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

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MAR 11 1994

MEMORANDUM

SUBJECT: Fenamiphos: Dietary Exposure Analysis in Support of the Reregistration Eligibility Document.

FROM: Jennifer M. Wintersteen
Dietary Risk Evaluation Section
Science Analysis Branch/HED (7509C)

TO: Jane S. Smith, Chemical Manager
Reregistration Section
Chemical Coordination Branch (7505C)

THROUGH: James P. Kariya, Section Head
Dietary Risk Evaluation Section
SAB/Health Effects Division

Action Requested

Provide a Dietary Risk Evaluation System (DRES) analysis to estimate the chronic and acute dietary exposure and risk from fenamiphos food uses that are either being supported through reregistration or pending publication in the Federal Register.

Discussion

1.Toxicological Endpoint: The chronic analysis used a Reference Dose (RfD) of 0.0001 mg/kg body weight/day, based on a no observed effect level (NOEL) of 0.01 mg/kg bwt/day and an uncertainty factor of 100. The NOEL is based on results of a two-year feeding study in beagle dogs which demonstrated plasma cholinesterase inhibition as an endpoint effect. The HED Carcinogenicity Peer Review Committee classified fenamiphos as a Group E carcinogen (G. Ghali memo, 11/23/93). The same memo notes that there was no evidence to suggest that the chemical was a developmental or reproductive toxicant. A M. Van Gemert memo of January 14, 1994 does indicate that acute cholinesterase inhibition was of concern for fenamiphos. In order to assess the acute dietary risk for fenamiphos a NOEL of 0.5 mg/kg bwt/day for maternal toxicity from the rat developmental study was supplied in the same memo as appropriate for acute dietary assessment.

2. Residue Information: Food uses in this analysis include all published tolerances listed in the Tolerance Index System (TIS) and 40 CFR §180.349 and §180.2950. All published tolerances are being supported in reregistration except soybeans and cocoa beans. New values for anticipated residues (ARs) have been prepared by Chemistry Branch-Reregistration Support (CBRS). ARs are listed in Table 1 of a C. Olinger memo, Reregistration of Fenamiphos, 12/20/93. Tolerances exist for feed items such as apple pomace, pineapple bran and raisin waste which result in secondary residues in meat of cattle, goats, horse, poultry, hogs and sheep as well as milk and eggs.

In the Reregistration Eligibility Document (C. Olinger memo, 1/26/94) CBRS recommends for a tolerance reassessment for certain commodities. CBRS recommends for a crop group tolerance for the citrus fruits group at 0.5 ppm and the revocation of established tolerances for grapefruit, lemons, limes, oranges and tangerines of 0.6 ppm. In the analysis the raw agricultural commodities (RACs) kumquat, citron and tangelo were added at 0.5 ppm and the other citrus RAC tolerances were unchanged at 0.6 ppm. CBRS recommends for the revocation of established tolerances on cocoa beans and soybeans since there are no registered uses of fenamiphos on these crops. These RACs were left in the analysis since they are still published tolerances.

CBRS recommends for tolerances on poultry and eggs; however, insufficient data are available to recommend appropriate tolerance levels. In a CBRS memo interim tolerances were supplied for estimates of fenamiphos on poultry (C. Olinger memo, 2/15/94) which were used in the chronic and acute analyses. CBRS also recommended the tolerance for peanuts should be increased from 0.02 to 1.0 ppm for reregistration. The DRES analysis reflects the higher proposed value. Finally, a food additive tolerance was proposed by the Registrant on pineapple juice at 0.5 ppm. This tolerance has been included in the analysis.

Tolerances have been proposed for the following commodities and were included in the file, except sugar beets, as type 'A' for approved, yet pending tolerances:

Pending Commodity	Tolerance
Cantaloupe	0.05 ppm
Coffee beans	0.2 ppm
potatoes	0.14 ppm
sweet potatoes	0.1 ppm
carrots	0.1 ppm
tomatoes	0.5 ppm
sugar beets	Petition for registration withdrawn[1]
peppers	0.6 ppm

Percent crop treated (PCT) information used in the chronic exposure analysis was supplied by the Biological and Economic Analysis Division (BEAD) in an E. Maurer memo dated 5/20/93. In the BEAD memo no known usage was indicated for some commodities and were assumed to be 100% crop treated in the analysis. Bananas and pineapple were included in the list of commodities with no known

usage from BEAD. These commodities are often imported and in order to estimate the amount of crop imported the USDA Pesticide Data Program Report of January-June 1992 was used and estimated 100% crop imported for bananas and 36% for pineapple. The DRES analysis assumed that all imports were treated, and thus used 100% and 36% as the percent-crop-treated values for bananas and pineapples respectively.

The DRES chronic analysis represents an overestimation of exposure and risk in that it considers risk not only from the recommended uses through reregistration, but also from uses which have been recommended for by the Chemistry and Toxicology Branches of the Health Effects Division but have not been published in the Federal Register. However, to the extent that it uses Anticipated Residues and percent-crop-treated information, it is not "worst-case". A summary of the residue information used in this analysis is attached as Table 1.

3. Results:

Chronic Exposure

The DRES chronic analysis used tolerance level residues to calculate the Theoretical Maximum Residue Contribution (TMRC) for the overall U.S. population and 22 population subgroups.

Refinements in residue and percent crop treated information were considered in calculating the Anticipated Residue Contribution (ARC) for those same population groups. The ARC is considered the more accurate estimate of dietary exposure. These exposure estimates were then compared to the RfD for fenamiphos to get estimates of chronic dietary risk. Summaries of the TMRCs, ARCs, and their representations as percentages of the RfD are attached as Tables 2, 3a and 3b.

The ARC for the U.S. population from the published uses of fenamiphos being recommended through reregistration is 1.0×10^{-5} mg/kg bwt/day, which represents 10% of the RfD. The proposed tolerances being recommended through reregistration contribute 2.0×10^{-6} mg/kg bwt/day, or 2% of the RfD. Pending tolerances for fenamiphos contribute an additional 4.8×10^{-5} mg/kg bwt/day, representing 48% of the RfD. If all new commodities proposed in reregistration and all pending tolerances not yet final were published the resulting ARC would be 5.9×10^{-5} mg/kg bwt/day, representing 59% of the RfD for the general U.S. population. This number could be higher depending upon the eventual tolerance values for poultry and eggs.

The ARC from published uses for the most highly exposed DRES subgroup, non-nursing infants less than one, is 4.0×10^{-5} mg/kg bwt/day (40% of the RfD). The ARC for new tolerances recommended in reregistration contributes less than 1.0×10^{-6} mg/kg bwt/day (0.2% of the RfD). The ARC for pending tolerances contributes 1.9×10^{-4} mg/kg bwt/day (189% of the RfD). If all new and pending tolerances were published for fenamiphos, the resulting ARC for non-nursing infants less than one would be 2.3×10^{-4} mg/kg bwt/day, representing 229% of the RfD.

