

US EPA ARCHIVE DOCUMENT



3-3-88

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

MAR 3 1988

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Cyfluthrin - TAS Dietary Exposure Assessment  
(FAP# 6H5515)

FROM: Susan L. Stanton  
Tolerance Assessment Program  
HED/RCB (TS-769C)

*Susan L. Stanton 3/2/88*

THRU: Karl Arne, Ph.D. *KArne*  
Branch Senior Scientist  
HED/RCB (TS-769C)

TO: George T. LaRocca, PM 15  
Insecticide-Rodenticide Branch  
Registration Division (TS-767)

Action Requested

Provide an estimate of dietary exposure resulting from the proposed new use of cyfluthrin (Baythroid) in food handling establishments (FAP# 6H5515).

Discussion

1. The Reference Dose (ADI) used in the analysis was 0.02 mg/kg body wt/day, based on a NOEL of 2.0 mg/kg body wt/day from a 2-year rat feeding study with a safety factor of 100. This value has been verified by Agency reference dose committees.

2. Currently, there are no published tolerances for cyfluthrin. The food uses evaluated in this analysis were those proposed in FAP# 6H5515 (0.05 ppm in or on foods or feeds as a result of cyfluthrin use in food handling establishments) and in PP# 4F3046/4H5427 (cotton, cottonseed oil (FA), and meat and milk). Residue Chemistry Branch has reviewed the petitions and recommended that the proposed tolerances be established (memo Arne to Gardner, 2/14/85; memo Bradley to LaRocca, 2/11/88). A complete listing of residue information is provided in the attached Table 1.

3. TAS conducted a routine chronic analysis using proposed tolerances and an assumption of 100% of crop/site treated. The TAS routine chronic analysis estimates the Theoretical Maximum Residue Contribution (TMRC) for the U.S. Population and each of 22 subgroups (see Table 2). The TMRC for the U.S. Population was calculated to be 0.000883 mg/kg/day, which occupies approximately 4% of the Acceptable Daily Intake (ADI). The two most highly exposed subgroups were non-nursing infants (0.002374 mg/kg/day or 12% of the ADI) and children, ages 1 to 6 (0.001941 mg/kg/day or 10% of the ADI). The effect of the current action (FAP# 6H5515 only) on exposure is shown below:

|                     | <u>Current<br/>Petition<br/>(6H5515)</u>    | <u>Other<br/>Pending<br/>Petitions</u> | <u>Total</u>       |
|---------------------|---------------------------------------------|----------------------------------------|--------------------|
| U.S. Population     | 0.000625 <sup>a</sup><br>(3.1) <sup>b</sup> | 0.000258<br>(1.3)                      | 0.000883<br>(4.4)  |
| Non-Nursing Infants | 0.001600<br>(8.0)                           | 0.000774<br>(3.9)                      | 0.002374<br>(11.9) |
| Children, 1-6       | 0.001426<br>(7.1)                           | 0.000515<br>(2.6)                      | 0.001941<br>(9.7)  |

<sup>a</sup>TMRC in mg/kg/day.

<sup>b</sup>TMRC as percent of the ADI.

5. As stated above, this analysis used proposed tolerances with an assumption of 100% of crop/site treated. This conservative approach likely overestimates risk significantly; however, since it produces an acceptable theoretical exposure, no further data are required at this time.

cc. TAS File                      Cyfluthrin SF  
 Reading File                 FAP# 6H5515  
 circ.  
 TOX (Rathman)

Table 1

| CHEMICAL               | STUDY TYPE                 | EFFECTS                  | REFERENCE DOSES   | DATA GAPS/COMMENTS    | STATUS                  |
|------------------------|----------------------------|--------------------------|-------------------|-----------------------|-------------------------|
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights;  | ADI 100           | No data gaps.         | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL=                      | inflammation of kidney.  | OPP RfD= 0.020000 |                       | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  | Doses based on food con- | EPA RfD= 0.025000 | TOX to reevaluate RfD | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL=                       | sumption.                |                   | 6/12/87.              |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogeni- | WHO RfD 0.020000  |                       |                         |
|                        | ONCO: Negative- 2 species. | city in rats or mice.    | Type: ADI         |                       | On IRIS.                |

| FOOD CODE | FOOD NAME                   | PETITION NUMBER | NEW      | TOLERANCE (PPM) | PENDING | PUBLISHED |
|-----------|-----------------------------|-----------------|----------|-----------------|---------|-----------|
| 01002AA   | BLACKBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01003AA   | BOYSENBERRIES               | 6H5515          | 0.050000 |                 |         | H         |
| 01004AA   | DEWBERRIES                  | 6H5515          | 0.050000 |                 |         | H         |
| 01005AA   | LOGANBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01006AA   | RASPBERRIES                 | 6H5515          | 0.050000 |                 |         | H         |
| 01007AA   | YOUNGBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01009AA   | BLUEBERRIES                 | 6H5515          | 0.050000 |                 |         | H         |
| 01010AA   | CRANBERRIES                 | 6H5515          | 0.050000 |                 |         | H         |
| 01010JA   | CRANBERRIES-JUICE           | 6H5515          | 0.050000 |                 |         | H         |
| 01011AA   | CURRENTS                    | 6H5515          | 0.050000 |                 |         | H         |
| 01012AA   | ELDERBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01013AA   | GOOSEBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01014AA   | GRAPES-FRESH                | 6H5515          | 0.050000 |                 |         | H         |
| 01014DA   | GRAPES-RAISINS              | 6H5515          | 0.050000 |                 |         | H         |
| 01014JA   | GRAPES-JUICE                | 6H5515          | 0.050000 |                 |         | H         |
| 01015AA   | HUCKLEBERRIES (GAYLUSSACIA) | 6H5515          | 0.050000 |                 |         | H         |
| 01016AA   | STRAWBERRIES                | 6H5515          | 0.050000 |                 |         | H         |
| 01024AA   | JUNE BERRY                  | 6H5515          | 0.050000 |                 |         | H         |
| 01025AA   | MULBERRIES                  | 6H5515          | 0.050000 |                 |         | H         |
| 02001AA   | CITRUS CITRUS               | 6H5515          | 0.050000 |                 |         | H         |
| 02002AA   | GRAPEFRUIT-UNSPECIFIED      | 6H5515          | 0.050000 |                 |         | H         |
| 02002AB   | GRAPEFRUIT-PULP             | 6H5515          | 0.050000 |                 |         | H         |
| 02002JA   | GRAPEFRUIT-JUICE            | 6H5515          | 0.050000 |                 |         | H         |
| 02003AA   | KUMQUATS                    | 6H5515          | 0.050000 |                 |         | H         |
| 02004AA   | LEMONS-UNSPECIFIED          | 6H5515          | 0.050000 |                 |         | H         |
| 02004AB   | LEMONS-PULP                 | 6H5515          | 0.050000 |                 |         | H         |
| 02004HA   | LEMONS-PEEL                 | 6H5515          | 0.050000 |                 |         | H         |
| 02004JA   | LEMONS-JUICE                | 6H5515          | 0.050000 |                 |         | H         |
| 02005AA   | LIMES-UNSPECIFIED           | 6H5515          | 0.050000 |                 |         | H         |
| 02005AB   | LIMES-PULP                  | 6H5515          | 0.050000 |                 |         | H         |
| 02005HA   | LIMES-PEEL                  | 6H5515          | 0.050000 |                 |         | H         |
| 02005JA   | LIMES-JUICE                 | 6H5515          | 0.050000 |                 |         | H         |
| 02006AA   | ORANGES-UNSPECIFIED         | 6H5515          | 0.050000 |                 |         | H         |
| 02006AB   | ORANGES-PULP                | 6H5515          | 0.050000 |                 |         | H         |
| 02006HA   | ORANGES-PEEL                | 6H5515          | 0.050000 |                 |         | H         |
| 02006JA   | ORANGES-JUICE               | 6H5515          | 0.050000 |                 |         | H         |
| 02007AA   | TANGELOS                    | 6H5515          | 0.050000 |                 |         | H         |
| 02008AA   | TANGERINES                  | 6H5515          | 0.050000 |                 |         | H         |
| 02008JA   | TANGERINE-JUICE             | 6H5515          | 0.050000 |                 |         | H         |
| 03001AA   | ALMONDS                     | 6H5515          | 0.050000 |                 |         | H         |

