Department of Pesticide Regulation

Mary-Ann Warmerdam
*Director*

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*Governor*

July 16, 2009

TO: Pesticide Registration and Evaluation Committee

SUBJECT: PRIORITIZATION AND STATUS OF ACTIVE INGREDIENTS FOR RISK CHARACTERIZATION: REPORT 51

The Birth Defect Prevention Act of 1984 (SB 950) requires the California Department of Pesticide Regulation (DPR) to review the toxicology data for all active ingredients currently registered in California.

As part of this review, the active ingredients listed on the attached list were identified as having potential adverse health effects in studies of sufficient quality to permit risk characterization. As a result, these active ingredients will enter the risk characterization process. During this process, DPR staff will identify the seriousness of the adverse effect, determine the expected levels of human exposure, assess the resulting risk to human health, and, if necessary, explore possible mitigation measures.

The results of this risk characterization process will help DPR staff determine if any registration action is warranted. A registration action is not the automatic result for every active ingredient entering the risk characterization process. In addition, as data gaps are filled, other adverse effects might be identified, necessitating another risk characterization. Finally, the risk characterization process should be viewed as a comprehensive evaluation requiring, in some cases, a considerable amount of time. Therefore, it is not possible to predict how long it will take to systematically complete the risk characterization process for each priority category.

The risk characterization document is forwarded to the Assistant Director for approval. When the risk characterization process has been completed, the active ingredient will be removed from this list. Any subsequent risk management activities will be conducted under a separate DPR process.

Attached is a list of active ingredients and the type of corresponding study in which the potential adverse health effects were noted. The active ingredients have been prioritized into High, Moderate, and Low categories.

The prioritization of the active ingredients is a subjective process based upon the nature of potential adverse effect, the number of potential adverse effects, the number of species affected, the no observable effect level (NOEL), potential human exposure, use patterns, quantity used, EPA evaluations and actions, etc. In addition, the status of the active ingredients in risk characterization under Senate Bill 950 (Birth Defects Prevention Act), Assembly Bill (AB) 1807 (Toxic Air Contaminant Act), AB 2161 (Food Safety Act), Proposition 65, and new registration submissions are provided in this report.

Questions about the information contained in this report can be directed to Dr. Joyce Gee, Senior Toxicologist in the Medical Toxicology Branch, at 916-324-3465, or by e-mail at <jgee@cdpr.ca.gov>.

Sincerely,

Gary Patterson, Ph.D., Chief
Medical Toxicology Branch
916-324-3466

Attachment

cc: Dr. Joyce Gee, Senior Toxicologist

RISK ASSESSMENT PRIORITIZATION LIST
Report # 51
July 16, 2009

The following is a list of the active ingredients that will undergo or are undergoing a risk assessment. The active ingredients have been prioritized into High, Moderate and Low categories. Also listed is the type of toxicity study in which the possible adverse effect(s) was noted.

| | Active Ingredient | Studies Indicating Possible Adverse Effects |
|---|---|---|
| | **High Priority** | |
| 1. | Acephate | Genotoxicity study, oncogenicity study, chronic toxicity study, low NOEL |
| 2. | Acrolein | Genotoxicity study, chronic toxicity study, oncogenicity study, reproduction study |
| 3. | Aldicarb | Low NOEL |
| 4. | Arsenic, inorganic | Oncogenicity study (epidemiology), neurotoxicity (epidemiology), genotoxicity study, teratology study |
| 5. | Azafenidin | Chronic toxicity study, oncogenicity study, teratology study, reproduction study |
| 6. | Bromoxynil | Genotoxicity study, oncogenicity study, teratology study |
| 7. | Captan | Genotoxicity study, oncogenicity study |
| 8. | Carbaryl | Genotoxicity study, oncogenicity study |
| 9. | Chloropicrin | Genotoxicity study, teratology study |
| 10. | Chlorothalonil | Combined oncogenicity/chronic toxicity study, oncogenicity study, genotoxicity study |
| 11. | Chlorpyrifos | Genotoxicity study, reproduction study |
| 12. | Cyfluthrin | Teratology study, reproduction study |
| 13. | λ-Cyhalothrin (lambda form) | Chronic toxicity study, oncogenicity study |

