



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
PREVENTION, PESTICIDES AND
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MEMORANDUM

February 22, 2005

Subject: EFED response to Registrant's 30 day Error Correction Comments on Fluometuron RED

To: Michael Goodis, Chief of Reregistration Branch III
Reregistration Division (7508C)

From: Diana M. Eignor, Fishery Biologist *Diana M. Eignor 2/22/05*
Ibrahim Abdel-Saheb, Agronomist *Ibrahim*
Environmental Risk Branch II
Environmental Fate and Effect Division (7507C)

Through: Tom Bailey, Chief, ERB II *TBA* (for T.B.)
Environmental Fate and Effects Division (7507C) *2-22-05*

Attached please find EFED's response to registrant's comments for the Fluometuron RED.

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**FLUOMETURON
ECOTOX AND EFATE SCIENCE CHAPTERS: ERRATA AND CORRECTIONS / COMMENTS**

Page #	Registrant Comment	Registrant Suggested Correction	EPA Response and Action
Page 5	Chemical and Physical Properties: CAS Registry No. 2164172	Should read 2164-17-2	Agreed. Correction made.
Page 6	Use Characterization, Paragraph 1, next to last sentence "The commercial end products include dry flowables (EPA Reg. No. 1812-439) and water dispersible granule (EPA Reg. No. 1812-323)"	Should read "The commercial end products include liquid flowables / emulsifiable concentrates (such as EPA Reg. No's 1812-285, 1812-439, 66222-32), dry flowables / water dispersible granules (such as EPA Reg. No's 1812-323, 1812-438, 66222-33) and wettable powders (such as 66222-30, 66222-31)."	Agreed. Correction made.
Page 6	Use Characterization Paragraph 1, last sentence "These formulations contain between 41.7 – 80% fluometuron."	Should read "These formulations contain between 41.2 -85% fluometuron."	Agreed. Correction made.
Page 6	Use Characterization Section	NOTE – there are also a handful of registered fluometuron products that contain 13.2% fluometuron and 27.6% MSMA (EPA Reg. No's 9779-319, 19713-127, 66222-29). These have not been mentioned in the Use Characterization Section	Agreed. A sentence regarding these products has been added.
Page 8	Bottom of Page, Last Sentence "A summary of the assessment and measurement endpoints . . . with exposure to fluometuron is provided in "	This sentence is incomplete – needs to be corrected	Disagree, the sentence is complete. The sentence reads "A summary of the assessment and measurement endpoints selected to characterize potential ecological risks associated with exposure to fluometuron is provided in Table 2 ".
Page 15	Last entry in Table 3, MRID Number is given as 42643602	MRID should be changed: Correct MRID for CGA-41686 Adsorption / Description is 42643604	Agreed. Correction made.
Page 26	Chronic Toxicity to Mammals, First Sentence: "A chronic mammalian test was submitted (MRID 00163772) was submitted using . . . "	The second 'was submitted' should be deleted. Should read "A chronic mammalian test was submitted (MRID 00163772) using . . . "	Comment in question is on Page 28. Agreed. Correction made.

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Page 29	Second Paragraph, Last Sentence "Chronic RQ's could not be calculated because no chronic freshwater fish "	Spelling correction: ". . . because no chronic freshwater fish "	Agreed. Correction made.
Page 31	Footnotes to Table 13 – Footnote A: Sheephead minnow (<i>Cyprinodon variegatus</i>)	Scientific name should be italicized: "Sheephead minnow (<i>Cyprinodon variegatus</i>)"	Agreed. Correction made.
Page 44	Freshwater Invertebrates, First Paragraph, Last Sentence "It should be noted that when the EC50 value for the Eastern Oyster (220 µg/L)."	Sentence is not complete – should be revised.	Agreed. Phrase deleted.
Appendix A-3	Batch Equilibrium of Three Metabolites, First Paragraph, Last Line "(163-1, MRID's 42643602, 42643603 (below), 42643604 (below))"	MRID Numbers are assigned incorrectly. MRID Number for Primary Degradate (CGA-41686) Batch Equilibrium study is 42643604. Last line should read "(163-1, MRID's 42643602 (below), 42643603 (below), 42643604)". It would be even more appropriate to assign each MRID to the proper paragraph, so in Batch Equilibrium of Three Metabolites, the first paragraph (CGA-41686) would indicate (163-1, MRID 42643604); second paragraph (CGA-41685) would indicate (163-1, MRID 42643603) and the third paragraph (CGA 72903) would indicate (163-1, MRID 42646302)	Agreed. Correction made. MRID associated with the individual metabolites are identified in each paragraph.
Appendix B-3 / B-4 B-6 B-8 B-11 L-3 L-6 L-8 L-11	PRZM/EXAMS Results – Data Used for this Run indicates figures used for Aerobic Aquatic Metabolism as 346 day half life; Anaerobic Aquatic Metabolism, 876 day half life; Aerobic Soil Metabolism 543 day half life	These half lives were apparently used for all PRZM/EXAMS runs indicated in this chapter (each page number indicates another incident of using these figures). These half lives seem to be excessive. In the body of this document (Page 3), the following half lives were given: Aerobic Soil Metabolism – 181 days Anaerobic Soil Metabolism – 378 days Anaerobic Aquatic Metabolism –	Aerobic Aquatic Metabolism half life was calculated by multiplying 0.5*the aerobic soil half-life rate as follows: 0.5 X 0.693/180 d = 0.002; 0.693/0.002=346 day. (See input guideline 2/2002). Anaerobic Aquatic metabolism half life was calculated by multiplying the anaerobic aquatic half life X 3; 3x292=876 day (See input guideline 2/2002). Aerobic Soil Metabolism half life was calculated by multiplying 181 days X 3 = 543 day half life (See

