Shaughnessy No.: 029001

Date Out of EAB: 6/22/87

JUN 22 1987

To: Robert Forrest
Product Manager #21
Registration Division (TS-767)

From: Emil Regelman, Supervisory Chemist
Review Section #3
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

Attached, please find the EAB review of...

Reg./File # : 1

Chemical Name: 1,3-Dichloropropene

Type Product : Nematicide/Fungicide/Insecticide/Herbicide

Product Name : Telone II

Company Name : Dow Chemical Company

Purpose : Addendum to a Standard. Review of field dissipation study.

Action Code(s): 400 EAB #(s) : 70111

Date Received: 9/16/86 TAIS Code: 62

Date Completed: 6/19/87 Total Reviewing Time: 2 days

Monitoring requested: _____

Monitoring submitted: _____

MRID 00[illegible]

Deferrals to: _____ Ecological Effects Branch

_____ Residue Chemistry Branch

_____ Toxicology Branch

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1. CHEMICAL: Common name:

1,3-Dichloropropene

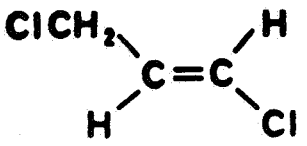
Chemical name:

1,3-Dichloropropene

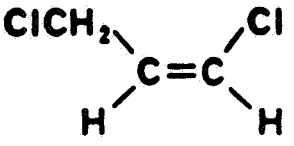
Trade name(s):

Telone II Soil Fumigant

Structure:



(trans)



(cis)

Formulations:

94% Ready to use (RTU)

Physical/Chemical properties:

Molecular formula: $C_3H_4Cl_2$.
Molecular weight: 111.
Physical state: Colorless to straw-colored liquid.
Vapor pressure: 22 mm Hg at 20°C.
Solubility: Water - 0.1%.

2. TEST MATERIAL:

Telone II, formulation unspecified.

3. STUDY/ACTION TYPE:

Review of(1) Field dissipation; and, (2) Ancillary well water studies to satisfy data requirements for 1,3-Dichloropropene Registration Standard.

4. STUDY IDENTIFICATION:

Oliver, G.R., E.L. Bjerke, and F.C. O'Melia. 1986. Field dissipation study for Telone II soil fumigant. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 264183.

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5. REVIEWED BY:

Padma Datta, Ph.D.
Chemist
Review Section #3
EAB/HED

Signature: PRDatta

Date: 6/19/87

6. APPROVED BY:

Emil Regelman
Supervisory Chemist
Review Section #3
EAB/HED

Signature: E. Brinson Conerly for E. Regelman

Date: 6/22/87

7. CONCLUSION:

The data submitted for the terrestrial field dissipation study are not adequate to support the registration of Telone II (1,3-dichloropropene) for the following reasons: (1) an unspecified formulation of Telone II was used; (2) the rate of application of active ingredient is unclear (407 kg of 1,3-dichloropropene/hr); (3) incomplete field test data were submitted; (4) inadequate data were provided on the characteristics of the soil used; (5) pH data of soils were not reported; and (6) temperature data were reported for only the first 28 days of the study. This study in its present form is not acceptable to EAB.

The ancillary study on well-water monitoring provides data from four wells (one well within the test plot and three wells surrounding the plot). These data are inadequate because the formulation of the test substance is not specified and the field tests data are incomplete. Therefore EAB cannot accept this study in its present form.

Both studies appear to be scientifically valid studies; however, the inadequacies of the reported data preclude a full evaluation of their acceptability.

8. RECOMMENDATION:

EAB recommends that the Registration Division request Dow Chemical Co. to provide the following information on the terrestrial study: (a) specification and strength (conc.) of formulation; (b) rate of application in lb ai/A; (c) complete characterization of the soil in the experimental study; and, (d) complete field test data as described in Subdivision N of the Guidelines and 40 CFR §158.130.