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|---|---|---|
| 14. | 2,4-D | Combined oncogenicity/chronic toxicity study, reproduction study, genotoxicity study |
| 15. | Daminozide | Oncogenicity study |
| 16. | Dazomet | Chronic toxicity study, teratology study, genotoxicity study |
| 17. | Diazinon | Genotoxicity study, reproduction study |
| 18. | Dicamba | Neurotoxicity study, chronic toxicity study, oncogenicity study |
| 19. | Dichlobenil | Combined oncogenicity/chronic toxicity study |
| 20. | 1,3-Dichloropropene (Telone) | Systemic toxicity/short term exposure |
| 21. | Dicofol | Oncogenicity study, low NOEL, reproduction study |
| 22. | Dimethoate | Genotoxicity study, low NOEL |
| 23. | Disulfoton | Genotoxicity, low NOELs |
| 24. | Emamectin Benzoate | Neurotoxicity in subchronic and chronic studies, reproduction study |
| 25. | Ethylene oxide | Combined oncogenicity/chronic toxicity study, oncogenicity study, genotoxicity study |
| 26. | Ethylene thiourea (ETU) | Genotoxicity study, chronic toxicity study, combined oncogenicity/chronic toxicity study |
| 27. | Famoxadone | Chronic toxicity study; genotoxicity study |
| 28. | Fenamiphos | Genotoxicity study, low NOEL |
| 29. | Fenbuconazole | Chronic toxicity study, oncogenicity study, combined oncogenicity/chronic toxicity study, reproduction study, teratology study |
| 30. | Fenvalerate/Esfenvalerate | Neurotoxicity |

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|---|---|---|
| 31. | Fipronil | Chronic toxicity study, combined chronic toxicity/oncogenicity study |
| 32. | Flonicamid | Oncogenicity |
| 33. | Flumioxazin | Chronic toxicity study, reproduction study, teratology study |
| 34. | Glufosinate ammonium | Chronic toxicity study, teratology study |
| 35. | Glutaraldehyde | Genotoxicity study, subchronic toxicity study, combined toxicity study |
| 36. | Imazalil | Teratology study |
| 37. | Indoxacarb | Subchronic toxicity studies, combined chronic toxicity/oncogenicity study, chronic toxicity study, oncogenicity study, neurotoxicity study |
| 38. | Iprodione | Genotoxicity study, chronic toxicity studies, oncogenicity study |
| 39. | Linuron | Combined oncogenicity/chronic toxicity study, oncogenicity study, chronic toxicity study, reproduction study |
| 40. | Mancozeb | Genotoxicity study, chronic toxicity study (also see ETU) |
| 41. | Methiocarb | Teratology study |
| 42. | Methyl parathion | Reproduction study, teratology study, genotoxicity study, chronic toxicity study |
| 43. | Metofluthrin | Oncogenicity, neurotoxicity |
| 44. | Milbemectin | Reproduction study, neurotoxicity study, subchronic toxicity study |
| 45. | N-octylbicycloheptene dicarbomixide (MGK-264) | Oncogenicity study |
| 46. | Novaluron | Chronic toxicity |

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| 47. | Orthophenylphenol | Genotoxicity study, oncogenicity study, teratology study |
| 48. | Oxadiazon | Chronic toxicity study, oncogenicity study, genotoxicity study, teratology study |
| 49. | Oxydemeton-methyl | Reproduction study, genotoxicity study |
| 50. | Paradichlorobenzene | Oncogenicity study, reproduction study, genotoxicity study |
| 51. | Paraquat dichloride | Genotoxicity study, oncogenicity study, combined oncogenicity/chronic toxicity study, chronic toxicity study |
| 52. | PCNB | Genotoxicity study, oncogenicity studies |
| 53. | Profenofos | Low NOEL, chronic toxicity study |
| 54. | Propanil | Combined oncogenicity/chronic toxicity study, chronic toxicity study, oncogenicity study |
| 55. | Propargite | Reproduction study, genotoxicity study, combined oncogenicity/chronic toxicity study |
| 56. | Propylene oxide | Genotoxicity study, oncogenicity study |
| 57. | Propyzamide | Oncogenicity study |
| 58. | Pyraclostrobin | Subchronic toxicity study, low NOEL's in teratology , chronic and reproduction studies |
| 59. | Sodium tertathiocarbonate ($CS_2$) | Multiple toxicity studies |
| 60. | Spirodiclofen | Chronic dog, rat and mouse oncogenicity, Rat reproduction |
| 61. | Spiromesifin | Low NOELs |
| 62. | Spirotetramat | Chronic and oncogenicity |
| 63. | Sulfentrazone | Chronic rat, reproductive effects, rat Developmental toxicity |
| 64. | Tebuconazole | Teratology study |

