

CPG Sec. 575.100 Pesticide Residues in Food and Feed - Enforcement Criteria

BACKGROUND:

The regulation of food and feed containing pesticide residues is governed by sections 402, 408, and 409 of the Federal Food, Drug, and Cosmetic Act (FFDCA) as set forth in the following:

Tolerances for Pesticides:

Section 408 of the FFDCA authorizes the Environmental Protection Agency (EPA) to establish a tolerance for the maximum amount of a pesticide residue that may be legally present in or on a raw agricultural commodity. This section also authorizes EPA to exempt a pesticide residue in a raw agricultural commodity from the requirement of a tolerance. A tolerance or tolerance exemption is required when EPA grants registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for the use of a pesticide in food and feed production in the United States. Registration of a pesticide is not, however, a prerequisite for establishing a tolerance. For example, EPA may establish a temporary tolerance under section 408(j) to permit the experimental use of a non-registered pesticide, or EPA may establish a tolerance for a pesticide residue resulting from the use of the pesticide in food or feed production in a foreign country.

Tolerances and exemptions from tolerances established by EPA for pesticide residues in a raw agricultural commodities are listed in 40 CFR Part 180.

Food Additive Regulations for Pesticides:

A tolerance or tolerance exemption for a pesticide residue in a raw agricultural commodity also applies to the processed form of the commodity when ready to eat. (See section 402(a)(2)(C) of the FFDCA.) However, if a pesticide is to be used on a processed food or feed, or if conformity with residue present in or on a raw agricultural commodity in conformity with its tolerance under section 408 concentrates during processing to a level when ready to eat that is greater than the tolerance for the raw agricultural commodity, a food additive regulation is required. In either instance, EPA is authorized under section 409 of the FFDCA to establish a food additive regulation for the maximum amount of a pesticide residue that may be legally present in a processed food or feed.

Food additive regulations issued by EPA for pesticide residues in processed food and feed appear in 21 CFR Part 193 and in 21 CFR Part 561, respectively.

Enforcement of Tolerances and Food Additive Regulations for Pesticides:

The Food and Drug Administration (FDA) is responsible for the enforcement of pesticide tolerances and food additive regulations established by EPA. This enforcement authority is derived from section 402(a)(2)(B) and of the FFDCA. Under this section a raw agricultural commodity or a processed food or feed is deemed to be adulterated and subject to FDA enforcement action if it contains either:

- A pesticide residue at a level greater than that specified by a tolerance or food additive regulation; or
- A pesticide residue for which there is no tolerance, tolerance exemption, or food additive regulation.

There are exceptions to FDA enforcing an adulteration charge under section 402 for a pesticide residue in a food or feed that is not subject to a tolerance, tolerance exemption, or food additive regulation. The exceptions include:

- Unavoidable Pesticide Residues: Food or feed may contain a pesticide residue from sources of contamination that cannot be avoided by good agricultural or manufacturing practices, such as contamination by a pesticide that persists in the environment. In the absence of a tolerance, tolerance exemption, or food additive regulation, FDA may establish an "action level" for such unavoidable pesticide residues. An action level specifies the level below which FDA exercises its discretion not to take enforcement action. An action level established by FDA is based on EPA's recommendation, which follows the criteria of Section 406 of the FFDCA. (See 21 CFR Parts 109 and 509 for information on FDA policy and procedures for establishing action levels for unavoidable food and feed contaminants.) Food or feed found to contain an unavoidable pesticide residue at a level that is at or greater than an action level is subject to FDA enforcement action. FDA action levels currently in effect for unavoidable pesticide residues in food and feed are listed in Attachment B.

- EPA Emergency Exemptions: EPA is authorized by section 18 of FIFRA to grant an exemption from the registration requirements for the use of a non-registered pesticide under emergency conditions. (See 40 CFR Part 166.) Neither FIFRA nor the FFDCA have explicit provisions for establishing an "emergency tolerance" for a pesticide residue resulting from an emergency exemption granted-by EPA for food or feed use. Under a formal agreement between the U.S. Department of Agriculture, EPA, and FDA (50 FR 2304), however, EPA will recommend an enforcement level for residues of a pesticide granted an emergency exemption. FDA will use the recommended enforcement level to determine compliance with the FFDCA. (See FDA Field Management Directive No. 136.)