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		177 days Please double check the use of these half life figures.	input guideline 2/2002). There is no contradiction between what is reported as PRZM/EXAMS model-input and what is in the body of this document on Page 3 (please see comments above regarding calculation of each half-life). The reported Anaerobic Aquatic Metabolism – 177 days on page 3 was a typo; it should be 292 days instead of 177 (MRID# 43158901). This value has been corrected in the document.
Appendix C-2	Definitions of Elements in rate Equation: Ci, Second line of definition: "Ci is calculated based on Kenega and Fletcher by multiplying the" Ci, Third line: "Ci is calculated based on the Kenega nomogram ... "	Second line seems to appear in error – should be deleted or modified Spelling of Kenega is incorrect in third line	Agreed. Second line is in error and was deleted. Spelling of Kenega was corrected.
Appendix C-3		Margins on this page are too wide – some text is cut off	Agreed. Formatting corrected.
Appendix D-2	Second Paragraph, EFED's runoff scenario is: "(1) based on a pesticide's ... and the amount of pesticide present ... "	Spelling should be corrected: "(1) . . . and the amount of pesticide present ... "	Agreed. Correction made.
Appendix E-4	Toxicity of Fluometuron to Mammals chart: Species: laboratory rat (<i>Rattus norvegicus</i>)	Scientific name should be italicized: laboratory rat (<i>Rattus norvegicus</i>) [NOTE: same species appears twice – both should be italicized]	Agreed. Correction made.
Appendix F-2	Spray Applications to Foliage, Sentence 1: "The estimated environmental concentration . . . are derived from the Kenega nomograph"	Spelling of Kenega should be corrected	Agreed. Correction made.
Appendix G-3	Fluometuron Chronic Risk Quotients for aquatic plants based on a Tier II EEC and NOEC chart: Second Entry, Cotton / TX, Acute RQ (Peak EEC/EC50) value: 0866363636	This value should not be emboldened, because it does not exceed a RQ value of 1.0.	Agreed. Correction made.

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Appendix G-5	Fluometuron Acute Risk Quotient for freshwater invertebrates based on a Tier II EEC and EC50 chart: All values in Acute RQ (Peak EEC/EC50) column: 1.473636364 0.866363636 1.117727273 0.235809091	All values should be emboldened, because they are all greater than a RQ of 0.05.: 1.473636364 0.866363636 1.117727273 0.235809091	Agreed. Correction made.
Appendix J-3	165-4 Bioaccumulation in Fish, First Reference (Shortelle et al.)	This reference does not have an associated MRID number – please check and include appropriate MRID	Agreed. MRID 42017304 added to paragraph.
Appendix K-2 / K-3	72-1 Acute Toxicity to Freshwater Fish and 72-2 Acute Toxicity to Freshwater Invertebrates: First Reference (Mayer et. al.) MRID number reported as 400098001	MRID associated with this reference in both instances has too many digits Please check MRID number and correct	Agreed. Correction made. Correct MRID number is 40098001.
Appendix L-17	Fluometuron Acute Risk Quotients for freshwater fish based on a Tier II EEC and LC50 chart, Acute RQ (Peak EEC/LC50 values for Cotton / TX, and Cotton CA: 0.0496875 0.011875	These values are improperly emboldened, because they are less than RQ value of 0.05	Agreed. Correction made.
Appendix L-18	Fluometuron Acute Risk Quotients for freshwater invertebrates based on a Tier II EEC and EC50 chart, Acute RQ (Peak EEC / EC50 column, value for Cotton / CA: 0.034545455	This value is improperly emboldened, because it is less than a RQ value of 0.05	Agreed. Correction made.
Appendix L-19	Fluometuron Acute Risk Quotients for estuarine/marine fish based on a Tier II EEC and LC50 chart, Acute RQ (Peak EEC/LC50) column, all figures: 0.000902350 0.000575045 0.00059132 0.000137432	All values are improperly emboldened, because all are below a RQ value of 0.05: 0.000902350 0.000575045 0.00059132 0.000137432	Agreed. Correction made.

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