlands, this product should not be applied to these areas. Furthermore, EPA regulations (CFR 49 §158.55 (a)) require a label statement on all pesticides registered for non-aquatic uses prohibiting direct application to water or wetlands.

NALED*

Chemical Name: 1,2-Dibromo-2,2-dichloroethyl dimethyl phosphate

Alternate Names: Bromochlophos, Bromex, CAS 300-76,5, Dibrom, ENT-24988, RE-4355

Principal Use: Insecticide, acaricide

Sample Description: Technical material 90%

SUMMARY OF ACUTE TOXICITY

Test Organism	State or wt (g)	Temp (C)	96-Hr. LC ₅₀ 95% CI (ug/L)
<u>Simocephalus</u>	I ₁	15	1.1 1.0 - 2.1
<u>Daphnia pulex</u>	I ₁	15	0.4 0.2 - 0.8
<u>Asellus</u>	M	15	41
<u>G. fasciatus</u>	M	15	18 16 - 20
<u>Palaemonetes</u>	M	15	92 ^b
<u>Pteronarcys</u>	YC ₂	15	8 6 - 11
Cutthroat Trout	2.3	12	127 ^b 115 - 139
Rainbow Trout	1.5	13	195 126 - 302
Lake Trout	0.3	12	87 53 - 142
Fathead Minnow	1.3	18	3,300
Channel Catfish	5.2	18	710
Bluegill Sunfish	1.4	18	2,200 ^b
Largemouth Bass	0.7	18	1,900 ^b

* From data submitted

a 48-Hr. EC₅₀

b Tested in hard water, 162-272 ppm CaCO₂

NOTE: Naled was about twice as toxic to rainbow trout at 13° C as at 2° C. Toxicity was not affect by variations in water hardness.