



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

APR 16 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

TO: Don Stubbs
Emergency Response Section
Registration Division (TS-767)

THRU: Robert B. Jaeger, Section Head *RB 4/14/82*
Review Section #1 *RB 4/15/82*
Toxicology Branch/HED (TS-769)

SUBJECT: Section 18 Request for an emergency exemption from
California Department of Food and Agriculture for
the use of carbaryl; 82-CA-23.
CASWELL No. 160

Action Requested:

1. Crisis exemption to use carbaryl in urban areas for control of gypsy moth.
2. Residue levels of carbaryl on avocados at 10 ppm.

Recommendation:

Toxicology Branch favors the emergency exemption for the use of carbaryl for the control of gypsy moth in urban areas and the use on avocados.

Use:

Sevin 50W and Sevin Sprayable to be applied at one pound a.i. per 100 gallons water by ground application at seven day intervals or as needed to infested areas statewide.

Data base for tolerances:

Monkey Teratology	No effects at highest level tested (20 mg/kg)
Three-Generation Rat Reproduction Study	NOEL 200 mg/kg/day (highest level tested)
One-year Dog Feeding Study	NOEL 400 PPM
2-Year Rat Feeding Study	NOEL 200 PPM, slight systemic effects at 400 PPM
18-Month Mouse Oncogenicity Study	Negative at 400 PPM (highest level tested)

Data desirable but currently lacking - None

Action taken to obtain the lacking information - Not applicable

Related tolerances for carbaryl - Refer to the attached print out of Carbaryl updated 4/2/82.

Calculated Dietary Exposure for 40 CFR 180.169

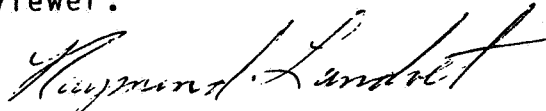
The two year chronic feeding study in rats with a systemic NOEL of 200 ppm and a safety factor of 100 results in an ADI of 0.1 mg/kg/day and a MPI of 6.0 mg/kg (60 kg).

Proposed Increase in Dietary Exposure

An emergency exemption for the combined residues of carbaryl and its metabolites on avocados at 10 ppm would result in a contribution of 0.0045 mg/day/1.5 kg to the TMRC and an approximate 0.07% increase in the ADI. The MPI will not be exceeding by this action.

Regulatory Action Against Carbaryl - None

Any other relevant consideration in setting this exemption.
None known to this reviewer.



Raymond Landolt
Review Section #1
Toxicology Branch/HED (TS-769)

Attachment

TS-769:LANDOLT:s11:X73710:4/9/82 card 3

File last updated 4/2/82

ACCEPTABLE DAILY INTAKE DATA

Ref, Older NOLL	S.F.	ADI	MFI
mg/kg	mg/kg/day	mg/kg/day	mg/kg/day/60kg
10.000	200.00	100	0.1000
			6.0000

Published Tolerances

Code	Tolerance	Food Factor	mg/day/1.5kg
Blackberries(15)	12.000	0.03	0.00540
Boysenberries(17)	12.000	0.03	0.00540
Collards(37)	12.000	0.08	0.01472
Dewberries(52)	12.000	0.03	0.00540
Beet greens(13)	12.000	0.03	0.00540
Kale(75)	12.000	0.03	0.00540
Loganberries(86)	12.000	0.03	0.00540
Mustard Greens(99)	12.000	0.06	0.01104
Parsley(110)	12.000	0.03	0.00540
Raspberries(135)	12.000	0.03	0.00540
Spinach(150)	12.000	0.05	0.00920
Swiss Chard(158)	12.000	0.03	0.00540
Turnip Greens(166)	12.000	0.03	0.00540
Apples(2)	10.000	2.53	0.37950
Apricots(3)	10.000	0.11	0.01680
Asparagus(5)	10.000	0.14	0.02146
Bananas(7)	10.000	1.42	0.21308
Beans(9)	10.000	2.04	0.30600
Blueberries(16)	10.000	0.03	0.00450
Broccoli(19)	10.000	0.10	0.01533
Brussel Sprouts(20)	10.000	0.03	0.00450
Cabbage, sauerkraut(22)	10.000	0.74	0.11037
Carrots(24)	10.000	0.46	0.07205
Cauliflower(27)	10.000	0.07	0.01073
Cherries(30)	10.000	0.10	0.01533
Chinese Cabbage(177)	10.000	0.03	0.00450
Citrus Fruits(33)	10.000	3.81	0.57179
Cranberries(44)	10.000	0.03	0.00450
Cucumbers, inc pickl(46)	10.000	0.73	0.10884
Eggplant(53)	10.000	0.03	0.00450
Escarole/endive(56)	10.000	0.03	0.00450
Grapes, inc raisins(66)	10.000	0.49	0.07358
Kohlrabi(76)	10.000	0.03	0.00450
Lettuce(84)	10.000	1.31	0.19622
Melons(92)	10.000	2.00	0.30046
Nectarines(100)	10.000	0.03	0.00450
Okra(103)	10.000	0.07	0.01073
Olives(104)	10.000	0.06	0.00920
Peaches(114)	10.000	0.90	0.13490
Pears(116)	10.000	0.26	0.03832
Peas(117)	10.000	0.09	0.10424
Peppers(120)	10.000	0.12	0.01840
Plums, inc prunes(125)	10.000	0.13	0.01993
Pumpkin, inc squash(131)	10.000	0.11	0.01686
Salisfy(142)	10.000	0.03	0.00450
Sorghum(147)	10.000	0.03	0.00450

