190891,190892
RECORD NO.

109301
SHAUGHNESSY NO.

REVIEW NO.

EE BRANCH REVIEW

DATE: IN 03-09-87 OUT 04-08-87

FILE OR REG. NO. 352-485,352-486

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 03/02/87

DATE RECEIVED BY HED 03/06/87

RD REQUESTED COMPLETION DATE 04/06/87

EEB ESTIMATED COMPLETION DATE 04/06/87

RD ACTION CODE/TYPE OF REVIEW 192

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

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. G. LaRocca(15)

PRODUCT NAME(S) Asana(Pydrin)Insecticide
[fenvalerate,esfenvalerate]

COMPANY NAME E.I.duPont deNemours & Company

SUBMISSION PURPOSE Mesocosm protocol review for Asana (esfenvalerate)

SHAUGHNESSY NO.	CHEMICAL & FORMULATION	% A.I.
109301	fenvalerate,esfenvalerate	

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

APR 13 1987

MEMORANDUM

TO: George LaRocca, PM (15)
Registration Division (TS-767)

FROM: Leslie W. Touart, Fisheries Biologist
Section 1

THRU: Raymond Matheny, Head
Section 1

THRU: Michael Slimak, Chief
EEB/HED (TS-769)

SUBJECT: Mesocosm protocol to support "Asana" and "Pydrin"
(EPA Reg. Nos. 352-485, 352-486)

A formal review was not given to the protocol submitted as it lacked pertinent descriptions of intended treatment methods and rates. This information must be present for final acceptance of a protocol. The protocol was reviewed for consistency with EEB's draft guidance document for conducting mesocosm tests and was determined to be quite consistent. The following points will bear consideration in submittal of a final protocol and ultimate conduct of the study:

1) The ponds should develop a natural fauna and flora consistent with aquatic systems in the general area of the test, deficiencies noted during the acclimation phase should be rectified by addition of appropriate organisms in the treatment phase of the test;

2) Bottom sampling with Ekman dredge during the acclimation phase should be scrutinized for possible disruptions to benthic biota;

3) Fertilization must be closely monitored to ensure that eutrophic conditions will be averted in the treatment phase;

2

4) Determinations of treatment rates should make use of available models (i.e., SWRRB, Holst Drift, etc.) and experiential data to arrive at a typical value which will represent all (or at least the predominant) registrations of Asana (Pydrin);

5) High and low treatment levels should be based on the range of expected exposures from minimal to worst case situations, if 10(x) and 1/10(x) are adequate to span the range fine, otherwise different multiples should be considered;

6) Any modifications in the treatment phase methods warranted from observations made in the acclimation phase should be made in consultation with EEB staff.

The protocol has been evaluated and is considered acceptable contingent on agreement of treatment methods and rates.