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| 65. | Thiacloprid | Oncogenicity, reproductive toxicity |
| 66. | *Thiamethoxam**  | Oncogenicity, chronic toxicity |
| 67. | Thiazopyr | Subchronic toxicity study, combined oncogenicity /chronic toxicity study |
| 68. | Thiophanate-methyl | Oncogenicity studies, chronic toxicity studies |
| 69. | Tralkoxydim | Chronic toxicity study, combined toxicity study, teratology study |
| 70. | Triadimefon | Teratology study, oncogenicity study, reproduction study, chronic toxicity study |
| 71. | Triallate | Oncogenicity study, chronic toxicity study, genotoxicity study |
| 72. | Tributyltin benzoate | Developmental toxicity study, oncogenicity study |
| 73. | Trifloxysulfuron-sodium | Neurotoxicity study |
| 74. | Vinclozolin | Chronic toxicity study, teratology study, genotoxicity study, reproduction study |
| 75. | Ziram | Oncogenicity study, reproduction study, genotoxicity study |

**Moderate Priority**

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|---|---|---|
| 1. | Acequinocyl | Chronic toxicity study, reproduction study |
| 2. | Acetamiprid | Subchronic and chronic toxicity studies |
| 3. | Acibenzolar-s-methyl | Combined chronic toxicity/oncogenicity study, teratology study, genotoxicity study, chronic toxicity study, subchronic toxicity study |
| 4. | Alkyldimethyl benzyl ammonium chloride | Teratology study |
| 5. | Azoxystrobin | Teratology study |

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| 6. | Bensulide | Chronic toxicity study, low NOEL, delayed neurotoxicity study |
| 7. | Bentazon, sodium salt | Teratology study, oncogenicity study |
| 8. | Bifenazate | Chronic toxicity study, combined toxicity study |
| 9 | Boric acid | Chronic toxicity study, teratology study |
| 10. | Boscalid (BAS510F) | Oncogenicity study |
| 11. | Bromacil | Oncogenicity study, genotoxicity study |
| 12. | Buprofezin | Subchronic toxicity study, chronic toxicity study, combined toxicity study, teratology study |
| 13. | Cacodylic acid | Genotoxicity study, chronic toxicity study, oncogenicity study, teratology study |
| 14. | Carboxin | Genotoxicity study, oncogenicity study, chronic toxicity study |
| 15. | Chlorflurenol, methyl ester | Chronic toxicity study, teratology study |
| 16. | Chlorthal-dimethyl | Combined oncogenicity/chronic toxicity study, oncogenicity study |
| 17. | Clomazone | Chronic toxicity study, teratology study |
| 18. | Clothianidin | Genotoxicity, neurotoxicity (subchronic study) |
| 19. | *Coumaphos** | *Cholinesterase inhibition, neurotoxicity* |
| 20. | Cryolite | Oncogenicity study |
| 21. | Cyanuric acid, monosodium salt | Combined oncogenicity/chronic toxicity study |
| 22. | Cyclanilide | Combined oncogenicity/chronic toxicity study |