3

Table 1 (con't.)

| CHEMICAL               | STUDY TYPE                 | EFFECTS                                         | REFERENCE DOSES   |     | DATA GAPS/COMMENTS             | STATUS                  |
|------------------------|----------------------------|-------------------------------------------------|-------------------|-----|--------------------------------|-------------------------|
|                        |                            |                                                 | ADJ               | 100 |                                |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights; inflammation of kidney. | ADJ               | 100 | No data gaps.                  | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2.0000 mg/kg         | Doses based on food consumption.                | OPP RfD= 0.020000 |     |                                | ORD verified 4/8/86.    |
| CAS NO. 68359-37-5     | 50.00 ppm                  |                                                 | EPA RfD= 0.025000 |     | TOX to reevaluate RfD 6/12/87. | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL= 6.2000 mg/kg          |                                                 |                   |     |                                |                         |
| CFR NO. 180.           | 150.00 ppm                 | No evidence of oncogenicity in rats or mice.    | WHO RfD 0.020000  |     |                                |                         |
|                        | ONCO: Negative- 2 species. |                                                 | Type: ADI         |     |                                | On IRIS.                |

| FOOD CODE | FOOD NAME                  | PETITION NUMBER | TOLERANCE (PPM) |         | H |
|-----------|----------------------------|-----------------|-----------------|---------|---|
|           |                            |                 | NEW             | PENDING |   |
| 03002AA   | BRAZIL NUTS                | 6H5515          | 0.050000        |         | H |
| 03003AA   | CASHEWS                    | 6H5515          | 0.050000        |         | H |
| 03004AA   | CHESTNUTS                  | 6H5515          | 0.050000        |         | H |
| 03005AA   | FILBERTS, HAZELNUTS        | 6H5515          | 0.050000        |         | H |
| 03006AA   | HICKORY NUTS               | 6H5515          | 0.050000        |         | H |
| 03007AA   | MACADAMIA NUTS (BUSH NUTS) | 6H5515          | 0.050000        |         | H |
| 03008AA   | PECANS                     | 6H5515          | 0.050000        |         | H |
| 03009AA   | WALNUTS                    | 6H5515          | 0.050000        |         | H |
| 03010AA   | BUTTER NUTS                | 6H5515          | 0.050000        |         | H |
| 03011AA   | PISTACHIO NUTS             | 6H5515          | 0.050000        |         | H |
| 03013AA   | BEECHNUTS                  | 6H5515          | 0.050000        |         | H |
| 04001AA   | APPLES-FRESH               | 6H5515          | 0.050000        |         | H |
| 04001DA   | APPLES-DRIED               | 6H5515          | 0.050000        |         | H |
| 04001JA   | APPLES-JUICE               | 6H5515          | 0.050000        |         | H |
| 04002AA   | CRABAPPLES                 | 6H5515          | 0.050000        |         | H |
| 04003AA   | PEARS-FRESH                | 6H5515          | 0.050000        |         | H |
| 04003DA   | PEARS-DRIED                | 6H5515          | 0.050000        |         | H |
| 04004AA   | QUINCES                    | 6H5515          | 0.050000        |         | H |
| 05001AA   | APRICOTS-FRESH             | 6H5515          | 0.050000        |         | H |
| 05001DA   | APRICOTS-DRIED             | 6H5515          | 0.050000        |         | H |
| 05002AA   | CHERRIES-FRESH             | 6H5515          | 0.050000        |         | H |
| 05002DA   | CHERRIES-DRIED             | 6H5515          | 0.050000        |         | H |
| 05002JA   | CHERRIES-JUICE             | 6H5515          | 0.050000        |         | H |
| 05003AA   | NECTARINES                 | 6H5515          | 0.050000        |         | H |
| 05004AA   | PEACHES-FRESH              | 6H5515          | 0.050000        |         | H |
| 05004DA   | PEACHES-DRIED              | 6H5515          | 0.050000        |         | H |
| 05005AA   | PLUMS (DAMSONS)-FRESH      | 6H5515          | 0.050000        |         | H |
| 05005DA   | PLUMS-PRUNES (DRIED)       | 6H5515          | 0.050000        |         | H |
| 05005JA   | PLUMS, PRUNE- JUICE        | 6H5515          | 0.050000        |         | H |
| 06001AA   | AVOCADOS                   | 6H5515          | 0.050000        |         | H |
| 06002AA   | BANANAS-UNSPECIFIED        | 6H5515          | 0.050000        |         | H |
| 06002AB   | BANANAS-FRESH              | 6H5515          | 0.050000        |         | H |
| 06002DA   | BANANAS-DRIED              | 6H5515          | 0.050000        |         | H |
| 06003AA   | COCONUT-FRESH              | 6H5515          | 0.050000        |         | H |
| 06003DA   | COCONUT-COPRA              | 6H5515          | 0.050000        |         | H |
| 06003JA   | COCONUT-WATER              | 6H5515          | 0.050000        |         | H |
| 06004AA   | DATES                      | 6H5515          | 0.050000        |         | H |
| 06005AA   | FIGS                       | 6H5515          | 0.050000        |         | H |
| 06006AA   | GUAVA                      | 6H5515          | 0.050000        |         | H |
| 06007AA   | MANGOES                    | 6H5515          | 0.050000        |         | H |

| CHEMICAL               | STUDY TYPE                 | EFFECTS                  | REFERENCE DOSES |          | DATA GAPS/COMMENTS    | STATUS                  |
|------------------------|----------------------------|--------------------------|-----------------|----------|-----------------------|-------------------------|
|                        |                            |                          | ADI             | 100      |                       |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights;  | ADJ             | 100      | No data gaps.         | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2.0000 mg/kg         | inflammation of kidney.  | OPP RFD=        | 0.020000 |                       | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  | Doses based on food con- | EPA RFD=        | 0.025000 | TOX to reevaluate RFD | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL= 6.2000 mg/kg          | sumption.                |                 |          | 6/12/87.              |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogeni- | WHO RFD         | 0.020000 |                       |                         |
|                        | ONCO: Negative- 2 species. | city in rats or mice.    | Type: ADI       |          |                       | On IRIS.                |