Additionally, Dow Chemical Company should provide the following information on the ancillary well water study: (a) identify and specify concentration of the formulation; and, (b) details of the field trial [statistical design, sampling protocol, hydrogeological map of the wells, prior pesticide usage information, criteria measurements (conductivity, pH, temperature, etc.), pumping water volumes prior to sampling (to ensure stable ground water flow in the sampling port), and retroprospective data (to show that contamination via airborne, runoff and spill of the pesticide in question were absent in these selected wells)].

9. BACKGROUND:

A. Introduction

1,3-Dichloropropene has been previously reviewed by Dynamac Corporation in reports dated July 19, 1985 and September 13, 1985.

B. Directions for Use

Dichloropropene is a nematicide/fungicide/insecticide/herbicide registered for preplant application to terrestrial food crop (field and vegetable crop and orchard crop) and terrestrial non-food (nursery stock and tobacco) use sites. Application rates range from 38.3 to 1067.6 lbs ai/A. Dichloropropene is formulated as a single active ingredient only as a 94% RTU. In multiple active ingredient formulations, it may be combined with methyl isothiocyanate, chloropicrin, methyl isothiocyanate plus chloropicrin, and methyl bromide. Dichloropropene may be applied prior to planting by chisel injection into the soil (6-22 inch depth) or pouring a measured amount into a planting hole during backfilling. The specific application technique is determined by use site and equipment availability. Applicators must be certified or under direct supervision of applicators certified to apply dichloropropene.

On July 5, 1984, the Agency sent a special data call in notice for ground water, toxicology, residue and related data for 1,3-dichloropropene. The authority for this notice is under Section 3(c)(2)(b) of FIFRA, 7 U.S.C. Section 136(a)(c)(2)(b) amended 1972. Some of the environmental fate data requirements under §158.130 and the Pesticide Assessment Guidelines, Subdivision N, 40 CFR were included.

On July 29, 1986, Dow Chemical Co. submitted a terrestrial field dissipation study for Telone II soil fumigant (Acc# 264183). This study was submitted in accordance with the 2 year submission schedule. The study was conducted in Parlier, California. An unspecified formulation of Telone II was injected into a depth of 14 inches on 10/29/84 at the rate of 36 gal/A to a fallow field of Delhi sand. After the treatment, several soil samples from various soil depths were analyzed for 1,3-dichloropropene (1,3-D), 1,2-dichloropropane (1,2-D) and 3-chloroallyl alcohol (3-CAA). 1,3-D and 3-CAA dissipated rapidly and moved only to a maximaum depth of 8.9 feet. No residues of 1,2-D were detected in the soil. 1,3-D, 1,2-D, and 3-CAA were not detected in ground water (24-26 feet) directly below the treated site.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:

See attached review of individual study.

11. COMPLETION OF ONE-LINER: N/A

12. CBI APPENDIX:

All data reviewed here are considered "company confidential" by the registrant and must be treated as such.

DYNAMAC
CORPORATION

1,3-DICHLOROPROPENE

Final Report

Task 1: Review and Evaluation of Individual Studies

Task 2: Environmental Fate and Exposure Assessment

Contract No. 68-02-4250

MAY 6, 1987

Submitted to:
Environmental Protection Agency
Arlington, VA 22202

Submitted by:
Dynamac Corporation
The Dynamac Building
11140 Rockville Pike
Rockville, MD 20852

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1,3-DICHLOROPROPENE

Table of Contents

INTRODUCTION

Dichloropropene is a nematicide/fungicide/insecticide/herbicide registered for preplant application to terrestrial food crop (field and vegetable crop and orchard crop) and terrestrial nonfood (nursery stock and tobacco), use sites. Application rates range from 38.3 to 1067.6 lb ai/A. Dichloropropene is formulated as a single active ingredient only as a 94% RTU. In multiple active ingredient formulations, it may be combined with methyl isothiocyanate, chloropicrin, methyl isothiocyanate plus chloropicrin, and methyl bromide. Dichloropropene may be applied prior to planting by chisel injection into a planting hole during backfilling. The specific application technique is determined by use site and equipment availability. Applicators must be certified or under direct supervision of applicators certified to apply dichloropropene.

