



File-125401

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

June 13, 1986

Subject: Command Meeting on Off-target Movement and Carry-over problems.

From: James Yowell, Team 25 RD

To: Bill Burnam	TOX/HED	Anne Barton	HED
Dave Severn	EAB/HED	Tom Ellwanger	FHB/RD
Bob Holst	EAB/HED	Carl Grable	FHB/RD
Sam Creeger	EAB/HED	James Akerman	RD
Mike Slimak	EEB/HED	Lynn Bradley	RCB/HED
Chuck Trichilo	RCB/HED	Rick Loranger	RCB/HED
Tom Adamczyk	FHB/RD	Frank Sanders	FHB/RD
Bob Taylor	FHB/RD		

The meeting is scheduled for June 18, 1986 in room 1112C at 9:30 AM. FMC has provided an agenda and list of attendees. Please attend or send a representative. If you have any questions about the meeting or the problem call Frank Sanders or Tom Adamczyk on 557-1650.



June 13, 1986

Mr. James Akerman
Deputy Director, Registration Division
U.S. Environmental Protection Agency
Office of Pesticide Programs
Registration Division (TS-767-C)
Crystal Mall, Building #2
1921 Jefferson Davis Highway
Arlington, VA 22202

Dear Mr. Akerman:

Subject: Command 6 EC Herbicide
EPA Reg. No. 279-3054
Command 4 EC Herbicide
EPA Reg. No. 279-3053
Command Technical
EPA Reg. No. 279-3052

As we discussed on June 12, 1986, FMC Corporation is actively pursuing an explanation for the reported incidents of carryover and "off-target" movement (chlorosis of non-target plants) by Command Herbicide.

In order that we may minimize this effect in the future we would like to discuss criteria for acceptable label modifications regarding application recommendations. Additionally, we would like to discuss the question of potential inadvertent residues and data that may be required to address this issue. The following are some points for discussion:

- o 1986 FMC research programs
- o random residue samples from reported "off-target" incidents
- o precedents with other herbicides
- o direct spraying of crops and residue sample harvest intervals when simulating "off-target" movement
- o rates to be used

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- o crops to be tested and feasibility of a crop grouping approach
- o representative geographical locations
- o entities to be analyzed (i.e. metabolites, parent compound)
- o choice of crop(s) for a foliar plant metabolism study
- o animal forage/feed crop related issues
- o meat, milk, poultry, eggs residue related questions
- o processed commodities

FMC is considering alternative formulations to our current Command 4 EC and Command 6 EC. While we are aware of the standard requirements, e.g. acute toxicology and product chemistry, we need to discuss whether the Agency will require additional data.

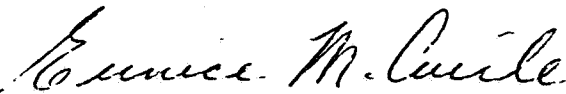
We will also be prepared to discuss the concerns presented in your letter dated June 12, 1986.

We appreciate the opportunity to meet with representatives from the EPA to discuss these issues on Wednesday, June 18, 1986.

In attendance from FMC will be:

Ed Cherry (Director, Product Registrations and Planning)
Ron Cook (Residue Analysis Manager)
Bob Robinson (Metabolism Manager)
Don Carlson (Product Development Manager, Herbicides)
Joe Sipia (Manager, Product Registration)
Eunice Cuirle (Registration Specialist)

Sincerely,



Eunice M. Cuirle
Registration Specialist

cc: Frank Sanders
Robert J. Taylor

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUN 12 1986

Ms. Eunice M. Cuirle
FMC Corporation
Agricultural Chemical Group
2000 Market Street
Philadelphia, PA 19103

Dear Ms. Cuirle:

Subject: Command 6 EC Herbicide
EPA Registration Number 279-3054
Command 4 EC Herbicide
EPA Registration Number 279-3053
Command Technical
EPA Registration Number 279-3052
Your letter of June 3, 1986

The Agency has received the subject letter required by Section 6(a)(2) of FIFRA regarding Command Herbicide carryover and off-target movement. We have also received reports from State agencies concerning numerous incidents of chlorosis in non-target plants. It is our understanding that ~~Eunice Cuirle of FMC~~ will deliver reports from FMC's files on Thursday, June 12, 1986, ~~per our request~~.