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| 23. | Cymoxanil | Genotoxicity study, chronic toxicity study, teratology study |
| 24. | Cypermethrin | Chronic toxicity studies, oncogenicity study, reproduction study |
| 25. | Cyphenothrin | Neurotoxicity |
| 26. | Cyprodinil | Subchronic toxicity study, combined oncogenicity/chronic toxicity study |
| 27. | 2,4-DB [4-(2,4-dichloro-phenoxy)butyric acid] | Genotoxicity studies, reproduction study |
| 28. | *2,2-Dibromo-3-nitrilo-propionamide* | *Developmental study* |
| 29. | Dichloran/Dicloran | Genotoxicity study, chronic toxicity study, reproduction study |
| 30. | Didecyldimethyl-ammonium chloride | Low NOEL |
| 31. | N,N-Diethyl-2-(4-methylbenzyloxy)-ethylamine Hydrochloride (PT807-HCL) | Subchronic toxicity study, chronic toxicity studies |
| 32. | Difenacoum | Genotoxicity, chronic effects |
| 33. | Difenoconazole | Teratology studies, combined oncogenicity/chronic toxicity study |
| 34 | Difethialone | Low NOEL (acute, subchronic) |
| 35. | Dimethenamid-P | Rat oncogenicity/chronic toxicity, low NOEL |
| 36. | Dimethomorph | Oncogenicity study, chronic toxicity study, genotoxicity study |
| 37. | O,O-Dimethyl O-(4-nitro-M-tolyl)-phosphorothioate (Sumithion) | Low NOEL (subchronic study), oncogenicity study, reproduction study |

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| 38. | Dinotefuran | Reproduction study, chronic toxicity study, subchronic toxicity study |
| 39. | Diphenylamine | ombined chronic toxicity/oncogenicity study |
| 40. | Dipropyl iso-cinchomeronate (MGK-326) | Oncogenicity studies |
| 41. | Dithiopyr | Subchronic toxicity studies |
| 42. | Diuron | Genotoxicity study, oncogenicity studies |
| 43. | Dodine | Oncogenicity study |
| 44. | Endothall | Chronic toxicity study, oncogenicity study |
| 45. | Esbiothrin | Genotoxicity study, reproduction study |
| 46. | Ethalfluralin | Chronic toxicity study, genotoxicity study, combined oncogenicity/chronic toxicity study |
| 47. | Ethofumesate | Teratology study |
| 48. | Etoxazole | Genotoxicity study |
| 49. | Fenarimol | Combined oncogenicity/chronic toxicity study |
| 50. | Flubendiamide | Chronic effects in multiple studies |
| 51 | Fludioxonil | Combined oncogenicity/chronic toxicity study, subchronic toxicity study |
| 52. | Fluopicolide | Oncogenicity and liver changes |
| 53. | Fluoxastrobin | Oncogenicity |
| 54. | Fluroxypyr | Chronic toxicity study, subchronic toxicity study |
| 55. | Flurprimidol | Chronic toxicity study, teratology study, reproduction study |
| 56. | τ-Fluvalinate (tau form) | Genotoxicity study, reproduction study, teratology study, chronic toxicity study |

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| 57. | Forchlorfenuron | Genotoxicity study |
| 58. | Formaldehyde | Genotoxicity study, oncogenicity study |
| 59. | Halosulfuron | Chronic toxicity study |
| 60. | Hexahydro-1,3,5-triethyl-S-triazine | Teratology study |
| 61. | Hexythiazox | Oncogenicity study |
| 62. | (Hydroxymethyl)phosphonium sulfate (Tetrakis) | Teratology study |
| 63. | Imidacloprid | Combined oncogenicity/chronic toxicity study, teratology study, genotoxicity study |
| 64. | Imiprothrin | Teratology study, neurotoxicity study, chronic toxicity study, genotoxicity study |
| 65. | *Ipconazole** | *No specific effect; reduced body weight in several species* |
| 66. | Isoxaben | Oncogenicity studies, genotoxicity study. |
| 67. | Kresoxim-methyl | Combined chronic toxicity/oncogenicity study |
| 68. | *Mandipropamid** | *Organ and body weight effects* |
| 69. | MCPA | Genotoxicity study |
| 70. | Mecoprop (MCPP) | Oncogenicity study, genotoxicity study |
| 71. | Mefenoxam | Genotoxicity study |
| 72. | Mefluidide, diethanolamine salt | Combined oncogenicity/chronic toxicity study, oncogenicity study, chronic toxicity study |
| 73. | Metaflumizone | Genotoxicity |
| 74. | Metalaxyl | Genotoxicity study |

