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

OCT 23 1986

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: List of Pesticides for Which IR-4 Needs Residue Chemical Information Before the Commencing of Tolerance Petition Actions (Per Drew Baker Letter Request of July 24, 1986) RCB No. 1295

FROM: V. Frank Boyd, Ph.D., Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

THRU: Charles L. Trichilo, Ph.D., Chief
Tolerance Petition Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C)

TO: Hoyt L. Jamerson
Minor Uses Officer
Registration Division (TS-767C)

The letter request of July 24, 1986 (see attachment) is seeking information from HED in all technical areas and from RD in administrative areas predicting the regulatory status of 92 pesticides between now and not to exceed the year of 1989. Accordingly, RCB supplied information on residue tolerance potentials by participating in a telephone conference with IR-4 on August 26, 1984. That conference with five participants (F. Boyd, RCB, Hoyt Jamerson and E. Asbury, RD; with D. Baker and R. Guest of IR-4 Headquarters in New Jersey) allowed expeditious transmittal of brief assessments on each of the 92 chemicals, as requested by IR-4 in aforementioned correspondence.

In an effort to initiate a written record of such status reports, as periodically requested by IR-4, a one-liner type summary is given for each of the 92 pesticides below. The list of pesticides is divided into the following three groups:

1. Pesticides with no foreseen RCB problems;

2. Pesticides with known RCB problems that may be resolved by 1989; and

3. Pesticides with known RCB problems that may not be resolved by 1989.

Since the Residue Chemistry Chapter of the Reregistration Standards identifying many of the data gap deficiencies must be considered in formulating the preceding groups, those pesticides whose Standards are already completed by RCB are denoted with two asterisks (**) and those whose Standards are scheduled for 1987 are denoted with one asterisk (*).

Status of Researchable Pesticides

Group I. Pesticides With No Foreseen "RCB Problems"

RCB advises IR-4 to read the completed RCB Chapters of the various Registration Standards denoted below:

1. Amdro-Tolerances have been set and proposed at 0.05 ppm on some raw agricultural commodities (RCB) (see Pesticide Chemical New Guide)
2. Asulam*
3. Benomyl - New tolerances on "minor crops" seem to be feasible
4. Cyhexatin - New "Minor Uses" may be successful
5. Diazinon*
6. Diuron**
7. Bentazon**
8. Diflubenzuron**
9. Malathion*
10. Metalaxyl**
11. Methyl bromide
12. Metalachlor
13. Naptalam**
14. Oxamyl*
15. Sethoxydim
16. Terbufos

17. Thiobencarb

18. Triallate

19 Gibberellic acid

20 Ethephon

21 Fensulfothion**

22 Fenthion*

23. Methidathion**

24 Fenamiphos*

25 Etridiazole - mix of terrazole and thiophanate

26. Thiophanate-methyl** - same as for benomyl

27. Sodium chlorate

28. Sodium fluoaluminate

29. Phosmet**

30. NAA

Group II. Pesticides With Known RCB Problems that may be Resolved by 1989

31 Acephate** - Need to utilize M-12A Method for metabolites not used for generating previous residue data

32. Methamidophos** - Metabolite of acephate (see above)

33 Aldicarb** - Need ruminant metabolism and processing data

34 Chlorothalonil** - Need plant and animal metabolism; analyze for HCB and PCBN

35 Chlorpyrifos** - Metabolism needed in corn, root crop, and animals

36. DCNA - Data on totaling pre-harvest and post-harvest residues needed.

37. Diclofop-methyl - Animal metabolism needed

38 Diethatyl-ethyl - Meat, milk, poultry analytical methodology is needed

39. Dimethoate** - RCB data are old and unreliable there are no minor uses at present

40. Diquat - Crop residue data are needed - more data will be required

41 Ametryn - Manufacturer is performing new metabolism, methodology and processing studies - opinions will depend on review of data to be submitted

