



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

JAN 13 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Addendum to the Residue Chemistry Chapter of the Chlorpyrifos Second Round Review (SRR) - Removal of the metabolite, 3,5,6-trichloropyridinol (TCP), from the tolerance definition

FROM: Debra F. Edwards, Ph.D. *Debra Edwards*
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THROUGH: Charles L. Trichilo, Ph.D., Chief
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TO: Charles W. Kent, Chief
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Special Review and Reregistration Division (TS-767C)

Current tolerances for chlorpyrifos cover combined residues of the parent and its metabolite, 3,5,6-trichloropyridinol (TCP). The Toxicology Branch (II) in its recent review of data for the Second Round Review has determined that the metabolite, TCP, is not of toxicological concern (memo, dated 11/29/88 from Alan Levy [TOX-II] to Dennis Edwards [RD]). Furthermore, at a meeting held on 12/8/88 between Alan Levy, Quang Bui, and Marcia Van Gemert of TOX-II, Dennis Edwards of RD, and Debra Edwards of DEB, the members of the TOX Branch confirmed that the toxicology data do not justify regulation of the metabolite in food.

As a result of these TOX conclusions, the conclusions stated in the Residue Chemistry Chapter of the Chlorpyrifos SRR, issued 11/18/88, must be revised. All data requirements pertaining to the metabolite must be deleted. Also, the Registrant is being asked to propose comprehensive tolerance revisions such that the metabolite, TCP, is no longer included in the tolerance definition. Revision of tolerances to exclude TCP has been addressed for many crops by Stephanie Willet, in her most recent review of PP#3F2884. Revision of tolerances for the remaining commodities will be handled via the SRR.

The attached data tables for residue chemistry contain all necessary revisions pertaining to TCP. These tables should be used in preparing the Guidance Document for the Chlorpyrifos SRR, in lieu of those prepared earlier as part of the 11/18/88 document. The tables are available for your use in WordPerfect 4.2 format.

TS-769C:DEB:DFE:1/89:CM2:RM812D:x4353

cc:RF,Circ.,Edwards,Reg.Std.File(SRR),PMSD/ISB,A.Rispin(SIPS),
A.Kocialski(SACB)

RDI:W.Boodee,1/89;R.Schmitt,1/89

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
<u>158.125 Residue Chemistry</u>					
171-2. Chemical Identity ⁴					
171-3. Directions for use		(See Index)			
171-4. Qualitative Nature of the residue (Metabolism) - Plants	PAIRA	Yes	00066724. 00066725. 00072657. 00072660. 00157541*. 00157542*. 00157543*. 40638801*. 40638802*.	No.	
171-4. Qualitative Nature of the residue (Metabolism) - Livestock	PAIRA and plant metabolites	Yes	00077055. 00154734*. 00160046*. 00161743*. 40638802*. PP#3F1306.	No.	

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
171-4. Residue analytical methods	TGAJ and metabolites	Yes	00034031. 00037455. 00037457. 00037458. 00039642. 00039643. 00051801. 00058089. 00071201. 00084330. 00084331. 00095179. 00095201. 00095216. 00095251. 00095377. 00095387. 00095383. 00095436. 00134720. 00141725*. 00148881*. 00115578*. 00155579*. 00155580*. 00157713*. 00158566*. 00158567*. 00158568*. 00158569*. 00162109*. 00164187*. 40101301*. 40131302* 40288501*.	No	
171-4. Storage stability	TEP and metabolites	Yes	00033586. 00034031. 00044555. 00051798. 00077120. 00095227. 00095620. 00095734. 00101566. 00116675. 00134720. 00162109*.	No	
171-4. Magnitude of the residue in plants					