FDA will also consider taking enforcement action for violation of sections 402(a)(2)(B) or 402(a)(2)(C) in the following situations:

- A food or feed contains residues of two or more pesticides of the same chemical class and the total amount of such residues when added together exceeds the lowest numerical tolerance for residues of one of the pesticides found in that class as set forth in 40 CFR 180.3(e)(1). (Note: In applying the criteria in this regulation, the residues to be added together must be at or above the analytical limit of quantitation as specified in the Pesticide Analytical Manual (PAM), Volume I, section 143.21.).

- A processed food or feed was derived from a raw agricultural commodity that contained a pesticide residue that did not conform to an established tolerance or tolerance exemption.

- In the absence of a food additive regulation and in accordance with 21 CFR 170.19 or 21 CFR 570.19, a pesticide residue in a processed food or feed when ready to eat is greater than the tolerance prescribed for the raw agricultural commodity.

Imports:

The requirements of section 402 of the FFDCA apply equally to domestically produced and imported food and feed found to contain pesticide residues. Therefore, even though the use of a pesticide in a foreign country is not subject to EPA registration requirements under FIFRA, a pesticide residue in imported food or feed must be in conformity with a tolerance, tolerance exemption, or food additive regulation established by EPA or, if the pesticide residue is unavoidable, an action level established by FDA.

CRITERIA FOR INITIATING AN ENFORCEMENT ACTION:

A. General Requirements:

A appropriate ORA Program Field Office may initiate an enforcement action involving any of the violative situations described in the preceding section, provided each of the following general requirements is met:

1. The sample of food or feed was collected in accordance with instructions provided in the Investigations Operations Manual, Sample Schedule, Chart 3;
2. The portion of food or feed analyzed was in accordance with 40 CFR 180.1(j) or PAM Volume I, section 141, Column b. (Note: Generally, the portion of commodity analyzed will be on a whole commodity basis as set forth in the cited references. In some situations, however, it may be necessary to analyze the edible portion of a commodity for investigative and/or enforcement purposes. The appropriate center is responsible for advising the program field office(s) regarding such situations.);
3. An original and check analysis on the amount of residue was performed, and the results obtained from each are in reasonably close agreement based on the pesticide residue, type of food or feed, analytical method, and level of residue;

4. The pesticide residue was measured and the level was calculated in accordance with the residue definition for the applicable tolerance, food additive regulation, or action level;
5. The analytical methods used for the original and check analyses are contained in the PAM, Volume I or II, or the Official Methods of Analysis of the Association of Official Analytical Chemists, or are considered by the appropriate center to be suitable for FDA enforcement purposes; and
6. The identity of the residue in either the original or check analysis sample was confirmed in accordance with PAM, Volume I, section 601.

B. Requirements for Direct Reference Seizure or Import Detention:

1. Direct reference seizure for domestic food or feed, or detention of imported food or feed, without prior approval of the appropriate center is authorized provided:
 - a. The "General Requirements" under section A are met; and
 - b. The level of pesticide residue found by the original and check analyses exceeds by at least one half the amount specified by either a tolerance (or the limit specified in Attachment A if the pesticide has a zero tolerance), a food additive regulation, or an action level. (Note: Enforcement action may be recommended to the appropriate center whenever the level of pesticide residue exceeds a tolerance or food additive regulation or is below or above an action level, but not by the incremental amount specified. Also, because of the gas chromatographic patterns for chlordane and toxaphene, the above criteria do not apply to residue of these pesticides. In such cases, refer to the guidance in section C below); or
2. Direct reference seizure or detention of imports without prior center approval is also authorized for a pesticide residue finding for which there is no tolerance, tolerance exemption, or food additive regulation, provided:
 - a. The "General Requirements" under section A are met;
 - b. There is evidence or other reasons to conclude that the residue could have been avoided by good agricultural or manufacturing practices;
 - c. The program field office has had an enforcement action previously approved by the center for the same pesticide residue and the same food or feed;
 - d. The levels of pesticide residue found by the original and check analyses in the instant case are at or above the level of residue for the previously approved case and the same analytical methodology was used; and
 - e. The direct seizure referral includes the FDC number of the previous case.