42 Prometryn* - Same as #41

43. Propargite - Same as #41

44 Ethoprop** - Metabolism in plants; residues in potatoes and tabacco may be submitted by 1987

45. Acifluorfen - Limited residue data are available; single soybean action and NDR level has been considered

46. Fluazifop-p-butyl - Plant metabolism is inadequate

47. Linuron** - Residue data are old - need new residue data on all crops; NDR only on minor crops

48 Zinc phosphide** - Need resolution of Product Chemistry and impact on livestock

49. Maneb - ETU data sufficient for Risk/Benefit; low residues - minor crops

Group III. Pesticide With Known RCB Problems that may not be Resolved by 1989

50. Amitraz** - Need plant metabolism; no feed crop tolerances

51. Azinphos-methyl**

52. B T. Israelensis - Exempted for use on mosquitoes; no RAC

53. Bensulide - Ornamentals and turf uses only

54. Captafol** - Plant metabolism needed for pre- and postharvest use - Compounds under special review

55. Captan - Same as #54

56. Carbofuran** - Registration Standard gaps are to be completed in 1988; phenolic residues are needed

57. Dalapon* - All data are old; lots of RAC's

58. DCPA* - Discontinued by manufacturer

59. Dicofol** - No addition of DDT to environment allowed

60. 2,4-DB - Plant and animal metabolism are needed

61. 4-CPA - Same as #60

62. Dimethazone - Experimental, only, in crops as of present

63. Dinoseb** - No!

64. Disulfaton** - All data are needed, including plant and animal metabolism

65. Endosulfan** - Current data on alfalfa including method are unacceptable

66. Ethion** - Plant metabolism is unknown

67. Fonofos** - Animal feeding and residue data are needed

68. Formetanate hydrochloride - Structurally and toxicologically involved in restricted use of chlordimeform

69. Mancozeb - Risk/Benefit review is expected to limit use

70. Methiocarb - Analytical method problems precipatated by registrant

71. Methomyl** - Acetamide as metabolite in plants and animals must be cleared up

72. Thiodicarb** - Same as #71

73. Mevinphos - All data are old; have no good residue data

74. Napropamide - Metabolism and residue data are needed

75. Molinate - Registered for used with propanil, only

76. Propanil* - 3,4-dichloroproprianilid is still a metabolite problem

77. Nitrapyrin** - Plant metabolism (corn) is needed

78. Paraquat** - Good residue data are needed (could be moved to Group II above)

79. PCNB - Method must be for PCA, MPCPS, PCB, and HCB

80. Pendimethalin** - Need all data - should be nearing completion

81. Parathion - Most residue data are old - must now separate methyl from ethyl parathion for tolerance

82. Oxydemetonmethyl - See disulfaton above

83. Oxyfluorfen - Metabolism needed if proposed tolerances are finite

84. Pronamide - Good residue data are required (could be moved to Group I above)

85. Propachlor** - Needs everything!

86. Proparqite** - Metabolism may be needed due to limited RAC's

87. Pyrazon - Sugarbeet herbicide, only-have no other residue or metabolism data

88. Simazine** - Animal metabolism and feeding studies should be completed in 1989

89. Streptomycin - Methodology and residue data are old

90. Terbutryn** - Incomplete and old data for metabolism; have residue data in barley only

91. Triphenyltin hydroxide** - NDR tolerances only compound is in Special Review

92. Ziram - No RCB data submitted since 1955

In many of the above comments the age of data is mentioned. In keeping with an OPP trend to update all analytical data to the state-of-the-art, data age is an important point for IR-4 to discuss with manufacturer when scheduling residue analysis of field samples by appropriate method.

Recommendations

RCB recommends that IR-4 use the above information as a guide only. Although we have gone to great length in researching the above 92 compounds, continuous incoming information may change our thoughts on these compounds within weeks, i.e., RCB cannot be held responsible for any project that may prove to be fatal before, during, and after completion. For example, you have submitted PP#6E3427-Methiocarb on raspberries. Recently, analytical methods problems were precipitated by the registrant which postponed approval of tolerances.