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
Root and Tuber Vegetables					
- Radishes	TEP	Partially	00095259.	Yes ⁵	18 months
- Rutabagas	TEP	Partially	00095259.	Yes ⁵	18 months
- Sugar beets	TEP	Partially	00039641. 00101566.	Yes ⁶	18 months
- Sweet potatoes	TEP	Partially	00095227.	Yes ⁵	18 months
- Turnip roots	TEP	Partially	00095259.	Yes ⁵	18 months
Leaves of Root and Tuber Vegetables					
- Sugar beet tops	TEP	Partially	00039641. 00101566.	Yes ⁷	18 months
- Turnip tops	TEP	Partially	00095259.	Yes ⁵	18 months
Bulb Vegetables					
- Leeks	TEP	Partially	00157909*.	Yes ⁸	18 months
- Onions (dry bulb)	TEP	Partially	00154019.	Yes ⁹	18 months
Brassica Leafy Vegetables					
-	TEP	Partially	00095273. 00155580*. 00158566*.	Yes ¹⁰	18 months
Legume Vegetables					
-	TEP	Partially	00095216. 00095624.	Yes ⁵	18 months

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
- Soybeans	TEP	Partially	00095270.	Yes ⁵	18 months
Foliage of Legume Vegetables					
- Bean vines and hay	TEP	Partially	00095264.	Yes ¹¹	18 months
- pea vines and hay	TEP	Partially	00095264.	Yes ¹²	18 months
- Soybean forage, hay, and straw	TEP	Partially	00095270.	Yes ¹²	18 months
Fruiting Vegetables					
- Peppers	TEP	Partially	00095251. 001311864.	Yes ¹³	18 months
- Tomatoes	TEP	Partially	00095251. 00131864*.	Yes ¹⁴	18 months
Cucurbit Vegetables					
- Cucumbers	TEP	Partially	00095264.	Yes ⁵	18 months
- Pumpkins	TEP	Partially	00095264.	Yes ⁵	18 months
Citrus Fruits					
-	TEP	Partially	00084326. 00095260.	Yes ¹⁵	18 months
Pome Fruits					
- Apples	TEP	Partially	00044555. 00088978. 00095264.	Yes ¹⁶	18 months

(Continued).

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TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
- Pears	TEP	Partially	00044555.	Yes ⁵	18 months
Stone Fruits					
- Cherries	TEP	Partially	00044555. 00077120.	Yes ⁵	18 months
- Nectarines	TEP	Partially	00044555. 00095179.	Yes ¹⁷	18 months
- Peaches	TEP	Partially	00044555. 00095179.	Yes ¹⁷	18 months
- Plums (fresh prunes)	TEP	Partially	00044555.	Yes ¹⁷	18 months
Small Fruits and Berries					
- Blueberries	TEP	Partially	00164187*.	Yes ¹⁸	18 months
- Cranberries	TEP	Partially	00108813.	Yes ¹⁹	18 months
- Grapes	TEP	Partially	00085785. 00126713*. 00134499*.	Yes ²⁰	18 months
- Strawberries	TEP	Partially	00052967. 00095271. 40131302*.	Yes ⁵	18 months
Tree Nuts					
- Pecans	TEP	Partially	00044555. 00116675.	Yes ²¹	18 months
- Almonds	TEP	Partially	00132786.	Yes ²¹	18 months
- Walnuts	TEP	Partially	00044555. 00116675.	Yes ²¹	18 months

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
Cereal Grains					
- Corn, field and fresh	TEP	Partially	00070509. 00084266. 00095216.	Yes ²² Yes ²³	18 months 24 months
- Sorghum	TEP	Partially	00046785. 00095249.	Yes ²⁴	18 months
Forage, Fodder, and Straw of Cereal Grains					
- Corn forage and fodder	TEP	Partially	00070509. 00078962.	Yes ⁵	18 months
- Sorghum forage and fodder	TEP	Partially	00046785. 00158569*.	Yes ²⁵	18 months
Non-Grass Animal Feeds					
- Alfalfa forage and hay	TEP	Partially	00125686. 00158567*. 00158568*.	Yes ⁵	18 months
Herbs and spices					
- Dill	TEP	No	N/A.	Yes ²⁶	18 months
Miscellaneous Commodities					
- Asparagus	TEP	Partially	00094088.	Yes ²⁷	18 months
- Bananas	TEP	Partially	00125686.	Yes ²⁸	18 months
- Cottonseed	TEP	Partially	00037455. 00095373. 40131303*.	Yes ⁵	18 months
- Dates	TEP	Partially	00162109*.	Yes ²⁹	18 months

