

Shaughnessy Number: 029001

Date Out of EAB: 5/6/88

TO: L. Rossi/H. Toma
Product Manager 21
Registration Division (TS-767C)

FROM: Patrick Holden, Team Leader *C.E. for*
Ground-Water Team
Exposure Assessment Branch/HED (TS-769C)

THRU: Paul F. Schuda, Chief *Paul F. Schuda*
Exposure Assessment Branch/HED (TS-769C)

Attached, please find the EAB review of:

Reg./File #: 464-511

Chemical Name: 1,3-Dichloropropene

Type Product: Soil fumigant

Company Name: DOW Chemical Company

Purpose: Review of monitoring sites for small-scale
retrospective ground-water monitoring study.

Date Received: 3/30/88 ACTION CODE: 0

Date Completed: 5/3/88 EAB #(s): 80609

Monitoring study requested: x Total Review Time: 8 hr

Monitoring study voluntarily:

Deferrals To: Ecological Effects Branch
 Residue Chemistry Branch
 Toxicology Branch

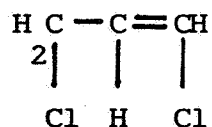
SMALL-SCALE RETROSPECTIVE GROUND-WATER
MONITORING STUDY SITE REVIEW FOR TELONE II

1. CHEMICAL:

Chemical name: 1,3-Dichloropropene

Common name: 1,3-D, Telone II

Structure:



2. TEST MATERIAL:

Not Applicable.

3. STUDY/ACTION TYPE:

Review of proposed sites for small-scale retrospective ground-water monitoring study.

4. STUDY IDENTIFICATION:

Title: Letter dated 3/21/88 with attachments from Robert Morgan, Agricultural Products Department, DOW Chemical U.S.A. to Herman Toma, Registration Division, EPA/OPP.

Submitted by: Robert W. Morgan, Manager
Regulatory Planning
Agricultural Products Department
DOW Chemical U.S.A.
Midland, MI 48640

Identifying No.: 464-511
Action Code: 0
Accession Number: Not given
Record Number: 218,789
Date Sent to HED: 3/30/88

5. REVIEWED BY:

W. Martin Williams
Hydrologist
OPP/HED/EAB/Ground-Water Team

Signature: W. Martin Williams
Date: 5/5/88

6. APPROVED BY:

Patrick Holden
Team Leader
OPP/HED/EAB/Ground-Water Team

Signature: Catherine Eiden

Date: 5/5/88

7. CONCLUSIONS:

Site data submitted to date is inadequate to give approval on proposed sites. See deficiencies under Section 10.

8. RECOMMENDATIONS:

Registrant should be sent a copy of the discussion given in Section 10 with the enclosed Appendix from EAB's Ground-Water Monitoring Guidelines.

9. BACKGROUND:

The protocol for a small-scale retrospective ground-water monitoring study for Telone II was submitted and reviewed in EAB file #70575 (dated 6/16/87). The present review includes both site data submitted from the registrant (accompanying the letter identified above) and agreements reached at a meeting on April 15, 1988 between DOW Chemical Company and the Ground-Water Team of the Exposure Assessment Branch. Present during the meeting were Robert Morgan, Frances O'Melia, J. Robert Peterson of Dow Chemical U.S.A.; and Herman Toma, Catherine Eiden, and W. Martin Williams of U.S.EPA/OPP.

10. DISCUSSION:

Agreements reached during the April 15, 1988 meeting are presented below.

1. DOW Chemical Company will need to provide supplemental information on each site prior to site approval. A list of minimum data requirements follows:

- Chemical use histories (minimum requirements are use in 2/3 or 3/5 most recent years),
- Crop history (past and proposed),
- Ground slopes (ideal requirements are 2% maximum),
- Water table depths (ideal requirements are 20-30 ft maximum),
- Seasonal water table fluctuations,
- Irrigation practices,
- Soil characterization (restrictive layers prohibited), and
- Knowledge of anthropogenic influences (e.g. installation of drain tiles, significant ground water withdrawals, site grading, etc.).

2. The Ground-Water Team will forward a copy of the Appendix to the Ground-Water Monitoring Guidelines to the registrant.

3. Sampling is not required to begin prior to spring 1988 field treatment of Telone II. Sampling will continue for one year after study initiation, during and after the following spring treatment. This agreement is based

on a need for additional time for site selection and setup.

4. DOW Chemical Company will propose two sites in Oregon and two sites in Washington from which one monitoring site will be selected by the Agency. This is based on EAB's concern for relatively low use histories, high well depths, and fine textured soils in Dow's proposed Washington sites.

5. Both sites proposed in Florida look promising with Site A preferred at this time. Minimum data requirements are outstanding.