| FOOD CODE | FOOD NAME                  | PETITION NUMBER | NEW      | TOLERANCE (PPM) |           |
|-----------|----------------------------|-----------------|----------|-----------------|-----------|
|           |                            |                 |          | PENDING         | PUBLISHED |
| 06008AA   | LOQUATS                    | 6H5515          | 0.050000 |                 | H         |
| 06009AA   | OLIVES                     | 6H5515          | 0.050000 |                 | H         |
| 06010AA   | PAPAYAS-UNSPECIFIED        | 6H5515          | 0.050000 |                 | H         |
| 06010AB   | PAPAYAS-PULP               | 6H5515          | 0.050000 |                 | H         |
| 06010DA   | PAPAYAS-DRIED              | 6H5515          | 0.050000 |                 | H         |
| 06010JA   | PAPAYAS-JUICE              | 6H5515          | 0.050000 |                 | H         |
| 06011AA   | PAPAWAS                    | 6H5515          | 0.050000 |                 | H         |
| 06012AA   | PERSIMMONS                 | 6H5515          | 0.050000 |                 | H         |
| 06013AA   | PINEAPPLE-FRESH, PULP      | 6H5515          | 0.050000 |                 | H         |
| 06013DA   | PINEAPPLE-DRIED            | 6H5515          | 0.050000 |                 | H         |
| 06013JA   | PINEAPPLE-FRESH, JUICE     | 6H5515          | 0.050000 |                 | H         |
| 06014AA   | PASSION FRUIT (GRANADILLA) | 6H5515          | 0.050000 |                 | H         |
| 06015AA   | POMEGRANATES               | 6H5515          | 0.050000 |                 | H         |
| 06016AA   | PLANTAINS                  | 6H5515          | 0.050000 |                 | H         |
| 06017AA   | LYCHEES (LITCHI)           | 6H5515          | 0.050000 |                 | H         |
| 06017DA   | LYCHEE-DRIED               | 6H5515          | 0.050000 |                 | H         |
| 06018AA   | KIWI                       | 6H5515          | 0.050000 |                 | H         |
| 06020AA   | ACEROLA                    | 6H5515          | 0.050000 |                 | H         |
| 06021AA   | GINKGO NUTS                | 6H5515          | 0.050000 |                 | H         |
| 06022AA   | MANEY (MAMMEE APPLE)       | 6H5515          | 0.050000 |                 | H         |
| 06023AA   | PITANGA (SURINAM CHERRY)   | 6H5515          | 0.050000 |                 | H         |
| 06024AA   | SOURSOP (ANNONA MURICATA)  | 6H5515          | 0.050000 |                 | H         |
| 06025AA   | SUGAR APPLES (SWEETSOP)    | 6H5515          | 0.050000 |                 | H         |
| 06026AA   | BREAD FRUIT                | 6H5515          | 0.050000 |                 | H         |
| 06027AA   | BREAD NUTS                 | 6H5515          | 0.050000 |                 | H         |
| 06029AA   | CARAMBOLA                  | 6H5515          | 0.050000 |                 | H         |
| 06030AA   | CHERIMOYA                  | 6H5515          | 0.050000 |                 | H         |
| 06031AA   | LONGAN FRUIT               | 6H5515          | 0.050000 |                 | H         |
| 06033AA   | GENIP (SPANISH LIME)       | 6H5515          | 0.050000 |                 | H         |
| 07001FA   | COCOA BUTTER               | 6H5515          | 0.050000 |                 | H         |
| 07001SA   | CHOCOLATE                  | 6H5515          | 0.050000 |                 | H         |
| 07002AA   | COFFEE                     | 6H5515          | 0.050000 |                 | H         |
| 07003AA   | TEA                        | 6H5515          | 0.050000 |                 | H         |
| 07006AA   | CHICORY                    | 6H5515          | 0.050000 |                 | H         |
| 08004AA   | ANICE                      | 6H5515          | 0.050000 |                 | H         |
| 08006AA   | BASIL                      | 6H5515          | 0.050000 |                 | H         |
| 08007AA   | CARRAWAY                   | 6H5515          | 0.050000 |                 | H         |
| 08008AA   | CASSIA                     | 6H5515          | 0.050000 |                 | H         |
| 08011AA   | CINNAMON                   | 6H5515          | 0.050000 |                 | H         |
| 08012AA   | CLOVE                      | 6H5515          | 0.050000 |                 | H         |

5

Table 1 (con't.)

CHEMICAL INFORMATION FOR CASWELL NUMBER 266E

| CHEMICAL               | STUDY TYPE                 |                          | EFFECTS           | REFERENCE DOSES         |     | DATA GAPS/COMMENTS | STATUS |
|------------------------|----------------------------|--------------------------|-------------------|-------------------------|-----|--------------------|--------|
|                        | 2yr feeding- rat           | NOEL=                    |                   | ADI                     | 100 |                    |        |
| Cyfluthrin (Baythroid) | 2.0000 mg/kg               | Decreased body weights;  | No data gaps.     | TOX complete 3/14/86.   |     |                    |        |
| Caswell #266E          | 50.00 ppm                  | inflammation of kidney.  | OPP RfD= 0.020000 | ORD verified 4/8/86.    |     |                    |        |
| CAS No. 68359-37-5     | 6.2000 mg/kg               | Doses based on food con- | EPA RfD= 0.025000 | WHO last reviewed 1987. |     |                    |        |
| A.I. CODE: 128831      | 150.00 ppm                 | sumption.                |                   |                         |     |                    |        |
| CFR No. 180.           | ONCO: Negative- 2 species. | No evidence of oncogeni- | WHO RfD 0.020000  |                         |     |                    |        |
|                        |                            | city in rats or mice.    | Type: ADI         | On IRIS.                |     |                    |        |

| FOOD CODE | FOOD NAME              | PETITION NUMBER |         | TOLERANCE (PPM) |   |
|-----------|------------------------|-----------------|---------|-----------------|---|
|           |                        | NEW             | PENDING | PUBLISHED       |   |
| 08013AA   | CORIANDER              | 6H5515          |         |                 | H |
| 08014AA   | CUMIN                  | 6H5515          |         |                 | H |
| 08015AA   | DILL                   | 6H5515          |         |                 | H |
| 08019AA   | GINGER                 | 6H5515          |         |                 | H |
| 08020AA   | HOPS                   | 6H5515          |         |                 | H |
| 08022AA   | HORSERADISH            | 6H5515          |         |                 | H |
| 08023AA   | ROSEMARY               | 6H5515          |         |                 | H |
| 08026AA   | MARJORAM               | 6H5515          |         |                 | H |
| 08026AB   | OREGANO                | 6H5515          |         |                 | H |
| 08028AA   | MUSTARD SEED           | 6H5515          |         |                 | H |
| 08029AA   | NUTMEG                 | 6H5515          |         |                 | H |
| 08029AB   | MACE                   | 6H5515          |         |                 | H |
| 08035AA   | SAGE                   | 6H5515          |         |                 | H |
| 08036AA   | SAVORY                 | 6H5515          |         |                 | H |
| 08038AA   | BAY                    | 6H5515          |         |                 | H |
| 08042AA   | THYME                  | 6H5515          |         |                 | H |
| 08043AA   | TURMERIC               | 6H5515          |         |                 | H |
| 08047AA   | ALLSPICE               | 6H5515          |         |                 | H |
| 08048DA   | PAPRIKA                | 6H5515          |         |                 | H |
| 08049AA   | POPPY                  | 6H5515          |         |                 | H |
| 10002AA   | CANTALOUPE-UNSPECIFIED | 6H5515          |         |                 | H |
| 10002AB   | CANTALOUPE-PULP        | 6H5515          |         |                 | H |
| 10003AA   | CASABAS                | 6H5515          |         |                 | H |
| 10004AA   | CRENSHAWNS             | 6H5515          |         |                 | H |
| 10005AA   | HONEYDEW MELONS        | 6H5515          |         |                 | H |
| 10007AA   | PERSION MELONS         | 6H5515          |         |                 | H |
| 10008AA   | WATERMELON             | 6H5515          |         |                 | H |
| 10010AA   | CUCUMBERS              | 6H5515          |         |                 | H |
| 10011AA   | PUMPKIN                | 6H5515          |         |                 | H |
| 10013AA   | SQUASH-SUMMER          | 6H5515          |         |                 | H |
| 10014AA   | SQUASH-WINTER          | 6H5515          |         |                 | H |
| 10017AA   | BITTER MELON           | 6H5515          |         |                 | H |
| 10020AA   | TOWELCOURD             | 6H5515          |         |                 | H |
| 1001AA    | EGGPLANT               | 6H5515          |         |                 | H |
| 11003AA   | PEPPERS, SWEET, GARDEN | 6H5515          |         |                 | H |
| 11003AB   | CHILI PEPPERS          | 6H5515          |         |                 | H |
| 11003AD   | PEPPERS-OTHER          | 6H5515          |         |                 | H |
| 11004AA   | PIMENTOS               | 6H5515          |         |                 | H |
| 11005AA   | TOMATOES-WHOLE         | 6H5515          |         |                 | H |
| 11005JA   | TOMATOES-JUICE         | 6H5515          |         |                 | H |