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
- Figs	TEP	Partially	00098580.	Yes ⁵	18 months
- Kiwi fruit	TEP	Partially	00115260.	Yes ³⁰	18 months
- Mint	TEP	Partially	00034031.	Yes ⁵	18 months
- Mushrooms	TEP	Partially	00129295.	Yes ³¹	18 months
- Okra	TEP	No	N/A.	Yes ³²	18 months
- Peanuts	TEP	Partially	00025942. 00083840. 00095263.	Yes ⁵	18 months
- Sunflower	TEP	Partially	00084845. 00084846.	Yes ³³	18 months
- Tobacco	TEP	Yes	40265201*.	No	
Crops Grown Solely for Seed					
- Clover forage, seed and hay	TEP	No	N/A.	Yes ³⁴	18 months
171-4. Magnitude of residue in	TGAI	Partially	00058087. 00095179.	Yes ^{35, 36, 37, 38}	18 months
- Meat/Milk/Poultry/Eggs			00095438.		

(Continued).

TABLE A. GENERIC DATA REQUIREMENTS FOR CHLORPYRIFOS.

Data Requirement	Test substance ¹	Does EPA have data?	Bibliographic citation ²	Must additional data be submitted?	Time frame for submission ³
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- | | | | | | |
|---|-----|-----|---------------------|-----|--|
| 171-4. Magnitude of residue. - TEP
Food Handling
Establishments | TEP | Yes | 00090562. 00090563. | No. | |
|---|-----|-----|---------------------|-----|--|
1. Test substance: TPAI = technical grade of the active ingredient; PAI = purified active ingredient; PAIRA = purified active ingredient, radiolabeled; TEP = typical end-use product; EP = end-use product.
 2. Asterisks indicate references submitted since completion of the CHLORPYRIFOS Residue Chemistry Chapter dated 9/28/84 or otherwise reviewed in this FRSTR. Other references listed here were reviewed in the interim Residue Chemistry Chapter.
 3. Data must be submitted within the indicated time frame, based on the date of this Guidance Document.
 4. The same chemical identity data are required as under 158.120, with emphasis on impurities that could constitute residue problems. Refer to Product Chemistry Data Requirements tables.
 5. The established tolerance must be revised to cover only residues of the parent, chlorpyrifos, in accordance with conclusions previously set forth under PP#3F2884.
 6. The Registrant must submit a proposal to revise the tolerance such that only residues of the parent, chlorpyrifos, are covered. Currently available are for the combined residues of chlorpyrifos and its metabolite, TCP. Thus, unless the Registrant wishes to generate new data depicting residues of the parent, per se, the tolerance level must remain at 1 ppm. In addition, tolerance revisions must be proposed for the processed commodities, dried pulp and molasses, in accordance with the conclusions previously set forth under PP#3F2884.
 7. The Registrant must submit a proposal to revise the tolerance such that only residues of the parent, chlorpyrifos, are covered. Currently available are for the combined residues of chlorpyrifos and its metabolite, TCP. Thus, unless the Registrant wishes to generate new data depicting residues of the parent, per se, the tolerance level must remain at 8 ppm.

TABLE A. Footnotes (Continued).

