STUDY TITLE

Registrant's Error Comments on EPA's Preliminary Risk Assessments for the Reregistration Eligibility Decision for Napropamide
Case No. 2450, Chemical Code 103001

Data Requirement

Not Applicable

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Not applicable – not a study

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Statement of Data Confidentiality Claims

No information is claimed confidential on the basis of its falling within the scope of FIFRA § 10(d)(1)(A), (B), or (C).

However, information is claimed confidential on the basis of its falling within the scope of FIFRA §10(b), 10(d)(2) and has been removed to a confidential appendix and is cited by cross-reference in the body of the study.

Company: United Phosphorus Incorporated

Company Agent: Ann M. Tillman, Ph.D.

Agent's Title: Technical Director

Signature: _____

Date: January 19, 2005

STATEMENT OF GLP COMPLIANCE

This report, titled "Registrant's Error Comments on EPA's Preliminary Risk Assessments for the Reregistration Eligibility Decision for Napropamide" is a discussion and presentation of information. This report, per se, does not need to comply with EPA Good Laboratory Practice Standards (40 CFR Part 160) and no GLP statement is required for this type of report.

Company: United Phosphorus, Inc.

Company Agent: Ann M. Tillman

Agent's Title: Technical Director

Signature: _____

Date: January 19, 2005

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I. INTRODUCTION

United Phosphorus, Inc. (UPI) is providing comments on the Environmental Protection Agency's (EPA's) preliminary risk assessments for napropamide. These comments address errors, inconsistencies, omitted studies, and interpretations found in the EPA documents entitled

- *Napropamide: HED Chapter of the Reregistration Eligibility Decision Document*
- *Napropamide: Residue Chemistry Considerations for Reregistration Eligibility Decision*
- *Napropamide RED: Reregistration Eligibility Decision. Product Chemistry Considerations*
- *Napropamide: Occupational and Residential Exposure Assessment and Recommendations for the Reregistration Eligibility Decision*
- *Revised Drinking Water Assessment for Napropamide*
- *EFED Risk Assessment for the Napropamide Reregistration Eligibility Document*

No comments or corrections are provided for the following EPA documents:

- *Napropamide: Chronic Dietary Exposure Assessment for Reregistration Eligibility Decision*
- *Napropamide: Outcome of the 3/16/93 meeting of the HED Metabolism Committee*
- *Drinking Water Assessment for Napropamide for Terrestrial Uses*
- *Review of Napropamide Incident Reports*

UPI acquired the napropamide registrations from Syngenta in 2003 and is still in the process of archiving and interpreting all the data files. Not all the files needed for complete error review were available within the allowed 30-day comment period. In this document, UPI discusses some of the errors in the above documents regarding how the product is used in the field, the inputs used for the modeling scenarios, and interpretation of data supporting the product. Based on our current understanding we believe that significant reductions in the risks--as calculated by EPA--are likely with more appropriate assumptions and we reserve the option to submit further error corrections and suggestions for improvement as product understanding and integration into UPI continues.

General comments are provided below and a table is provided with specific corrections.

II. GENERAL COMMENTS

A. Registrations

The document refers to formulations which have been voluntarily cancelled and are no longer supported. The following tables summarize the current status of napropamide registrations:

Voluntarily Cancelled registrations	Effective Date
70506-26 Devrinol 50-WP Selective	10/15/04
70506-28 Devrinol 2-E Ornamental	Requested 12/16/04
70506-29 Devrinol 50-WP Ornamental	10/15/04
70506-30 Devrinol 10-G Ornamental	10/15/04

Active registrations

70506-27	Devrinol 2-E Selective
70506-31	Devrinol 4-F Selective
70506-33	Devrinol 2-G Ornamental
70506-34	Devrinol 10-G Selective
70506-35	Devrinol Technical
70506-36	Devrinol 50-DF Selective
70506-37	Devrinol 4-F Ornamental
70506-38	Devrinol 50-DF Ornamental
70506-39	Devrinol Lawn & Ornamental
70506-63	Devrinol 2-EC Ornamental
70506-64	Devrinol 2-EC Selective

In accordance with the list of voluntarily cancelled and active registrations above, all references to the 50-WP registrations should be removed from these documents, as all products with that formulation have been cancelled.

B. Use Pattern

Napropamide is a pre-emergent herbicide, generally applied to bare ground. The product works by disrupting the growth process during germination and therefore soil incorporation or watering-in is recommended. To be effective, napropamide must reach the zone of weed seed germination, which is typically 2 to 4 inches below the soil surface. All the product labels bear wording recommending either mechanical incorporation or incorporation through irrigation.

The cancelled WP formulation was registered for use on food crops at the 6 lb ai/A rate, which is referenced in many of the EPA documents. This use rate is not found on the current product labels for food crop uses, only for turf and ornamental uses.

Many of the risk assessment documents use the scenario of two applications for some crops. However, a second application is permitted only for certain crops in the Western region (see label for Devrinol 50-DF Selective (70506-36) for a map of which states this includes).

In instances where more than one application is permitted, the interval of 7 days between applications (the input parameter used by EPA in risk assessments) does not reflect agricultural practices for herbicides. An interval of 90 days would be considered more representative for this herbicide.

The vast majority of the agricultural uses (with the exception of turf, mint and cranberries), receive band treatments such that the actual amount of product applied to the field (vs. broadcast) is lower than a calculated per acre rate. In band treatments, the product is applied to the area directly under the tree (usually a 4-8 foot wide band) and not in the aisles (or middle rows). Compared to broadcast methods, this application scenario results in only about 1/3 of an acre receiving treatment. Although Devrinol may be applied to any crop as a broadcast treatment, this method is not economical for growers and is used less than 10% of the time in favor of band treatments.

The cranberry maximum use rate is 9 lb ai/A. Although a rate of 15 lb ai/A appears on the label (Devrinol 10-G), it is registered for use only in WA and OR, and only if the bog soil type is muck soil. There are an estimated 34,000 acres of cranberries grown in the US [13,000 in WI, 15,000 in MA, 3,000 in NJ, 1,000 in WA and 1500 in OR; USDA, NASS, The Cranberry Institute]. The cranberry acres in WA, the only region of the US with muck soils, represent only 3% of the total cranberry acres, and not all of those acres have muck soils. The use rates in that region are in fact closer to 6 to 7 lb ai/A and not 15 as used in the EFED risk assessments [personal communication, Delmer Robison, Western Growers Supply, Bandon, OR].

In the EFED Risk Assessment for the Napropamide Reregistration Eligibility Document (page 10), information from the National Agriculture Statistics Service (NASS) was cited regarding napropamide usage in the US. NASS reported that napropamide was used on treated acres for the following crops (representing 75% of the napropamide use in 1997):

Tomatoes – 23.5 %
Tobacco – 20%
Cranberries 11.8%
Hot Peppers 10.2%
Strawberries – 8.9%

NASS reports that 448,000 lbs ai were applied in 1997. UPI is providing more detailed sales and use figures. Due to the confidentiality of the following information, this commercial and financial information has been removed to a confidential appendix and is cited by **CROSS REFERENCE NUMBER 1**.

C. Fate in the Environment--Dissipation Issue

The Agency is concerned about the fact that an acceptable explanation has not been provided to explain the large difference in half life between the lab aerobic metabolism study and the half lives in the field dissipation studies. We acknowledge that an interpretation for the differences has not been provided. However, there are substantial data available to indicate that the field data numbers are valid and that the product does actually degrade rapidly in the field. In the field dissipation studies cited in the EFED risk assessment, the half life ranged from 17-24 days. One of the studies was done with the DF formulation and comprised 2 applications, separated by one month. The half life in the latter study was 17.4 days, with NO indication of any accumulation. A total of 17 field degradation studies were undertaken in Germany, USA and Canada using various formulations and application timings, resulting in a range of half life values between 9 and 120 days. Additional studies will be submitted which support the reliability of the field data and provide experimental evidence that there is no accumulation. We believe that EPA's concern that there may be accumulation is not justified based on the weight of the evidence from higher tier, field dissipation studies.

The fact that the fastest routes of dissipation for the product based on lab studies are photolysis (soil and water) does not negate the results of the field data. EPA comments that soil photolysis is not operative because of soil incorporation and aqueous photolysis is not operative in the presence of organics. The extent to which these mechanisms

operate in the field is speculation, whereas there is substantial field data that confirms the product does not accumulate in the soil.