CASE GS -- 1,3-DICHLOROPROPENE STUDY 1 PM --

CHEM 029001 1,3-Dichloropropene

BRANCH EAB DISC --

FORMULATION 90 - FORMULATION NOT IDENTIFIED

FICHE/MASTER ID No MRID CONTENT CAT 01

Oliver, G.R., E.L. Bjerke, and F.C. O'Melia. 1986. Field dissipation study for Telone II soil fumigant. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 264183.

SUBST. CLASS = S.

DIRECT RVW TIME = 8 (MH) START-DATE END DATE

REVIEWED BY: W. Higgins
TITLE: Staff Scientist
ORG: Dynamac Corp., Rockville, MD
TEL: 468-2500

APPROVED BY: P. Datta
TITLE: Chemist
ORG: EAB/HED/OPP
TEL: 557-9733

SIGNATURE: PRDatta DATE: 6/22/87

CONCLUSIONS:

Field Dissipation - Terrestrial

1. This study is scientifically valid.

2. 1,3-Dichloropropene (Telone II, formulation unspecified), applied at 407 kg/ha, declined from a maximum of 130,000 ppb in the 0.30 to 0.45-m layer of soil immediately after treatment to <10 ppb (detection limit) in any soil layer at 71 days in a field plot of sand soil located in California. The degradate 3-chloroallyl alcohol declined from a maximum of 410 ppb in the 0.66- to 0.81-m layer of soil at 7 days posttreatment to <10 ppb in any soil layer at 71 days.

3. This study does not fulfill EPA Data Requirement for Registering Pesticides because the formulation of the test substance was not specified, the soil was incompletely characterized, and field test data were incomplete.

Ancillary Study - Well-Water Monitoring

1. This study is scientifically valid.

2. 1,3-Dichloropropene (Telone II, formulation unspecified) was <10 ppb (not detected) between 0 and 170 days posttreatment in water from four wells located in and around a field plot of sand soil treated with 1,3-dichloropropene at 407 kg/ha. 1,2-Dichloropropane was <10 ppb in water samples except for two samples taken 1 day pre- and post-treatment which were considered to be contaminated.

3. This study does not fulfill EPA Data Requirements for Registering Pesticides because the formulation of the test substance was not specified, the soil was incompletely characterized, and field test data were incomplete.

MATERIALS AND METHODS:

An orchard field plot (0.35 ha) of Delhi sand soil (Figure 1) near Parlier, California, was treated with 1,3-dichloropropene (Telone II, formulation unspecified, containing 0.2% 1,2-dichloropropane, Dow Chemical Company) at 407 kg 1,3-dichloropropene/ha on October 24, 1984. The treatment was made using injection chisels spaced 45.7 cm apart, and at a depth of 35.6 cm. Soil samples were taken at intervals from 1 day pretreatment to 170 days posttreatment to depths of 8.43 m. Each core segment was ~15 cm in length and ~6 cm in diameter. Samples were frozen until needed.

A 5-cm diameter monitoring well was installed near the center of the test plot 21 days prior to treatment. The well extended to a depth of 17.4 m with perforations from 12.2 to 17.4 m. A 15.2-cm diameter gravel pack was installed around the well. The well was constructed of threaded PVC pipe and was sealed with 9.1 kg of bentonite tablets. A stainless steel bladder-type pump (Model T-1200 Well Wizard, QED Environmental Systems, Inc., Ann Arbor, MI) with a bladder made of Teflon and polyethylene tubing was dedicated to the monitoring well. The pump is designed to prevent air-water contact and avoid sample loss or contamination. The water level in the well was measured using an electronic water level detector prior to each sampling. After the water level was recorded, the well was pumped for 10-15 minutes prior to taking the sample for analysis. The pumping period prior to sampling was sufficient to remove more than 3-5 well volumes of water. Three existing wells located near the test plot were sampled on the sampling dates for the monitoring well. Two of the wells were domestic and one was an irrigation well used on nearby vineyeards. Although well logs were not available for the wells, general information on wells in the area indicated that the wells in the area would generally be less than 37 m in depth. One well was located approximately 290 m northeast of the monitoring well. The well was an irrigation well which pumps water into an open concrete standpipe leading to underground laterals. A small valve was opened prior to pumping which allowed motor oil to flow from a reservoir onto the pump bearings during operation, and this resulted in the presence of a oil slick on the water surface. The pump was operated for 15 minutes before the duplicate samples were taken. Samples were obtained directly from the concrete standpipe by placing the bottles in the stream of water as it entered the standpipe. A domestic well was located approximately 175 m west of the monitoring well. The storage tank for the well was drained for 30 minutes so that the pump was