Due to the severity of these problems we request that you, through the Product Manager, arrange a meeting between your representatives and Agency personnel to discuss the above issues. The discussion should focus on the following:

1. Has a method of detection been validated for raw agricultural commodities other than soybeans (we are especially interested in non-lipid raw agricultural commodities)?
2. What is the limit of detection for these methods, if there are others available?

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CONCURRENCES			
SYMBOL	15-767-C	5-767C	
SURNAME	Yowell	adyphe	
DATE	6/12/86	6/12/86	

EPA Form 1320-1 (12-70)

OFFICIAL FILE CO

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3. Explain the apparent absence of volatility in the aqueous and soil photolysis studies (both by J. Wu dated 6/13/85; FMC corporation study number 164E12E02, P-1136 and 164E12E02, P-1137)?

For both studies, it appears that after 30 days and "moving air" conditions, only about 6% of the applied chemical was volatilized and caught in traps in the aqueous photolysis study (and less than 1% in the dark control) and less than 1% of the applied chemical was volatilized and caught in traps in the soil photolysis study (similar results were found in the dark control).

4. The Agency requests your explanation on the cause of the off-target movement and the length of time observed for carryover damage seen in the field. The Agency also requests information on plant recovery that has been observed.

5. You should be prepared to discuss your plans and proposed methods to alleviate the damage potential observed in the carryover and off-target movement.

6. You should be prepared to discuss the volatility of inerts in the registered formulations of Command.

7. At the conclusion of the Experimental Use Permit, the final report did not discuss any noted off-target effects. You should re-examine your program to determine if phytotoxic effects were observed in non-target plants.

We suggest the proposed meeting be scheduled as soon as possible due to the serious nature of these problems.

Sincerely,

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Frank Sanders, Acting Chief
Fungicide Herbicide Branch
Registration Division (TS-767C)

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OFF-TARGET SUMMARY

Report Number	Rep	Complainant	Town & State	Species	Seriousness	Applic. Method	Comments-dated
1	Christensen	[REDACTED]	St. Charles, MO	Lettuce	Spotty	PPE	Grower is eating lettuce - symptoms minor.
2	Connors		Waverly, IL	Trees in pasture	?	PI	Reported by dealer, Jim Koplein, Farmers Elev., Lark, IL Concerned dog and goat died for 2nd grower 5/15 [REDACTED] called provided same info
3	Buffington		Bridley, IL	Lettuce, Radish, Apple, Maple	Yes White trees	PPE	Grower will eat after turns green but concerned Report Less Garner, Growmark, Bloomington, IL Rep notified
4	Dickerson		Bibson, IA	Alfalfa	Minor	ORE	10% into alfalfa field - some degree white
5	Wagoner		Casey, IA	Ornamentals			4/17 sprayed - road bank growing out Others growing out 5/15 recovered
6	Head	[REDACTED]	Meadow, IL	Gov. Oats	2		Grower not concerned - relatives' oats
7	Head		Lexington, IL	Ornamentals Pond	10		IL Dept. Ag involved - residue sample water
8	Zeman		Franklin, IL	Heinz Tomatoes			Currently under investigation
9	Connor		Atlanta, IL	Gov. Oats	2		Third party
10	Connor		Atlanta, IL	Gov. Oats	2		1/8 mile away
11	Connor	[REDACTED]	Deland, IL	Roses	1		No problem
12	Connor		Dawson, IL	Ornamentals	5		No inquiry yet
13	Hooten		St. Peter, IL	Wheat/ Ornamentals	10		IL Dept. Ag involved Residue sample wheat
14	Duer		Ohio	Apple Orchard			Improving
15	Wagner		Michigan	Three hives - Trees, etc.			
16	Krotz	[REDACTED]	Bucrus, KS	Plants, Clover Trees		PPE	Serious drift - ins. paying Residue samples - Corn and 240
17	Buffington		Peoria, IL	Peas, Radishes			Spray by Oster, Martin price, movement 60 to 100 ft.