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| 75. | Methomyl | Oncogenicity study, chronic toxicity study |
| 76. | Methoxyfenozide | Chronic toxicity study, combined toxicity study, reproduction study |
| 77. | Metribuzin | Chronic toxicity study |
| 78. | MSMA/MAA | Combined oncogenicity/chronic toxicity study |
| 79. | Napropamide | Combined oncogenicity/chronic toxicity study, genotoxicity study |
| 80. | Napthalene acetic acid | Reproduction study, teratology study, chronic toxicity study, combined toxicity study |
| 81. | Norflurazon | Chronic toxicity study |
| 82. | Noviflumuron (XDE-007) | Reproduction study |
| 83. | Ortho-benzyl-para-chlorophenol | Teratology study |
| 84. | Oryzalin | Oncogenicity study, chronic toxicity study |
| 85. | Oxyfluorfen | Genotoxicity study, oncogenicity study, teratology study |
| 86. | Oxythioquinox | Chronic toxicity study, reproduction study, teratology study, genotoxicity study |
| 87. | Pebulate | Combined oncogenicity/chronic toxicity study, chronic toxicity study |
| 88. | Penoxsulam | Oncogenicity |
| 89. | Permethrin | Reproduction study, chronic toxicity study, oncogenicity study |
| 90. | Phenol | Oncogenicity studies |
| 91. | Phenothrin | Oncogenicity study, reproduction toxicity study |
| 92. | Phorate | Low NOEL |

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| 93. | Picaridin (KBR 3023*)* | Subchronic toxicity, genotoxicity |
| 94. | Picloram | Combined chronic toxicity/oncogenicity study |
| 95. | *Pinoxaden** | *Genotoxicity* |
| 96. | Polyhexamethylene biguanidine (Baquacil) | Teratology study |
| 97. | Prallethrin (ETOC) | Subchronic toxicity study, chronic toxicity study, teratology study |
| 98. | Prometon | Low NOEL |
| 99. | Propiconazole | Low NOEL, chronic toxicity study |
| 100. | Pymetrozine | Combined oncogenicity/chronic toxicity study, oncogenicity study, acute neurotoxicity study |
| 101. | Pyraflufen-ethyl | Chronic toxicity study, oncogenicity study, genotoxicity study |
| 102. | Pyrethrins | Reproduction study, genotoxicity study, oncogenicity study |
| 103. | Pyridaben | Low NOEL |
| 104. | Pyridate | Chronic toxicity study |
| 105. | Pyrimethanil | Oncogenicity |
| 106. | Pyriproxyfen | Chronic toxicity study |
| 107. | Pyrithiobac-sodium | Combined chronic toxicity/oncogenicity study |
| 108. | Quinclorac | Chronic toxicity study; genotoxicity study |
| 109. | Resmethrin | Teratology study, oncogenicity study, chronic toxicity study, reproduction study |
| 110 | Rimsulfuron | Chronic toxicity studies |

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| 111. | *Saflufenacil** | Genotoxicity (also, anemia) |
| 112. | Simazine | Combined oncogenicity/chronic toxicity study |
| 113. | Spinetoram | Chronic toxicity |
| 114. | Spinosad | Chronic toxicity study, combined chronic toxicity/oncogenicity study |
| 115. | Sulfosulfuron | Chronic toxicity, oncogenicity |
| 116. | TCMTB | Oncogenicity study |
| 117. | Tebufenozide | Chronic toxicity studies |
| 118. | Terbuthylazine (Bellacide) | Low NOEL |
| 119. | Tetrachlorvinphos | Oncogenicity study, genotoxicity study |
| 120. | Tetraconazole | Oncogenicity (sugarbeets only use) |
| 121. | Thiamethoxam | Combined chronic toxicity/oncogenicity study, chronic toxicity study, oncogenicity study |
| 122. | Thiodicarb | Oncogenicity study, reproduction study, genotoxicity study |
| 123. | Thiram | Low NOEL, teratology study, chronic toxicity study, combined oncogenicity/chronic 8oxicity study |
| 124. | *Tribenuron-methyl** | *Reproduction study* |
| 125. | Trichlorfon | Combined chronic toxicity/oncogenicity study, genotoxicity study |
| 126. | Triclopyr | Genotoxicity study, low NOEL |
| 127. | Trifloxystrobin | Oncogenicity study, chronic toxicity study, genotoxicity study |
| 128.. | Triflumizole | Chronic toxicity study |