D. Modeling Assumptions

We believe that the use of the correct and more realistic assumptions, such as

- the correct vapor pressure ($1.7x10^{-7}$ torr), water solubility (74 mg/L), aqueous photolysis half-life (6.8 min)
- field dissipation half life (in place of aerobic soil metabolism half life),
- a realistic time between applications (such as 90 days) for those uses with more than one application per season rather than a default of 7 days, and
- a lower lbs. ai use rate to reflect the band applications rather than broadcast,

will reduce the calculated EECs.

E. Risk Assessments

Although EPA does acknowledge that napropamide is a pre-emergent herbicide, generally applied to bare ground, it is not clear that this is really taken into account in the risk assessments. The vast majority of the agricultural uses (with the exception of turf, mint and cranberries), are via band applications such that the actual amount of product applied to the field (vs. broadcast) is lower. Further, the product must be either soil incorporated (where applicable) or watered in, making less product available for runoff such that only treatments from the edges of agricultural sites (i.e., a very small part of the actual amount applied) is available for runoff.

The Agency concluded that no acute risk levels of concern were exceeded for freshwater or marine/estuarine fish and invertebrates, but that chronic risks to aquatic organisms could not be evaluated because there were no chronic data submitted. UPI does have additional chronic aquatic data which will be submitted to assist the Agency in evaluating chronic risk to aquatic species.

The Agency believes that chronic exposure to aquatic organisms is possible because of the "potential persistence" which may cause chronic exposure to aquatic organisms. We believe that EPA significantly over-estimates the amount of napropamide in the soil which is available for runoff. In addition, the aquatic dissipation mechanism on which EPA relies –aqueous photolysis— may not be the only mechanism available to reduce the amount of product in the water phase. Sufficient weight must be given to the following:

- Based on the use pattern, the amount of napropamide reaching aquatic environments is much less than that estimated by EPA.
- The field dissipation data indicate rapid dissipation.
- A natural sediment-water study shows that the product partitions from the water phase into the sediment with a half-life of 24-34 days making napropamide less available to the aquatic organisms.

In assessing risk to terrestrial organisms, EPA significantly over-estimated exposure primarily due to the use of non-realistic input values as discussed above. Terrestrial non target organism exposure from the use of this herbicide is most likely to occur as a result

spray drift due to the use pattern. The product is generally applied in a band (with the exception of turf, mint and cranberries) under and near the agricultural crop being grown. As a result, it is not likely that there would be significant residues in other areas of the treated fields.

In areas adjacent to the treated fields, there is a potential for spray drift to non-target organisms. Given the mode of action of this product, it is not likely to impact established plants since there is no incorporation of the product in these areas. Two additional studies are being submitted which tested seedling emergence –with and without soil incorporation. These show that the results are clearly more severe with incorporation—a practice not applicable to off site areas. It should also be pointed out that the product dissipates rapidly in the soil and by photolysis in water and therefore the actual exposure to non-target organisms will decline quickly.

The RQ's calculated will improve with the use of more appropriate inputs to the EEC calculations. Nevertheless, even if the RQ's as calculated using the conservative lab input to the modeling exceed the Levels of Concern, there is no evidence--after 25 years of Devrinol use--suggesting that actual adverse effects occur from the existing uses.

III. LIST OF ADDITIONAL STUDIES TO BE SUBMITTED

The following is a list of reports which will be submitted by UPI to assist in the revisions to the Agency risk assessments.

Science Area	Study Title	Expected date of submission
Product Chemistry	A. Tillman. 2003. Group A: Product Identity and Composition of Devrinol Technical. United Phosphorus, Inc. Report No. UPI-2003-19.	Jan. 31, 2005
Product Chemistry	G. A. White. 2003. Spectral Examination of Napropamide. Report No. J14368.	Jan. 31, 2005
Residue	Lurvey, E. L. 1993. Napropamide: Magnitude of the Residue in Basil. IR-4 Report No. 03439.	Jan. 31, 2005
EFED	D. Shaw. 2001. Napropamide: Aerobic Soil Route and Rate of Degradation. Report No. UPH/027.	Jan. 31, 2005
	Mackay, J. C. 1989. Devrinol 50-WP Field Dissipation Study. Rodney, Ontario, Canada. Report No. WRC 89-55.	Jan. 31, 2005
	Mackay, J. C. 1989. Devrinol 50-WP Field Dissipation Study, Slimcoe, Ontario, Canada. Report No. WRC 89-50.	Jan. 31, 2005
	Simmons, N. D. 1990. Napropamide: Soil Dissipation Studies (West Germany 1988-1989). Report No. RJ0860B.	Jan. 31, 2005
	Long, K. W. J., and Roberts, G. C. 1995. Napropamide: Degradation of 14C-labelled material in Natural Sediment-Water Systems. Report No. BL5425/B.	Jan. 31, 2005
	Tapp, J. F., Sankey, S.A., Caunter, J. E. and Miller, H. M. 1989. Napropamide: Determination of the 28 day LC50 to Rainbow Trout (*Salmo gairdneri*). Report No. BL/B/3624.	Jan. 31, 2005
	Stewart, K. M., Tapp, J. F., Sankey, S. A., Williams, T. D. and Stanley, R. D. 1990. Napropamide: Determination of Chronic Toxicity to *Daphnia Magna*. Report No. BL3709/B.	Jan. 31, 2005
	Jenkins, C.A. 2002. Napropamide: Higher Plant (*Lemna minor*) Growth Inhibition Test. Report No. UPH022/013214	Jan. 31, 2005
	Jenkins, C. A. 2002. Napropamide: Algal Growth Inhibition Assay (*Anabaena*). Report No. UPH021/013213.	Jan. 31, 2005
	Baluff, M. 2003. Seedling Emergence Dose Response Test for Non-Target Plants Following Multiple Rate Application of Devrinol 45 FL in the Greenhouse Under Controlled Climatic Conditions in Spain, 2002. Report No. 20023053/S1-FNTP.	Jan. 31, 2005
	Baluff, M. 2003. Seedling Emergence Dose Response Test for Non-Target Plants Following Multiple Rate Application with Soil Incorporation of Devrinol 45 FL in the Greenhouse Under Controlled Climatic Conditions in Spain, 2003. Report No. 20023053/S3-FNTP.	Jan. 31, 2005
	S. Schmitzer. 2003. Laboratory Testing for Toxicity (Acute Contact and Oral) of Devrinol 450 SC on Honey Bees (*Apis mellifera* L.). Report No. 17073035.	Jan. 31, 2005
	Gough, H. J. and Pilling, E. D. 1995. Napropamide: Acute Contact Toxicity to Honey Bees (*Apis mellifera*) of a 50% Wettable Powder Formulation.	Jan. 31, 2005

IV. SPECIFIC CORRECTIONS AND COMMENTS ON DOCUMENTS PROVIDED

Corrections directed at specific sections of the risk assessments are presented in the following tables.