activated and refilled the tank several times. The casing was also flushed prior to sample collection. Water samples were obtained from a faucet 0.9 m from the tank. A piece of tubing made of Teflon was inserted into the opening of the faucet while the other end was placed in the bottom of the bottle. This procedure minimized aeration of the sample during collection. Samples were collected from this domestic well from October 23, 1984 through November 21, 1984. A malfunction of the pump prevented further samplings. A large irrigation well located 3 m from the domestic wall was utilized for the remainder of the study. The pump was operated for 15 minutes prior to sample collection from the overhead standpipe. Another domestic well was located approximately 200 m southwest of the monitoring well. The well owner indicated the well was approximately 31-m deep with a 15-cm steel casing and gravel pack. The storage tank was drained so that the pump was activated for 15 minutes and the casing was flushed before sampling. The water samples were collected from a Schraeder valve by connecting a piece of tubing made of Teflon to the valve while the other end of the tubing was placed into the bottom of the bottle to minimize aeration during collection. Groundwater samples were obtained from the monitoring well in the plot and three existing wells surrounding the plot on 0, 1, 3, 7, 14, 21, 28, 71, 170, and 364 days after application. Duplicate water samples in 1-L amber glass bottles were obtained on the designated sampling dates from each well. The sample bottles were sealed with foil-lined screw caps and placed on wet ice. All well water samples were delivered to the California Analytical Laboratory in Sacramento, California, for analysis generally within 24-48 hours.

Soil samples were extracted by shaking for 1 hour with methanol. A portion of the extract was diluted with water and then extracted with hexane. The resulting hexane extract was analyzed for 1,3-dichloropropene and 1,2-dichloropropane by GC. The extracted solution was rinsed with hexane and the hexane was discarded. Sodium chloride was added and the solution was extracted twice with diethyl ether. The extracts, plus 1.0 mL of methanol, were concentrated to 1.0 mL and analyzed for 3-chloroallyl alcohol by GC. Well-water samples were analyzed by the same procedure as the soil samples except the initial methanol extraction was not performed.

REPORTED RESULTS:

During the first month of the field test, air temperatures ranged from 9.1 to 26.9°C and soil temperatures ranged from 3.5 to 29.2°C. Rainfall for the first, second, and third months of the study (November, December, and January) was 5.35, 4.95, and 3.05 cm, respectively. Total rainfall for the 12-month period of the study was 23.8 cm.

1,3-Dichloropropene declined from a maximum of 130,000 ppb in the 0.30- to 0.45-m layer of soil at 0 days posttreatment to <10 ppb (detection limit) at any soil depth at 71 days (Table 1). The parent compound was never detected below a depth of 3 m, except for one sample (30 ppb) at 14 days in the 4.72- to 4.87-m depth. 1,2-Dichloropropane was not detected in any soil sample. 3-Chloroallyl alcohol declined from a maximum of 410 ppb in the 0.66- to 0.81-m layer of soil at 7 days posttreatment to <10 ppb in any soil layer at 71 days (Table 2). 1,3-Dichloropropene

was <10 ppb in water samples except in one sample which contained 5.3 ppb at 1 day posttreatment; the registrant attributed this to contamination of the sample container. 1,2-Dichloropropane was <10 ppb in water samples except for two samples taken 1 day pre- and posttreatment (21 and 33 ppb, respectively); the registrant attributed this to contamination in an oil slick on the water surface. 3-Chloroallyl alcohol was not detected in any water samples.