2	Strawberries(152)	10.000	0.15	0.02759
3	Summer Squash(155)	10.000	0.03	0.00450
4	Tomatoes(153)	10.000	2.87	0.43122
5	Corn,all types(138)	5.000	2.51	0.18825
6	Cottonseed (oil)(141)	5.000	0.15	0.01125
7	Beets(14)	5.000	0.17	0.01303
8	Horseradish(77)	5.000	0.03	0.00225
9	Poultry(128)	5.000	2.94	0.22075
10	Parsnips(111)	5.000	0.03	0.00225
11	Peanuts(115)	5.000	0.36	0.02683
12	Radishes(133)	5.000	0.03	0.00225
13	Pice(137)	5.000	0.55	0.04139
14	Rutabagas(139)	5.000	0.03	0.00225
15	Salisfy(142)	5.000	0.03	0.00225
16	Soybeans (oil)(148)	5.000	0.92	0.06886
17	Turnips(165)	5.000	0.05	0.00383
18	Almonds(1)	1.000	0.03	0.00045
19	Filberts(58)	1.000	0.03	0.00045
20	Pecans(118)	1.000	0.03	0.00045
21	Walnuts(167)	1.000	0.03	0.00045
22	Potatoes(127)	0.200	5.43	0.01623
23	Eggs(54)	0.500	2.77	0.02078
24	Sweet Potatoes(157)	0.200	0.40	0.00120
25	Chestnuts(153)	1.000	0.03	0.00045
26	Celery(28)	10.000	0.29	0.04292
27	Maple syrup(201)	0.500	0.03	0.00023
28	Lentils(83)	10.000	0.04	0.00613
29	Dandelion(194)	12.000	0.03	0.00540
30	Wintersquash(171)	10.000	0.03	0.00450
31	Pistachio nuts(210)	1.000	0.03	0.00045
32	Wheat(170)	3.000	10.36	0.46633
33	Cattle(26)	0.100	7.18	0.01078
34	Goats(62)	0.100	0.03	0.00005
35	Hogs(69)	0.100	3.43	0.00515
36	Sheep(145)	0.100	0.19	0.00029
37	Horses(208)	0.100	0.03	0.00005
38	Kidney(203)	1.000	0.03	0.00045
39	Liver(211)	1.000	0.03	0.00045
40	Milk&Dairy Products(93)	0.300	28.62	0.12877

	NPI	THRC	% ADI
42	6.0000 mg/day/60kg	4.6593 mg/day/1.5kg	77.66
43	*****		

45 Unpublished,Tox Approved 6E1874,6E1848,8G1036,1E2497,1E2498

	CROP	Tolerance	Food Factor	mg/day/1.5kg
48	Rye(140)	3.000	0.03	0.00135
49	Oats(102)	3.000	0.36	0.01610
50	Barley(8)	3.000	0.03	0.00135
51	Millet(94)	3.000	0.03	0.00135
52	Flax Seed(182)	5.000	0.03	0.00225

	NPI	THRC	% ADI
55	6.0000 mg/day/60kg	4.6617 mg/day/1.5kg	78.03
57	*****		

59 Current Action Section 18

	CROP	Tolerance	Food Factor	mg/day/1.5kg
61	Avocados(6)	10.000	0.03	0.00450

NPI

THRC

% ADI

6.0000 mg/ua 50kg

4.6862 mg/day/1.5'

78.10