30-DAY ERROR RESPONSE TO "HED CHAPTER OF THE REREGISTRATION ELIGIBILITY DECISION DOCUMENT (RED). PC CODE 103001, CASE # 2450, DP Barcode D308278". 11/18/04.		
Header	**Page and Location**	**Error Correction**
2.0 Ingredient Profile	4, paragraph 2	Correct the second sentence since all wettable powder formulations have been cancelled effective 10/15/04.
	5, Table 2.2	Add footnote 1 to EP 70506-28. Add two other registrations 70506-63, Devrinol 2-EC Ornamental and 70506-64, Devrinol 2-EC Selective (both are 24.1% EC formulations).
	5, Table 2.3	Correct the density to 0.584 g/mL.
3.3 Environmental Degradation	10	The photolytic half-life in water cited in the EFED risk assessment is 6.8 minutes.
3.5.1 Tabular Summary	10, Table 3.5	Footnote 1 can be revised to remove the last part of the first sentence. Current labels reflect the plant-back intervals specified (see Devrinol 50-DF, EPA Reg. No. 70506-36 approval dated 7/28/04, and Devrinol 2-EC, EPA Reg. No. 70506-64, approval dated 7/19/04).
4.1 Hazard Characterization	11, second paragraph	The last sentence on the page should be corrected to read "…were observed in livers from male rats fed 48 mg napropamide/kg/day…".
4.1 Hazard Characterization	13, Table 4.1a	Correct the typo in the MRID for 870.26 to 40362903.
4.2.6.2 Degree of Concern Analysis and Residual Uncertainties for Pre and/or Post-natal Susceptibility	18	The second sentence should be corrected: a 3-generation reproduction study was conducted with napropamide.
6.1.1 Residue Profile	32, first paragraph	The last sentence can be corrected to add apple juice and pomace.
6.1.1 Residue Profile	32, last paragraph	Correct the statement since all current labels have been changed to reflect the plant-back intervals specified (see Devrinol 50-DF, EPA Reg. No. 70506-36 approval dated 7/28/04, and Devrinol 2-EC, EPA Reg. No. 70506-64, approval dated 7/19/04).
6.2 Water Exposure/Risk Pathway	34	All values are overestimates because the use patterns selected are not registered. See Section II General Comments, above, regarding current use patterns. Footnote a: Napropamide is not applied using foliar applications. Applications are made to the area directly under and around the trees/bushes.
6.3.1.3 Residential Handler Exposure and Risk Assessments	37, Table 6.3.1	In the column "Inhalation Dose (mg/kg/day)" there is a reference to footnote 5 but there is no footnote 5 at the end of the table (other footnotes are letters).
6.3.2.3 Residential Postapplication Exposure and Risk Estimates	40	SA units should be corrected to cm^2.
10.2 Residue and Product Chemistry Deficiencies	52	The 5th bullet point should be corrected to read "…appropriate plant-back intervals (PBI)." However, current labels have already been changed to reflect the PBIs.
Appendix 1.0	54	For guideline 870.3100, additional data should not be required since data were fulfilled and accepted in chronic studies.

30-DAY ERROR RESPONSE TO "HED CHAPTER OF THE REREGISTRATION ELIGIBILITY DECISION DOCUMENT (RED). PC CODE 103001, CASE # 2450, DP Barcode D308278". 11/18/04.		
Header	**Page and Location**	**Error Correction**
Appendix 2.0	55, 21-Day Dermal	Correct the second word in the first sentence to "of".
Appendix 3.0, Currently Registered Uses	58-85	All registrant corrections regarding the referenced table of uses can be found in the section of this document which contains comments on Residue Chemistry Considerations (corrections on Appendix 1, Table A2, pages 76-119 of that document). The two tables are essentially identical.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE. RESIDUE CHEMISTRY CONSIDERATIONS FOR REREGISTRATION ELIGIBILITY DECISION". DP Barcode D305600. 11/15/04.		
Header	**Page and Location**	**Error Correction**
Executive Summary	2, second paragraph	The 50%WP formulations have been voluntarily cancelled (EPA Reg. Nos. 70506-26 and -29); cancellation was effective 10/15/04.
Executive Summary	3, second paragraph	Add apple juice and pomace to the last sentence regarding storage stability in processed commodities.
Executive Summary	4, second paragraph	The appropriate crop rotation restrictions have been added to the following labels: Devrinol 50DF Selective (approved 7/28/04, EPA Reg. No. 70506-36) and Devrinol 2-EC Selective (approved 7/19/04, EPA Reg. No. 70506-64).
Regulatory Recommendations and Residue Chemistry Deficiencies	4, last bullet	Change the words "preharvest intervals (PHIs)" to "plantback intervals (PBIs) as noted in paragraph 2 on this page.
Background	5, Table 2	Correct the density to 0.5<u>8</u>4 g/ml (see comments to Product Chemistry Considerations, D305599).
860.1200 Directions for Use	6, Product List	All Syngenta napropamide products were transferred to United Phosphorus, Inc. on July 24, 2003, and are no longer valid registrations.
860.1200 Directions for Use	7, Table 3	All Syngenta napropamide products were transferred to United Phosphorus, Inc. on July 24, 2003, and are no longer valid registrations. Correct the header to remove Syngenta Crop Protection. The following corrections are for UPI products: 70506-26 and -29 – cancellations effective 10/15/04 70506-28 – cancellation requested 12/6/04 70506-30 – cancellation effective 10/15/04 70506-32 – cancellation effective 10/15/04 70506-39 –correct product name spelling to Devrinol; the formulation is a 2% granular. Add the following products to this list: 70506-63 Devrinol 2-EC Ornamental Herbicide, registered 5/24/04 70506-64 Devrinol 2-EC Selective Herbicide, registered 5/24/04. Footnotes 2 and 37: the reference to making a change to the plant back interval (PBI) on the labels can be removed since the PBIs have been added to the labels.
860.1200 Directions for Use	8, Table 3, footnote 3	Correct the product name for the final product listed: it should read (Devrinol <u>5G</u> Ornamental).
Summary of Residue Chemistry Data Requirements	10, Table 4 Basil, Marjoram 11, Table 4 Winter savory	UPI is submitting data from IR-4 to support unrestricted registration of these crops.
Use Pattern Table	11, Table 4	The current 40CFR tolerances for Cranberry, Grape, and Strawberry are noted as "Not Established" but these tolerances are currently active under the obsolete crop group "Fruit, small" [see 40 CFR § 180.328(a)]. A separate footnote <u>must</u> be added to explain this fact so that, when this document is available during the Public Review process, growers do not become concerned that uses on these three crops are illegal because no tolerances exist.
Use Pattern Table	12, Table 4,	A coffee bean processing study was submitted. See MRID

30-DAY ERROR RESPONSE TO "NAPROPAMIDE. RESIDUE CHEMISTRY CONSIDERATIONS FOR REREGISTRATION ELIGIBILITY DECISION". DP Barcode D305600. 11/15/04.		
Header	**Page and Location**	**Error Correction**
	Coffee Processing	92125074 for the Phase 3 summary, and 140144 for the original study.
Berry Group	41	In the paragraph beginning "Crop field trial data", third line, change the number 196 to 176 to match the field testing data.
Blueberry	42	In the second line, change 196 to 176 to match the field testing data.
Basil	44	UPI is submitting data from IR-4 to support unrestricted registration of this crop.
Marjoram	45	UPI is submitting basil data from IR-4 to support unrestricted registration of this crop.
Winter savory	46	UPI is submitting basil data from IR-4 to support unrestricted registration of this crop.
Cranberry	49, 50	The Agency is requiring residue testing at 9 lbs ai per acre, one application, in NJ or MA. UPI points out that this use pattern has been covered sufficiently by trials submitted in MRID 00118001 (see Phase 3 Summary MRID 92125049), and no additional trials for this use rate should be required.
860.1500 Crop Field Trials	54, Pistachio	The use pattern with 2 applications was on the 50WP label, which has been cancelled. There is now only the single application with a maximum rate of 4 lb ai/A.
860.1500 Crop Field Trials	55, Pomegranate	The use pattern with 2 applications was on the 50WP label, which has been cancelled. There is now only the single application with a maximum rate of 4 lb ai/A and maximum seasonal rate of 4 lb ai/A.
860.1500 Crop Field Trials	56, Strawberry	The use pattern with 2 applications was on the 50WP label, which has been cancelled. There is now only the single application with a maximum rate of 4 lb ai/A. No PHI is noted on the current label but the label does restrict application from bloom through harvest.
860.1500 Crop Field Trials	56, Tobacco	In the paragraph which lists the registered formulations, delete references to the 50WP, which has been cancelled.
860.1520 Processed Food and Feed	57, Coffee	A coffee bean processing study was submitted. See MRID 92125074 for the Phase 3 summary, and 140144 for the original study.