Almost all of this increase is due to the pending tolerances on carrots and sweet potatoes. The U.S. population and all the DRES subgroups have ARCs for chronic dietary risk below the RfD except nursing and non-nursing infants less than one when all published, pending and new commodities are considered. It appears that chronic dietary risk is minimal for this chemical for published tolerances and of concern for the infants subgroup when the pending tolerances are taken into consideration.

Acute Exposure

The DRES detailed acute exposure analysis evaluates individual food consumption as reported by respondents in the USDA 77-78 Nationwide Food Consumption Survey (NFCS) and estimates the distribution of single day exposures through the diet for the U.S. population and certain subgroups. The analysis assumes uniform distribution of fenamiphos in the commodity supply. Since the toxicological effect to which high end exposure is being compared to in this analysis is cholinesterase inhibition, all standard DRES subgroups are of concern. The analysis includes the U.S. population-48 states and four subgroups: Infants (<1 year), children (1-6 years), females (13+ years) and males (13+ years).

The Margin of Exposure (MOE) is a measure of how closely the high end exposure comes to the NOEL (the highest dose at which no effects were observed in the laboratory test), and is calculated as the ratio of the NOEL to the exposure (NOEL/exposure = MOE). For cholinesterase inhibition, the Agency is not generally concerned unless the MOE is below 100.

In the analysis, tolerance level residues were used to calculate the exposure of the highest exposed individual for the U.S. population in the distribution (0.05 mg/kg bwt/day) and was compared to the NOEL of 0.5 mg/kg bwt/day from the rabbit developmental study (M. Van Gemert memo, 1/14/94) to get an MOE of 10. The table below provides the calculated MOEs for all five subgroups.

DRES Subgroup	Exposure (mg/kg bwt/day)	Mean MOE NOEL/Mean Exposure	MOE NOEL/High Exposure
U.S. pop. -48 states	0.05	159	10
Infants (< 1 year)	0.075	66	7
Children (1-6 years)	0.05	65	10
Females (13+ years)	0.015	213	33
Males (13+ years)	0.015	224	33

A table of distribution of exposures used in this analysis is attached as Table 4; this table includes on it the calculation of the MOEs for all five subgroups. This is the first time that acute exposure has been calculated for fenamiphos using the DRES system. The calculated MOE is of concern for all five subgroups used in the DRES acute program.

Attachments

cc: DRES, CBRS, Tox II, RD Team 22 (Jim Stone), Caswell #453A

1 Jim Stone (RD). Personal communication. 2/7/94.

Table 1

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 1

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
01006AA	RASPBERRIES	10 RAW-FRESH OR NFS	2E2605	P 0.100000	0.009000	FIELD TRIAL	9.00	0.000810
01006AA	RASPBERRIES	15 RAW-FRESH OR CANNED	2E2605	P 0.100000	0.009000	FIELD TRIAL	9.00	0.000810
01006AA	RASPBERRIES	31 COOKED-FRESH OR CANNED	2E2605	P 0.100000	0.009000	FIELD TRIAL	9.00	0.000810
01006AA	RASPBERRIES	62 COOKED-FRESH OR FROZEN-BAKED	2E2605	P 0.100000	0.009000	FIELD TRIAL	9.00	0.000810
01006AA	RASPBERRIES	70 RAW-FROZEN	2E2605	P 0.100000	0.009000	FIELD TRIAL	9.00	0.000810
01014AA	GRAPES-FRESH	10 RAW-FRESH OR NFS	2F2623	P 0.100000	0.005000	FIELD TRIAL	14.00	0.000700
01014AA	GRAPES-FRESH	21 COOKED-NFS	2F2623	P 0.100000	0.005000	FIELD TRIAL	14.00	0.000700
01014AA	GRAPES-FRESH	31 COOKED-FRESH OR CANNED	2F2623	P 0.100000	0.005000	FIELD TRIAL	14.00	0.000700
01014DA	GRAPES-RAISINS	10 RAW-FRESH OR NFS	2H5361	P 0.300000	0.005500C	FT/PROCESSING	14.00	0.000770
01014DA	GRAPES-RAISINS	21 COOKED-NFS	2H5361	P 0.300000	0.005500C	FT/PROCESSING	14.00	0.000770
01014DA	GRAPES-RAISINS	22 COOKED-FRESH-BAKED	2H5361	P 0.300000	0.005500C	FT/PROCESSING	14.00	0.000770
01014JA	GRAPES-JUICE	10 RAW-FRESH OR NFS	2F2623	P 0.100000	0.005000C	FT/PROCESSING	14.00	0.000700
01014JA	GRAPES-JUICE	15 RAW-FRESH OR CANNED	2F2623	P 0.100000	0.005000C	FT/PROCESSING	14.00	0.000700
01014JA	GRAPES-JUICE	21 COOKED-NFS	2F2623	P 0.100000	0.005000C	FT/PROCESSING	14.00	0.000700
01016AA	STRAWBERRIES	10 RAW-FRESH OR NFS	6E3403	P 0.600000	0.015000	MONITORING DATA	100.00	0.015000
01016AA	STRAWBERRIES	21 COOKED-NFS	6E3403	P 0.600000	0.015000	MONITORING DATA	100.00	0.015000
01016AA	STRAWBERRIES	70 RAW-FROZEN	6E3403	P 0.600000	0.015000	MONITORING DATA	100.00	0.015000
02001AA	CITRUS CITRON	22 COOKED-FRESH-BAKED	REREGIS	N 0.500000	0.500000		100.00	0.500000
02002AA	GRAPEFRUIT-UNSP	00 NOT SPECIFIED (NO CONSUMPTION)	6F1865	P 0.600000	0.011000	FIELD TRIAL	20.00	0.002200
02002AB	GRAPEFRUIT-PULP	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	20.00	0.002200
02002AB	GRAPEFRUIT-PULP	21 COOKED-NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	20.00	0.002200
02002JA	GRAPEFRUIT-JUICE	15 RAW-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	20.00	0.000400
02002JA	GRAPEFRUIT-JUICE	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	20.00	0.000400
02003AA	KUMQUATS	10 RAW-FRESH OR NFS	REREGIS	N 0.500000	0.500000		100.00	0.500000
02004AA	LEMONS-UNSPEC	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	32.00	0.003520
02004AA	LEMONS-UNSPEC	22 COOKED-FRESH-BAKED	6F1865	P 0.600000	0.011000	FIELD TRIAL	32.00	0.003520
02004AB	LEMONS-PULP	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	32.00	0.003520
02004AB	LEMONS-PULP	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.011000	FIELD TRIAL	32.00	0.003520
02004HA	LEMONS-PEEL	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.109000	FIELD TRIAL	32.00	0.034880
02004HA	LEMONS-PEEL	21 COOKED-NFS	6F1865	P 0.600000	0.109000	FIELD TRIAL	32.00	0.034880
02004JA	LEMONS-JUICE	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.002000C	FIELD TRIAL	32.00	0.000640
02004JA	LEMONS-JUICE	15 RAW-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FIELD TRIAL	32.00	0.000640
02004JA	LEMONS-JUICE	21 COOKED-NFS	6F1865	P 0.600000	0.002000C	FIELD TRIAL	32.00	0.000640
02004JA	LEMONS-JUICE	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FIELD TRIAL	32.00	0.000640
02005AA	LIMES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	6F1865	P 0.600000	0.011000	FIELD TRIAL	100.00	0.011000
02005AB	LIMES-PULP	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	100.00	0.011000
02005HA	LIMES-PEEL	21 COOKED-NFS	6F1865	P 0.600000	0.109000	FIELD TRIAL	100.00	0.109000
02005JA	LIMES-JUICE	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.002000C	FT/PROCESSING	100.00	0.002000
02005JA	LIMES-JUICE	15 RAW-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	100.00	0.002000
02005JA	LIMES-JUICE	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	100.00	0.002000