6. Only one site will be required in the Carolinas. Both sites in North Carolina look promising with the Sampson Co. site preferred at this time. This decision was based on similarities between both proposed Carolina sites and the desire to pick up an additional site in California.

7. The proposed site in Scott's Bluff County Nebraska looks promising at this time. Minimum data requirements are outstanding.

8. Two sites will be monitored in California: one in the coastal (i.e., brocoli) region and one in the central valley. This decision is based on diverse climatological and geological conditions in these two areas.

9. Site selection and monitoring for Hawaii will require additional investigation because of the steep slopes and deep water tables in the pineapple regions. DOW Chemical Company will research: a) additional hydrogeological descriptions of the pineapple growing areas including soil characterizations and the nature of underground springs, and b) existing monitoring programs that may be used as substitutes in this study. EAB will concurrently investigate existing monitoring programs and upon receipt of DOW's research will consider the following alternate options to assess the potential of Telone II to reach ground-water in Hawaii: a) a large-scale retrospective study using existing wells, b) a monitoring study of ground-water seeps, c) a soil dissipation study, and d) a feasibility study assessing the potential of 1,3-D to contaminate ground water based on existing literature, modeling, and sampling done to date on existing wells and seeps. EAB will investigate the potential to help fund financially prohibitive studies through federal and state cooperative agreements.

REGISTRATION DATA SHEET <small>Use Only the Attached Data for Formulation and Any or All Available Information on the Technical or Manufacturing Chemical.</small>										
1. CHEMICAL NAME 1,3-Dichloropropene (PINE II)										
2. IDENTIFYING NUMBER 464-511-106			3. SECTION CODE			4. ACCESSION NUMBER		TO BE COMPLETED BY HED		
								5. RECORD NUMBER 21878		
								6. REFERENCE NUMBER 38		
								7. DATE RECEIVED (SPR) 3/22/88		
								8. STATUTORY DUE DATE		
								9. PRODUCT MANAGER (PM) Rossi/Toma		
								10. PM TEAM NUMBER 21		
14. CHECK IF APPLICABLE								TO BE COMPLETED BY PCB		
<input checked="" type="checkbox"/> Public Health/Quarantine				<input type="checkbox"/> Minor Use				11. DATE SENT TO HED/SS 3-30-88		
<input type="checkbox"/> Substitute Chemical				<input type="checkbox"/> Part of IPM				12. PRIORITY NUMBER 23		
<input type="checkbox"/> Seasonal Concern				<input type="checkbox"/> Review Requires Less Than 4 Hours				13. PROJECTED RETURN DATE 4-8-88		
15. INSTRUCTIONS TO REVIEWER					F. INSTRUCTIONS					
A. HED <input type="checkbox"/> Total Assessment - 3(c)(5) <input type="checkbox"/> Incremental Risk Assessment - 3(c)(7) and/or E.L. Johnson memo of May 12, 1977.					C. <input type="checkbox"/> BFS/D <input type="checkbox"/> TSS/RD <input type="checkbox"/> Other					
B. SPRD (Send Copy of Form to SPRD PM) <input type="checkbox"/> Chemical Undergoing Active RPAR Review <input type="checkbox"/> Chemical Undergoing Active Registration Standards Review					Please expedite review of 1,3-D potential sites for ground water monitoring: Attn: Cathy Eden, EABATED Return to H. Toma (Rm 255)					
16. RELATED ACTIONS 1,3-dichloropropene Reg. Standard requirement										
17. 3(c)(1)(D) <input type="checkbox"/> Use Any or All Available Information <input type="checkbox"/> Use Only Attached Data <input type="checkbox"/> Use Only the Attached Data for Formulation and Any or All Available Information on the Technical or Manufacturing Chemical.					18. REVIEWS SENT TO <input type="checkbox"/> TB <input checked="" type="checkbox"/> EEB <input type="checkbox"/> EF <input type="checkbox"/> PL <input type="checkbox"/> RCB <input type="checkbox"/> EFB <input type="checkbox"/> CH <input type="checkbox"/> BFS/D					
HED	To	TYPE OF REVIEW	NUMBER OF ACTIONS							
			Registration	Petition	EUP	SLN	Sec. 18	Inert	MNR. USE	Other
		TOXICOLOGY								
		ECOLOGICAL EFFECTS								
RD/TSS	To	RESIDUE CHEMISTRY								
		ENVIRONMENTAL STATE								
		CHEMISTRY								
BFS/D	To	EFFICACY								
		PRECAUTIONARY LABELING								
20. <input type="checkbox"/> Label Submitted with Application Attached		21. <input type="checkbox"/> Confidential Statement of Formula		22. <input type="checkbox"/> Representative Labels Showing Accepted Uses Attached		23. Date Returned to RD (to be completed by HED)		24. Include an Original and 4 (four) Copies of This Completed Form for Each Branch Checked for Review.		