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| 129. | Trifluralin | Combined oncogenicity/chronic toxicity study, oncogenicity study |
| 130. | Triforine | Teratology study, oncogenicity study |
| 131. | Tris (hydroxymethyl nitromethane*)* | Genotoxicity study, teratology study |
| 132. | Trisulfuron-methyl | Chronic toxicity study, oncogenicity study |
| 133. | *Triticonazole** | *Chronic dog (eye effects); genotoxicity* |
| 134. | Uniconazole-P | Chronic toxicity study, oncogenicity study, genotoxicity study, low NOEL |
| 135. | Zinc 2-Pyridinethiol-1-oxide *(omadine)* | Teratology studies |

**Low Priority**

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|---|---|---|
| 1. | Alachlor | Oncogenicity study, chronic toxicity study, low NOEL |
| 2. | Alpha-isooctadecyl-omega-hydroxy-poly(oxyethylene) | None identified |
| 3. | Aminopyralid | Chromosome aberrations |
| 4. | 4-t-Amylphenol (Para-tert-amylphenol) | None identified |
| 5. | Azadirachten | None identified |
| 6 | Bacillus subtilis | None identified |
| 7. | Bacillus thuringiensis | None identified |
| 8. | Beauveria bassiana | None identified |
| 9. | Benefin | Combined chronic toxicity/oncogenicity study |
| 10. | Benzyl benzoate | None identified |

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| 11. | Bronopol | Chronic toxicity study, low NOEL |
| 12. | Butylate | Genotoxicity study, neurotoxicity study |
| 13. | N-Butyl-1,2-benzisothiazole-3-one | Genotoxicity |
| 14. | Carfentrazone-ethyl | Chronic toxicity studies |
| 15. | Chlorhexidine diacetate | Dermal (local) effects |
| 16. | 1-(3-Chloroallyl)-3,5,7-triaza-azoniaadamantane | Genotoxicity study, teratology study |
| 17. | 4-Chloro-3,5-xylenol | Genotoxicity study |
| 18. | Chlorpropham | Genotoxicity study |
| 19. | Chlorsulfuron | Chronic toxicity study |
| 20. | Clethodim | Genotoxicity study |
| 21. | Clopyralid | Subchronic toxicity study; combined oncogenicity/chronic toxicity study |
| 22. | *Copper 2-pyridinethiol-oxide (Omadine)** | *Neurotoxicity* |
| 23. | Cyazofamid | Body and organ weight effects |
| 24. | N-Cyclopropyl-N'-(1,1,-dimethylethyl)-6-(methylthio)-1,3,5-triazine-2,4-diamine (Irgarol) | None identified |
| 25. | 2,4-DP | Combined oncogenicity/chronic toxicity study |
| 26. | Desmedipham | Genotoxicity study, teratology study |
| 27. | 1,2-Dibromo-2,4-dicyanobutane (Tektamer 38) | Subchronic toxicity study |
| 28. | 4,5-Dichloro-2-noctyl-3(2H)-isothiazolone (Sea-Nine) | Antimicrobial; local corrosive effects |