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 2

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
02006AA	ORANGES-UNSPEC	00 NOT SPECIFIED (NO CONSUMPTION)	6F1865	P 0.600000	0.011000	FIELD TRIAL	15.00	0.001650
02006AB	ORANGES-PULP	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	15.00	0.001650
02006AB	ORANGES-PULP	21 COOKED-NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	15.00	0.001650
02006HA	ORANGES-PEEL	21 COOKED-NFS	6F1865	P 0.600000	0.109000	FIELD TRIAL	15.00	0.016350
02006HA	ORANGES-PEEL	22 COOKED-FRESH-BAKED	6F1865	P 0.600000	0.109000	FIELD TRIAL	15.00	0.016350
02006HA	ORANGES-PEEL	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.109000	FIELD TRIAL	15.00	0.016350
02006JA	ORANGES-JUICE	15 RAW-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	15.00	0.000300
02006JA	ORANGES-JUICE	31 COOKED-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	15.00	0.000300
02007AA	TANGELOS	10 RAW-FRESH OR NFS	REREGIS	N 0.500000	0.500000		100.00	0.500000
02008AA	TANGERINES	10 RAW-FRESH OR NFS	6F1865	P 0.600000	0.011000	FIELD TRIAL	100.00	0.011000
02008JA	TANGERINE-JUICE	15 RAW-FRESH OR CANNED	6F1865	P 0.600000	0.002000C	FT/PROCESSING	100.00	0.002000
04001AA	APPLES-FRESH	10 RAW-FRESH OR NFS	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001AA	APPLES-FRESH	21 COOKED-NFS	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001AA	APPLES-FRESH	31 COOKED-FRESH OR CANNED	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001AA	APPLES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001DA	APPLES-DRIED	10 RAW-FRESH OR NFS	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001DA	APPLES-DRIED	22 COOKED-FRESH-BAKED	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001DA	APPLES-DRIED	62 COOKED-FRESH OR FROZEN-BAKED	9F2252	P 0.250000	0.005000	FIELD TRIAL	2.00	0.000100
04001JA	APPLES-JUICE	15 RAW-FRESH OR CANNED	9F2252	P 0.250000	0.004000C	FT/PROCESSING	2.00	0.000080
04001JA	APPLES-JUICE	31 COOKED-FRESH OR CANNED	9F2252	P 0.250000	0.004000C	FT/PROCESSING	2.00	0.000080
05002AA	CHERRIES-FRESH	10 RAW-FRESH OR NFS	9F2252	P 0.250000	0.016000	FIELD TRIAL	3.00	0.000480
05002AA	CHERRIES-FRESH	21 COOKED-NFS	9F2252	P 0.250000	0.016000	FIELD TRIAL	3.00	0.000480
05002AA	CHERRIES-FRESH	31 COOKED-FRESH OR CANNED	9F2252	P 0.250000	0.016000	FIELD TRIAL	3.00	0.000480
05002AA	CHERRIES-FRESH	62 COOKED-FRESH OR FROZEN-BAKED	9F2252	P 0.250000	0.016000	FIELD TRIAL	3.00	0.000480
05002DA	CHERRIES-DRIED	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.250000	0.016000	FIELD TRIAL	3.00	0.000480
05002JA	CHERRIES-JUICE	15 RAW-FRESH OR CANNED	9F2252	P 0.250000	0.016000		3.00	0.000480
05002JA	CHERRIES-JUICE	21 COOKED-NFS	9F2252	P 0.250000	0.016000		3.00	0.000480
05004AA	PEACHES-FRESH	10 RAW-FRESH OR NFS	9F2252	P 0.250000	0.018000	FIELD TRIAL	1.00	0.000180
05004AA	PEACHES-FRESH	21 COOKED-NFS	9F2252	P 0.250000	0.018000	FIELD TRIAL	1.00	0.000180
05004AA	PEACHES-FRESH	31 COOKED-FRESH OR CANNED	9F2252	P 0.250000	0.018000	FIELD TRIAL	1.00	0.000180
05004AA	PEACHES-FRESH	51 COOKED-CANNED	9F2252	P 0.250000	0.018000	FIELD TRIAL	1.00	0.000180
05004DA	PEACHES-DRIED	10 RAW-FRESH OR NFS	9F2252	P 0.250000	0.018000		1.00	0.000180
05004DA	PEACHES-DRIED	21 COOKED-NFS	9F2252	P 0.250000	0.018000		1.00	0.000180
06002AA	BANANAS-UNSPEC	22 COOKED-FRESH-BAKED	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06002AB	BANANAS-FRESH	10 RAW-FRESH OR NFS	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06002AB	BANANAS-FRESH	21 COOKED-NFS	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06002AB	BANANAS-FRESH	31 COOKED-FRESH OR CANNED	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06002DA	BANANAS-DRIED	10 RAW-FRESH OR NFS	3F1399	P 0.100000	0.007000		100.00	0.007000
06002DA	BANANAS-DRIED	21 COOKED-NFS	3F1399	P 0.100000	0.007000		100.00	0.007000
06013AA	PINEAPPLE-PULP	10 RAW-FRESH OR NFS	6F1864	P 0.300000	0.024000	FIELD TRIAL	36.00	0.008640