C. Requirements for Recommending an Enforcement Action to a Center:

The field office is authorized to submit a recommended enforcement action to the Center for Food Safety and Applied Nutrition's *CFSAN/Office of Field Programs/Division of Enforcement (HFS-605)* for a food or to the Center for Veterinary Medicine's Division of Compliance (HFV-230) for feed provided:

1. The "General Requirements" in section A are met;
2. The food or feed may be considered actionable under any of the violative situation described in BACKGROUND; and
3. The requirements for direct reference seizure or detention are not met.

A recommendation must be accompanied by all analytical worksheets (including chromatograms) and inspection reports. For a recommendation involving a pesticide residue for which there is no tolerance, tolerance exemption, or food additive regulation, the recommendation must also include the investigational or other evidence that supports the program field office's conclusion that the pesticide residue could have been avoided by good agricultural or manufacturing practices.

If the field office encounters a food or feed that contains an unavoidable pesticide residue, but there is no tolerance or action level, the field office should contact the appropriate center for specific guidance. In such cases, it may be necessary for FDA to request that EPA recommend an action level.

SPECIMEN CHARGES FOR DIRECT REFERENCES SEIZURE AND FOR IMPORT DETENTIONS:

For a raw agricultural commodity that contains a pesticide residue in excess of tolerance:

Domestic

The article of food was adulterated when introduced into and while in interstate commerce and is adulterated while held for sale after shipment in interstate commerce within the meaning of 21 U.S.C. 342(a)(2)(B) in that it is a raw agricultural commodity within the meaning of 21 U.S.C. 321(r) which bears and contains a pesticide chemical, namely, which is unsafe within the meaning of 21 U.S.C. 346a since the quantity of such pesticide chemical exceeds the limits of the tolerance granted for the use of such pesticide chemical in or on the article pursuant to 40 CFR 180.

Imports

The article of food is violative within the meaning of 21 U.S.C. 381(a)(3) in that it appears to be adulterated because it contains, _____ a pesticide chemical which is unsafe.

For a raw agricultural commodity that contains a pesticide residue for which there is no tolerance or tolerance exemption:

Domestic

The article of food was adulterated when introduced into and while in interstate commerce and is adulterated while held for sale after shipment in interstate commerce within the meaning of 21 U.S.C. 342(a)(2)(B) in that it is a raw agricultural commodity within the meaning of 21 U.S.C. 321(r) which bears and contains a pesticide chemical, namely, _____, which is unsafe within the meaning of 21 U.S.C. 346a since no tolerance or exemption from a tolerance has been granted for the use of such pesticide chemical on _____.

Imports

The article of food is violative within the meaning of 21 U.S.C. 381(a)(3) in that it appears to be adulterated because it contains, _____ a pesticide chemical which is unsafe.

For a processed food or feed that contains a pesticide residue that is actionable under the situations described in the "BACKGROUND":

Domestic

The article of food was adulterated when introduced into and while in interstate commerce and is adulterated while held for sale after shipment in interstate commerce within the meaning of 21 U.S.C. 342(a)(2)(C) in that it bears and contains, a food additive, which is unsafe within the meaning of 21 U.S.C. 348 since its presence in the article is not in conformity with any regulation or exemption in effect under 21 U.S.C. 348.

Imports

The article of food is violative within the meaning of 21 U.S.C. 381(a)(3) in that it appears to be adulterated because it contains, _____ a food additive which is unsafe.

ENFORCEMENT LEVELS FOR PESTICIDES HAVING A ZERO TOLERANCE:

The following table lists the level at which an enforcement action may be considered when residues of these pesticides are found in a commodity that the cited regulation specifies as having a zero tolerance. *The analytical levels are based on the level at which residues of these pesticides can be detected, quantified, and confirmed in the particular commodity.* The enforcement levels specified for raw agricultural commodities also apply to their corresponding processed commodity.