PRIVACY ACT EXEMPTION

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SME Rpt 6/2/80

OFF-TARGET SUMMARY

Report Number	Rep	Complainant	Town & State	Species	Seriousness	Applic. Method	Comments-dated
18			Vinton Benton Garrison, IA	Alfalfa Oats	Sprayed 5/5		Ready cut-symptoms 5/16 Alfalfa - 100' x 150' 2/1 mile long 14 acres discolored New crop 17 acres 1/2 acres
19	Faucett			Oak trees Garden Ash Radishes			Moist soil - 1/4 mile, oak trees
20	Winter		Elgin, IL	Tomatoes			Dealer - Joy Feed, Don Miller 15 acres, tops white for 8 inches
21	Cashan		Walter, IA	Garden Trees			Peas/beans - soil wet - drift 200 ft. Killed lettuce/radishes
22	Thompson		Royal Center, IN	Apples/Hulberry/ Other Garden			All trees, garden white Garden, radishes, etc. white
23	Tomline		LaCrosse, IN	3 gardens			
24	Luedtke		Boshola, IA	S/B - Oats 6"-8"			10-40 feet drift - rain after application
25	Luedtke		Boshola, IA	S/B - Alfalfa			10-40 feet drift - rain after application
26	Winter		Galva, IL	Sov. Oats	2		304 of 80
27	Winter		Muscantine, IL	Heinz Tomatoes			Currently under investigation
28	Zeman		Chapin, IL	Alfalfa/Oats Willow	4		Oats for grain Residue sample taken on oats
29	Zeman		Chapin, IL	Corn/Oats Ornamentals Around home	8		
30	Zeman		Mason City, IL	Oats/Alfalfa	4		Alfalfa underseeded with oats
31	Raker		Warren, IN	Garden	1		
32	Thompson		Gillage Green Etna Green, IN	Trees, fruits Garden			Sprayed 5/14 - 219/858-2537 - 5 ft. from field drift - garden
33	Novotny	Dealer: Conino Grow. t	Pierce, NE	Corn			Corn white - some dying. Wants to replant Drift 2 fields 2 adjacent rows, 1 field, 12 rows

PRIVACY ACT EXEMPTION

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OFF-TARGET SUMMARY

Report Number	Rep	Complainant	Town & State	Species	Seriousness	Applic. Method	Comments-dated
34	?		Clinton, IL				5/16 - 8-10 acres corn 7-8 inches white Kojax - corn
35	Engard		Hampton, MN	Alfalfa			5/22 - White
36	King		Lewiston, MN	Trees, alfalfa			5/22 - Sprayed - 5/8 - 2 wks. later top half white 300-500 ft., 30-40% field white
37	Weninger		Winchester, WI	Oats			5/22 - Oats 100 ft.
38	Schaneean			Trees, alfalfa Weeds Oats (tips)			5/22 - Banded low pressure system Pre 200+ yds. winds 25-30 mph, treated dust moved
39	Todd		Fairfax, MO	Garden			5/22 - Will recover
40	Klug		Patron Coop Black Earth	Trees Garden	5		5/22 - Sprayed 5/10 - wk. of rain after
41	Dobbins?		Ferdinand, IN	Corn	5		5/22 - Applied 5/10 - Heavy rain runoff into neighbor's corn - white
42	Blone		Neola FS Hazelton, IA	Alfalfa	5		5/22 - 300 ft. into field white Need to harvest
43	Luedtke		Dunbar, IA	Begonias House plant			5/22 - Drift 1/4 mile - white in 1 day 10-15 mph
44	Dickerson		Washington, IA	Alfalfa Soil - Beans			5/22 - Alfalfa 10% - Organic farmer concerned about residue chemical soil
45	Nelson		Molvaill, IA	Corn Garden			5/22 - Corn sprayed with contaminated tank Garden
46	Nelson			Trees Alfalfa			5/22 - 10-20 ft. white
47	Krotz			Willows Trees Fence rows			5/22 - 1/2 pint Command w/Treflan