The following corrections are noted for Appendix 1: Food/Feed Use Pattern Table for Napropamide Generated by BEAD/OPP which begins on page 75.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE. RESIDUE CHEMISTRY CONSIDERATIONS FOR REREGISTRATION ELIGIBILITY DECISION". DP Barcode D305600. 11/15/04.		
Header	**Page and Location**	**Error Correction**
Appendix 1 – Food/Food Use Pattern Table for Napropamide	Table A2	General comments: This table is called Table A2. If there is not a Table A1, the registrant suggests this table be renamed. The registrant does not understand the header "Foliar" contained throughout this table. As a preemergent herbicide, this product is never applied (1) to the leaves of crops or (2) to the leaves of weeds (napropamide does not control established weeds). We have changed this term where it appears in the table to more appropriate wording. The registrant does not understand the header

30-DAY ERROR RESPONSE TO "NAPROPAMIDE. RESIDUE CHEMISTRY CONSIDERATIONS FOR REREGISTRATION ELIGIBILITY DECISION". DP Barcode D305600. 11/15/04.		
Header	**Page and Location**	**Error Correction**
		"Postemergence" contained throughout this table. Does the Agency mean to indicate application after the emergence of the weed, or after emergence of the crop being treated? Napropamide is not effective on established weeds, since its activity is on the germination of the seed, and thus it would not be effective on postemergent weeds. If the term is meant to apply to crops, then the registrant does not understand what "postemergence" would mean in relation to a tree crop, for instance. It is UPI's understanding that the term "Transplant" means application at or immediately following transplanting. UPI questions the meaning of the term "Seed bed". It is our understanding that this term refers to the establishment of daughter plants. With the exception of tobacco, peppers, tomatoes, and sweet potatoes, this product is not applied to any crops as a "Seedbed" application. This row should be **removed** from all crop listings except tobacco, peppers, tomatoes, and sweet potatoes.
ALMOND	76, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
APPLE	77, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
APRICOT	78, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
ARTICHOKE	79, Foliar	Change the Max Seasonal Rate from NS to 4. Change the Max # Apps from NS to 1. Change "Foliar" to "Postplant, Basal Spray/Broadcast/Directed/Ground".
ASPARAGUS	80, Foliar	Change Max Seasonal Rate to 4. Change Max # Apps from NS to 1. Change "Foliar" to "Postemergence".
AVOCADO	81, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
BLACKBERRY	81, Foliar	Change Max Seasonal Rate to 4. Change "Foliar" to "Directed Postplant, Band Spray".
	81, Postemergence	Change Max Seasonal Rate to 4.
BLUEBERRY	82, Foliar	Change Max Seasonal Rate to 4. Change Max # Apps from NS to 1. Change "Foliar" to "Directed Postplant, Band Spray".
BOYSENBERRY	83, Foliar	Change Max Seasonal Rate to 4. Change Max # Apps from NS to 1. Change "Foliar" to "Directed Postplant, Band Spray".
	83, Postemergence	Change Max Seasonal Rate to 4. Remove NS from Max # Apps.
BROCCOLI	83, Postplant	Change Max Seasonal Rate from NS to 2. Change description to "Postplant over Seed or Transplants".
	83, Preplant	Change Max Seasonal Rate from NS to 2.
	Transplant	Change Max Seasonal Rate from NS to 2.
BRUSSELS SPROUTS	85, Postplant, Preplant, Transplant	Change Max Seasonal Rate from NS to 2. Change description to "Postplant over Seed or Transplants".
CABBAGE	86, Postplant, Preplant	Change Max Seasonal Rate from NS to 2. Change description to "Postplant over Seed or Transplants".
	87, Transplant	Change Max Seasonal Rate from NS to 2.
CAULIFLOWER	87, Postplant, Preplant	Change Max Seasonal Rate from NS to 2. Change description to "Postplant over Seed or Transplants".

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Header	**Page and Location**	**Error Correction**
	88, Transplant	Change Max Seasonal Rate from NS to 2.
CHERRY	89, Postemergence	Change Max Seasonal Rate from NS to 8.
	90, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
CITRUS	90, Foliar	Change Max Seasonal Rate from NS to 8; change Max # Apps from NS to 2. Change "Foliar" to "Directed Postplant, Band Spray".
CRANBERRY	90, Foliar	Max Single App is 15 lbs only in very specific areas (heavy muck soils in OR and WA). More representative rate is 9 lbs.
	90, Postharvest, Postplant	Delete these use descriptions as they are redundant.
CURRANT	91, Foliar	Change Max Seasonal Rate from NS to 4; change Max # Apps from NS to 1. Change "Foliar" to "Directed Postplant, Band Spray".
EGGPLANT	91, Preplant	Change Max Seasonal Rate from NS to 2.
	92, Pretransplant, Transplant	Change Max Seasonal Rate from NS to 2.
FIG	92, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	92, Postemergence	Change Max Seasonal Rate from NS to 8; change Max # Apps from 1 to 2.
FILBERT	94, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	94, Postemergence	Change Max Seasonal Rate from NS to 8; change Max # Apps from 1 to 2.
GRAPEFRUIT	94, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	94, Postemergence	Change Max Seasonal Rate from NS to 8; change Max # Apps from 1 to 2. Change description to "Postemergence, soil application".
GRAPES	95, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	95, Postemergence	Change Max Seasonal Rate from NS to 8; change Max # Apps from 1 to 2.
KIWI	96, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
LEMON	97, Postemergence, Foliar	Change Max Seasonal Rate from NS to 8; change Max # Apps from 1 to 2. Change "Foliar" to "Directed Postplant, Band Spray".
LOGANBERRY	98, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
MINT	99, Foliar	Change Max Seasonal Rate from NS to 4; change Max # Apps from NS to 1.
NECTARINE	100, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2. Change "Foliar" to "Directed Postplant, Band Spray".
OLIVE	101, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
ORANGE	101, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	102, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
PEACH	102, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	103, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
PEAR	104, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	104, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
PECAN	105, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	105, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE. RESIDUE CHEMISTRY CONSIDERATIONS FOR REREGISTRATION ELIGIBILITY DECISION". DP Barcode D305600. 11/15/04.		
Header	**Page and Location**	**Error Correction**
PEPPER	106, Posttransplant, Preplant	Change Max Seasonal Rate from NS to 2,
	106, Transplant	Change Max Single Appl Rate from 4 to 2, change Max Seasonal Rate from NS to 2.
PERSIMMON	107, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
PISTACHIO	108, Foliar, Postemergence	Change Max Seasonal Rate to 4. Change "Foliar" to "Directed Postplant, Band Spray".
PLUM	109, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	109, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
POMEGRANATE	109, Foliar	Change Max Seasonal Rate from 8 to 4, change Max # Apps from 2 to 1. Change "Foliar" to "Directed Postplant, Band Spray".
PRUNE	110, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	110, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
RASPBERRY	111, Foliar, Postemergence	Change Max Seasonal Rate from NS to 4, change Max # Apps from NS to 1. Change "Foliar" to "Directed Postplant, Band Spray".
RHUBARB	112, Dormant	Change Max Seasonal Rate from NS to 4, change Max # Apps from NS to 1.
STRAWBERRY	113, Established plantings, Foliar, Posttransplant, Prebloom	Change Max Seasonal Rate to 4. Change "Foliar" to "Dormant".
SWEET POTATO	114, Plant Bed, Posttransplant	Change Max Seasonal Rate from NS to 2, change Max # Apps from NS to 1.
TANGELO	114, 115 Foliar	Change Max Seasonal Rate from NS to 8. Change "Foliar" to "Directed Postplant, Band Spray".
TANGERINE	115, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	116, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
TOMATO	116, Posttransplant, Preplant	Change Max Seasonal Rate from NS to 2.
	117, Transplant	Change Max Single Appl Rate from 4 to 2, change Max Seasonal Rate from NS to 2.
WALNUT	117, Foliar	Change "Foliar" to "Directed Postplant, Band Spray".
	118, Postemergence	Change Max Seasonal Rate from NS to 8, change Max # Apps from 1 to 2.
PRODUCT NUMBERS CONTAINED IN THIS REPORT	119 Table Footer	Remove 70506-26, 70506-29 because they have been cancelled. Add 70506-38, 70506-63, 70506-64.
HOMEOWNER PRODUCTS CONTAINED IN THIS REPORT	119 Table Footer	Add 70506-33 and 70506-39.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE RED – REREGISTRATION ELIGIBILITY DECISION. PRODUCT CHEMISTRY CONSIDERATIONS. CASE NO. 2450". DP Barcode D305599. 10/29/04.		
Header	**Page and Paragraph**	**Error Correction**
Background Identification of Active Ingredient	3, Table 2 and Attachment 1, table 2	Correct the density; bulk density, specific gravity value to 0.584 g/mL.
Background Identification of Active Ingredient	4, Table 2 and Attachment 1, Table 2	UV/visible absorption: Report available for submission.
830.1550-7950 Product Chemistry Data Requirements	5, Table 3, Footnote 1, 3, 5, 6	830.1550/1600/1620/1670/1700/1750/1800: Report on United Phosphorus' 95.7% technical available for submission.
830.1550-7950 Product Chemistry Data Requirements	5, Table 3, Footnote 8 and Attachment 1, Table 2	Guideline No. 830.6313, Stability to normal and elevated temperatures is not applicable to napropamide technical since the product is stored in fiberboard drums with an inner plastic liner and is not in contact with metals.
Attachment 1: Review of Product Chemistry, OPPTS 830 Series	10, Table 1	Delete footnote number 2 as there is no CBI Appendix A.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE: OCCUPATIONAL AND RESIDENTIAL EXPOSURE ASSESSMENT AND RECOMMENDATIONS FOR THE REREGISTRATION ELIGIBILITY DECISION DOCUMENT". DP Barcode 305598. 11/17/04.		
Header	**Page and Location**	**Error Correction**
Cover sheet	1, list of EPA Reg. Nos.	Delete the following, as they have been cancelled: 70506-26, -28, -29, -30, -32.
Executive Summary	3	Change second to last sentence to indicate that the wettable powder products have been cancelled.
Hazard Concerns	3, paragraph 1	On line 3, delete "(12".
	3, paragraph 2	Add end close quote to "Not Likely to Be Carcinogenic to Humans".
1.3 Summary of Hazard Concerns for Napropamide	6	The second sentence refers to Table 1 but it appears that the information is in Table 2.
1.3 Summary of Hazard Concerns for Napropamide	7, Cancer	Add end close quote to "Not Likely to Be Carcinogenic to Humans".
1.3 Summary of Hazard Concerns for Napropamide	7, Acute Toxicity	The data referenced is in Table 1.
1.3 Summary of Hazard Concerns for Napropamide	7, Table 1	Correct the typo in the MRID for 870.26 to 40362903.
1.3 Summary of Hazard Concerns for Napropamide	8, Table 2	Place an asterisk (*) in front of the footnote to the table or delete the asterisk in the header of the third column.
1.5.1 End Use Products	9, paragraph 1	The first and third sentences should be corrected to reflect the fact that only the 2% granular formulation is used by residential homeowners.
1.5.1 End Use Products	9, Table 3	In the header, correct the spelling of "Summary". Two registered products are missing from this list: Devrinol 2-G Selective, 70506-33 and Devrinol 2-EC Selective 70506-64. It might be helpful to list which of the registered products are for agricultural uses (70506-27, -31, -34, -36, -64), for professional ornamental uses (70506-33, -37, -38, -63) and for use by homeowners (70506-33, -39). The footnote should be corrected to indicate that the products listed there have been cancelled effective 10/15/04, and for Devrinol 2-E Selective (70506-28) cancellation was requested 12/16/04.
Type of Pesticide/Targeted Pest/Use Sites	9, first paragraph	The next to last sentence should be changed to read "all wettable powder products have been cancelled".
Type of Pesticide/Targeted Pest/Use Sites	9, second paragraph	Correct the spelling of "napropamide". Correct the spelling of "cranberry".
1.5.2 Registered Use Categories and Sites	10	Capitalize the first word (napropamide) in the first sentence of the paragraph.
1.5.2 Registered Use Categories and Sites	10, Table 4	In the header, correct the spelling of "Acres". We suggest adding the word "Maximum" to the second column header "APP Rate", for clarity.
1.5.2 Registered Use Categories and Sites	10, 11, 12, Table 4	Add the FlC formulation to the listing for the crop Loganberry. Add the G formulation to the listing for the crops Nectarine, Plum, Tobacco, Walnut.