Table 1 (cont.)

| CHEMICAL               | STUDY TYPE                 | EFFECTS                  | REFERENCE DOSES   |     | DATA GAPS/COMMENTS    | STATUS                  |
|------------------------|----------------------------|--------------------------|-------------------|-----|-----------------------|-------------------------|
|                        |                            |                          | ADI               | 100 |                       |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights;  | ADI               | 100 | No data gaps.         | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2.0000 mg/kg         | inflammation of kidney.  | OPP RfD= 0.020000 |     |                       | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  | Doses based on food con- | EPA RfD= 0.025000 |     | TOX to reevaluate RfD | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL= 6.2000 mg/kg          | sumption.                |                   |     | 6/12/87.              |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogeni- | WHO RfD 0.020000  |     |                       |                         |
|                        | ONCO: Negative- 2 species. | city in rats or mice.    | Type: ADI         |     |                       | On IRIS.                |

| FOOD CODE | FOOD NAME                               | PETITION NUMBER | TOLERANCE (PPM) |         | STATUS |
|-----------|-----------------------------------------|-----------------|-----------------|---------|--------|
|           |                                         |                 | NEW             | PENDING |        |
| 11005RA   | TOMATOES-PUREE                          | 6H5515          | 0.050000        |         | H      |
| 11005TA   | TOMATOES-PASTE                          | 6H5515          | 0.050000        |         | H      |
| 11005VA   | TOMATOES-CATSUP                         | 6H5515          | 0.050000        |         | H      |
| 11006AA   | GROUNDCHERRIES (FOHA/CAPE-GOOSEBERRIES) | 6H5515          | 0.050000        |         | H      |
| 13001AA   | BEETS-TOPS(GREENS)                      | 6H5515          | 0.050000        |         | H      |
| 13002AA   | CELERY                                  | 6H5515          | 0.050000        |         | H      |
| 13003AA   | CHICORY (FRENCH OR BELGIAN ENDIVE)      | 6H5515          | 0.050000        |         | H      |
| 13005AA   | BROCCOLI                                | 6H5515          | 0.050000        |         | H      |
| 13006AA   | BRUSSEL SPROUTS                         | 6H5515          | 0.050000        |         | H      |
| 13007AA   | CABBAGE-GREEN AND RED                   | 6H5515          | 0.050000        |         | H      |
| 13008AA   | CAULIFLOWER                             | 6H5515          | 0.050000        |         | H      |
| 13009AA   | COLLARDS                                | 6H5515          | 0.050000        |         | H      |
| 13010AA   | CABBAGE-CHINESE/CELERY, INC. BOK CHOY   | 6H5515          | 0.050000        |         | H      |
| 13011AA   | KALE                                    | 6H5515          | 0.050000        |         | H      |
| 13012AA   | KOHLRABI                                | 6H5515          | 0.050000        |         | H      |
| 13013AA   | LETTUCE-LEAFY VARIETIES                 | 6H5515          | 0.050000        |         | H      |
| 13014AA   | DANDELION                               | 6H5515          | 0.050000        |         | H      |
| 13015AA   | ENDIVE, CURLY AND ESCAROLE              | 6H5515          | 0.050000        |         | H      |
| 13016AA   | FENNEL                                  | 6H5515          | 0.050000        |         | H      |
| 13017AA   | CRESS, GARDEN, FIELD                    | 6H5515          | 0.050000        |         | H      |
| 13018AA   | ARTICHOKES-GLOBE                        | 6H5515          | 0.050000        |         | H      |
| 13020AA   | LETTUCE-UNSPECIFIED                     | 6H5515          | 0.050000        |         | H      |
| 13021AA   | MUSTARD GREENS                          | 6H5515          | 0.050000        |         | H      |
| 13022AA   | PARSLEY                                 | 6H5515          | 0.050000        |         | H      |
| 13023AA   | RHUBARB                                 | 6H5515          | 0.050000        |         | H      |
| 13024AA   | SPINACH                                 | 6H5515          | 0.050000        |         | H      |
| 13025AA   | SWISS CHARD                             | 6H5515          | 0.050000        |         | H      |
| 13026AA   | TURNIPS-TOPS                            | 6H5515          | 0.050000        |         | H      |
| 13027AA   | WATERCRESS                              | 6H5515          | 0.050000        |         | H      |
| 13034AA   | TARO-GREENS                             | 6H5515          | 0.050000        |         | H      |
| 13039AA   | CRESS, UPLAND                           | 6H5515          | 0.050000        |         | H      |
| 13045AA   | LETTUCE-HEAD VARIETIES                  | 6H5515          | 0.050000        |         | H      |
| 13047AA   | LAMBSQUARTER                            | 6H5515          | 0.050000        |         | H      |
| 13048AA   | CACTUS PADS                             | 6H5515          | 0.050000        |         | H      |
| 13049AA   | GRAPES-LEAVES                           | 6H5515          | 0.050000        |         | H      |
| 13999AA   | LEAFY ORIENTAL VEGETABLES               | 6H5515          | 0.050000        |         | H      |
| 14001AA   | BEETS-ROOTS                             | 6H5515          | 0.050000        |         | H      |
| 14003AA   | CARROTS                                 | 6H5515          | 0.050000        |         | H      |
| 14004AA   | CELERIAC                                | 6H5515          | 0.050000        |         | H      |
| 14005AA   | CHIVES                                  | 6H5515          | 0.050000        |         | H      |



Table 1 (cont.)

| CHEMICAL               | STUDY TYPE        | EFFECTS                                          | REFERENCE DOSES   |                   | DATA GAPS/COMMENTS             | STATUS                  |
|------------------------|-------------------|--------------------------------------------------|-------------------|-------------------|--------------------------------|-------------------------|
|                        |                   |                                                  | ADI               | OPR RfD           |                                |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat  | Decreased body weights; inflammation of kidney.  | ADI 100           | OPR RfD= 0.020000 | No data gaps.                  | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2,000 mg/kg | Doses based on food consumption.                 | EPA RfD= 0.025000 |                   | TOX to reevaluate RfD 6/12/87. | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | LEI= 50.00 ppm    |                                                  |                   |                   |                                | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEI= 6,200 mg/kg  |                                                  |                   |                   |                                |                         |
| CFR No. 180.           | 150.00 ppm        | ONCO: Negative- 2 species. city in rats or mice. | WHO RfD 0.020000  | Type: ADI         |                                | On IRIS.                |