8. The tolerance for leeks is currently 0.5 ppm for combined residues of chlorpyrifos and TCP, with no more than 0.2 ppm of chlorpyrifos per se. The Registrant must propose a tolerance revision such that only residues of the parent, chlorpyrifos, are covered.
9. Data depicting chlorpyrifos residues in or on dry bulb onions harvested at maturity (100-110 days) following application of a representative G formulation made at planting at 1.6 lb ai/A (18-inch row spacing). The tests must be conducted in ID or OR, MI or MN, and NY to adequately represent the states in which this use is permitted. Tests conducted in MI representative of the 24(c) use must also be submitted. Dry bulb onions must be harvested at a PHI to be specified by the registrant following a directed spray of the 4 lb/gal EC to the base of seedlings or transplants at 1 lb ai/A. A label amendment specifying the PHI must be submitted. An appropriate tolerance revision must be proposed such that only residues of the parent, chlorpyrifos, are covered.
10. Currently, the tolerance for combined residues of chlorpyrifos and TCP in or on members of the Brassica leafy vegetables group is set at 2 ppm, with no more than 1 ppm of the parent permitted. The Registrant must propose a tolerance revision such that only residues of the parent, chlorpyrifos, are covered.
11. A tolerance must be proposed and appropriate supporting residue data submitted for residues of chlorpyrifos in or on bean hay. Bean seed must be treated at 1 oz ai/cwt and hay grown from treated seed harvested as soon after planting as it would be suitable for use as livestock feed. Also, the Registrant must revise the established tolerance for residues in or on bean forage such that only residues of the parent, chlorpyrifos, are covered, in accordance with conclusions set forth previously under PP#3F2884.
12. Data will be translated from bean hay (above). Tolerances for residues in or on pea and soybean hay must be proposed. The currently established tolerance for residues in or on soybean straw must be revised such that only residues of the parent, chlorpyrifos, are covered, based on the required bean hay data. The tolerance for residues in or on pea forage must be revised such that only residues of the parent, chlorpyrifos, are covered, in accordance with conclusions previously set forth under PP#3F2884. Also, the established tolerance of 8 ppm for combined residues of chlorpyrifos and TCP in or on soybean forage must be revised such that only residues of the parent, chlorpyrifos, are covered. Since current label restrictions prohibit feeding of soybean forage, hay or straw after all uses other than seed treatment, the tolerance level for forage may be reduced to 0.7 ppm (based on available bean forage data from seed treatment).

TABLE A. Footnotes (Continued).

13. English translations of all product label(s) permitting use of chlorpyrifos on peppers imported to the U.S. must be submitted. Also, the Registrant must propose a tolerance revision such that only residues of the parent, chlorpyrifos, are covered. Since the majority of the residues reported in the available data (translated from tomatoes) consisted of the parent rather than the metabolite, the current tolerance level of 1 ppm should not be reduced.
14. English translations must be provided for all product labels that permit use of chlorpyrifos on tomatoes imported to the U.S. The Registrant must propose a tolerance revision such that only residues of the parent, chlorpyrifos, are covered. Since the majority of the residues in the available data consist of the parent, the established level of 0.5 ppm should not be reduced.
15. Appropriate tolerance revisions must be proposed such that the tolerances for residues in or on citrus fruits, oil, and dried pulp cover only residues of the parent, chlorpyrifos. Since the available data indicate that the majority of the residues consist of the parent rather than TCP, the current tolerance levels should not be lowered.
16. The Registrant must propose tolerance revisions for residues in apples and apple pomace such that only residues of the parent are covered. Since the available data indicate that the majority of the residues will consist of the parent rather than TCP, the currently established levels should not be lowered.
17. The Registrant must propose that the tolerance be revised such that only residues of the parent, chlorpyrifos, are covered, in accordance with the conclusions previously set forth under PP#3F2884. A crop group tolerance of 0.01 ppm for residues of chlorpyrifos in or members of the stone fruits group, except cherries, may be proposed.
18. The established tolerance of 2 ppm for blueberries currently covers the combined residues of chlorpyrifos and its metabolite, TCP, with no more than 1 ppm of the parent permitted. The Registrant must propose a tolerance revision such that only residues of the parent are covered by the tolerance.
19. The Registrant must propose a tolerance revision such that the tolerance for residues in or on cranberries covers only residues of chlorpyrifos per se. Since the available data from foliar tests were for combined residues of the parent and its metabolite, TCP, the currently established tolerance level may not be lowered. Alternatively, the Registrant may generate new data depicting residues solely of the parent.
20. For grapes and dry grape pomace, the Registrant must propose appropriate tolerance revisions such that the tolerances cover only residues of the parent, chlorpyrifos.

TABLE A. Footnotes (Continued).