30-DAY ERROR RESPONSE TO "NAPROPAMIDE: OCCUPATIONAL AND RESIDENTIAL EXPOSURE ASSESSMENT AND RECOMMENDATIONS FOR THE REREGISTRATION ELIGIBILITY DECISION DOCUMENT". DP Barcode 305598. 11/17/04.		
Header	**Page and Location**	**Error Correction**
		Add the EC formulation to the listing for the crops Strawberry and Tobacco. Add the DF formulation to the listing for Turf. Under Turf, delete the EC from column 3. Under Cranberry, the application rate should be corrected to 9 lb ai/A with application rates up to 15 lb ai/A allowed only for certain soil types (muck) in certain regions (WA, OR). The 15 lb rate represents less than 3% of the total cranberry usage. The DF formulation can be applied by chemigation only in Florida or the Western region (see label for map) or by groundboom. Delete chemigation under cranberries as this is not a method of application for this crop.
1.5.3 Application Methods	12, first sentence	Correct the spelling of "cranberry".
2.1.1.1 Assumptions for Handler Exposure Scenarios	14, second bullet	At the beginning of the second line, replace "an" with "a".
ORETF Handler Studies	16	Last sentence: delete the discussion of the last half with reference to homeowner exposure while using a hose-end sprayer. Only the granular formulation is ever applied by a homeowner and the granular product in not mixed with water or applied with a hose end sprayer. Delete the reference to the ORETF Study OMA004 since it is not discussed.
2.1.3.2 Napropamide Risk Summary	20, Table 6 header	Correct the spelling of "summary".
2.1.3.2 Napropamide Risk Summary	20, Table 6	Last row: there is no footnote 1 found in the body of the table. Footnotes 2 and 6 are missing at the end of the table.
2.1.3.2 Napropamide Risk Summary	21, Table 6	The footnote might read better as "Inhalation risk assumes no respirator used by handlers" as is found in the HED Chapter (D308278, page 51).
3.1.2 Data and Assumptions for Handler Exposure Scenarios	24, Bullet 1	It is not clear why in this assessment the PHED data for aerosol can is used to assess pump-trigger sprayer applications. There are no home-owner uses of napropamide that require pump-trigger spray applications.
3.1.2 Data and Assumptions for Handler Exposure Scenarios	24. last paragraph	The last sentence should be corrected to refer to section 2.1.1.2.
3.2.3 Residential Postapplication Exposure and Risk Estimates	28	SA units should be corrected to cm^2.
3.2.3 Residential Postapplication Exposure and Risk Estimates	30, Table 8	Footnote b should be corrected to "Target MOE is 100."
Appendix A Short and Intermediate Term Inhalation Risk	Table A1	The footnote for the header in column 2 should be footnote 1, not footnote 2.

30-DAY ERROR RESPONSE TO "REVISED DRINKING WATER ASSESSMENT FOR NAPROPAMIDE" AND "DRINKING WATER ASSESSMENT FOR NAPROPAMIDE FOR TERRESTRIAL USES". DP Barcode D305601. 11/12/04.

Although there are no dietary risk concerns using the estimated drinking water concentrations from the "Drinking Water Assessment for Napropamide for Terrestrial Uses", many of the input parameters do not accurately reflect current labeling and thus, the estimated drinking water concentrations used in the Lifeline® model are overestimated. **A reassessment of the EECs (both from PRZM/EXAMS and SCI-GROW) should be carried out using the correct input parameters.**

No napropamide label bears a 6 lb ai/A use rate for any crop including pecans (turf and ornamentals excluded). In fact, the use rate for pecans in Georgia is 4 lb ai/A. A second application may be made to certain crops, including pecans, only in the Western region (see Devrinol 50-DF Selective label, EPA Reg. No. 70506-36). If a second application were made, a 7-day interval between applications is inappropriate for herbicide applications. While this interval might be applicable to insecticides, napropamide is a herbicide for which a 90 day retreatment interval would be more appropriate. In addition, most napropamide applications are band, such that the product is applied to the area just under the tree (usually a 6-10 foot wide area) and not in the aisles (or middle rows). This application scenario results in about 33% of an acre receiving treatment. There is precedent for EFED to use this factor in modeling and it should be utilized for napropamide. Note that band treatments are not carried out in turf, mint or cranberries (these crops receive broadcast applications).