PRIVACY ACT EXEMPTION

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1736 COMMAND CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/Trial Number	Brower	Town & State	Soybean Rate/Applic.	1985 Inst. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
1		Hayes/TH02		Hayline, MO	1.25/PP1/PRE	5/20	Corn		?	3	1 Mostly end rows
2		Krotz/BKS06		Hiawatha, KS	1.00 PP1	5/1	Corn		Unknown	4	1.0 probably won't be a problem.
3	L	Kinsinger/RNK99		Dowhatta, KS	?	?	Corn		Stauffer BS05 tothers & Funk	7 8	General over the field - 1 lb. rate 3/16
4	L	Dickerson/DD003		Washington, IA	1.00 PRE	5/13	Corn		Stauffer S340 supercross no.	7	5/16
5	L	Dickerson/DD001		Wappello, IA	?	5/11	Corn		?	7	Sounds like it's going to be bad. 1 1/4 lbs.
6		Buffington/KRB11		Chaddsworth, IL	1.00 PRE	5/22	Corn		Pioneer 3377 bad Cargill 937 good 603 ?	5	1 lb. general but worse overlap going out of
7		Head/RKK15		Saybrook, IL	1.00 PP1	5/9	Corn		?	6	1 lb. general worse overlap is coing out
8		Buffington/KRB10		Petin, IL	1.00 PRE	5/14	Corn		Various	5	5/16
9	L	Buffington/KRB04		Laura, IL	1.00 PP1	5/3	Corn		Pioneer 3377 Garst 8388 Supercross 5415	6	1 lb. coing out of it
10	L	Buffington/KRB13		Brinfield, IL	1.00 PP1	4/27	Corn		Wefellos 48	7	1 lb. coing out of it
11	L	Buffington/KRB16		Elwood, IL	1.00 PRE	5/20	Corn		?	7	1 lb. coing out of it
12	L	Buffington/KRB02		Deer Creek, IL	1.00 PRE	5/08	Corn		?	4	Slight injury
13	L	Buffington/KRB12		Galesburg, IL	1.00 PRE	5/21	Corn		?	6	5/16
14	L	Burgard/LAB06		Findlay, OH	1.00 PRE	5/06	Corn		DeLaib T1100 Pioneer 3377	9	1 1/4 lb. - probably going to be a problem
15		Roth/TKR04		Maple Park, IL	1.00 PRE	5/07	Corn		?	?	1 lb.
16	L	Roth/TKR05		DeLaib, IL	1.00 PRE	5/21	Corn		?	8	1 lb. problem
17		Roth/TKR12		St. Ann, IL	1.00 PRE	5/10	Corn		?	6	5/16 - 1lb.
18		Dean/HL011		Menroe, NE	1.00 PRE	5/22	Corn		?	?	

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1986 COMBAND CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/ Trial Number	Grower	Town & State	Soybean Rate/Applic.	1985 Treat. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
19		Schaneen/BS06		Aurora, NE	1.00 PRE	5/21	Corn		?	?	
20		Schaneen/BS07		Aurora, NE	1.00 PPI	6/05	Corn		3377	4	5/16 - 50% early, 20% today
21		Kelley/RK07		Henderson, IL	1.00 PPI/PRE	5/24	Corn		?	?	
22		Kelley/RK19		Casargo, IL	1.00 PPI/PRE	5/07	Corn		?	4	
23		Kelley/RK06		Allerton, IL	1.00 PRE	5/11	Corn		?	4	
24		Vaupel/BS05		Bruning, NE	1.25 PRE	5/24	Corn		?	5	Worse earlier
25		Luedtke/TCL01		Kellogg, IA	1.00 PRE	5/18	Corn		?	?	
26		Luedtke/TCL08		Newton, IA	1.00 PRE	5/22	Oats & Corn		?	?	Oats showing
27	L	Luedtke/TCL02		Story City, IA	?	5/16	Corn		?	?	End rows spotty
28		Wagoner/ND005		Atlantic, IA	1.00 PPI	5/26	Alfalfa & Corn		?	?	Alfalfa is showing spotty in the field
29		Conner/RK05		Rochester, IL	1.00 PPI	5/04	Corn		?	6	Coating out of it
30		Conner/RK16		Windsor, IL	1.13 PPI	5/09	Corn		?	6	Coating out of it
31		Conner/RK01		Marequa, IL	1.00 PPI	5/04	Corn		?	3	Spotty
32	L	Conner/RK13		Clinton, IL	?	5/11	Corn		Thorp seed and has alot of varieties	8	
33	L	Burgard/LAB08		Delphos, IL	1.25 PRE	5/14	Corn		Pioneer 3475 Beck's 51X	6	Spotty & general
34		Vaupel/BS08		Belvidere, NE	1.00 PPI	5/21	Corn		Pioneer 3377	5	Spotty end rows
35		Lauber/BCL19		Greenwood, NE	1.00 PRE	5/10	Corn		?	5	Spotty end rows
36	L	Roth/TKR03		Haward, IL	1.00 PRE	5/13	Corn		?	8	
37	L	Dickerson/DD013		South English, IA	1.00 PPI	5/20	Corn		?	8	Overlaps yellowing
38	L	Winter/RLW12		Princeton, IL						9	5/16