40 CFR Section Pesticide Commodity (see note "a") Level (ppm)

180.131 Endrin Vegetables 0.05
Cottonseed 0.05

180.139 Perthane Milk 0.2 (fat basis)

180.169 Carbaryl Grains 0.2

180.174 Tetradifon Milk 0.4 (fat basis)

180.190 Diphenylamine Milk (see note "b")

Note "a": Commodities cited as broad food classes of vegetables and grains are limited to only those specific commodities listed in the regulation as having a zero tolerance.

Note "b": No level can be prescribed at this time due to lack of analytical experience with this pesticide.

FDA ACTION LEVELS FOR UNAVOIDABLE PESTICIDE RESIDUES IN FOOD AND FEED COMMODITIES:

Pesticides Covered

[ALDRIN & DIELDRIN](#)

[BENZENE HEXACHLORIDE \(BHC\)](#)

[CHLORDANE](#)

[CHLORDECONE \(KEPONE\)](#)

[DDT, DDE, & TDE](#)

[DICOFOL \(KELTHANE\)](#)

[ETHYLENE DIBROMIDE \(EDB\)](#)

[HEPTACHLOR & HEPTACHLOR EPOXIDE](#)

[LINDANE](#)

[MIREX](#)

None of the action levels listed here are binding on the agency, the regulated industry, or the courts. In any given case, FDA may decide to initiate an enforcement action below the action level or decide not to initiate an enforcement action if the level is exceeded. The field office must contact the appropriate center for a preliminary assessment regarding the use of an action level in a given case.

Unless otherwise a specified, an action level listed for:

1. a raw agricultural commodity (other than grains) may also apply to the corresponding processed food intended for human consumption;

2. grains may also apply to both raw and processed grains intended for human or animal consumption;
3. fish may also apply to shellfish and processed fish intended for human consumption; and
4. processed animal feed may include mixed feeds and feed ingredients.

ALDRIN AND DIELDRIN

The following action levels are for residues of the above pesticides individually or in combination. In adding amounts of aldrin and dieldrin do not count aldrin or dieldrin found at a level below 0.01 ppm for nonfatty foods, 0.1 ppm for fish and 0.1 (fat basis) for milk.

Commodity (see note "a") Action Level (ppm)

Alfalfa 0.03
 Animal feed, processed 0.03
 Artichokes 0.05
 Asparagus 0.03
 Bananas 0.02
 Beets (garden and sugar) 0.1
 Beet tops (garden and sugar) 0.05
 Broccoli 0.03
 Brussels sprouts 0.03
 Bulb vegetables 0.1
 Cabbage 0.03
 Carrots 0.1
 Cauliflower 0.03
 Cereal grains (except buckwheat, millet, 0.02
 teosinte, and wild rice)
 Celery 0.03
 Clover 0.03
 Collards 0.05
 Cowpea hay 0.03
 Cucumbers 0.1
 Eggplant 0.05
 Eggs 0.03
 Endive (escarole) 0.05
 Fats and oils (animal feed) 0.3
 Figs 0.05
 Fish (edible portion) 0.3
 Forage, fodder, and straw of cereal 0.3
 grains (except those of buckwheat,

millet, teosinte, and wild rice)
Grapefruit 0.02
Hay 0.03
Horseradish 0.1
Kale 0.05
Kohlrabi 0.05
Legume vegetables (except guar, 0.05
Jack beans, lablab beans, and lentils)
Lemons 0.02
Lespedeza 0.03
Lettuce 0.03
Limes 0.02
Mangoes 0.03
Melons 0.1
Milk (fat basis) 0.3
Mustard green 0.05
Oranges 0.02
Parsnips 0.1
Pea 0.03
Peaches 0.02
Peanuts 0.05
Peanut hay 0.03
Peppers 0.05
Pimentos 0.05
Pineapple 0.03
Pome Fruits (except crabapples 0.03
and loquats)
Potatoes 0.1
Radishes 0.1
Radish tops 0.03
Rutabagas 0.1
Salsify roots 0.1
Salsify tops 0.05
Small fruits and berries 0.05
Soybean hay 0.03
Spinach 0.05
Squash 0.1
Stone fruits (except Chickasaw, 0.3
Damson, and Japanese plums,
and peaches)

Sugarbeet pulp (animal feed) 0.1
Sweet potatoes 0.1
Swiss chard 0.05
Tangerines 0.02
Tomatoes 0.05
Turnips 0.1
Turnip tops 0.05

Note "a": Action levels for crop groups cover all commodities specified in 40 CFR 108.34(f), except where an exception is noted.