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 3

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
06013AA	PINEAPPLE-PULP	21 COOKED-NFS	6F1864	P 0.300000	0.024000	FIELD TRIAL	36.00	0.008640
06013AA	PINEAPPLE-PULP	31 COOKED-FRESH OR CANNED	6F1864	P 0.300000	0.024000	FIELD TRIAL	36.00	0.008640
06013DA	PINEAPPLE-DRIED	10 RAW-FRESH OR NFS	6F1864	P 0.300000	0.024000		36.00	0.008640
06013JA	PINEAPPLE-JUICE	10 RAW-FRESH OR NFS	6F1864	P 0.500000	0.029000C	FT/PROCESSING	36.00	0.010440
06013JA	PINEAPPLE-JUICE	15 RAW-FRESH OR CANNED	6F1864	P 0.500000	0.029000C	FT/PROCESSING	36.00	0.010440
06013JA	PINEAPPLE-JUICE	21 COOKED-NFS	6F1864	P 0.500000	0.029000C	FT/PROCESSING	36.00	0.010440
06013JA	PINEAPPLE-JUICE	31 COOKED-FRESH OR CANNED	6F1864	P 0.500000	0.029000C	FT/PROCESSING	36.00	0.010440
06016AA	PLANTAINS	21 COOKED-NFS	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06016AA	PLANTAINS	23 COOKED-FRESH-BOILED	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06016AA	PLANTAINS	25 COOKED-FRESH-FRIED	3F1399	P 0.100000	0.007000	FIELD TRIAL	100.00	0.007000
06018AA	KIWI	10 RAW-FRESH OR NFS	8E3585	P 0.100000	0.033000	FIELD TRIAL	14.00	0.004620
07001FA	COCOA BUTTER	21 COOKED-NFS	2E2691	P 0.020000	0.020000		100.00	0.020000
07001SA	CHOCOLATE	10 RAW-FRESH OR NFS	2E2691	P 0.020000	0.020000		100.00	0.020000
07001SA	CHOCOLATE	21 COOKED-NFS	2E2691	P 0.020000	0.020000		100.00	0.020000
07001SA	CHOCOLATE	22 COOKED-FRESH-BAKED	2E2691	P 0.020000	0.020000		100.00	0.020000
07002AA	COFFEE	21 COOKED-NFS	9E3721	A 0.200000	0.200000	IMPORT TOL	100.00	0.200000
10002AA	CANTALOUPES-UNSP	00 NOT SPECIFIED (NO CONSUMPTION)	9E3721	A 0.050000	0.050000	IMPORT TOL	100.00	0.050000
10002AB	CANTALOUPES-PULP	10 RAW-FRESH OR NFS	9E3721	A 0.050000	0.050000	IMPORT TOL	100.00	0.050000
10002AB	CANTALOUPES-PULP	21 COOKED-NFS	9E3721	A 0.050000	0.050000	IMPORT TOL	100.00	0.050000
11001AA	EGGPLANT	10 RAW-FRESH OR NFS	8E3650	P 0.100000	0.008000	FIELD TRIAL	100.00	0.008000
11001AA	EGGPLANT	21 COOKED-NFS	8E3650	P 0.100000	0.008000	FIELD TRIAL	100.00	0.008000
11001AA	EGGPLANT	25 COOKED-FRESH-FRIED	8E3650	P 0.100000	0.008000	FIELD TRIAL	100.00	0.008000
11003AA	PEPPERS,SWEET	10 RAW-FRESH OR NFS	2E4047	A 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11003AA	PEPPERS,SWEET	21 COOKED-NFS	2E4047	A 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11003AB	CHILI PEPPERS	00 NOT SPECIFIED (NO CONSUMPTION)	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11003AD	PEPPERS-OTHER	10 RAW-FRESH OR NFS	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11003AD	PEPPERS-OTHER	21 COOKED-NFS	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11003AD	PEPPERS-OTHER	51 COOKED-CANNED	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11004AA	PIMIENTOS	10 RAW-FRESH OR NFS	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11004AA	PIMIENTOS	21 COOKED-NFS	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11004AA	PIMIENTOS	31 COOKED-FRESH OR CANNED	7E3559	P 0.600000	0.034000	FIELD TRIAL	100.00	0.034000
11005AA	TOMATOES-WHOLE	10 RAW-FRESH OR NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005AA	TOMATOES-WHOLE	21 COOKED-NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005AA	TOMATOES-WHOLE	31 COOKED-FRESH OR CANNED	6F1693	A 0.500000	0.500000		1.00	0.005000
11005JA	TOMATOES-JUICE	10 RAW-FRESH OR NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005JA	TOMATOES-JUICE	21 COOKED-NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005RA	TOMATOES-PUREE	10 RAW-FRESH OR NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005RA	TOMATOES-PUREE	21 COOKED-NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005RA	TOMATOES-PUREE	31 COOKED-FRESH OR CANNED	6F1693	A 0.500000	0.500000		1.00	0.005000
11005RA	TOMATOES-PUREE	32 COOKED-FRESH OR CANNED-BAKED	6F1693	A 0.500000	0.500000		1.00	0.005000