DISCUSSION:

1. The formulation of the test substance was not specified. The current formulation of Telone II is 94% 1,3-dichloropropene (Farm Chemicals Handbook, 1986, Meister Publishing Company). In addition, it is unclear if the application rate (407 kg 1,3-dichloropropene/ha) was reported as active ingredient.

2. Soil CEC (cation exchange capacity) and pH were not provided.

3. Irrigation was used during the study and the registrant reported the necessary information. The reviewer did not summarize the information since irrigation was not employed until after 1,3-dichloropropene residues were no longer detected.

4. Field test data were incomplete. Temperature data were reported for only the first 28 days of the study. The slope of the field plot was not provided.

5. The registrant stated that the study was of one-year's duration; however, residues in soil were monitored for only 170 days.

RIN 3413-94 1,3-DICHLOROPROPENE REVIEWS
029001

Page_____ is not included in this copy.

Pages 12 through 14 are not included.

The material not included contains the following type of information:

____ Identity of product inert ingredients.

____ Identity of product impurities.

____ Description of the product manufacturing process.

____ Description of quality control procedures.

____ Identity of the source of product ingredients.

____ Sales or other commercial/financial information.

____ A draft product label.

____ The product confidential statement of formula.

____ Information about a pending registration action.

✓ FIFRA registration data.

____ The document is a duplicate of page(s) _____.

____ The document is not responsive to the request.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.

EXECUTIVE SUMMARY

The data summarized here are scientifically valid data that have been reviewed in this report. These data do not fulfill data requirements unless noted in the Recommendations section of this report.

1,3-Dichloropropene (Telone II, formulation unspecified), applied at 407 kg/ha, declined from a maximum of 130,000 ppb in the 0.30- to 0.45-m layer of soil immediately after treatment to <10 ppb (detection limit) in any soil layer at 71 days in a field plot of sand soil located in California. The degradate 3-chloroallyl alcohol declined from a maximum of 410 ppb in the 0.66- to 0.81-m layer of soil at 7 days posttreatment to <10 ppb in any soil layer at 71 days.

RECOMMENDATIONS

Available data are insufficient to fully assess the environmental fate of 1,3-dichloropropene. The submission of data relevant to registration requirements (Subdivision N) for terrestrial food crop and terrestrial nonfood use sites is summarized below:

The following are data gaps:

Photodegradation studies in air: No data were reviewed for this addendum, but all data are required.

Aerobic soil metabolism studies: No data were reviewed for this addendum, but all data are required.

Anaerobic soil metabolism studies: No data were reviewed for this addendum, but all data are required.

Leaching and adsorption/desorption studies: No data were reviewed for this addendum, but all data are required.

Confined accumulation studies on rotational crops: No data were reviewed for this addendum, but all data are required.

Accumulation studies on irrigated crops: No data were reviewed for this addendum, but all data are required.

Laboratory studies of pesticide accumulation in fish: No data were reviewed for this addendum, but all data are required.

Field accumulation studies on aquatic nontarget organisms: No data were reviewed for this addendum, but all data are required.

Reentry studies: No data were reviewed for this addendum. For each site, the registrant must propose an acceptable reentry interval based upon: 1) tasks that require reentry into treated areas; 2) air concentrations of 1,3-dichloropropene at the time of reentry; and 3) residues of 1,3-dichloropropene in or on soil, if any work task is such that human exposure to the treated soil is likely to occur.

Exposure studies: No data were reviewed for this addendum. Because of the acute inhalation, dermal, and other potential hazards of 1,3-dichloropropene, the Agency requests data for quantitative permeation and breakthrough time on various materials used for protective clothing and equipment (gloves, boots, respirator hoses, face pieces, etc.) for the formulated products(s). If quantitative data are not available then appropriate permeability studies should be conducted.

The registrants should submit the information to the product manager for review by the Protective Clothing Group (PCWG)/HED. The PCWG will address updating the current label language, once the information has been evaluated.