| FOOD CODE | FOOD NAME                      | PETITION NUMBER | NEW      | TOLERANCE (PPM) |           |
|-----------|--------------------------------|-----------------|----------|-----------------|-----------|
|           |                                |                 |          | PENDING         | PUBLISHED |
| 14006AA   | TARO-ROOT                      | 6H5515          | 0.050000 |                 | H         |
| 14007AA   | GARLIC                         | 6H5515          | 0.050000 |                 | H         |
| 14009AA   | ARTICHOKES-JERUSALEM           | 6H5515          | 0.050000 |                 | H         |
| 14010AA   | LEEKs                          | 6H5515          | 0.050000 |                 | H         |
| 14011AA   | ONIONS-DRY-BULB (CIPOLLINI)    | 6H5515          | 0.050000 |                 | H         |
| 14011CA   | ONIONS-DEHYDRATED OR DRIED     | 6H5515          | 0.050000 |                 | H         |
| 14013AA   | POTATOES(WHITE)-WHOLE          | 6H5515          | 0.050000 |                 | H         |
| 14013AB   | POTATOES(WHITE)-UNSPECIFIED    | 6H5515          | 0.050000 |                 | H         |
| 14013AC   | POTATOES(WHITE)-PEELED         | 6H5515          | 0.050000 |                 | H         |
| 14013DA   | POTATOES(WHITE)-DRY            | 6H5515          | 0.050000 |                 | H         |
| 14013HA   | POTATOES(WHITE)-PEEL ONLY      | 6H5515          | 0.050000 |                 | H         |
| 14014AA   | RADISHES-ROOTS                 | 6H5515          | 0.050000 |                 | H         |
| 14014AB   | RADISHES-TOPS                  | 6H5515          | 0.050000 |                 | H         |
| 14015AA   | RUTABAGAS-ROOTS                | 6H5515          | 0.050000 |                 | H         |
| 14015AB   | RUTABAGAS-TOPS                 | 6H5515          | 0.050000 |                 | H         |
| 14016AA   | SALSIFY(OYSTER PLANT)          | 6H5515          | 0.050000 |                 | H         |
| 14017AA   | SHALLOTS                       | 6H5515          | 0.050000 |                 | H         |
| 14018AA   | SWEETPOTATOES (INCLUDING YAMS) | 6H5515          | 0.050000 |                 | H         |
| 14019AA   | TURNIPS-ROOTS                  | 6H5515          | 0.050000 |                 | H         |
| 14021AA   | PARSNIPS                       | 6H5515          | 0.050000 |                 | H         |
| 14024AA   | YAMBEAN, TUBER                 | 6H5515          | 0.050000 |                 | H         |
| 14026AA   | CASSAVA (YUCA BLANCA)          | 6H5515          | 0.050000 |                 | H         |
| 14026AB   | TAPIOCA                        | 6H5515          | 0.050000 |                 | H         |
| 14028AA   | YAUTIA, TANNIER                | 6H5515          | 0.050000 |                 | H         |
| 14030AA   | PARSLEY ROOTS                  | 6H5515          | 0.050000 |                 | H         |
| 14031AA   | WATER CHESTNUTS                | 6H5515          | 0.050000 |                 | H         |
| 15001AA   | BEANS-DRY-GREAT NORTHERN       | 6H5515          | 0.050000 |                 | H         |
| 15001AB   | BEANS-DRY-KIDNEY               | 6H5515          | 0.050000 |                 | H         |
| 15001AC   | BEANS-DRY-LIMA                 | 6H5515          | 0.050000 |                 | H         |
| 15001AD   | BEANS-DRY-NAVY (PEA)           | 6H5515          | 0.050000 |                 | H         |
| 15001AE   | BEANS-DRY-OTHER                | 6H5515          | 0.050000 |                 | H         |
| 15001AF   | BEANS-DRY-PINTO                | 6H5515          | 0.050000 |                 | H         |
| 15002AA   | BEANS-SUCCULENT-LIMA           | 6H5515          | 0.050000 |                 | H         |
| 15003AA   | BEANS-SUCCULENT-GREEN          | 6H5515          | 0.050000 |                 | H         |
| 15003AB   | BEANS-SUCCULENT-OTHER          | 6H5515          | 0.050000 |                 | H         |
| 15003AC   | BEANS-SUCCULENT-YELLOW, WAX    | 6H5515          | 0.050000 |                 | H         |
| 15004AA   | CORN, POP                      | 6H5515          | 0.050000 |                 | H         |
| 15005AA   | CORN, SWEET                    | 6H5515          | 0.050000 |                 | H         |
| 15006AA   | PEANUTS-WHOLE                  | 6H5515          | 0.050000 |                 | H         |
| 15007AA   | PEAS(GARDEN)-MATURE SEEDS, DRY | 6H5515          | 0.050000 |                 | H         |

8

Table 1 (con't.)

| CHEMICAL                                                                                           | STUDY TYPE                                                                                                                                 | EFFECTS                                                                                                                                | REFERENCE DOSES                               |     | DATA GAPS/COMMENTS                              | STATUS                                                                   |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----|-------------------------------------------------|--------------------------------------------------------------------------|
|                                                                                                    |                                                                                                                                            |                                                                                                                                        | ADJ                                           | 100 |                                                 |                                                                          |
| Cyfluthrin (Baythroid)<br>Caswell #266E<br>CAS No. 68359-37-5<br>A.I. CODE: 128831<br>CFR No. 180. | 2yr feeding- rat<br>NOEL= 2.0000 mg/kg<br>50.00 ppm<br>LEL= 6.2000 mg/kg<br>150.00 ppm<br>ONCO: Negative- 2 species, city in rats or mice. | Decreased body weights;<br>inflammation of kidney.<br>Doses based on food consumption.<br>No evidence of oncogenicity in rats or mice. | ADJ<br>OPP RED= 0.020000<br>EPA RED= 0.025000 | 100 | No data gaps.<br>TOX to reevaluate RED 6/12/87. | TOX complete 3/14/86.<br>ORD verified 4/8/86.<br>WHO last reviewed 1987. |