PRIVACY ACT EXEMPTION

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1986 CORN CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/Trial Number	Grower	Town & State	Soybean Rate/Applic.	1985 Treat. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
39		Raker/EDT07		Silver Lake, IN	1.00 PRE	5/22	Corn		?	?	100% Overlap
40		Raker/EDT08		South Whitney, IN	1.00 PRE	4/30	Corn		?	?	Small plot - growing out of it
41		Tutt/SFT		Waseca, MN Univ. of MN	?	?	Oats		?	?	Final round white
42		Thompson/EDT04		Converse, IN	1.00 PRE	5/10	Corn		?	?	60% discolored
43		Thompson/EDT14		Marion, IN	1.00 PPI	5/15	Corn		?	?	1.0 pre
44	L	Thompson/SRB07		Elwood, IN	1.25 SR	5/19	Corn		?	?	1.0 pre
45		Wagoner/WDH02		Jefferson, IA	1.00 PPI/PRE	5/15	Corn		?	?	1.25
46		Lauber/BCL04		Toledo, IA	1.00 PPI/PRE	5/22	Corn		?	?	General till. No stand loss 20-30% white No till stand loss 10-15% 80-100 white
47		Klug/AFK03		Belaont, MI	1/20 PRE	5/20	Corn	4/24	Hugh 5104	?	1.00 AI Incorpor - 15% D. color 4 Command treatments OK
48		Schaneen		Shelby, NE	1 pt. 41.00	?	Corn		?	?	End rows
49	L	Roth/TKR06		Grand Ridge, IL	1.00 PRE	5/29	Corn		?	?	General discolor Tilled
50		Burgard/LAB18		Delphos, OH	1.00 PRE	5/8	Corn		?	?	1.0
51		White/JRW02		Wilmington, OH	1.00 PRE	5/10	Corn		?	?	1.25
52		Barry/SNB08		Rushville, IN	1.00 SR PPI	?	Corn		?	?	PPI predominant - spotty 50% plants - discolored 50%
53	L	Barry/SNB09		Brownsburg, IN	1.13 SR	4/29	Corn	4/29	PAG 329	?	Spotty - 12 affected plant 15-100%
54		Barry/SNB21		Rushville, IN	1.00 PRE	6/27	Corn		?	?	Heavy areas - general 65% - avg. 30% - some dying
55	L	Wagoner/WDH01		Vail, IA	1.13 PPI/PRE	5/5	Corn		?	?	Two weeks after planting - rain Ranges 15-100% recovery
56	L	Wagoner/WDH08		Corn Rapids, IA	1.00 PRE	5/25	Corn		?	?	Avg. 80-100 field spots - no till Stand loss 1-22, 7/20
57		Thompson/EDT18		Sharpsville, IN	1.00 PRE	5/10	Oats		?	?	Spiking - seed corn field - general male 100% Spot white, balance OK
											End rows

PRIVACY ACT EXEMPTION

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1986 CORN AND CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/Trial Number	Grower	Town & State	Soybean Rate/Applic.	1985 Insect. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
58	L	Novotny/DN08		Canton, SD	1.00 PRE	5/20	Corn	?	?	8	
59	L	Rosine/BUR05		Kentland, IN	1.13 PPI	5/29	Corn	?	?	7	Mostly end rows
60		Rosine/BUR21		Logansport, IN	1.00 PRE	5/1	Corn	?	?	?	
61		Rosine/BUR11		Boswell, IN	1.13 PPI	5/7	Corn	?	?	5	Overlap, slight general 15% overall
62		Rosine/BUR13		Fowler, IN	1.00 PPI	5/24	Corn	?	?	6	
63		Rosine/BUR08		Williamsport, IN	1/13 PPI	4/29	Corn	?	?	1	Very slight
64		Schaneman/BS		?	?	?	Corn	?	?	8	Will be stand loss - general Ridge till
65		Burgard/LAB10		Holgate, OH	1/25 PRE	5/8	Corn	4/29	Northcoast 2515	6	30-40% plants - no till General 8-10% will recover
66		Kling/JOK12		Lewiston, MN	1.00 PRE	5/25	Corn	?	?	1	Spots minor General 8-10% will recover
67		Schaneman/GAS08		Central City, NE	1.00 PRE	5/18	Corn	?	?	1	Scattered plants
68		Dhaan/?		Uehling, NE	?	?	Corn	?	?	?	
69		Dhaan/ML015		Dakota City, NE	1.00 PRE	5/28	Corn	?	?	7	15% severe, 1 dead
70		Thompson/EDT17		Sharpville, IN	1.00 PPI	5/13	Corn	?	?	5	1.0
71		Burgard/LAB02		Delphos, OH	1.00 PRE	5/8	Corn	?	?	3	Sandy hill showing
72		Wagoner/WDH07		Missouri Valley, IA	.75 PRE	5/20	Corn	?	?	5	
73	L	Kelley/RXK08		Rantoul, IN	1.00 PRE	5/10	Corn	?	?	7	
74		Hooten/RSH29		Pineville, IN	1.00 PRE/PPI	5/21	Corn	?	?	5	40%
75		Rosine		Dear Creek, IN	?	?	Corn	?	?	?	
76		Rosine		Crawfordsville, IN	?	?	Corn	?	?	?	
77		Marken/CCM06		Orchard, IA	1.00	?	Corn	?	Flanagan 3737	1	Less than 1%
78		Marken/CCM14		Osage, IA	1.00	?	Corn	?	?	2	Spotty
79		Marken/CCM19		Postville, IA	1.00	?	Corn	?	?	2	End rows