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 4

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
11005RA	TOMATOES-PUREE	51 COOKED-CANNED	6F1693	A 0.500000	0.500000		1.00	0.005000
11005TA	TOMATOES-PASTE	21 COOKED-NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
11005TA	TOMATOES-PASTE	22 COOKED-FRESH-BAKED	6F1693	A 0.500000	0.500000		1.00	0.005000
11005TA	TOMATOES-PASTE	31 COOKED-FRESH OR CANNED	6F1693	A 0.500000	0.500000		1.00	0.005000
11005UA	TOMATOES-CATSUP	21 COOKED-NFS	6F1693	A 0.500000	0.500000		1.00	0.005000
13001AA	BEETS-TOPS	31 COOKED-FRESH OR CANNED	8E3651	P 1.000000	0.180000	FIELD TRIAL	100.00	0.180000
13001AA	BEETS-TOPS	63 COOKED-FRESH OR FROZEN-BOILED	8E3651	P 1.000000	0.180000	FIELD TRIAL	100.00	0.180000
13006AA	BRUSSEL SPROUTS	21 COOKED-NFS	3F1399	P 0.100000	0.017000	FIELD TRIAL	1.00	0.000170
13006AA	BRUSSEL SPROUTS	23 COOKED-FRESH-BOILED	3F1399	P 0.100000	0.017000	FIELD TRIAL	1.00	0.000170
13007AA	CABBAGE	10 RAW-FRESH OR NFS	3F1399	P 0.100000	0.014000	FIELD TRIAL	1.00	0.000140
13007AA	CABBAGE	11 RAW-FRESH-PICKLED,CORNED,OR CURED	3F1399	P 0.100000	0.014000	FIELD TRIAL	1.00	0.000140
13007AA	CABBAGE	21 COOKED-NFS	3F1399	P 0.100000	0.014000	FIELD TRIAL	1.00	0.000140
13010AA	CABBAGE-CHINESE	10 RAW-FRESH OR NFS	3F1399	P 0.100000	0.230000	FIELD TRIAL	11.00	0.025300
13010AA	CABBAGE-CHINESE	10 RAW-FRESH OR NFS	0E3845	P 0.400000	0.230000	FIELD TRIAL	11.00	0.025300
13010AA	CABBAGE-CHINESE	21 COOKED-NFS	3F1399	P 0.100000	0.230000	FIELD TRIAL	11.00	0.025300
13010AA	CABBAGE-CHINESE	21 COOKED-NFS	0E3845	P 0.400000	0.230000	FIELD TRIAL	11.00	0.025300
14001AA	BEETS-ROOTS	10 RAW-FRESH OR NFS	8E3651	P 1.500000	0.130000	FIELD TRIAL	100.00	0.130000
14001AA	BEETS-ROOTS	21 COOKED-NFS	8E3651	P 1.500000	0.130000	FIELD TRIAL	100.00	0.130000
14001AA	BEETS-ROOTS	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	8E3651	P 1.500000	0.130000	FIELD TRIAL	100.00	0.130000
14001AA	BEETS-ROOTS	31 COOKED-FRESH OR CANNED	8E3651	P 1.500000	0.130000	FIELD TRIAL	100.00	0.130000
14003AA	CARROTS	10 RAW-FRESH OR NFS	6F1770	A 0.100000	0.100000		100.00	0.100000
14003AA	CARROTS	21 COOKED-NFS	6F1770	A 0.100000	0.100000		100.00	0.100000
14003AA	CARROTS	23 COOKED-FRESH-BOILED	6F1770	A 0.100000	0.100000		100.00	0.100000
14003AA	CARROTS	31 COOKED-FRESH OR CANNED	6F1770	A 0.100000	0.100000		100.00	0.100000
14003AA	CARROTS	51 COOKED-CANNED	6F1770	A 0.100000	0.100000		100.00	0.100000
14007AA	GARLIC	10 RAW-FRESH OR NFS	2E2691	P 0.500000	0.028000	FIELD TRIAL	100.00	0.028000
14007AA	GARLIC	21 COOKED-NFS	2E2691	P 0.500000	0.028000	FIELD TRIAL	100.00	0.028000
14007AA	GARLIC	32 COOKED-FRESH OR CANNED-BAKED	2E2691	P 0.500000	0.028000	FIELD TRIAL	100.00	0.028000
14013AA	POTATO(WH)-WHOLE	10 RAW-FRESH OR NFS	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AA	POTATO(WH)-WHOLE	21 COOKED-NFS	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AA	POTATO(WH)-WHOLE	22 COOKED-FRESH-BAKED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AB	POTATO(WH)-UNSPE	22 COOKED-FRESH-BAKED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AC	POTATO(WH)-PULP	21 COOKED-NFS	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AC	POTATO(WH)-PULP	22 COOKED-FRESH-BAKED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AC	POTATO(WH)-PULP	23 COOKED-FRESH-BOILED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013AC	POTATO(WH) PULP	25 COOKED-FRESH-FRIED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013DA	POTATO(WH)-DRY	10 RAW-FRESH OR NFS	6F1693	A 0.140000	0.100000		6.00	0.006000
14013DA	POTATO(WH)-DRY	31 COOKED-FRESH OR CANNED	6F1693	A 0.140000	0.100000		6.00	0.006000
14013HA	POTATO(WH)-PEEL	22 COOKED-FRESH-BAKED	6F1693	A 0.140000	0.100000		6.00	0.006000
14018AA	SWEETPOTATOES	21 COOKED-NFS	6F1693	A 0.100000	0.100000		100.00	0.100000

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 5

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
14018AA	SWEETPOTATOES	31 COOKED-FRESH OR CANNED	6F1693	A 0.100000	0.100000		100.00	0.100000
14018AA	SWEETPOTATOES	51 COOKED-CANNED	6F1693	A 0.100000	0.100000		100.00	0.100000
15006AA	PEANUTS-WHOLE	10 RAW-FRESH OR NFS	3F1399	P 0.020000	0.042000	FIELD TRIAL	2.00	0.000840
15006AA	PEANUTS-WHOLE	10 RAW-FRESH OR NFS	7F3523	A 0.980000	0.042000	FIELD TRIAL	2.00	0.000840
15006AA	PEANUTS-WHOLE	21 COOKED-NFS	3F1399	P 0.020000	0.042000	FIELD TRIAL	2.00	0.000840
15006AA	PEANUTS-WHOLE	21 COOKED-NFS	7F3523	A 0.980000	0.042000	FIELD TRIAL	2.00	0.000840
15006AA	PEANUTS-WHOLE	22 COOKED-FRESH-BAKED	3F1399	P 0.020000	0.042000	FIELD TRIAL	2.00	0.000840
15006AA	PEANUTS-WHOLE	22 COOKED-FRESH-BAKED	7F3523	A 0.980000	0.042000	FIELD TRIAL	2.00	0.000840
15015AA	OKRA	21 COOKED-NFS	2E2724	P 0.300000	0.047000	FIELD TRIAL	100.00	0.047000
15015AA	OKRA	25 COOKED-FRESH-FRIED	2E2724	P 0.300000	0.047000	FIELD TRIAL	100.00	0.047000
15029AA	SOYBEAN-SPROUTED	00 NOT SPECIFIED (NO CONSUMPTION)	3F1399	P 0.050000	0.050000		1.00	0.000500
16002AA	ASPARAGUS	21 COOKED-NFS	3E2913	P 0.020000	0.005000	FIELD TRIAL	100.00	0.005000
16002AA	ASPARAGUS	23 COOKED-FRESH-BOILED	3E2913	P 0.020000	0.005000	FIELD TRIAL	100.00	0.005000
27003OA	COTTONSEED-OIL	18 PROCESSED OIL	3F1399	P 0.050000	0.009000C	FT/PROCESSING	1.00	0.000090
27003WA	COTTONSEED-MEAL	18 PROCESSED OIL	3F1399	P 0.050000	0.005000	FT/PROCESSING	1.00	0.000050
27007OA	PEANUTS-OIL	18 PROCESSED OIL	3F1399	P 0.020000	0.021000	FT/PROCESSING	2.00	0.000420
27007OA	PEANUTS-OIL	18 PROCESSED OIL	7F3523	A 0.980000	0.021000	FT/PROCESSING	2.00	0.000420
27010OA	SOYBEANS-OIL	18 PROCESSED OIL	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AA	SOYBEANS-UNSPEC	21 COOKED-NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AB	SOYBEANS-DRY	10 RAW-FRESH OR NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AB	SOYBEANS-DRY	21 COOKED-NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AB	SOYBEANS-DRY	23 COOKED-FRESH-BOILED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AB	SOYBEANS-DRY	25 COOKED-FRESH-FRIED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023AB	SOYBEANS-DRY	31 COOKED-FRESH OR CANNED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WA	SOY-FL, FULL FAT	21 COOKED-NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WA	SOY-FL, FULL FAT	22 COOKED-FRESH-BAKED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WA	SOY-FL, FULL FAT	31 COOKED-FRESH OR CANNED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WB	SOY-FL, LOW FAT	21 COOKED-NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WC	SOY-FL,DEFAT	10 RAW-FRESH OR NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WC	SOY-FL,DEFAT	21 COOKED-NFS	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WC	SOY-FL,DEFAT	22 COOKED-FRESH-BAKED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WC	SOY-FL,DEFAT	51 COOKED-CANNED	3F1399	P 0.050000	0.050000		1.00	0.000500
28023WC	SOY-FL,DEFAT	53 COOKED-CANNED-BOILED	3F1399	P 0.050000	0.050000		1.00	0.000500
43058AA	WINE AND SHERRY	10 RAW-FRESH OR NFS		P 0.100000	0.005000C	FT/PROCESSING	14.00	0.000700
43058AA	WINE AND SHERRY	21 COOKED-NFS		P 0.100000	0.005000C	FT/PROCESSING	14.00	0.000700
50000DB	MILK-NON-FAT SOL	10 RAW-FRESH OR NFS	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000DB	MILK-NON-FAT SOL	21 COOKED-NFS	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000DB	MILK-NON-FAT SOL	51 COOKED-CANNED	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000FA	MILK-FAT SOLIDS	10 RAW-FRESH OR NFS	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000FA	MILK-FAT SOLIDS	21 COOKED-NFS	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 6