| FOOD CODE | FOOD NAME                               | PETITION NUMBER | NEW      | TOLERANCE (PPM) |           | PUBLISHED |
|-----------|-----------------------------------------|-----------------|----------|-----------------|-----------|-----------|
|           |                                         |                 |          | PENDING         | PUBLISHED |           |
| 15009AA   | PEAS(GARDEN)-GREEN IMMATURE             | 6H5515          | 0.050000 |                 |           | H         |
| 15011AA   | LENTILES-WHOLE                          | 6H5515          | 0.050000 |                 |           | H         |
| 15011AB   | LENTILES-SPLIT                          | 6H5515          | 0.050000 |                 |           | H         |
| 15013AA   | MUNG BEANS (SPROUTS)                    | 6H5515          | 0.050000 |                 |           | H         |
| 15015AA   | OKRA                                    | 6H5515          | 0.050000 |                 |           | H         |
| 15018AA   | SUNFLOWER-SEEDS                         | 6H5515          | 0.050000 |                 |           | H         |
| 15020AA   | CAROB                                   | 6H5515          | 0.050000 |                 |           | H         |
| 15021AA   | ALFALFA SPROUTS                         | 6H5515          | 0.050000 |                 |           | H         |
| 15022AA   | BEANS-DRY-BROADBEANS(MATURE SEED)       | 6H5515          | 0.050000 |                 |           | H         |
| 15022AB   | BEANS-SUCCULENT-BROADBEANS(IMMAT. SEED) | 6H5515          | 0.050000 |                 |           | H         |
| 15023AA   | BEANS-DRY-PIGEON BEANS                  | 6H5515          | 0.050000 |                 |           | H         |
| 15026AA   | SESAME SEEDS                            | 6H5515          | 0.050000 |                 |           | H         |
| 15027AA   | BEANS-UNSPECIFIED                       | 6H5515          | 0.050000 |                 |           | H         |
| 15028AA   | PINENUTS                                | 6H5515          | 0.050000 |                 |           | H         |
| 15029AA   | SOYBEANS-SPROUTED SEEDS                 | 6H5515          | 0.050000 |                 |           | H         |
| 15030AA   | BEANS-DRY-HYACINTH(MATURE SEEDS)        | 6H5515          | 0.050000 |                 |           | H         |
| 15030AB   | BEANS-SUCCULENT-HYACINTH(YOUNG PODS)    | 6H5515          | 0.050000 |                 |           | H         |
| 15031AA   | BEANS-DRY-BLACKEYE PEAS(COMPEAS)        | 6H5515          | 0.050000 |                 |           | H         |
| 15032AA   | BEANS-DRY-GARBANZO(CHICK PEA)           | 6H5515          | 0.050000 |                 |           | H         |
| 16002AA   | ASPARAGUS                               | 6H5515          | 0.050000 |                 |           | H         |
| 16003AA   | MUSHROOMS                               | 6H5515          | 0.050000 |                 |           | H         |
| 16004AA   | ONIONS-GREEN                            | 6H5515          | 0.050000 |                 |           | H         |
| 16007AA   | POKE GREENS                             | 6H5515          | 0.050000 |                 |           | H         |
| 16008AA   | BAMBOO SHOOTS                           | 6H5515          | 0.050000 |                 |           | H         |
| 24001AA   | BARLEY                                  | 6H5515          | 0.050000 |                 |           | H         |
| 24002EA   | CORN, GRAIN-ENDOSPERM                   | 6H5515          | 0.050000 |                 |           | H         |
| 24002HA   | CORN GRAIN-BRAN                         | 6H5515          | 0.050000 |                 |           | H         |
| 24002SA   | CORN SUGAR                              | 6H5515          | 0.050000 |                 |           | H         |
| 24003AA   | OATS                                    | 6H5515          | 0.050000 |                 |           | H         |
| 24004AA   | RICE-ROUGH                              | 6H5515          | 0.050000 |                 |           | H         |
| 24004AB   | RICE-MILLED                             | 6H5515          | 0.050000 |                 |           | H         |
| 24005AA   | RYE-ROUGH                               | 6H5515          | 0.050000 |                 |           | H         |
| 24005CA   | RYE-GERM                                | 6H5515          | 0.050000 |                 |           | H         |
| 24005WA   | RYE-FLOUR                               | 6H5515          | 0.050000 |                 |           | H         |
| 24006AA   | SORGHUM (INCLUDING MILO)                | 6H5515          | 0.050000 |                 |           | H         |
| 24007AA   | WHEAT-ROUGH                             | 6H5515          | 0.050000 |                 |           | H         |
| 24007GA   | WHEAT-GERM                              | 6H5515          | 0.050000 |                 |           | H         |
| 24007HA   | WHEAT-BRAN                              | 6H5515          | 0.050000 |                 |           | H         |
| 24007WA   | WHEAT-FLOUR                             | 6H5515          | 0.050000 |                 |           | H         |
| 24012AA   | MILLET                                  | 6H5515          | 0.050000 |                 |           | H         |

Table 1 (cont.)

| CHEMICAL               | STUDY TYPE                 | EFFECTS                  | REFERENCE DOSES   |     | DATA GAPS/COMMENTS    | STATUS                  |
|------------------------|----------------------------|--------------------------|-------------------|-----|-----------------------|-------------------------|
|                        |                            |                          | AD1               | 100 |                       |                         |
| Cyfluthrin (Baythroid) | 2 yr feeding- rat          | Decreased body weights;  | AD1               | 100 | No data gaps.         | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2,000 mg/kg          | inflammation of kidney.  | OPP RfD= 0.020000 |     |                       | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  | Doses based on food con- | EPA RfD= 0.025000 |     | TOX to reevaluate RfD | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL= 6,2000 mg/kg          | sumption.                |                   |     | 6/12/87.              |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogeni- | WHO RfD 0.020000  |     |                       |                         |
|                        | ONCO: Negative- 2 species. | city in rats or mice.    | Type: AD1         |     |                       | On IRIS.                |

| FOOD CODE | FOOD NAME                                     | PETITION NUMBER | TOLERANCE (PPM) |           | H |
|-----------|-----------------------------------------------|-----------------|-----------------|-----------|---|
|           |                                               |                 | NEW             | PUBLISHED |   |
| 25001AA   | HONEY                                         | 6H5515          | 0.050000        |           | H |
| 25002SA   | BEEF SUGAR                                    | 6H5515          | 0.050000        |           | H |
| 25003SA   | CANE SUGAR                                    | 6H5515          | 0.050000        |           | H |
| 25003SB   | SUGAR-MOLASSES                                | 6H5515          | 0.050000        |           | H |
| 25004SA   | MAPLE SYRUP                                   | 6H5515          | 0.050000        |           | H |
| 26001AA   | BUCKWHEAT                                     | 6H5515          | 0.050000        |           | H |
| 26011AA   | GUAR BEANS                                    | 6H5515          | 0.050000        |           | H |
| 270010A   | CASTOR BEANS                                  | 6H5515          | 0.050000        |           | H |
| 270020A   | CORN, GRAIN-OIL                               | 6H5515          | 0.050000        |           | H |
| 270030A   | COTTONSEED-OIL                                | 6H5515          | 0.050000        |           | H |
| 27003WA   | COTTONSEED-MEAL                               | 4H5427          | 2.000000        |           | H |
| 27004AA   | FLAX SEED                                     | 4F3046          | 1.000000        |           | H |
| 270070A   | PEANUTS-OIL                                   | 6H5515          | 0.050000        |           | H |
| 27008AA   | SAFFLOWER-SEED                                | 6H5515          | 0.050000        |           | H |
| 270080A   | SAFFLOWER-OIL                                 | 6H5515          | 0.050000        |           | H |
| 270090A   | SESAME-OIL                                    | 6H5515          | 0.050000        |           | H |
| 270100A   | SOYBEANS-OIL                                  | 6H5515          | 0.050000        |           | H |
| 270110A   | SUNFLOWER-OIL                                 | 6H5515          | 0.050000        |           | H |
| 270150A   | COCONUT-OIL                                   | 6H5515          | 0.050000        |           | H |
| 270160A   | OLIVE OIL                                     | 6H5515          | 0.050000        |           | H |
| 27017AA   | RAPE SEED                                     | 6H5515          | 0.050000        |           | H |
| 270190A   | PALM OIL                                      | 6H5515          | 0.050000        |           | H |
| 28023AA   | SOYBEANS-UNSPECIFIED                          | 6H5515          | 0.050000        |           | H |
| 28023AB   | SOYBEANS-MATURE, SEEDS DRY                    | 6H5515          | 0.050000        |           | H |
| 28023WA   | SOYBEANS-FLOUR, FULL FAT                      | 6H5515          | 0.050000        |           | H |
| 28023WB   | SOYBEANS-FLOUR, LOW FAT                       | 6H5515          | 0.050000        |           | H |
| 28023WC   | SOYBEANS-FLOUR, DEFATTED                      | 6H5515          | 0.050000        |           | H |
| 28024AB   | ORIENTAL VEGETABLES -NON-LEAFY                | 6H5515          | 0.050000        |           | H |
| 28040AA   | SEEDS (PUMPKIN, PSYLLIUM, CHIA, APRICOT, ETC) | 6H5515          | 0.050000        |           | H |
| 28080AA   | PEPPERMINT                                    | 6H5515          | 0.050000        |           | H |
| 280800A   | PEPPERMINT-OIL                                | 6H5515          | 0.050000        |           | H |
| 28081AA   | SPERMINT                                      | 6H5515          | 0.050000        |           | H |
| 280810A   | SPERMINT-OIL                                  | 6H5515          | 0.050000        |           | H |
| 43057AA   | VINEGAR                                       | 6H5515          | 0.050000        |           | H |
| 43058AA   | WINE AND SHERRY                               | 6H5515          | 0.050000        |           | H |
| 43059AA   | DISTILLED ALCOHOL                             | 6H5515          | 0.050000        |           | H |
| 43060AA   | GELATIN                                       | 6H5515          | 0.050000        |           | H |
| 50000DB   | MILK-NON-FAT SOLIDS                           | 4F3046          | 0.010000        |           | H |
| 50000FA   | MILK-FAT SOLIDS                               | 4F3046          | 0.010000        |           | H |
| 50000SA   | MILK SUGAR (LACTOSE)                          | 4F3046          | 0.010000        |           | H |