BENZENE HEXACHLORIDE (BHC)

The following action levels are for residues of total BHC. However, in adding amounts of individual isomers do not count alpha, gamma, or delta BHC at a level below 0.02 ppm in milk and rabbits, and 0.01 ppm for all other commodities listed. Do not count beta BHC at a level below 0.05 ppm for milk and rabbits, and 0.02 ppm for all other commodities listed.

Commodity (see note "a") Action Level (ppm)

Animal feed, processed 0.05
Apples 0.05
Asparagus 0.05
Avocados 0.05
Beans 0.05
Brassica (cole) leafy vegetables 0.05
(except broccoli raab, rape greens)
Celery 0.05
Carrots 0.3
Cereal grains (except buckwheat, 0.05
millet, popcorn, teosinte, wild rice)
Citrus Fruits 0.05
Cocoa beans 0.5
Cucurbit vegetables (except Balsam,0.05
pears, Chinese waxgourds, gherkins,
gourds)
Eggplant 0.05
Eggs 0.05
Endive 0.05
Figs 0.05
Frog legs (edible portion) 0.3
Guavas 0.05

Hays 0.05
Lettuce 0.05
Mangoes 0.05
Milk (fat basis) 0.3
Okra 0.05
Onions 0.05
Paprika 1.0
Pears 0.05
Peas 0.05
Pecans 0.05
Peppers 0.05
Pineapples 0.05
Quices 0.05
Rabbits (fat basis)b 0.3
Root and tuber vegetables 0.05
(except carrots)
Small fruits and berries 0.05
Spinach 0.05
Swiss chard 0.05
Stone fruits (except Chickasaw, 0.05
Damson, and Japanese plums)
Tomatoes 0.05
Turnip greens 0.05

Note "a": Action levels for crop groups cover all commodities specified in 40 CFR 180.34(f), except where an exception is noted.

Note "b": For rabbits that contain insufficient fat to conduct an analysis on a fat basis, analyze the rabbits on a whole product basis (edible portion) and use 0.1 ppm, the limit of determination, as the action level.

CHLORDANE

The following action levels are for residues of chlordane, including cis and trans chlordane, cis and trans nonachlor, oxychlordane, alpha, beta, and gamma chlordane and chlordane. Levels of individual components must be quantitated at 0.02 ppm or above and confirmed in order to be added into the "chlordane" total value. See analytical note below.

Commodity (see [Note "A"](#)) Action Level (ppm)

Animal fat, rendered 0.3
Animal feed, processed 0.1
Asparagus 0.1

Bananas 0.1
Beans 0.1
Beets (with or without tops) 0.1
Beets greens 0.1
Brassica (cole) leafy vegetables 0.1
(except broccoli, raab, Chinese mustard
cabbage, and rape greens)
Carrots 0.1
Celery 0.1
Citrus fruits 0.1
Corn 0.1
Cucumbers 0.1
Eggplant 0.1
Fish (edible portion) 0.3
Lettuce 0.1
Melons 0.1
Okra 0.1
Onions 0.1
Papayas 0.1
Parsnips 0.1
Peanuts 0.1
Peas 0.1
Peppers 0.1
Pineapple 0.1
Pome fruits (except crabapples 0.1
and loquats)
Potatoes 0.1
Radishes 0.1
Radish tops 0.1
Rutabagas (with or without tops) 0.1
Rutabaga tops 0.1
Small fruits and berries (except 0.1
cranberries, currants, elderberries,
gooseberries, and olallie berries)
Spinach 0.1
Squash 0.1
Stone fruits (except, Chickasaw, 0.1
Damson, and Japanese plums)
Sweet potatoes 0.1
Swiss chard 0.1

Tomatoes 0.1

Turnips (with or without tops) 0.1

Turnip greens 0.1

Note A: Action levels for crop groups cover all commodities specified in 40 CFR 180.34(f), unless an exception is noted.