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| 29. | Dichlorprop-p | Chronic toxicity studies |
| 30. | Difenzoquat methyl sulfate | Chronic toxicity study |
| 31. | Diflufenzopyr | Teratology study, reproduction study |
| 32. | Dimethipin | Chronic toxicity study |
| 33. | Dimethoxane | Oncogenicity study, genotoxicity study |
| 34. | 5,5-Dimethylhydantoin | Chronic toxicity studies |
| 35. | 4,4-Dimethyloxazolidine | Genotoxicity study |
| 36. | Ethephon | Genotoxicity study |
| 37. | Fenamidone | Chronic toxicity studies, genotoxicity studies |
| 38. | Fenhexamid | Subchronic and chronic toxicity studies |
| 39. | Flumiclorac-pentyl | Chromosome aberrations |
| 40. | Fluridone | Chronic toxicity study, oncogenicity study |
| 41. | Flutolonil | Genotoxicity study, combined oncogenicity/ chronic toxicity study |
| 42. | Foramsulfuron | Genotoxicity study |
| 43. | Formetanate hydrochloride | Genotoxicity study |
| 44. | Fosetyl-Al | Combined oncogenicity/chronic toxicity study |
| 45. | Gliocladium verens | None identified |
| 46. | Glyphosate | Oncogenicity studies |
| 47. | Halofenozide | Teratology study, subchronic toxicity study |
| 48. | Hexazinone | Genotoxicity study |
| 49. | Hydroprene | Chronic toxicity study, oncogenicity study |

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|---|---|---|
| 50. | 5-Hydroxymethyl-1-aza-3,7-dioxabicyclo-(3,3,0)octane | Genotoxicity study |
| 51. | Imazamethabenz | Subchronic toxicity study, combine chronic toxicity/oncogenicity study |
| 52. | Imazamox | Teratology studies |
| 53. | Imazapic | Chronic toxicity study |
| 54. | Imazapyr | Teratology study |
| 55. | Imazethapyr | Genotoxicity study, teratology study |
| 56. | Intersept (for chemical details, see chemicals 3836, 3837, 3838) | Teratology study |
| 57. | Maleic hydrazide | Genotoxicity study |
| 58. | Maneb (also see ETU-High Priority) | Genotoxicity study |
| 59. | Mepiquat chloride | Chronic toxicity studies |
| 60. | Mesosulfuron-methyl | Subchronic toxicity study |
| 61. | Metaldehyde | Chronic toxicity study |
| 62. | Methylene bis(thiocyanate) | Genotoxicity study |
| 63. | Metolachlor | Oncogenicity study, chronic toxicity study |
| 64. | Nicosulfuron (Accent) | None identified |
| 65. | Nithiazine | Neurotoxicity study |
| 66. | Nitrapyrin | Combined oncogenicity/chronic toxicity study |
| 67 | 4-(2-Nitrobutyl) morpholine/ 4,4'-(2-ethyl-2-nitrotrimethylene) morpholine | Genotoxicity study |
| 68 | Octhilinone | Genotoxicity study |
| 69. | Orthosulfamuron | Oncogenicity and chronic liver changes |

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| 70. | Oxamyl | Chronic toxicity study |
| 71. | Oxazolidine E (Bioban) | Teratology study |
| 72. | Parachlorometacresol | Antimicrobial; local irritant |
| 73. | Pendimethalin | Oncogenicity study |
| 74. | Phenmedipham | None identified; incomplete data base |
| 75. | Piperonyl butoxide | Oncogenicity study |
| 76. | Prodiamine | Teratology study, genotoxicity study |
| 77. | Prohexadione calcium | Chronic toxicity study, genotoxicity study |
| 78. | Prometryn | None identified |
| 79. | Propoxycarbazone-sodium | None identified |
| 80 | Pseudomonas cepacia (Blue Circle) | None identified |
| 81. | Pseudomonas fluorescens (Frostban A&B) | None identified |
| 82. | Pseudomonas syringae | None identified |
| 83. | Pyrazon | Chronic toxicity studies |
| 84. | Rotenone | Genotoxicity study |
| 85. | Sethoxydim | Teratology study, chronic toxicity study |
| 86. | Siduron | Oncogenicity study |
| 87. | Sodium hydroxymethyl glycinate | None identified |
| 88. | Streptomyces griseoviridis (Mycostop) | None identified |
| 89. | Tebuthiuron | Reproduction study, teratology study, mutagenicity study |
| 90. | Tetramethrin | Reproduction study, oncogenicity study, teratology study |