30-DAY ERROR RESPONSE TO "REVISED DRINKING WATER ASSESSMENT FOR NAPROPAMIDE" AND "DRINKING WATER ASSESSMENT FOR NAPROPAMIDE FOR TERRESTRIAL USES". DP Barcode D305601. 11/12/04.		
Header	**Page and Location (Document is not paginated)**	**Error Correction**
Summary	1, paragraph 1	The vapor pressure should be corrected to $1.7x10^{-7}$ torr (see Product Chemistry Considerations, D305599, 10/29/04).
Summary	2, paragraph 3	**The SCI-GROW surface water drinking water concentration is overestimated and should be recalculated using correct input values.**
Surface Water Modeling of Terrestrial Uses for Napropamide	3, paragraph 2	Add "ppb" after the value 1.67. Modeling does not take into account that only 1/3 of an orchard acre receives a napropamide treatment since band applications are made.
Surface Water Modeling of Terrestrial Uses for Napropamide	3, Table 1 and Appendix A, Table 1	The EECs presented for GA pecan reflect two applications of 6 lb ai/A at 7 day intervals. There are no current labels with a food crop use rate at 6 lb ai/A. Labels allow two applications only in the Western region. The minimum reapplication interval is 90 days. **A reassessment of the EEC values for various scenarios should be re-done using correct label information.** There is a footnote 1 at the end of the table but it is not found in the table. The registrant does not have a copy of the "2/8/02 Input Parameter Guidance" to verify that the input values are appropriate.
Surface Water Modeling of Terrestrial Uses for Napropamide	4, Table 2 and Appendix A, Table 2	There are no current labels with a pecan use rate at 6 lb ai/A. The maximum use rate for pecans is 4 lb ai/A. A second application is only allowed for pecans grown in the Western region at a 90 day interval. Napropamide is mainly applied as a band application, not broadcast. Modeling should be revised to take into consideration a lower total lb ai applied per acre. Appendix A, Table 2 Input Parameters: GA pecans do not receive a second application so no

30-DAY ERROR RESPONSE TO "REVISED DRINKING WATER ASSESSMENT FOR NAPROPAMIDE" AND "DRINKING WATER ASSESSMENT FOR NAPROPAMIDE FOR TERRESTRIAL USES". DP Barcode D305601. 11/12/04.		
Header	**Page and Location (Document is not paginated)**	**Error Correction**
		interval between applications should be included in this assessment. The vapor pressure should be corrected to 1.7×10^{-7} torr. The water solubility is 74 mg/L at 25 °C; delete the "x 10" after the °C. (see Product Chemistry Considerations). The photolytic half-life should be corrected to 0.0047 d (6.8 min x 1hr/60 min x 1 day/24 hr) as noted in the EFED risk assessment document (D303453, 11/30/04, pages 20, 28). Footnote 2 should be corrected to delete the reference to the 6 lb ai/A rate.
Ground Water Assessment	5, paragraph 2	Delete reference to the 6 lb ai/A rate since this is not a use pattern for napropamide except in turf and ornamentals. Repeat applications are only permitted for certain crops in the Western region. **The SCI-GROW surface water drinking water concentration is overestimated and should be recalculated using current input values.**
Ground Water Assessment	5, Table 3 and Appendix B, Table 1	The table mistakenly includes a reference to "NC Tobacco", which should be changed to "GA Pecan". There are no current labels with a pecan use rate at 6 lb ai/A. The maximum use rate for pecans is 4 lb ai/A. A second application is only allowed for pecans grown in the Western region. Even if a second application were made, the typical interval between herbicide applications is 90 days. Napropamide is mainly applied as a band application, not broadcast so that modeling should take into consideration a lower total lb ai applied per acre. There is precedent for EFED to use 33% of the total use rate for band applications in tree nut and fruit orchards and this factor should be applied to the risk assessments for napropamide.

30-DAY ERROR RESPONSE TO "EFED RISK ASSESSMENT FOR THE NAPROPAMIDE REREGISTRATION ELIGIBILITY DOCUMENT". DP Barcode D303453.		
Header	**Page and Location**	**Error Correction**
	1, List of end use products	Remove the 50-WP, 5-G, and 2-E, since they have been cancelled. Current products include: Devrinol 50-DF Selective, 2-G Ornamental, 10-G Selective, 4-F Selective, 4-F Ornamental, 50-DF Ornamental, 2-EC and 2-EC Ornamental. Remove 50-DF at the end of the list since it is a duplicate.
I. Executive Summary	4, first paragraph	In the fourth line, remove "wettable powder", as all registrations with this formulation have been cancelled.
I. Executive Summary	4, second paragraph; 8, 5th paragraph	See comments under Section I.B of this document for comments on the difference between the laboratory and field data.
I. Executive Summary	4, third paragraph	Regarding the comment "Because the label does not specifically require soil incorporation…." All labels specify that the product must be mechanically or watered-in. Newer labeling has included the comment that the product should be incorporated or irrigated within 24 hours.
A. Potential Risks to Non-target Non-endangered Organisms	4, first paragraph	Devrinol 50-WP has been cancelled. No other label allows for the 6 lb ai/A use rate except on turf and ornamentals. For cranberries, the 15 lb ai/A rate is for muck soils only found in the PNW; this rate represents less than 3% of the entire cranberry acreage and is not representative of the maximum use rate (9 lb ai/A). Risk assessments should be refined to reflect these more representative use rates.
Aquatic organism risks	5, second paragraph, 8	The registrant has data for *Lemna* and *Anabaena* which will be submitted.
Mammalian Risks	5	Risk assessment inputs need to be corrected.
B. Potential Risks to Non-target Listed and Endangered Organisms/Aquatic Listed Species	6, third paragraph	Applications of napropamide are never made at 7-day intervals between applications but rather 90 day intervals. Risk assessments should be refined to include this information.
C. Major Uncertainties and Data Gaps	8, bullet 1	Data are available for *Lemma* and *Anabaena* and will be submitted.
C. Major Uncertainties and Data Gaps	8, bullet 2	Applications of napropamide are never made at 7-day intervals between applications but 90 days. Risk assessments should be refined to reflect this actual use pattern.
C. Major Uncertainties and Data Gaps	8, bullet 3, 4	The aqueous photolysis half-life should be corrected to 6.8 min.
C. Major Uncertainties and Data Gaps	8, bullet 5	See comments under Section II.C. of this document for a discussion of the difference between the laboratory and field data.
C. Major Uncertainties and Data Gaps	8, bullet 6	Foliar dissipation data were never developed for napropamide since it is applied to the soil or areas under trees and only a small portion of the applied product will reach off-site areas from spray drift or runoff.
A. Stressor Source and Distribution	9	Remove the reference to the 50-WP and 2-E since these registrations have been cancelled.

30-DAY ERROR RESPONSE TO "EFED RISK ASSESSMENT FOR THE NAPROPAMIDE REREGISTRATION ELIGIBILITY DOCUMENT". DP Barcode D303453.		
Header	**Page and Location**	**Error Correction**
2. Overview of Pesticide Usage	10, first paragraph	The registrant notes that the data from NCFAP is almost 8 years old and not representative of current sales. See Section II of this document for further comments.
	10, second paragraph	Correct the following statement: "Maximum label rates…range from 2 lbs ai/A to 8 lbs ai/A". No label bears a single application rate of 8 lb ai/A for any crop. Correct the following statement: "Maximum rates for…tomatoes…hot peppers… strawberries… are 2 applications per year at 4 lbs ai/A or one application per year at 6 lbs ai/A." All labels for these crops allow a single application at 4 lbs ai/A.
2. Overview of Pesticide Usage	10, Table 1	Delete all references in the table to the WP formulation. Correct the formulation type "FIC" to "FlC:
2. Overview of Pesticide Usage, Table 1	10, Almond, Pistachio	The footnotes c and d deleted from the WP rows should be moved elsewhere in the document.
	10-13, Table 1 Almond, Pistachio	All nut crop application methods should be corrected to C, BT, IR, DS. For the DF, revise the information to separate use patterns for Almonds from Pistachios. Almond use should read as it now stands in the section, but for Pistachios the information should read: App Rate 4, No App 1, App Interval NA, Max Load 4. Add information for the FlC to include all nuts (Almond, Pecan, Filbert, Pistachio, Walnut), as follows: Max App Rate 4, No App 1, App Interval NA, Max Load 4, App Method C, BT, IR, DS.
	10-13, Berries and Small Fruit	Correct the application methods to BT, C, IR, DS unless as specified for individual crops.
	10-13, Blueberry	For the DF formulation, change No. App to 1 and Max load to 4.
	11, Strawberry	Correct application methods to BT, IR, DS, C for all formulations. Add a row for the EC formulation, as follows: Max App 4, No. App. NS, App Interval NS, Max Load NS. For the DF formulation, change No. App. to 1, change App Interval to NA, change Max Load to 4. Add a row for the FlC formulation as follows: Max App 1, No App 1, App Interval NA, Max Load 4.
	11, Cranberries	For 15 lb ai/A, change No. App. to 1, change App Interval to NA, change Max Load to 15. Note that this is not the most representative use rate in cranberries (see comments under "A. Potential Risks to Non-target Non-endangered Organisms" in this table). Change the application method for the Granular formulation to A, B, IR, G.
	11, Currants	Change No. App. to 1, change App Interval to NA, change Max Load to 4.
	11, Brassica and Leafy Vegetables	Separate Asparagus from other listed vegetables. New row for Asparagus should contain the