Table 1 (con't.)

| CHEMICAL               | STUDY TYPE                 | EFFECTS                  | REFERENCE DOSES   |     | DATA GAPS/COMMENTS    | STATUS                  |
|------------------------|----------------------------|--------------------------|-------------------|-----|-----------------------|-------------------------|
|                        |                            |                          | ADI               | 100 |                       |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights;  | ADI               | 100 | No data gaps.         | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL= 2.0000 mg/kg         | inflammation of kidney.  | OPP RfD= 0.020000 |     |                       | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  | Doses based on food con- | EPA RfD= 0.025000 |     | TOX to reevaluate RfD | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL= 6.2000 mg/kg          | sumption.                |                   |     | 6/12/87.              |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogeni- | WHO RfD 0.020000  |     |                       |                         |
|                        | ONCO: Negative- 2 species. | city in rats or mice.    | Type: ADI         |     |                       | On IRIS.                |

| FOOD CODE | FOOD NAME                                   | PETITION NUMBER | NEW      | TOLERANCE (PPM) |           | PUBLISHED |
|-----------|---------------------------------------------|-----------------|----------|-----------------|-----------|-----------|
|           |                                             |                 |          | PENDING         | PUBLISHED |           |
| 53001BA   | BEEF-MEAT BYPRODUCTS                        | 4F3046          |          | 0.050000        |           |           |
| 53001BB   | BEEF (ORGAN MEATS) -OTHER                   | 4F3046          |          | 0.050000        |           |           |
| 53001DA   | BEEF-DRIED                                  | 4F3046          |          | 0.050000        |           |           |
| 53001FA   | BEEF (BONELESS) -FAT (BEEF TALLOW)          | 4F3046          |          | 0.050000        |           |           |
| 53001KA   | BEEF (ORGAN MEATS) -KIDNEY                  | 4F3046          |          | 0.050000        |           |           |
| 53001LA   | BEEF (ORGAN MEATS) -LIVER                   | 4F3046          |          | 0.050000        |           |           |
| 53001MA   | BEEF (BONELESS) -LEAN (W/O REMOVEABLE FAT)  | 4F3046          |          | 0.050000        |           |           |
| 53002BA   | GOAT-MEAT BYPRODUCTS                        | 4F3046          |          | 0.050000        |           |           |
| 53002BB   | GOAT (ORGAN MEATS) -OTHER                   | 4F3046          |          | 0.050000        |           |           |
| 53002FA   | GOAT (BONELESS) -FAT                        | 4F3046          |          | 0.050000        |           |           |
| 53002KA   | GOAT (ORGAN MEATS) -KIDNEY                  | 4F3046          |          | 0.050000        |           |           |
| 53002LA   | GOAT (ORGAN MEATS) -LIVER                   | 4F3046          |          | 0.050000        |           |           |
| 53002MA   | GOAT (BONELESS) -LEAN (W/O REMOVEABLE FAT)  | 4F3046          |          | 0.050000        |           |           |
| 53003AA   | HORSE                                       | 4F3046          |          | 0.050000        |           |           |
| 53005BA   | SHEEP-MEAT BYPRODUCTS                       | 4F3046          |          | 0.050000        |           |           |
| 53005BB   | SHEEP (ORGAN MEATS) -OTHER                  | 4F3046          |          | 0.050000        |           |           |
| 53005FA   | SHEEP (BONELESS) -FAT                       | 4F3046          |          | 0.050000        |           |           |
| 53005KA   | SHEEP (ORGAN MEATS) -KIDNEY                 | 4F3046          |          | 0.050000        |           |           |
| 53005LA   | SHEEP (ORGAN MEATS) -LIVER                  | 4F3046          |          | 0.050000        |           |           |
| 53005MA   | SHEEP (BONELESS) -LEAN (W/O REMOVEABLE FAT) | 4F3046          |          | 0.050000        |           |           |
| 53006BA   | PORK-MEAT BYPRODUCTS                        | 4F3046          |          | 0.050000        |           |           |
| 53006BB   | PORK (ORGAN MEATS) -OTHER                   | 4F3046          |          | 0.050000        |           |           |
| 53006FA   | PORK (BONELESS) -FAT (INCLUDING LARD)       | 4F3046          |          | 0.050000        |           |           |
| 53006KA   | PORK (ORGAN MEATS) -KIDNEY                  | 4F3046          |          | 0.050000        |           |           |
| 53006LA   | PORK (ORGAN MEATS) -LIVER                   | 4F3046          |          | 0.050000        |           |           |
| 53006NA   | PORK (BONELESS) -LEAN (W/O REMOVEABLE FAT)  | 4F3046          |          | 0.050000        |           |           |
| 53010AA   | FISH-UNSPECIFIED                            | 6H5515          | 0.050000 |                 |           |           |
| 53013AA   | FISH-SHELLFISH                              | 6H5515          | 0.050000 |                 |           |           |
| 53014AA   | MEAT, GAME                                  | 6H5515          | 0.050000 |                 |           |           |
| 53015AA   | FISH-ROE, CAVIAR                            | 6H5515          | 0.050000 |                 |           |           |
| 53016AA   | FISH-FRESHWATER FINFISH                     | 6H5515          | 0.050000 |                 |           |           |
| 53017AA   | FISH-SALTWATER FINFISH                      | 6H5515          | 0.050000 |                 |           |           |
| 53017DA   | FISH-FINFISH-SALTWATER-DRIED                | 6H5515          | 0.050000 |                 |           |           |
| 55008BA   | TURKEY-BYPRODUCTS                           | 6H5515          | 0.050000 |                 |           |           |
| 55008LA   | TURKEY-GIBLETS (LIVER)                      | 6H5515          | 0.050000 |                 |           |           |
| 55008MA   | TURKEY-FLESH(W/O SKIN, W/O BONES)           | 6H5515          | 0.050000 |                 |           |           |
| 55008MB   | TURKEY-FLESH(+SKIN,W/O BONES)               | 6H5515          | 0.050000 |                 |           |           |
| 55008MC   | TURKEY-UNSPECIFIED                          | 6H5515          | 0.050000 |                 |           |           |
| 55013BA   | POULTRY, OTHER-BYPRODUCTS                   | 6H5515          | 0.050000 |                 |           |           |
| 55013LA   | POULTRY, OTHER-GIBLETS(LIVER)               | 6H5515          | 0.050000 |                 |           |           |