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
50000FA	MILK-FAT SOLIDS	51 COOKED-CANNED	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000SA	MILK SUG (LACT)	21 COOKED-NFS	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
50000SA	MILK SUG (LACT)	51 COOKED-CANNED	9F2252	P 0.010000	0.000012	FEEDING STUDY	100.00	0.000012
53001BA	BEEF-MEAT BYP	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001BA	BEEF-MEAT BYP	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001BB	BEEF-OTH ORGAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001BB	BEEF-OTH ORGAN	51 COOKED-CANNED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001DA	BEEF-DRIED	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	10 RAW-FRESH OR NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	22 COOKED-FRESH-BAKED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	23 COOKED-FRESH-BOILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	24 COOKED-FRESH-BROILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001FA	BEEF-FAT	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001KA	BEEF-KIDNEY	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001LA	BEEF-LIVER	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001LA	BEEF-LIVER	31 COOKED-FRESH OR CANNED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001MA	BEEF-LEAN	10 RAW-FRESH OR NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001MA	BEEF-LEAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001MA	BEEF-LEAN	22 COOKED-FRESH-BAKED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001MA	BEEF-LEAN	23 COOKED-FRESH-BOILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53001MA	BEEF-LEAN	24 COOKED-FRESH-BROILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002BB	GOAT-OTH ORGAN	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002FA	GOAT-FAT	23 COOKED-FRESH-BOILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002FA	GOAT-FAT	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002KA	GOAT-KIDNEY	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002LA	GOAT-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002MA	GOAT-LEAN	23 COOKED-FRESH-BOILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53002MA	GOAT-LEAN	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53003AA	HORSE	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005BA	SHEEP-MEAT BYP	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005BB	SHEEP-OTH ORGAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005FA	SHEEP-FAT	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005KA	SHEEP-KIDNEY	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005LA	SHEEP-LIVER	00 NOT SPECIFIED (NO CONSUMPTION)	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005MA	SHEEP-LEAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53005MA	SHEEP-LEAN	31 COOKED-FRESH OR CANNED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006BA	PORK-MEAT BYP	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006BB	PORK-OTH ORGAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006BB	PORK-OTH ORGAN	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 7

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
53006FA	PORK-FAT	10 RAW-FRESH OR NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006FA	PORK-FAT	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006FA	PORK-FAT	23 COOKED-FRESH-BOILED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006FA	PORK-FAT	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006FA	PORK-FAT	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006KA	PORK-KIDNEY	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006LA	PORK-LIVER	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006LA	PORK-LIVER	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006MA	PORK-LEAN	21 COOKED-NFS	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006MA	PORK-LEAN	25 COOKED-FRESH-FRIED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
53006MA	PORK-LEAN	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	9F2252	P 0.050000	0.000120	FEEDING STUDY	100.00	0.000120
55008BA	TURKEY-BYP	21 COOKED-NFS	REREGIS	N 0.159000	0.000190	METABOLISM STY	100.00	0.000190
55008BA	TURKEY-BYP	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	REREGIS	N 0.159000	0.000190	M	100.00	0.000190
55008LA	TURKEY ORGAN	21 COOKED-NFS	REREGIS	N 0.159000	0.000850	M	100.00	0.000850
55008LA	TURKEY ORGAN	25 COOKED-FRESH-FRIED	REREGIS	N 0.159000	0.000850	M	100.00	0.000850
55008MA	TURKEY W/O SKIN	21 COOKED-NFS	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55008MA	TURKEY W/O SKIN	31 COOKED-FRESH OR CANNED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55008MA	TURKEY W/O SKIN	62 COOKED-FRESH OR FROZEN-BAKED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55008MB	TURKEY+SKIN	21 COOKED-NFS	REREGIS	N 0.009660	0.000190	M	100.00	0.000190
55008MB	TURKEY+SKIN	25 COOKED-FRESH-FRIED	REREGIS	N 0.009660	0.000190	M	100.00	0.000190
55008MC	TURKEY-UNSPEC	21 COOKED-NFS	REREGIS	N 0.159000	0.000190	M	100.00	0.000190
55013BA	POULTRY,OTH-BYP	00 NOT SPECIFIED (NO CONSUMPTION)	REREGIS	N 0.159000	0.000190	M	100.00	0.000190
55013LA	POULTRY,ORGAN	25 COOKED-FRESH-FRIED	REREGIS	N 0.159000	0.000850	M	100.00	0.000850
55013MA	POULTRY,OTHER	21 COOKED-NFS	REREGIS	N 0.159000	0.000190	M	100.00	0.000190
55014AA	EGGS-WHOLE	10 RAW-FRESH OR NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AA	EGGS-WHOLE	21 COOKED-NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AA	EGGS-WHOLE	22 COOKED-FRESH-BAKED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AA	EGGS-WHOLE	23 COOKED-FRESH-BOILED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AA	EGGS-WHOLE	25 COOKED-FRESH-FRIED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AB	EGGS-WHITE ONLY	10 RAW-FRESH OR NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AB	EGGS-WHITE ONLY	21 COOKED-NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AB	EGGS-WHITE ONLY	22 COOKED-FRESH-BAKED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AB	EGGS-WHITE ONLY	62 COOKED-FRESH OR FROZEN-BAKED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AB	EGGS-WHITE ONLY	81 COOKED-FROZEN	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AC	EGGS-YOLK ONLY	10 RAW-FRESH OR NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AC	EGGS-YOLK ONLY	21 COOKED-NFS	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AC	EGGS-YOLK ONLY	25 COOKED-FRESH-FRIED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55014AC	EGGS-YOLK ONLY	31 COOKED-FRESH OR CANNED	REREGIS	N 0.000840	0.000017	M	100.00	0.000017
55015BA	CHICKEN-BYP	00 NOT SPECIFIED (NO CONSUMPTION)	REREGIS	N 0.159000	0.000190	M	100.00	0.000190
55015LA	CHICKEN-ORGAN	21 COOKED-NFS	REREGIS	N 0.159000	0.000850	M	100.00	0.000850