30-DAY ERROR RESPONSE TO "EFED RISK ASSESSMENT FOR THE NAPROPAMIDE REREGISTRATION ELIGIBILITY DOCUMENT". DP Barcode D303453.		
Header	**Page and Location**	**Error Correction**
		following information for the DF formulation: Max App 4, No. App. 1, App Interval NS, Max Load 4. Correct the application methods to BT, B, C, SI, IR for all listed Brassica and Leafy Vegetables.
	11, Citrus	Remove Nectarines from this section and include in Stone Fruit, below. Add row for the FlC formulation for all citrus, as follows: Max App Rate 4, No App 1, App Interval NA, Max Load 4. Correct all citrus application methods to BT, DS, C, IR for all formulations.
	11, Stone Fruit	Add a row for the FlC formulation as follows: Max App Rate 4, No App 1, App Interval NA, Max Load 4. Correct all application methods to BT, DS, C, IR for all formulations.
	12, Apple, Pear	Add a row for the FlC formulation, as follows: Max App Rate 4, No App 1, App Interval NA, Max Load 4. Correct all application methods for Pome Fruit to BT, DS, C, IR for all formulations.
	12, Eggplant	Correct application methods for all Fruiting Vegetables to BT, C, SI, IR.
	12, Pepper and Tomato	Correct application methods for all Fruiting Vegetables to BT, C, SI, IR for all formulations. Add a row for the DF formulation, as follows: Max App Rate 2, No App NS, App Interval NS, Max Load 2. Add a row for the FlC formulation, as follows: Max App Rate 2, No App 1, App Interval NA, Max Load 2.
	12, Other Vegetables	For the DF row, change No App to 1, change App Interval to NA, and change Max Load to 4. Correct application methods to BT, C, SI, IR.
	12, Tropical Fruits	Correct the spelling of Avocado. Correct application methods to BT, DS, C, IR for all formulations.
	12, Tobacco	Add a row for the G formulation, as follows: Max App Rate 1.4, No App NS, App Interval NS, Max Load unknown. Correct application methods to B, BT, SI, IR for all formulations.
	12, Sweet Potato	For the DF row change No. App to 1, change App Interval to NA, and change Max Load to 2. Correct application methods to BT, B, SI, IR.
	13, Mint	For the DF row, change No. App to 1, change App Interval to NA, and change Max Load to 4. Correct application methods to B, IR for all formulations.
	13, Olive	Correct application methods to BT, DS, C, IR.
	13, Trees/Ornamentals, Ground Covers, Herbaceous plants/woody shrubs/vines, lawns and turf, potting soil	Add DF uses from EPA Reg. No. 70506-38. Add FlC uses from EPA Reg. No. 70506-37. Correct application methods for Shade Trees, Ground cover, Herbaceous plants to G, BT, SI, SB, DS, IR for all formulations. Correct application methods for turf to B, DS, IR, G

30-DAY ERROR RESPONSE TO "EFED RISK ASSESSMENT FOR THE NAPROPAMIDE REREGISTRATION ELIGIBILITY DOCUMENT". DP Barcode D303453.		
Header	**Page and Location**	**Error Correction**
		for all formulations.
	13, Footnotes	Add FlC = Flowable , A=air. The registrant assumed that there was no difference between the application methods ST and BT, and B and SB.
2. Overview of Pesticide Usage	14, Table 2	The number of applications to pecans should be 1 (based on UPI market research data).
3. Chemical and Physical Properties	15, Table 3	Correct the vapor pressure to 1.7×10^{-7} mm at 25°C. Correct Henry's Law constant to 8.1×10^{-10} at 25°C. Correct the water solubility to 74 at 25ºC (see comments to "Napropamide RED Product Chemistry Considerations"). Correct the soil photolysis half life to 28 days.
a. Fate in the Terrestrial Environment	16	Correct the vapor pressure to 1.7×10^{-7} mm.
a. Fate in the Aquatic Environment	16	Correct Henry's Law constant to 8.1×10^{-10} atm-m^3/mole.
b. Aquatic Environment	22, paragraph 1	Correct the laboratory data half-life to 6.8 minutes.
D. Key Uncertainties and Information Gaps	27, second bullet, third bullet	Correct the aqueous photolysis half-life to 6.8 minutes.
1. Specific Considerations	28, section 1.d	Correct the word "increased" to "increase".
2. Planned Analysis	30	Paragraph 1: delete the reference to WP. Paragraph 2: change "Devrinol G" to "Devrinol 10G".
a. Fate in the Terrestrial Environment	33, paragraph 1	Correct the vapor pressure to 1.7×10^{-7} mm.
a. Fate in the Aquatic Environment	34, third paragraph	Correct Henry's Law constant to 8.1×10^{-10} atm-m^3/mole (based on the correct vapor pressure and water solubility).
3. Aquatic Resource Exposure Assessment	35	The information from NCFAP is almost 8 years old and not accurate for the current use data for napropamide. See Section II.A. of this document for further comments.
3. Aquatic Resource Exposure Assessment	36, paragraph 2	Correct the assumption regarding the 7 day application interval to 90 days.
3. Aquatic Resource Exposure Assessment	36, paragraph 4	Correct the model assumptions for cranberries to reflect the fact that herbicides are not applied to a field which is flooded 0-4 hours after application. According to Dr. Hilary Sandler, University of Massachusetts Cranberry Research Station, fields are not flooded for at least 5 months after a napropamide (or other herbicide) application. A copy of the "Best Management Practices Guide for Massachusetts Cranberry Production" can be provided to support this use pattern.
3. Aquatic Resource Exposure Assessment, Table 7	37-38, Table 7	Header: correct the kg/h units for Application Rate—the rates in the table are in lb ai/A. Correct maximum application rates for all crops to 4 (the WP formulation registration is cancelled) except for turf which is applied at either 4 or 6 lb. ai/A. Under "Maximum No. of Applications" for 1 application, delete all but PA turf since there are no

