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

DEC 2 7 1989

MEMORANDUM

Subject: Acephate/Methamidophos.   Separation of Tolerances in
           Acephate Registration Standard.
           DEB# 5839.

From: Jane S. Smith, Chemist
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           Health Effects Division   (H-7509C)

Thru: Richard D. Schmitt, Ph.D, Chief
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To: W. Miller, PM Team 16
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           Registration Division   (H-7505C)

This memo is in response to a letter received from Valent dated
9/7/89 which is a follow-up to a meeting between the EPA and Valent
held 7/20/89.   Valent disagrees with the acephate Registration
Standard requirement that acephate tolerances must be separate from
methamidophos tolerances.

Valent has submitted with this letter information requested by the
Agency in the July meeting concerning the toxicity and dietary
intake of methamidophos and the impact of the combined residues of
acephate and methamidophos relative to ADI.   Review of this
information is not within the purview of DEB.

Presently, tolerances exist for acephate (including its metabolite
methamidophos) (40 CFR 180.108) and methamidophos (40 CFR 180.315)
in/on various agricultural commodities.   Maximum residue levels
(MRLs) of the Codex Alimentarius Commission exist which differ from
the U.S. tolerances.   The established tolerances are as follows:

Summary of U.S and Codex Tolerances for Acephate and Methamidophos

Commodity	Codex MRLs (mg/kg) Acephate	Methamidophos	U.S. Tolerances (mg/kg) Acephate[1]	Methamidophos[2]
Alfalfa forage green	10(fresh wt)	2	--	--
Beans (dry and succulent)	--	--	3(1)	--[1]
Broccoli	5	1	--	1
Brussels sprouts	5	1	3(0.5)	1
Cabbage, head	5	1	--	1
Cattle, fat	0.1	0.01[3]	0.1	--[0.01]
Cattle, meat	0.1	0.01[3]	0.1	--[0.01]
Cattle, mbyp	--	--	0.1	--[0.01]
Cauliflower	5	1	2(0.5)	1
Celery	--	2	10(1)	1(R)
Citrus Fruit	5	0.5	--	--
Cottonseed	2	0.1	2	0.1(N)[0.5]
Cottonseed hulls	--	--	4	--[0.1]
Cottonseed meal	--	--	8	--[2.5]
Cranberries	--	--	0.5(0.1)	--[0.1]
Cucumber	--	0.5	--	1
Eggplant	--	1	--	1
Eggs (poultry)	0.1	--	0.1	--[0.01]
Goat, fat	--	0.01[3]	0.1	--[0.01]
Goat, meat	--	0.01[3]	0.1	--[0.01]
Goat, mbyp	--	--	0.1	--[0.01]
Grass (hay, range, pasture)	--	--	15	--[3.0]
Hogs/Pigs fat	0.1	--	0.1	--
Hogs/Pigs meat	0.1	--	0.1	--
Hogs/Pigs mbyp	--	--	0.1	--[0.01]
Hops (dry)	--	5	--	--
Horses (fat, meat, mbyp)	--	--	0.1	--[0.01]
Lettuce, head	10	1	10(1)	1
Macadamia nuts	--	--	0.05(R)	--
Melons	--	--	--	0.5
Milk	0.1	--	0.1	--[0.05]
Mint hay	--	--	15(1)	--[1.0]
Peach	--	1	--	--
Peanuts	--	--	0.2	--[0.1]
Peanut hulls	--	--	5	--[1.5]
Peppers	--	1	4(1)	1
Potato	0.5	0.1	--	0.1(N)
Poultry, fat	0.1	--	0.1	--[0.01]
Poultry, meat	0.1	--	0.1	--[0.01]
Poultry, mbyp	--	--	0.1	--[0.01]
Rape seed	--	0.1	--	--

(continued)

Commodity	Codex MRLs (mg/kg)		U.S. Tolerances (mg/kg)	
	Acephate	Methamidophos	Acephate[1]	Methamidophos[2]
Sheep, fat	--	0.01^3	0.1	--[0.01]
Sheep, meat	--	0.01^3	0.1	--[0.01]
Sheep, mbyp	--	--	0.1	--[0.01]
Soya bean (dry)	0.5	0.05	1 (soybean)	--[0.2]
Soya bean meal	--	--	--	--[2.0]
Sugar beet	0.1	0.05	--	0.02
Sugar beet leaves or tops	10	1	--	0.5
Tomato	5	2	--	1
Tree tomato	0.5	0.01	--	--
Processed Foods	--	--	0.02	--

Footnotes:
1. U.S. acephate limits include residues of methamidophos. Maximum methamidophos residues allowed are in parentheses.
2. Numbers in brackets are the numbers recommended for methamidophos as the result of a U.S. redefinition (separation) of residue. Others (as well as acephate limits) remain the same.
3. The limit of detection for the method.

The summary provided is a reiteration of the information already outlined in the Registration Standard. The rationale for separating the tolerances for acephate and methamidophos provided in the acephate Registration Standard remains unchanged. Not only are the tolerances inconsistent within the U.S. for methamidophos and acephate metabolite (methamidophos), but the U.S. tolerances are inconsistent with Codex. The only way to achieve any consistency and compatibility is for the requirement for separation of the tolerances as stated in the Registration Standard to stand.

cc: R.F., S.F., circ., Reg. Std., J. Smith, PMSD/ISB.
RDI: W.Hazel, 12/26/89; E.Zager, 12/26/89.
H-7509C: DEB:JSS:jss:CM-2:Rm810F:557-7378:12/26/89.