21. For tree nuts and almond hulls, the Registrant must propose appropriate tolerance revisions such that only residues of the parent, chlorpyrifos, are covered.
22. Data depicting chlorpyrifos residues in or on sweet corn harvested 35 days following the last of five foliar applications of the 4 lb/gal EC formulation at 1.5 lb ai/A. The tests must be conducted in CA (10% of fresh market production), FL (29% fresh market), MN (26% of fresh corn for processing), and WI (25% processing), since these states represent the major areas of U.S. production of sweet corn (Agricultural Statistics, 1986, p. 156). Also, data are required depicting chlorpyrifos residues in or on sweet corn harvested 21 days following the last of 11 foliar applications of the 4 lb/gal EC formulation at 1 lb ai/A in 2 gal/A. The tests must be conducted in FL or GA, since this use is limited to these states. An appropriate tolerance revision must be proposed such that the tolerance covers only residues of the parent, chlorpyrifos. In addition, a tolerance revision must be proposed for corn grain, in accordance with the conclusions previously set forth under PP#3F2884.
23. Data depicting the potential for concentration of chlorpyrifos residues in starch, crude oil, and refined oil form wet milling; grits, meal, flour, and refined oil from dry milling; and grain dust processed from grain bearing measurable weathered residues. If residues concentrate in starch, grits, meal, or flour, appropriate food/feed additive tolerances must be proposed. The Registrant must also propose appropriate tolerance revisions such that tolerances for residues in corn oil and soapstock cover only residues of the parent, chlorpyrifos.
24. Data depicting chlorpyrifos residues in or on sorghum grain harvested 30 days following the last of three foliar applications of the 4 lb/gal EC formulation at 0.5 lb ai/A and data depicting chlorpyrifos residues in or on sorghum grain harvested 60 days following a foliar application of the 4 lb gal EC formulation at 1 lb ai/A preceded by a foliar application at 0.5 lb ai/A. The tests must be conducted in KS(26%) and TX(22%), since these states accounted for ca. 70% of 1985 U.S. sorghum production, if KS is representative of MO(11%) and NE(14%) (Agricultural Statistics, 1986, p. 52). Appropriate tolerance revisions must be proposed such that the tolerances for residues in or on sorghum grain and milling fractions cover only residues of the parent, chlorpyrifos.
25. Data depicting chlorpyrifos residues in or on sorghum forage and fodder harvested 30 days following the last of three foliar applications of the 4 lb/gal EC formulation at 0.5 lb ai/A and data depicting chlorpyrifos residues in or on sorghum forage and fodder harvested 60 days following a foliar application of the 4 lb gal EC formulation at 1 lb ai/A preceded by a foliar application at 0.5 lb ai/A. The tests must be conducted in KS(26%) and TX(22%), since these states accounted for ca. 70% of 1985 U.S. sorghum production, if KS is representative of MO(11%) and NE(14%) (Agricultural Statistics, 1986, p. 52). The Registrant must

TABLE A. Footnotes (Continued).

propose appropriate tolerance revisions such that the tolerances for residues in or on sorghum forage and fodder cover only residues of the parent, chlorpyrifos.

26. Data depicting chlorpyrifos residues in or on dill harvested at regular intervals following multiple foliar applications of the 15% G and 4 lb/gal EC formulations (each in separate tests) at 1.5 lb ai/A using ground equipment. The registrant must propose a PHI and a maximum seasonal application rate consistent with those reflected in the residue data. An appropriate tolerance must be proposed for residues of chlorpyrifos in or on dill based on the residue data. The tests must be conducted in CA where this use is registered.

27. The Registrant must propose an appropriate tolerance revision such that the tolerance for residues in or on asparagus covers only residues of the parent, chlorpyrifos. Since the majority of the available data are for combined residues of chlorpyrifos and TCP, the currently established tolerance level may not be lowered. Alternatively, the Registrant may conduct field trials in which the residue analyses are for chlorpyrifos per se.

28. The Registrant must propose an appropriate tolerance revision for residues in or on whole bananas, such that only residues of the parent, chlorpyrifos, are covered. Based on the available data, a level of 0.1 ppm would be acceptable. Also, the Registrant must propose a tolerance revision for pulp, in accordance with conclusions previously set forth under PP#3F2884.

29. The currently established tolerance for the combined residues of chlorpyrifos and TCP in or on dates is 0.5 ppm with no more than 0.3 ppm permitted of chlorpyrifos per se. The Registrant must propose a tolerance revision such that only residues of the parent, chlorpyrifos, are covered.

30. The Registrant must propose an appropriate tolerance revision such that the tolerance for residues in or on kiwi fruit covers only residues of the parent, chlorpyrifos. Since the available data indicate that residues in kiwi consist primarily of the parent, the current tolerance level may not be lowered.