Attachment

cc: R.F. Circu, V.F.Boyd, M. Kovacs, Minor Use File, Reading File
TS-769:RCB:Reviewer:F.Boyd:Edited vg:CM#2:Rm804:557-7324:10/16/86
RDI: J.H.Onley:9/25/86:R.D.Schmitt

87556:Boyd:C.Disk:KENCO:9/29/86:EK

ATTACHMENT

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

Boyd

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

July 24, 1986

Mr. Hoyt L. Jamerson
Minor Uses Officer
Emergency Response & Minor Use Section
Registration Support and Emergency
Response Branch
Registration Division (TS-767c)
OPP, EPA
Washington, DC 20460

Dear Hoyt:

Per our telephone conversation last week I have attached a list of pesticides for which IR-4 needs information.

The list consists of some of the pesticides that IR-4 would like to work on in 1987. Each has at least one state requesting at least one crop, and all are suppoed to be discussed at a series of regional IR-4 meetings in October. The problem is that IR-4 has limited resources and cannot work on all requests in any single year. Thus, IR-4 would like to know if there are any pesticides on the list that are not worth any efforts at this time.

For instance, mancozeb is on the list. According to my CFR, there have not been any new tolerances established since 1972 and I guess this is because of the metabolite ETU. However, Rohm & Haas assures IR-4 that they are working on it. The question is, should IR-4 work on it in 1987? If EPA expects that all the problems will be resolved by 1989, then IR-4 can do field work in 1987, analyze samples in 1988, and submit petitions in 1989. If EPA thinks the chances will still be poor for new tolerances in 1989, then IR-4 should not discuss it at the October meetings.

Another example from the attached list is nitrapyrin. Dow has told IR-4 that all toxicity data gaps will be filled in 1989. Does that agree with what EPA expects? Are there other problems, such as ground water or endangered species, that might delay approvals of new tolerances for nitrapyrin beyond 1989?

18

IR-4 does not want to work on pesticides with little chance for new tolerances in the next 3 years and it does not want something unexpected, such as ground water concern stopping oxamyl, or a new metabolite, such as acetamide, stopping methomyl. Both oxamyl and methomyl are on the attached list and should IR-4 drop them from consideration for field work in 1987?

IR-4 needs a response before Labor Day because that is when the researchable projects must be sent out for the October regional meetings. Perhaps a visit by Dick Guest and I sometime in August would be the best way to do it. Just get the folks in HED to give the odds for each pesticide in 1989.

Sincerely yours,

Drew

Drew M. Baker, Jr.
Environmental Scientist

DMB/al
Att.
cc: Dr. R.H. Kupelian, National Director, IR-4 Project
Dr. R. Guest, IR-4
Mr. J. Housenger, EPA
Dr. F. Boyd, EPA

SOME IR-4 PESTICIDES WHICH MAY BE RESEARCHABLE IN 1987

Acephate
Acifluorfen
Aldicarb-
Amdro
Ametryn
Amitraz
Asulam
Azinphos Methyl
B.T. Israelensis
Benomyl
Bensulide
Bentazon
Captafol
Captan
Carburofan
Chlorothalonil
Chlorpyrifos
Cyhexatin
Dalapon
DCNA
DCPA
Diazinon
Diclofop-Methyl
Dicofol
Diethatyl-Ethyl
Diflubenzuron
Dimethazone
Dimethoate
Dinoseb
Diquat
Disulfoton
Diuron
Endosulfan
Ethephon
Ethion
Ethoprop
Etridiazole
Fenamiphos
Fensulfothion
Fenthion
Fluazifop-p-butyl
Fonofos
Formetanate Hydrochloride
Gibberellic Acid
Linuron
Malathion
Mancozeb
Maneb
Metalaxyl
Methamidophos
Methidathion
Methiocarb
Methomyl
Methyl Bromide
Metolachlor
Mevinphos
Molinate
NAA
Napropamide
Naptalam
Nitrapyrin
Oxamyl
Oxydemetonmethyl
Oxyfluorfen
Paraquat
Parathion
PCNB
Pendimethalin
Phosmet
Prometryn
Pronamide
Propachlor
Propanil
Propargite
Propazine
Pyrazon
Sethoxydim
Simazine
Sodium Chlorate
Sodium Fluoaluminate
Streptomycin
Terbufos
Terbutryn
Thiobencarb
Thiodicarb
Thiophanate Methyl
Triallate
Triphenyltin Hydroxide
Zinc Phosphite
Ziram
2,4-DB
4-CPA