| CHEMICAL                                                                                           | STUDY TYPE                                                                                                                                    | EFFECTS                                                                                                            | REFERENCE DOSES                                            |     | DATA GAPS/COMMENTS                                 | STATUS                                                                               |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-----|----------------------------------------------------|--------------------------------------------------------------------------------------|
|                                                                                                    |                                                                                                                                               |                                                                                                                    | ADI                                                        | 100 |                                                    |                                                                                      |
| Cyfluthrin (Baythroid)<br>Caswell #266E<br>CAS No. 68359-37-5<br>A.I. CODE: 128831<br>CFR No. 180. | 2yr feeding- rat<br>NOEL= 2.0000 mg/kg<br>50.00 ppm<br>LEL= 6.2000 mg/kg<br>150.00 ppm<br>ONCO: Negative- 2 species.<br>city in rats or mice. | Decreased body weights;<br>inflammation of kidney.<br>Doses based on food consumption.<br>No evidence of oncogeni- | ADP RfD= 0.020000<br>EPA RfD= 0.025000<br>WHO RfD 0.020000 | 100 | No data gaps.<br>TOX to reevaluate RfD<br>6/12/87. | TOX complete 3/14/86.<br>ORD verified 4/8/86.<br>WHO last reviewed 1987.<br>On IRIS. |

| FOOD CODE | FOOD NAME                              | PETITION NUMBER | NEW      | TOLERANCE (PPM) |           | PUBLISHED |
|-----------|----------------------------------------|-----------------|----------|-----------------|-----------|-----------|
|           |                                        |                 |          | PENDING         | PUBLISHED |           |
| 55013MA   | POULTRY OTHER-FLESH (+SKIN, W/O BONES) | 6H5515          | 0.050000 |                 |           | H         |
| 55014AA   | EGGS-WHOLE                             | 6H5515          | 0.050000 |                 |           | H         |
| 55014AB   | EGGS-WHITE ONLY                        | 6H5515          | 0.050000 |                 |           | H         |
| 55014AC   | EGGS-YOLK ONLY                         | 6H5515          | 0.050000 |                 |           | H         |
| 55015BA   | CHICKEN-BYPRODUCTS                     | 6H5515          | 0.050000 |                 |           | H         |
| 55015LA   | CHICKEN-GIBLETS(LIVER)                 | 6H5515          | 0.050000 |                 |           | H         |
| 55015MA   | CHICKEN-FLESH(W/O SKIN, W/O BONES)     | 6H5515          | 0.050000 |                 |           | H         |
| 55015MB   | CHICKEN-FLESH(+SKIN, W/O BONES)        | 6H5515          | 0.050000 |                 |           | H         |

Table 2

## TOLERANCE ASSESSMENT SYSTEM ROUTINE CHRONIC ANALYSIS

DATE: 03/01/88

PAGE: 1

| CHEMICAL INFORMATION   | STUDY TYPE                 | EFFECTS                                         | REFERENCE DOSES |          | DATA GAPS/COMMENTS             | STATUS                  |
|------------------------|----------------------------|-------------------------------------------------|-----------------|----------|--------------------------------|-------------------------|
|                        |                            |                                                 | ADI             | 100      |                                |                         |
| Cyfluthrin (Baythroid) | 2yr feeding- rat           | Decreased body weights; inflammation of kidney. | ADI             | 100      | No data gaps.                  | TOX complete 3/14/86.   |
| Caswell #266E          | NOEL=                      | Doses based on food consumption.                | OPP RfD=        | 0.020000 |                                | ORD verified 4/8/86.    |
| CAS No. 68359-37-5     | 50.00 ppm                  |                                                 | EPA RfD=        | 0.025000 | TOX to reevaluate RfD 6/12/87. | WHO last reviewed 1987. |
| A.I. CODE: 128831      | LEL=                       |                                                 | WHO RfD         | 0.020000 |                                |                         |
| CFR No. 180.           | 150.00 ppm                 | No evidence of oncogenicity in rats or mice.    | Type: ADI       |          |                                | On IRIS.                |
|                        | ONCO: Negative- 2 species. |                                                 |                 |          |                                |                         |

| POPULATION SUBGROUP                                  | TOTAL TMRC (MG/KG BODY WEIGHT/DAY) |            | NEW TMRC AS PERCENT OF RFD | DIFFERENCE AS PERCENT OF RFD | EFFECT OF ANTICIPATED RESIDUES |
|------------------------------------------------------|------------------------------------|------------|----------------------------|------------------------------|--------------------------------|
|                                                      | CURRENT TMRC*                      | NEW TMRC** |                            |                              |                                |
| U.S. POPULATION - 48 STATES                          | 0.000000                           | 0.000883   | 4.413770                   | 4.413770                     |                                |
| U.S. POPULATION - SPRING SEASON                      | 0.000000                           | 0.000860   | 4.302080                   | 4.302080                     |                                |
| U.S. POPULATION - SUMMER SEASON                      | 0.000000                           | 0.000893   | 4.465575                   | 4.465575                     |                                |
| U.S. POPULATION - FALL SEASON                        | 0.000000                           | 0.000886   | 4.430260                   | 4.430260                     |                                |
| U.S. POPULATION - WINTER SEASON                      | 0.000000                           | 0.000882   | 4.410690                   | 4.410690                     |                                |
| NORTHEAST REGION                                     | 0.000000                           | 0.000911   | 4.553585                   | 4.553585                     |                                |
| NORTH CENTRAL REGION                                 | 0.000000                           | 0.000876   | 4.379635                   | 4.379635                     |                                |
| SOUTHERN REGION                                      | 0.000000                           | 0.000830   | 4.151535                   | 4.151535                     |                                |
| WESTERN REGION                                       | 0.000000                           | 0.000933   | 4.665120                   | 4.665120                     |                                |
| HISPANICS                                            | 0.000000                           | 0.001011   | 5.055640                   | 5.055640                     |                                |
| NON-HISPANIC WHITES                                  | 0.000000                           | 0.000874   | 4.371885                   | 4.371885                     |                                |
| NON-HISPANIC BLACKS                                  | 0.000000                           | 0.000845   | 4.223240                   | 4.223240                     |                                |
| NON-HISPANICS OTHER                                  | 0.000000                           | 0.000993   | 4.965865                   | 4.965865                     |                                |
| NURSING INFANTS (<1 YEAR OLD)                        | 0.000000                           | 0.001036   | 5.180270                   | 5.180270                     |                                |
| NON-NURSING INFANTS (<1 YEAR OLD)                    | 0.000000                           | 0.002374   | 11.867765                  | 11.867765                    |                                |
| FEMALES (13+ YEARS, PREGNANT)                        | 0.000000                           | 0.000642   | 3.210680                   | 3.210680                     |                                |
| FEMALES (1-6 YEARS, NURSING CHILDREN (1-6 YEARS OLD) | 0.000000                           | 0.000771   | 3.853560                   | 3.853560                     |                                |
| CHILDREN (7-12 YEARS OLD)                            | 0.000000                           | 0.001296   | 9.706205                   | 9.706205                     |                                |
| MALES (13-19 YEARS OLD)                              | 0.000000                           | 0.000865   | 4.423105                   | 4.423105                     |                                |
| FEMALES (13-19 YEARS OLD, NOT PREG. OR NURSING)      | 0.000000                           | 0.000735   | 3.675895                   | 3.675895                     |                                |
| MALES (20 YEARS AND OLDER)                           | 0.000000                           | 0.000674   | 3.368160                   | 3.368160                     |                                |
| FEMALES (20 YEARS AND OLDER)                         | 0.000000                           | 0.000629   | 3.142990                   | 3.142990                     |                                |

\*Current TMRC does not include new or pending tolerances.

\*\*New TMRC includes new, pending, and published tolerances.