Label Restrictions

Pending the submission of crop rotation data, it is suggested that crops other than those with registered dichloropropene uses be restricted from being planted in dichloropropene-treated soil. An interim 24-hour reentry interval is required unless protective clothing is worn.

The following are partial data gaps:

Terrestrial field dissipation studies: One study (Oliver et al., 1986, Acc. No. 264183) was reviewed and is scientifically valid. This study does not fulfill data requirements because the formulation of the test substance was not specified, the soil was incompletely characterized, and field test data were incomplete. All data are required.

The following requirements are fulfilled, or deferred or not required:

Hydrolysis studies: No data were reviewed for this addendum. Based on previously submitted data, no additional data are required.

Photodegradation studies in water: No data were reviewed for this addendum; however, no data are required because application is by soil injection and dichloropropene will not be available for aqueous phototransformation.

Photodegradation studies on soil: No data were reviewed for this addendum; however, no data are required because of the method of application and the high volatility.

Adsorption/diffusion studies: No data were reviewed for this addendum. A study was previously reviewed on the diffusion of 1,3-dichloropropene in soil. There are currently no regulatory guidelines appropriate to evaluate studies of the adsorption and diffusion of fumigants in soil.

Long-term field dissipation studies: No data were reviewed for this addendum, but all data may be required based on the results of the aerobic soil metabolism and field dissipation studies.

Field accumulation studies on rotational crops: No data were reviewed for this addendum, but all data may be required based on the results of the confined accumulation studies on rotational crops.

Anaerobic aquatic metabolism studies: No data were reviewed for this addendum; however, no data are required because 1,3-dichloropropene has no aquatic or aquatic impact uses.

Aerobic aquatic metabolism studies: No data were reviewed for this addendum; however, no data are required because 1,3-dichloropropene has no aquatic or aquatic impact uses.

Laboratory volatility studies: No data were reviewed for this addendum; however, no data are required because of the nature and use of this product.

Field volatility studies: No data were reviewed for this addendum; however, no data are required because of nature and use of this product.

Aquatic field dissipation studies: No data were submitted for this addendum; however, no data are required because 1,3-dichloropropene has no aquatic or aquatic impact use.

Forestry dissipation studies: No data were reviewed for this addendum; however, no data are required because currently 1,3-dichloropropene has no registered forestry uses per se. Use is limited to forest nurseries.

Dissipation studies for combination products and tank mix uses: No data were reviewed for this addendum. Data requirements for combination products and tank mix uses are currently not being imposed.

REFERENCES

Oliver, G.R., E.L. Bjerke, and F.C. O'Melia. 1986. Field dissipation study for Telone II soil fumigant. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 264183.

APPENDIX

STRUCTURE OF 1,3-DICHLOROPROPENE

TELONE II SOIL FUMIGANT

(trans) (cis)

1,3-Dichloropropene

TABLE A

GENERIC DATA REQUIREMENTS FOR TELONE II (1,3-dichloropropene)

Data Requirement	Test Substance[1]	Use Pattern[2]	Does EPA Have Data?	Bibliographic Citation	Must Additional Data be Submitted?	Time Frame for Submission
§158.130 Environmental Fate						
DEGRADATION STUDIES-LAB:						
161-1 - Hydrolysis	TGAI or PAIRA	A B	Yes	Acc#262730	No	
Photodegradation						
161-2 - In water	TGAI or PAIRA	A B	No	None	No[3]	
161-3 - On soil	TGAI or PAIRA	A	No	None	No[3]	
161-4 - In Air	TGAI or PAIRA	A	No	None	Yes	9 months
METABOLISM STUDIES-LAB:						
162-1 - Aerobic Soil	TGAI or PAIRA	A B	No	None	Yes	27 months
162-2 - Anaerobic Soil	TGAI or PAIRA	A	No	None	Yes	27 months
162-3 - Anaerobic Aquatic	TGAI or PAIRA	N/A	No	None	No[4]	
162-4 - Aerobic Aquatic	TGAI or PAIRA	N/A	No	None	No[4]	
MOBILITY STUDIES:						
163-1 - Leaching and Adsorption/Desorption	TGAI or PAIRA	A B	No	None	Yes[5]	12 months
163-2 - Volatility (Lab)	TEP	A	No	None	No[3]	
163-3 - Volatility (Field)	TEP	A	No	None	No[3]	