30-DAY ERROR RESPONSE TO "EFED RISK ASSESSMENT FOR THE NAPROPAMIDE REREGISTRATION ELIGIBILITY DOCUMENT". DP Barcode D303453.		
Header	**Page and Location**	**Error Correction**
		other uses at the 6 lb ai/A rate. Under "Maximum No. of Applications" for two applications, delete OR, PA, NC apples, GA pecan, and FL citrus since the labels only allow a single application. CA tomato and FL pepper were not included in the modeling so these should also be deleted. Correct the model input to 90 day application intervals for Western region crops only. Note that the granular may be applied by air to cranberries. Correct the vapor pressure to $1.7x10^{-7}$ mm at 25 °C. Correct the water solubility to 74 mg/L at 25 °C. Correct the photolysis half-life to 0.0047 days.
3. Aquatic Resource Exposure Assessment	39, Table 8	Correct the time from application to flooding to 135 days (typical application-to-flooding dates range from 120-150 days). The typical application dates for napropamide is from the end of March to mid-April; harvest is in mid-September. Input for cranberry model from Dr. Hilary Sandler, UMass Amherst Cranberry Research Station. Copies of cranberry BMP available upon request. Correct the maximum use rate to 9 since the maximum use rate of 15 is only for muck soils in the PNW (WA and OR) and the model does not model this type of soil (muck soils are high in organic carbon unlike the soil modeled). Muck soils represent less than 3% of the total cranberry acres in the US. Correct the aqueous photolysis half-life to 0.113 hr. (based on the 6.8 min half-life).
3. Aquatic Resource Exposure Assessment	40, Table 9	Correct all models for maximum use rate of 4 lb ai/A.
b. Spray Applications and Residues	43, Table 11	The application interval is 90 days, not 7 days and the maximum use rate is 4 lbs ai/A.
5. Non-Target Plant Exposure Modeling	43-45, Tables 12, 13, 14	Correct model inputs to delete 6 lb ai/A scenarios.
Napropamide Toxicity Categories	46, Table 15	The footnote is unclear since none of the fish acute toxicity tests demonstrated acute toxicity < 1 mg/L.
Napropamide Toxicity Categories	47, Table 16	The accession number for acute toxicity for mallard duck refers to other studies and the appropriate MRIDs are 79548 and 79555. The MRID for acute toxicity for laboratory rats is not a valid number and should be corrected to 40362902 (for technical).
A. Risk Estimation – Integration of Exposure and Effects Data	49	Paragraph 1: Correct the last sentence since Appendix G does not summarize the LOCs used in the risk assessment. The author might be referring to Appendix E. Paragraph 2: The use patterns should be corrected since two applications are only allowed in the Western region. Paragraph 6: Correct the interval between applications for the Western region from 7 days to 90 days.
A. Risk Estimation – Integration of Exposure and Effects	50, Table 18	None of the crop scenarios except turf and ornamentals are applied at 6 lb ai/A. and these assessments should be removed. The interval

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Data		between applications should be corrected to 90 days. The crop scenarios with two applications should be deleted except for the Western region scenarios [i.e., delete FL citrus, PA apple, NC apple, GA pecan with two applications of 4 lb ai/A].
A. Risk Estimation – Integration of Exposure and Effects Data	51, Table 19	A revised risk assessment should be conducted with appropriate input parameters (see comments for Table 8) and the RQs revised. Correct the Note at the end of the footnote section which refers to Table 18—it should refer to Table 10.
A. Risk Estimation – Integration of Exposure and Effects Data	51-52, Table 20	None of the crop scenarios except turf are applied at 6 lb ai/A. and these assessments should be removed. The interval between applications should be corrected to 90 days. The crop scenarios with two applications should be deleted except for the Western region scenarios [i.e., delete FL citrus, PA apple, NC apple, GA pecan with two applications of 4 lb ai/A].
A. Risk Estimation – Integration of Exposure and Effects Data	53, Table 21	None of the crop scenarios except turf and ornamentals are applied at 6 lb ai/A. and these assessments should be removed. Delete the crop scenario "Aerial Airblast, Spray Chemigation" since only the 10G formulation is allowed to be applied by air and only to cranberries. The interval between applications should be corrected to 90 days. The crop scenarios with two applications should be deleted except for the Western region scenarios [i.e., delete FL citrus, PA apple, NC apple, GA pecan with two applications of 4 lb ai/A]. Footnote 1, found at the end of the table, needs to be added to the table.
A. Risk Estimation – Integration of Exposure and Effects Data	53	The input parameters for TERRPLANT should be corrected so that the orchard/vineyard rate is 4 lb ai/A and the interval between applications corrected from 7 to 90 days. In addition, the fact that in most cases (turf excluded), napropamide is applied as a band treatment such that an entire acre is not treated is not taken into account. Except for mint, turf, and cranberry, napropamide is not applied by air.
A. Risk Estimation – Integration of Exposure and Effects Data	54, Table 22	None of the crop scenarios except turf and ornamentals are applied at 6 lb ai/A. and these assessments should be removed. The interval between applications should be corrected to 90 days. The crop scenarios with two applications should be deleted except for the Western region scenarios [i.e., delete FL citrus, PA apple, NC apple, GA pecan with two applications of 4 lb ai/A]. Footnote 1, found at the end of the table, needs to be added to the table.
B. Risk Description – Interpretation of Direct Effects	57	Bullet 3: Correct the half-life to 6.8 minutes. Bullet 4: Correct the statements after a reassessment of Fl citrus and GA pecans scenarios at a single application of 4 lb a.i/A. Bullet 5: After the cranberry model is re-run with

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		more realistic input parameters based on discussions with Dr. Hilary Sandler, the concentration cited should be corrected. Based on the half life in soil, it is unlikely that water will become contaminated with napropamide when cranberry fields are flooded 120-150 days after the application. Bullet 6: Reports for some aquatic plant species are available and will be submitted.
B. Risk Description – Interpretation of Direct Effects	59	Paragraph 1: The last sentence should be revised after the correct use pattern (one application at 4 lb ai/A) is included in the risk assessment. Paragraph 2: Correct the use pattern for orchards and vineyards. Paragraph 3: delete 6 lb ai/A as the highest application rate for food crop uses.
B. Risk Description – Interpretation of Direct Effects	60	Second paragraph: The first sentence should be corrected to give the correct use pattern (one application at 4 lb ai/A). The chronic risk to mammals was carried out using the incorrect assumption that the interval between applications in the Western region is 7 days; this interval should be 90 days. The risk assessment did not take into consideration the fact that napropamide is most often applied by band application such that an entire acre is not treated.
B. Risk Description – Interpretation of Direct Effects	65	Paragraph 1: the last sentence is correct with the exception that the 10G formulation can be applied to cranberries by air. Bullet 2: Correct the aqueous half-life to 6.8 minutes. Bullet 3: See comments in Section II.C. above. Bullet 4: the appropriate time between applications is 90 days, not 7. Bullet 5: Band applications are appropriate for many crops. See Section II.B. above for additional comments.
B. Risk Description – Interpretation of Direct Effects	66	Bullet 1: Correct the first sentence since none of the labels prohibit use on tobacco in NC. Bullet 6: Agronomic factors are readily available from either the cranberry grower associations or university personnel involved with cranberry production. Bullet 8: correct the spelling of the word "content".
B. Risk Description – Interpretation of Direct Effects	68	Paragraph 1: Correct the half-life to 6.8 minutes. Bullet 2: EFED should conduct a review of the open literature from ECOTOX in case data are available to refine the risk assessments.
Appendix A	A-1, Table	The MRID for accumulation in fish is missing and is 39774. Footnote 2 should be corrected to replace Syngenta with United Phosphorus.
Appendix B	B-1-2, Table B-1	Inputs should be corrected for use rates and application interval. The water solubility is 74 mg/L at 25° C. Correct the aqueous photolysis half-life to 6.8 min.
Appendix B	B-3-46	Comments were previously noted regarding the

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		input parameters for the PRZM-EXAMS modeling.
Appendix B	B-44, paragraph 1	The last sentence refers to Table XXX and should be Table B-2.
Appendix B	B-44, paragraph 2	The last sentence refers to Table YYY and should be Table B-3.
Appendix B	Table B-3	Application rate should be 9 lb ai/A.
Appendix C	C-1-3	Comments were previously noted regarding the input parameters for the SCI-GROW modeling.
Appendix D		The last page of what appears to be Appendix D is paginated as E-1 but labeled as Table D-1. Highlighted information in red was blacked out in the black and white copy submitted to registrant, making it impossible to verify the accuracy of the information. There are no MRIDs associated with the data and the endpoints could not be verified.
Appendix E		Pages should be repaginated.
Appendix E	E-2, Table	71-1: the accession number is incorrect and should be MRID 79548 and 79555 71-2: The MRIDs 2005019, 2005025 and 2005026 are incorrect and not found in NPIRS. One other MRID for this guideline which should be added is 41610202. 72-1: MRID 2005027 is not found in NPRIS.
Appendix E	E-5, Table 1	The accession number is not valid and the MRIDs should be 79548 and 79555.
Appendix E	E-5, Table 2	The MRIDs 2005019, 2005025 and 2005026 are not valid. The MRID listed as 25894 should be corrected to 125894. One additional study not listed is a mallard duck study 41610202.
Appendix E	E-6, Table 3	The accession number 230602 is not valid and should be 40362902.
Appendix E	E-7, Table 4	The MRID 2005027 is not valid and should be removed.
Appendix E	E-9, Table 7	The accession number 229228 is not valid for the listed species. The correct MRID is 65360.
Appendix G		Pages of this appendix are numbered as part of Appendix F.