31. The Registrant must propose an appropriate tolerance revision such that the tolerance for residues in or on mushrooms covers only residues of the parent, chlorpyrifos. Since the available data are for the combined residues of chlorpyrifos and TCP, the current tolerance level may not be lowered. Alternatively, the Registrant may initiate new residue trials in which analyses are conducted for chlorpyrifos per se.



TABLE A. Footnotes (Continued).

32. Data are required depicting the uptake of ring-labeled [^{14}C]chlorpyrifos in okra resulting from seed-treatment with [^{14}C]chlorpyrifos at the maximum registered rate. If radiotracer studies indicate that uptake and translocation do occur, the following additional data are required: Data depicting chlorpyrifos residues in or on okra resulting from seed treated with chlorpyrifos at 1 oz ai/cwt of seed using the 50% WP formulation. Pods must be collected at the shortest interval after planting in which they could be used for food. Tolerances must be proposed that reflect either the maximum expected residue levels or, if no measurable residues are detected, the limit of detection of the analytical method. The tests must be conducted in GA(21%) and TX(29%), since these states accounted for ca. 50% of the 1982 U.S. okra acreage (1982 Census of Agriculture, Vol. 1, Part 51, p. 348). It is recommended that the registrant withdraw the proposed tolerance for residues in or on seed and pod vegetables from PP#3F2884, since this crop grouping is obsolete.

33. Data depicting chlorpyrifos residues in or on sunflower seeds harvested 42 days following the last of three foliar applications of the 4 lb/gal EC formulation at 1.5 lb ai/A. The test must be conducted in ND, since this state accounted for ca. 70% of the 1985 U.S. sunflower seed production (Agricultural Statistics, 1986, p. 131). Appropriate tolerance revisions must be proposed such that the tolerances for residues in or on sunflower seeds and hulls cover only residues of the parent, chlorpyrifos.

34. The registrant must propose appropriate tolerances for residues of chlorpyrifos in or on clover seed, forage and hay. Samples of forage should be taken at a pregrazing interval (to be proposed by the registrant) and hay and seed at PHIs (to be proposed by the registrant) following multiple foliar applications of the 4 lb/gal EC formulation at 2 lb ai/A. Applications must be made by ground equipment in 40 gal/A. The registrant must propose a maximum number of applications per season or a maximum seasonal use rate. Tests should be conducted in OR where this use is registered.

35. Beef cattle must be sacrificed following two treatments (45 days between treatments) by spraying at 0.25 oz ai/8.5 gal water (1 gal finished spray/animal), dipping at 16 oz ai/525 gal water, and spot treatment at 3.75 oz ai/500 lb body weight (each type of treatment in separate tests). Animals must be sacrificed within 3 days after the last application and at an additional interval thereafter (within 7 days after the last application). The additional interval is necessary to ascertain that residues begin to decline in tissues after 3 days. If residues are higher at 7 days than at 3, additional sacrifice intervals must be included so that the tolerance will be set at an appropriate level reflecting the peak residues expected following legal use. Residues of chlorpyrifos must be determined in muscle, fat, liver and kidney. A preslaughter interval of ≤ 3 days must be proposed.

TABLE A. Footnotes (Continued).

36. Sheep must be sacrificed within 3 days after a spot treatment at 0.75 oz ai/100 lb body weight (or the maximum registered 25% EC rate). An additional sacrifice interval (within 7 days after treatment) must also be included, as above. Residues of chlorpyrifos must be determined in muscle, fat, liver and kidney. A preslaughter interval of ≤ 3 days must be proposed.

37. Goats and hogs must be sacrificed within 3 days after the last of several spray treatments (to simulate treatment of wounds) made at 5-day intervals with the 2.5% PrL. An additional sacrifice interval (within 7 days after treatment) must also be included, as above. Residues of chlorpyrifos must be determined in muscle, fat, liver and kidney. A preslaughter interval of ≤ 3 days must be proposed.

38. Milk must be collected within 1, 3, and 7 days after the last of several spray applications (to simulate treatment of wounds) made at 5-day intervals with the 2.5% PrL. Residues of chlorpyrifos must be determined in whole milk and milkfat.