TABLE A

GENERIC DATA REQUIREMENTS FOR TELONE II (1,3-dichloropropene)

Data Requirement	Test Substance[1]	Use Pattern[2]	Does EPA Have Data?	Bibliographic Citation	Must Additional Data be Submitted?	Time Frame for Submission
§158.130 Environmental Fate (continued)						
DISSIPATION STUDIES-FIELD:						
164-1 - Soil	TEP	A B	Partially	Acc#264183	Yes[6]	27 months
164-2 - Aquatic (Sediment)	TEP	N/A	No	None	No[4]	
164-3 - Forestry	TEP	N/A	No	None	No[7]	
164-4 - Combination and Tank Mixes	TEP	N/A	No	None	No[8]	
164-5 - Soil, Long-term	TEP	A	No	None	Reserved[9]	50 months
ACCUMULATION STUDIES:						
165-1 - Rotational Crops (Confined)	PAIRA	A	No	None	Yes	39 months
165-2 - Rotational Crops (Field)	TEP	A	No	None	Reserved[10]	
165-3 - Irrigated Crops	TEP	A	No	None	No[3]	
165-4 - In Fish	TGAI or PAIRA	A B	No	None	No[3]	
165-5 - In Aquatic Nontarget Organisms	TEP	N/A	No	None	No[3]	

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TABLE A

GENERIC DATA REQUIREMENTS FOR TELONE II (1,3 dichloropropene)

Data Requirement	Test Substance[1/]	Use Pattern[2/]	Does EPA Have Data?	Bibliographic Citation	Must Additional Data be Submitted?	Time Frame for Submission
§158.140 Reentry Protection						
132-1 - Foliar Dissipation	TEP	A B	No	None	No[3/]	
132-1 - Soil Dissipation	TEP	A B	No	None	Yes[11/]	27 months
133-3 - Dermal Exposure	TEP	A B	No	None	Yes[11/]	27 months
133-4 - Inhalation Exposure	TEP	A B	No	None	Yes[11/]	27 months
§158.142 Spray Drift						
201-1 - Droplet Size Spectrum	TEP	A B	No	None	No[3/]	
201-1 - Drift Field Evaluation	TEP	A B	No	None	No[3/]	
§158.75 Human Exposure Data	TEP	A B	No	None	Yes[11/]	
Other Exposure Data						

TABLE A

GENERIC DATA REQUIREMENTS FOR TELONE II (1,3-dichlorpropene)

FOOTNOTES:

1/ Composition: TGAI = Technical grade of the active ingredient; PAIRA = Pure active ingredient, radiolabelled; TEP = Typical end-use product.

2/ The use patterns are coded as follows: A = Terrestrial, Food Crop; B = Terrestrial, Non-Food; C = Aquatic, Food Crop; D = Aquatic, Non-Food; E = Greenhouse, Food Crop; F = Greenhouse, Non-Food; G = Forestry; H = Domestic Outdoor; I = Indoor.

3/ Not required because of the method of application (soil injection) and the high volatility.

4/ Not required due to reclassification of cranberry use from aquatic to terrestrial.

5/ There are no regulatory guidelines appropriate to evaluate studies of adsorption and diffusion of fumigants in soil.

6/ The study does not fulfill data requirements because incomplete data were submitted.

7/ Use is limited to forest nurseries.

8/ Currently not imposed for this product(single ingredient).

9/ Required unless soil residue <50% prior to subsequent treatment.

10/ Pending results of the confined accumulation study on rotational crops.

11/ Registrant must propose an acceptable reentry interval based on concentration of 1,3 -dichloropropene in air and in or on soil for task requiring human reentry to the treated field area.