

029001  
SHAUGHNESSEY NUMBER

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REVIEW NO.

EEB REVIEW

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RD ACTION CODE/TYPE OF REVIEW 740

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

DATA ACCESSION NO(S). 261118

PRODUCT MANAGER NO. H. Jacoby (21)

PRODUCT NAME(S) TELONE II

COMPANY NAME Dow Chemical U.S.A.

SUBMISSION PURPOSE Proposed EUP for use on established turf

grass when applied as a post plant

injection treatment

SHAUGHNESSY NO.

CHEMICAL & FORMULATION

% A.I.

029001

1,3-Dichloropropene

94%

## EEB BRANCH REVIEW

### 1,3-Dichloropropene

#### 100. Submission Purpose and Label Information

##### 100.1 Submission Purpose and Pesticide Use

Proposed EUP to evaluate the use of TELONE II to control plant parasitic nematodes and certain other soil inhabiting pests.

##### 100.2 Formulation Information

1,3-Dichloropropene.....	94.0%
Inerts.....	6.0
	<u>100.0%</u>

##### 100.3 Application Methods, Directions, Rates (As indicated in EPA Accession # 261118)

General Information: Use TELONE II soil fumigant as a post plant soil injection of established turf grass to evaluate control of plant nematodes, white grubs, and mole crickets. Apply TELONE II in accordance with the following directions.

When to Treat: Apply TELONE II at any time of the year when damage by nematodes, white grubs or mole crickets is being experienced. Make no more than 4 applications per year and allow a minimum of 60 days between applications.

Rate and Use Recommendations: Apply by injecting to a depth of 3 to 4 inches. The chisel number may vary from 1 (Stockdale shank with 4 outlets) to 8 (regular shanks with a 12 inch chisel spacing).

Use TELONE II at the rate of 4 to 8 gallons per broadcast acre (41 to 82 fluid ounces per 1000 feet of row per chisel based on a 12 inch chisel spacing).

Sealing: Seal the chisel traces immediately by rolling the turf over the trace. Irrigate the treated area within 1 hour after treatment. Apply a maximum of one-half acre inch of water.

Restrictions: Do not make more than four applications per year. Allow a minimum of 60 days between applications. Do not enter treated areas without heavy synthetic rubber foot gear until 3 days post treatment. Apply when soil temperature is between 40° to 80°F.

Attention: All applicable directions, restrictions and precautions on the EPA registered label for TELONE II soil fumigant are to be followed.

##### 100.4 Target Organisms

Plant parasitic nematodes [root-knot, meadow (lesion), citrus, cyst formers (golden sugar beet, soybean), burrowing, ring, spiral, sting, pin, stubby root, stylet, dagger], white grubs (such as the Japanese beetle) and mole crickets (such as the southern, tawny, and short winged mole cricket).

100.5 Precautionary Labeling

The federally registered TELONE II label bears the following environmental hazards statements: "This product is toxic to fish and wildlife. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes."

101 Hazard Assessment

101.1 Discussion  
(As indicated in EPA Accession # 261118)

Dichloropropene is presently registered as pre-planting soil fumigant for nematode, insect, disease, and weed control. It is recommended on a variety of crops such as vegetables, field crops, citrus, deciduous fruits and nuts, brush and vines, and nursery crops (Farm Chemicals Handbook, 1981).

TELONE II soil fumigant is to be evaluated for the control of certain plant parasitic nematodes, white grubs, and mole crickets. Applications will be made using conventional soil fumigation equipment with injection shanks to apply the chemical to the soil below the turfgrass. Applications will be made whenever damage from the above pests is being experienced but no more than 4 applications per year. There will be a minimum of 60 days between treatments. Dosage rates of 4 to 8 gallons per broadcast acre will be evaluated. Each treated "hole" will serve as a replicate.

The pesticide will be used in the states of Florida, Georgia, North Carolina and South Carolina. In each state, one golf course will be selected for treatment. The area to be treated on each course will vary from a minimum of 4 to 6 fairways and greens to a maximum of the entire course. Due to the variable nature of each "hole" on each course, the size of an individual fairway/green is expected to range from 50 x 150 yards to 50 x 700 yards. The total area to be treated will not exceed 100 acres per state.

Justification for the quantity (12,800 gallons) of TELONE II soil fumigant requested is based strictly on the need to have sufficient material to carry out the proposed experimental program. In making this determination, consideration was given to the maximum acreage to be treated (400 acres), the maximum number of applications to be made (4), and the maximum amount of chemical that may be applied per acre (8 gallons). The objective of this experimental program is to evaluate TELONE II soil fumigant under commercial conditions to control certain pests of turf and to evaluate any phytotoxicity potential to the grass. In addition, there will be studies done to monitor worker (applicator) exposure and to collect data on dislodgeable residues. It is expected that this program will take two years to complete the data collection and at that time sufficient information will be available to submit for registration.

Any unused material remaining at the conclusion of this experimental program will be disposed of according to label directions, or used according to the federally registered label.

#### 101.2 Likelihood of Adverse Effects to Non-Target Organisms

The Dichloropropene Registration Standard EEB memorandum dated August 30, 1985 references acceptable studies for use in making non-target avian and aquatic hazard assessments. The available toxicological data indicated that dichloropropene is of low toxicity to birds and moderate toxicity to fish. The method of application, i.e. injection into the soil and sealing of the chisel traces, would further reduce the minimum possible effects of the EUP. Therefore, the likelihood of harmful exposure of this pesticide to non-target organisms are improbable.

#### 101.3 Endangered Species Considerations

Because of the low toxicity of dichloropropene, the method of application and limited test acreage, no adverse impact on endangered species is expected.

#### 101.4 Adequacy of Toxicity Data

No data was submitted with this EUP application. Section C of the EUP application, assigned under EPA Accession # 261118, provides a summary of previously submitted toxicity data in support of TELONE II. The pending Dichloropropene Registration Standard, as indicated in EEB's memorandum dated August 30, 1985 will not require additional data.

#### 101.5 Adequacy of Labeling

The EUP labeling is supplemental to the federally registered TELONE II label. It bears the current appropriate environmental hazards language, including the statement prescribed by the Dichloropropene Registration Standard EEB memorandum dated August 30, 1985, "Do not contaminate water by cleaning of equipment or disposal of wastes". The memorandum indicates that fish and avian toxicity statements will not be required. Therefore, the TELONE II fish and wildlife toxicity statements may be deleted by the registrant after the issuance of the Dichloropropene Registration Standard in order to bring labeling into proper compliance.

#### 102 Classification

Based upon current evaluations of non-target avian and aquatic toxicity data, there are no present reasons to reclassify or restrict the use of TELONE II.

#### 103 Conclusions

The Ecological Effects Branch has determined that this proposed EUP will not pose any significant adverse problems to non-target organisms. Therefore, EEB concurs with this EUP action.

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