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| 91. | Thiobencarb | Genotoxicity study |
| 92. | *Tralopyril** | Antifouling paint |
| 93. | Trinexapac-ethyl (Cimectacarb) | Combined oncogenicity/chronic toxicity study |

## CHANGES TO THE RISK ASSESSMENT PRIORITIZATION LIST

**A. Changes in Status of Active Ingredients Already on Prioritization List**

**B. Active Ingredients Removed from Prioritization List [a] (1)**

*Endosulfan*

**C. Active Ingredients Added to Prioritization List (11)**

*Copper 2-pyridinethiol-oxide (Omadine)**
*Coumaphos**
*2,2-Dibromo=3=nitrilopropionamide**
*Ipconazole**
*Mandipropamid**
*Pinoxaden**
*Saflufenacil**
*Thiamthoxam**
*Tralopyril**
*Tribenuron-methyl**
*Triticonazole**

a/ A completed risk assessment must be approved by Assistant Director before it can be removed from the PREC prioritization list

## STATUS OF ACTIVE INGREDIENTS CURRENTLY IN RISK ASSESSMENT

*Note: The following list only includes those active ingredients that are currently in risk assessment. It does not include the active ingredients in risk mitigation/risk management. Once the risk assessment for a specific active ingredient has been completed and approved by the Assistant Director, that active ingredient is removed from the SB-950/PREC Prioritization List. In addition to conducting a risk assessment under SB-950 for occupational and residential exposures, many risk assessments contain a dietary component under AB-2161 and an air component under AB-1807. Whenever possible, these components are included in one, comprehensive risk characterization document.*

The following stages of the risk assessment process are included in this status section:

**Hazard Identification Stage**: includes the development of the Toxicology Profile Section and the selection of the definitive studies, critical endpoints and NOEL/LOEL/oncogenicity potency values that will be used for risk characterization. Responsibility: Medical Toxicology Branch.

**Exposure Assessment Stage:** includes the development of occupational, residential, dietary (food/water), ambient air and off-site air exposure scenarios. Responsibility: Worker Health and Safety Branch for occupational, residential and air. Medical Toxicology Branch for dietary.

**Risk Characterization Stage:** includes the development of quantitative values used to assess the risk from critical NOELs/oncogenic potency factors and exposure values. Responsibility: Medical Toxicology Branch

**Review Stage:** includes the review of the final draft of the Risk Characterization Document within DRP and externally by OEHHA, US EPA and other interested parties. Also includes development of DPR response to reviewers comments.

**Approval Stage:** completed Risk Characterization Document awaiting approval by Assistant Director.
DDVP Addendum 3

**Inactive :** No current risk assessment activities because of higher priorities.
. Paraquat-- Hazard identification stage - inactive
Propyzamide - Inactive

**Active Ingredients**

1. *Acephate –Response stage (OEHHA, US EPA)*
2. Acrolein – Hazard identification stage
3. *Carbaryl – Response stage (OEHHA, US EPA)*
4. *Chloropicrin – Review stage (OEHHA, US EPA) (PREC presentation)*
5. *Chlorothalonil – Review stage (occupational/air)(OEHHA, US EPA)*
6. Chlorpyrifos – response stage (occupational/air)(OEHHA US EPA)
7. Cyfluthrin – Hazard identification phase
8. Diazinon – Hazard identification phase

9. 1,3-dichloropropene (Telone) – Risk characterization phase (acute, air)
10. Dicofol – Hazard identification phase
11. Esfenvalerate – Hazard identification stage
12. Fipronil - Hazard identification and exposure assessment stages
13. Indoxacarb– Hazard identification and exposure assessment stages
14. Methomyl – Hazard identification stage (dietary)
15. *Methyl iodide- Review stage (OEHHA, US EPA)*
16. Methyl parathion – Risk characterization stage (occupational)
17. Paradichlorobenzene – Hazard identification stage
18. Phosphine – Hazard identification and exposure assessment stages
19. Propargite – Risk characterization stage (occupational)
20. Simazine - Hazard identification and exposure assessment stages
21. Sodium tetrathiocarbonate - Hazard identification and exposure assessment stages