PRIVACY ACT EXEMPTION

1986 COMBAND CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/Trial Number	Grower	Town & State	Soybean Rate/Applic.	1985 Frost. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
80		King/?		Elgin, MN	1.25	5/20		5/2/86	Stauffer 5340	2	Spotty - 10% low area more effect 30 acre PRE 1 pass digger 5/22 - 20-30%, general spots 20-100%
81		Tutt/?		Waseca, MN	1.25, 2.5	?	Corn	?	?	?	35% white
82		Novotny/?		Orchard, NE	0.75						
83		Miska/?		Medina, MN	1.00						50% white
84		Miller/?		Glidden, IA	1.16 PPI		Corn				General 40% white
85		Weber/WRM18		Napoleon, OH	1.125		Corn			5	Sandy - white 40-80%
86		Weber/WRM16		Dan Road, OH	1.125 PPI		Corn			2	Overlap only
87		Barry/SHB02		Mordsville, IN	1.25	5/20		4/27	Woodard 2520		75% avg 20% range - 25-100%
88		Barry/SHB11		Greenburg, IN	1.0 PRE 1.25 PPI	5/8	Corn	4/29	Seed Corn	1	Spots/discoloration very little
89		Nelson/SHN03		Reason, IA			Dekalb corn plot				Severe white general
90		Nelson/SHN05		Sargent Bluff, IA							
91		Nelson/SHN10		Arelia, IA							
92		Nelson/SHN?		Spencer, IA			Corn				Research plot for Dekalb seed corn
93		Schaneman/?					Corn			6	Spotty - General - Should core back
94		Blone/?		Hudson, IA	1.0		Corn		Seed	2	General 10%
95		Blone/?		Hudson, IA			Corn				General 60%-80% - Blauhe Research Plot
96		Blone/?		Sumner, IA	1.0		Corn				Overlaps pre none No till PPI spot - 30-40%
97		Cashan/?		Eldridge, IA	1.0		Corn				
98		Buffington/HSB14		El Paso, IL	1.33% PRE	5-14	Corn	4/29/86	Various	5	Spots 40%
99		Buffington/HSB05		El Paso, IL	1.33% PRE		Corn	4/29/86	6 Hybrids	0	
100		Roth/TPR05		Dekalb, IL	1.4% PRE	5/21	Corn			85-90	General very even