Table 1 (continued)

ANTICIPATED RESIDUE INFORMATION FOR CASWELL NUMBER 453A DATE: 03/08/94 PAGE: 8

CHEMICAL	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

FOOD CODE	FOOD	FOOD FORM	PET.#	TOLERANCE (ppm)	ANTICIPATED RESIDUE (ppm)	AR STATISTIC TYPE	% CROP TREATED	RES. VALUE USED IN TAS RUN (ppm)
55015LA	CHICKEN-ORGAN	25 COOKED-FRESH-FRIED	REREGIS	N 0.159000	0.000850	M	100.00	0.000850
55015LA	CHICKEN-ORGAN	26 COOKED-FRESH-PICKLED,CORNED,OR CURED	REREGIS	N 0.159000	0.000850	M	100.00	0.000850
55015MA	CHICKEN-W/O SKIN	21 COOKED-NFS	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55015MA	CHICKEN-W/O SKIN	22 COOKED-FRESH-BAKED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55015MA	CHICKEN-W/O SKIN	25 COOKED-FRESH-FRIED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55015MA	CHICKEN-W/O SKIN	31 COOKED-FRESH OR CANNED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55015MA	CHICKEN-W/O SKIN	53 COOKED-CANNED-BOILED	REREGIS	N 0.007280	0.000110	M	100.00	0.000110
55015MB	CHICKEN+SKIN	21 COOKED-NFS	REREGIS	N 0.009660	0.000190	M	100.00	0.000190
55015MB	CHICKEN+SKIN-	25 COOKED-FRESH-FRIED	REREGIS	N 0.009660	0.000190	M	100.00	0.000190

Table 2.

TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS DATE: 03/08/94 PAGE: 1

CHEMICAL INFORMATION	STUDY TYPE	EFFECTS	REFERENCE DOSES	DATA GAPS/COMMENTS	STATUS
Fenamiphos (Nemacur) Caswell #453A CAS No. 22224-92-6 A.I. CODE: 100601 CFR No. 180.349	1yr feeding - dog NOEL= 0.0100 mg/kg 0.50 ppm LEL= 0.0300 mg/kg 1.00 ppm ONCO: E (RfD/PR Commitee)	Plasma ChE inhibition No evidence of oncogenicity in rats or mice.	PADI UF -->100 OPP RfD= 0.000100 EPA RfD= 0.000250	Chronic feeding-dog (current study may be upgraded)	HED complete 03/21/86 EPA verified 12/09/86 WHO last reviewed 1987 HED complete 07/01/88 RfD/PR reviewed 05/20/93 On IRIS.

POPULATION SUBGROUP	TOTAL TMRC (MG/KG BODY WEIGHT/DAY) CURRENT TMRC*	NEW TMRC**	NEW TMRC AS PERCENT OF RFD	DIFFERENCE AS PERCENT OF RFD	EFFECT OF ANTICIPATED RESIDUES ARC	%RFD
U.S. POPULATION - 48 STATES	0.002183	0.003121	3120.921000	938.401000	0.000059	58.88800
U.S. POPULATION - SPRING SEASON	0.002164	0.003052	3052.461000	888.096000	0.000054	53.97600
U.S. POPULATION - SUMMER SEASON	0.002077	0.003038	3037.939000	961.066000	0.000060	60.30100
U.S. POPULATION - FALL SEASON	0.002202	0.003152	3151.948000	950.390000	0.000060	59.96700
U.S. POPULATION - WINTER SEASON	0.002277	0.003232	3231.634000	954.372000	0.000061	60.75900
NORTHEAST REGION	0.002682	0.003636	3636.339000	954.699000	0.000061	60.82800
NORTH CENTRAL REGION	0.002152	0.003144	3144.054000	991.913000	0.000060	59.88200
SOUTHERN REGION	0.001748	0.002606	2605.592000	857.151000	0.000052	52.12700
WESTERN REGION	0.002293	0.003272	3272.034000	979.090000	0.000066	65.77800
HISPANICS	0.002729	0.003807	3806.587000	1077.898000	0.000056	56.42000
NON-HISPANIC WHITES	0.002139	0.003108	3107.794000	968.526000	0.000060	60.41100
NON-HISPANIC BLACKS	0.002084	0.002778	2777.744000	693.865000	0.000048	47.63400
NON-HISPANIC OTHERS	0.003067	0.003866	3865.735000	799.181000	0.000072	72.16700
NURSING INFANTS (< 1 YEAR OLD)	0.003662	0.003973	3973.291000	311.017000	0.000141	141.42400
NON-NURSING INFANTS (< 1 YEAR OLD)	0.007114	0.007983	7982.589000	868.534000	0.000229	229.04100
FEMALES (13+ YEARS, PREGNANT)	0.001721	0.002509	2509.450000	787.998000	0.000042	41.54400
FEMALES 13+ YEARS, NURSING	0.001704	0.002543	2542.503000	838.545000	0.000054	53.60800
CHILDREN (1-6 YEARS OLD)	0.005928	0.007725	7725.056000	1796.865000	0.000094	94.28600
CHILDREN (7-12 YEARS OLD)	0.003228	0.004645	4644.655000	1416.939000	0.000066	65.50000
MALES (13-19 YEARS OLD)	0.001781	0.002798	2797.718000	1017.204000	0.000040	40.48700
FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)	0.001668	0.002516	2516.445000	848.599000	0.000041	40.66900
MALES (20 YEARS AND OLDER)	0.001315	0.002079	2078.714000	763.716000	0.000050	50.47800
FEMALES (20 YEARS AND OLDER, NOT PREG. OR NURS)	0.001571	0.002292	2291.783000	720.654000	0.000055	55.03700

*Current TMRC does not include new or pending tolerances.
**New TMRC includes new, pending, and published tolerances.

Table 3a.

TOLERANCE ASSESSMENT SUMMARY FOR Fenamiphos (Nemacur) DATE: 03/08/94
USING ANTICIPATED RESIDUES
CASWELL #453A

ANALYSIS FOR POPULATION SUB-GROUP: U.S. POPULATION - 48 STATES

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000010	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	9.809	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	0.000002	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	1.500	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000011	MG/KG/DAY
THE NEW ARC WILL OCCUPY	11.309	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000048	MG/KG/DAY
THIS ARC WILL OCCUPY	47.579	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000059	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	58.888	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: NON-NURSING INFANTS (< 1 YEAR OLD)

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000040	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	40.118	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	<0.000001	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	0.184	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000040	MG/KG/DAY
THE NEW ARC WILL OCCUPY	40.302	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000189	MG/KG/DAY
THIS ARC WILL OCCUPY	188.739	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000229	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	229.041	% OF THE ADI.

