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

MAY 21 1981

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21

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: PP#1G2440; Glyphosate in or on cotton at 15 ppm; Resubmission
CASWELL#661A

FROM: William Dykstra, Toxicologist
Toxicology Branch, HED (TS-769)

WJD + DC 5/6/81

TO: Robert Taylor (25)
Registration Division (TS-767)
and
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

for WJB

Recommendations:

1. The revised Section F can be toxicologically supported.

Revised Section F: Proposed Temporary Tolerances

Request is made to establish temporary tolerances for the combined residues of the herbicide N-phosphonomethyl glycine (glyphosate) and its metabolite, aminomethyl phosphonic acid, in or on the raw agricultural commodity as follows:

Cottonseed ---------- 15.0 ppm

Liver and kidney, cattle, goat, swine, horses, poultry and sheep -- 0.5 ppm

This increase in tolerance is due to the application of glyphosate as a preharvest topical treatment for weed control in cotton. Residue studies were established at 12 different locations.

Review

1. Memo of 2/6/81 from William Dykstra to Robert Taylor; PP#1G2440.

2. Tolerances have been established under 40 CFR 180.364.

3. Published tolerances utilize 7.21% of the ADI. Unpublished, TOX approved tolerances utilize the ADI to 19.73%. The revised Section F utilizes 0.01% of the ADI. All tolerances utilize 19.74% of the ADI (computer printout attached).

Conclusion and Recommendation:

The revised Section F can be toxicologically supported.

TS-769:th:TOX/HED:WDykstra:5-6-81:#5

File last updated 5/6/81

ACCEPTABLE DAILY INTAKE DATA

RAI, older mg/kg	NOEL ppm	S.F.	ADI mg/kg/day	MPI mg/day(60kg)
5.000	100.00	100	0.0500	3.0000

Published Tolerances

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Cottonseed(41)	6.000	0.15	0.01350
Grain Crops(64)	0.100	13.79	0.02069
Avocados(6)	0.200	0.03	0.00009
Citrus Fruits(33)	0.200	3.81	0.01144
Coffee(36)	1.[illegible]00	0.75	0.01119
Grapes, inc raisins(66)	0.100	0.49	0.00074
Leafy Vegetables(80)	0.200	2.76	0.00828
Molasses(96)	2.000	0.03	0.00092
Nuts(101)	0.200	0.10	0.00031
Pome Fruits(126)	0.200	2.79	0.00837
Root Crop Veg(136)	0.200	11.00	0.03299
Seed&Pod Veg(143)	0.200	3.66	0.01098
Soybeans(148)	6.000	0.92	0.08263
Palm Oil(202)	0.100	0.03	0.00005
Kidney(203)	0.100	0.03	0.00005
Pistachio nuts(210)	0.200	0.03	0.00009
Liver(211)	0.100	0.03	0.00005
Sugar,cane&beet(154)	0.100	3.64	0.00546
Asparagus(5)	0.200	0.14	0.00043
Bananas(7)	0.200	1.42	0.00426
Olives(104)	0.100	0.06	0.00009
Stone Fruits(151)	0.200	1.25	0.00374

MPI	TMRC	% ADI
3.0000 mg/day(60kg)	0.2163 mg/day(1.5kg)	7.21

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Unpublished,Tox Approved PP#8E2122,9H5196,9F2163,9H5204,0F2329,0E2421
1F2455, 1E2490

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Sugar,cane&beet(154)	1.900	3.64	0.10369
Molasses(96)	18.000	0.03	0.00828
Cucurbits(49)	0.100	2.84	0.00426
Fruiting Vegetables(60)	0.100	2.99	0.00449
Small Fruit,berries(146)	0.100	0.83	0.00124
Hops(73)	0.100	0.03	0.00005
Fish,shellfish(59)	2.000	1.08	0.03250
Potable Water(198)	0.100	133.33	0.20000
Peanuts(115)	0.100	0.36	0.00054
Cranberries(44)	0.200	0.03	0.00009
Guava(184)	0.200	0.03	0.00009
Papayas(109)	0.200	0.03	0.00009
Cottonseed(41)	9.000	0.15	0.02025
Mangoes(88)	0.200	0.03	0.00009

MPI	TMRC	% ADI

3.0000 mg/day(60kg) 0.5920 mg/day(1.5kg) 19.73

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Current Action ### 132440

CROP	Tolerance	Food Factor	mg/day(1.5kg)
Kidney(203)	0.400	.03	0.00012
Liver(211)	0.400	.03	0.00018

TPI	TMRC	% ADI
3.0000 mg/day(60kg)	0.5923 mg/day(1.5kg)	19.74

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