1995 CORN CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/ Trial Number	Brower	Town & State	Soybean Rate/Applic.	1995 Treat. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
101		Winter/RLW02		Buda, IL	1.33PT PRE	5/23	Corn	4/21/86	Flickering 484	0	
102		Winter/RLW10		Erie, IL	1PT1.5PT PRE	5/13	Corn	4/16/86	Cargill 896		25 end rows only
103		Winter/RLW05		Geneseo, IL	1.33PT PPT 1.33PT PRE 1.33PT + .25ai Sencor		Corn		Agripro Seed Field DK 11100 15 varieties	100/80 10/65	Male up only will be rechecked when female emerges
104		Winter/RLW03		Macon, IL	1.4PT PRE	5/24	Corn	4/17-18/86			General
105		Roth/RKX11		Thomasboro, IL			Corn		Varieties Inbreds	65/30	General
106		Conner/RKX14		Clinton, IL	1.33PT PRE		Corn				General
107		Conner/RKX02		Macon, IL	1.5PT PRE 1.5PT PPT 1.5PT + 3/8ai Sencor		Corn			10/40 5-100	Generally spotty End row overlap all evident
108		Conner/RKX10		Lincoln, IL			Corn			10/40	
109		Conner/RKX07		Clinton, IL			Corn			2	Spotty
110		Conner/RKX18		Warrensburg, IL			Corn			5	General
111		Conner/RKX04		New Berlin, IL			Corn			0	
112		Conner/RKX17		Pleasant Plains, IL			Corn			3	General
113		Zeean/RKX03		Jacksonville, IL			Corn			41	End rows
114		Crowell/RKX15		Sandoval, IL	1.33PT PRE	5/20	Corn	4/24/86	Pioneer 1755	41	End rows spotty
115		Rosine/RKX03		Perney, IN	1.55PT PPT 1.5PT SR	5/13	Corn	4/27/86	Supercrest 5433	50/40	General
116		Raker/EDT02		Buffton, IN			Corn			65/45	General - Seed corn 70% affected - 60% female rows
117		Raker/EDT12		Huntington, IN			Corn			10	
118		Raker/EDT13		Huntington, IN			Corn			10	

PRIVACY ACT EXEMPTION

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1985 COMBAND CARRYOVER COMPLAINTS

Report Number	Potential Stand Loss/Liability	Rep/Trial Number	Grover	Town & State	Soybean Rate/Applic.	1985 Treat. Date	Crop	Planting Date	Variety	Severity Rating (1-10)	Comments (dated): General Vs. Spotty (Overlap)
119		Raker/ED119		Warren, IN			Corn			10	Spotty overlap area
120		Thompson/ED101		Portland, IN	1.33 PT		Corn			5	End rows
121		Thompson/SMB03		Muncie, IN	1.6PT		Cats				
122		Thompson/SMB06		Arcadia, IN	1.33PT		Corn			40	General
123		Thompson/SMB14		Middleton, IN	1.33PT		Corn	4/19/86	Beck's 611	11/40-60	Spotty
124		Thompson/SMB18		Farmeland, IN	1.5PT		Corn	4/21/86	Pioneer 3377	10/60	Spotty overlaps
125		Harper/PE107		Marshall, MO	1.2 lbs.	7/1/85	Corn	4/17/19	Funks 4522 4500 4507		General 2-5 - No variety difference High rate and late 1985 application Spotty 1% stand loss
126		Novotny/?		Bereford, SD			Corn				Spotty overlaps
127		Miska/JFM03		Dartur, MN			Corn			2	General 5-10% Spotty end rows - 80% max
128		Miska/JFM19		Sleepy Eye, MN			Corn			1	Improved in 3 days End rows - spot 40%
129		Barry/SMB10		Bergstown	1.00		Corn	4/25	Pioneer 3378		5/23 - 15% general at 65° Some plants died about 10%
130		Engbard/?		Hastings, MN	1.0-1.2 lbs.		Corn		Seed corn	?	5/23 - Plants corn up 80% white Turn 100% white 2-15 acres
131		Thompson/SMB19		Union City, IN	1.25	5/10	Corn	5/16	Pioneer	5	5/23 - 5% general discolored 40-65%
132		Thompson/SMB13		Atlanta, IN	1.2 lbs.	5/8	Seed corn	5/6	Pioneer	7	5/23 - General 90% discolored 40-100%
133		Thompson/SMB04		Knightstown, IN	1.0	6/1	Corn	5/6	Pioneer 3378	4	5/23 - End rows - 5% discolored 50-80%

PRIVACY ACT EXEMPTION

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WASHINGTON, D.C. 20460

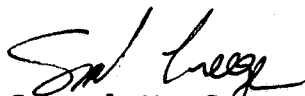
OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Memo of Meeting

6/18/86

Met with representatives of FMC to discuss the off-target phototoxicity problems that have been reported for dimethazone (COMMAND).

FMC states that in most cases, affected plants recover. Also, volatility was not noticed in the soil photolysis study done in 1985 because the a.i. was applied to dry soil. EAB will need data comparing application to both dry and wet soil and subsequent volatility.

and not moist soil.

Samuel M. Creeger

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