ANALYSIS FOR POPULATION SUB-GROUP: NURSING INFANTS (< 1 YEAR OLD)

EXISTING ANTICIPATED RESIDUES (PUBLISHED ONLY)		
RESULT IN AN ARC OF:	0.000014	MG/KG/DAY
THE EXISTING ARC IS EQUIVALENT TO:	14.199	% OF THE ADI.
PROPOSED NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
RESULT IN AN ARC OF:	<0.000001	MG/KG/DAY
THESE NEW ANTICIPATED RESIDUES WILL OCCUPY:	0.100	% OF THE ADI.
IF THE NEW ANTICIPATED RESIDUES (CURRENT PETITION ONLY)		
ARE APPROVED THE RESULTANT ARC WILL BE:	0.000014	MG/KG/DAY
THE NEW ARC WILL OCCUPY	14.299	% OF THE ADI.
OTHER PENDING ANTICIPATED RESIDUES EXCLUDING THE		
CURRENT NEW PETITION HAVE AN ARC OF:	0.000127	MG/KG/DAY
THIS ARC WILL OCCUPY	127.125	% OF THE ADI.
IF ALL PENDING ANTICIPATED RESIDUES (INCLUDING THE		
CURRENT NEW PETITION) ARE GRANTED		
THE RESULTANT ARC WILL BE:	0.000141	MG/KG/DAY
THE TOTAL ARC WILL OCCUPY	141.424	% OF THE ADI.

Table 3b: Chronic Exposure and Risk Contributed by Food Uses of Fenamiphos

Tolerance Type	Exposure in mg chemical/kg bwt/day (% RfD in parentheses)		
	U.S. population	Non-Nursing Infants <1 yr	Nursing Infants <1 yr
Published Uses	0.000010 (10%)	0.000040 (40%)	0.000014 (14%)
Pending Uses existing in file	0.000048 (48%)	0.000189 (189%)	0.000127 (127%)
-cantaloupe	0.000002 (2%)	<0.000001 (0.4%)	0.000000 (0%)
-coffee beans	0.000009 (9%)	0.000000 (0%)	0.000000 (0%)
-potatoes	0.000007 (7%)	0.000008 (8%)	0.000002 (2%)
-sweet potatoes	0.000004 (4%)	0.000029 (29%)	0.000021 (21%)
-carrots	0.000017 (17%)	0.000146 (146%)	0.000103 (103%)
-tomatoes	0.000007 (7%)	0.000005 (5%)	0.000001 (1%)
-peppers	0.000001 (1%)	<0.000001 (0.1%)	<0.000001 (0.1%)
Proposed uses through reregistration	0.000002 (2%)	<0.000001 (0.2%)	<0.000001 (0.1%)
Total	0.000059 (59%)	0.000229 (229%)	0.000141 (141%)

Table 4: Acute Dietary Distributions

NOEL for Cholinesterase Inhibition is 0.5 mg/kg/day

*NAME: FENAMIPHOS (NEMACUR)		STUDY	RDV	NOEL	SF	STUDY TYPE	SPECIES	EFF. LEV.	CORE GRADE	DOC. NO.*
*CASWELL NO: 453A	CFR NO: CFR180.349	A	00000.0003	000001.000	000100	Chronic	Dog	Enzymatic	Minimum	0000001314*
*CAS NO: 22224-92-6	SHAUGHNESSY NO: 100601	B	00000.0150	000003.000	000010	Chronic	Rat	Enzymatic	Minimum	0000001314*
*STATUS CODES:		C	00000.0150	000030.000	000100	Reprodctn	Rat	Systemic	Minimum	0000001314*
*RDV INFO: The LD value used in this analysis is 0.005			MG/KG of BODY WEIGHT/DAY							*
*FILE INFO: No Tolerance Data Are Used--Without User Modifications.								AR DATA:	No User Modifications	*

-U.S. POP.--48 STATES

	ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY	
ESTIMATES BASED ON	PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY	AS PERCENT OF RDV
TOLERANCES:	0.00	0.000000	0.00
ANTICIPATED RESIDUES:	99.83	0.003144	62.88

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

	0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
TOLERANCES:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTICIPATED RESIDUES:	100	65	47	35	25	18	14	10	8	7	6	2	1	1	0	0	0

Exposure = 0.005 x 10 = 0.05
NOEL/Exposure = 0.5/0.05 = 10

0INFANTS(<1 YEAR)

	ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY	
ESTIMATES BASED ON	PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY	AS PERCENT OF RDV
TOLERANCES:	0.00	0.000000	0.00
ANTICIPATED RESIDUES:	93.94	0.007615	152.30

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

	0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
TOLERANCES:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTICIPATED RESIDUES:	100	82	65	56	48	43	38	34	31	28	25	16	10	6	1	0	0

Exposure = 0.005 x 15 = 0.075
NOEL/Exposure = 0.5/0.075 = 7

OCHILDREN(1-6 YRS)

	ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
ESTIMATES BASED ON	PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY / AS PERCENT OF RDV
TOLERANCES:	0.00	0.000000 / 0.00
ANTICIPATED RESIDUES:	99.94	0.007704 / 154.08

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

	0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
TOLERANCES:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTICIPATED RESIDUES:	100	87	72	61	53	47	43	39	36	32	29	16	8	4	0	0	0

Exposure = 0.005 x 10 = 0.05
NOEL/Exposure = 0.5/0.05 = 10

-FEMALES(13+ YRS)

	ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
ESTIMATES BASED ON	PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY / AS PERCENT OF RDV
TOLERANCES:	0.00	0.000000 / 0.00
ANTICIPATED RESIDUES:	99.89	0.002351 / 47.01

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

	0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
TOLERANCES:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTICIPATED RESIDUES:	100	59	42	30	20	13	8	5	3	2	2	0	0	0	0	0	0

Exposure = 0.005 x 3 = 0.015
NOEL/Exposure = 0.5/0.015 = 33

OMALES(13+ YRS)

	ESTIMATED % OF POTENTIAL	MEAN DAILY RESIDUE CONTRIBUTION PER USER-DAY
ESTIMATES BASED ON	PERSON DAYS THAT ARE USER-DAYS	MG/KG BODY WEIGHT/DAY / AS PERCENT OF RDV
TOLERANCES:	0.00	0.000000 / 0.00
ANTICIPATED RESIDUES:	99.94	0.002233 / 44.67

ESTIMATED % OF POPULATION USER-DAYS WITH RESIDUE CONTRIBUTION EXCEEDING X TIMES THE RDV, FOR X=

	0	.2	.4	.6	.8	1	1.2	1.4	1.6	1.8	2	3	4	5	10	15	20
TOLERANCES:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTICIPATED RESIDUES:	100	60	41	27	17	10	6	4	3	2	1	0	0	0	0	0	0

Exposure = 0.005 x 3 = 0.015
NOEL/Exposure = 0.5/0.015 = 33