Analytical Note:

The GLC pattern of the residue determines which reference standard(s) will be used for quantitation. If the residue pattern matches that of technical chlordane, quantitate against a technical chlordane reference standard. If the residue consists of identifiable individual components, (i. e., cis and trans chlordane, cis and trans nonachlor, oxychlordane, alpha, beta, and gamma chlordane and chlordane), quantitate individual components against their respective standards. Sum individual values to obtain the total "chlordane" level. Do not include levels of heptachlor epoxide in the summation.

CHLORDECONE (see Note "a")

Commodity Action Level (ppm)

Crabmeat 0.4

Fish 0.3

Note "a": The trade name for chlordecone is Kepone.

DDT, TDE, and DDE

The following action levels are for residues of the above pesticides of the above pesticides individually or in combination. However, in adding amounts of DDT, TDE, and DDE do not count any of the three found below 0.02 ppm for non-fatty food and 0.2 ppm for fish, eggs, and grains.

Commodity Action Level (ppm)

Animal feed, processed 0.5

Artichokes 0.5

Asparagus 0.5

Avocados 0.2

Beets (roots and tops) 0.2

Brassica (cole) leafy vegetables 0.5

(except broccoli, raab, Chinese
mustard cabbage, and rage greens)

Carrots 3

Cereal grains (except buckwheat, fresh 0.5
sweetcorn, millet, popcorn, teosinte,

and wild rice)
Celery 0.5
Citrus fruits 0.1
Cocoa beans 1
Corn, fresh sweet 0.1
Cottonseed 0.1
Cucumbers 0.1
Eggplant 0.1
Eggs 0.5
Endive (escarole) 0.5
Fish (edible portion) 5
Grapes 0.05
Guavas 0.2
Hay 0.5
Hops 0.1
Legume vegetables (except guar, 0.2
Jack beans, lablab beans, and lentils
Lettuce 0.5
Mangoes 0.2
Melons 0.1
Milk (fat basis) 1.25
Mushrooms 0.5
Okra 0.2
Onions (dry bulb) 0.2
Papayas 0.2
Parsnips (roots and tops) 0.2
Peanuts 0.2
Peppermint hay 0.5
Peppermint oil 1
Peppers 0.1
Pineapples 0.2
Pome fruits (except crabapples and 0.1
loquats)
Potatoes 1
Radishes (roots and tops) 0.2
Rutabagas (roots and tops) 0.2
Small fruits and berries (except 0.1
elderberries, grapes, and
olallie berries)
Soybean oil (crude) 1

Spearmint hay 0.5
Spearmint oil 1
Spinach 0.5
Squash 0.1
Stone fruits (except Chickasaw, 0.2
Damson, and Japanese plums)
Sweet potatoes 1
Swiss chard 0.5
Tomatoes 0.05
Tomato pomace 0.5
Turnips (roots and tops) 0.2

Note "a": Action levels for crop groups cover all commodities specified in 40 CFR 180.34(f), except where an exception is noted.

DICOFOL (see note "a")

Commodity Action Level (ppm)
Animal feed, processed 0.5

Note "a": The trade name for dicofol is Kelthane.

ETHYLENE DIBROMIDE (EDB)

Commodity Action Level (ppb)

Grain Products

Intermediate (milled) grain products 150
(must be cooked prior to consumption)

Examples: flour, cake mix,
pancake mix, corn meal,
grits, quick grits, oatmeal,
instant oatmeal, hominy,
brown and serve rolls,
frozen bread dough

Ready-to-eat (cooked) products 30
(require no cooking prior to consumption)

Examples: bread, cakes,
pancakes, corn bread,
hushpuppies, cooked grits,
cooked oatmeal, cooked hominy,

crispy rice cereal, wheat flakes
cereals, puffed oats, corn oil

Honey

Ready-to-eat 30

(will not undergo further processing
prior to consumption)

HEPTACHLOR AND HEPTACHLOR EPOXIDE

The figures below are for residues of the above pesticide and its metabolite individually or in combination. However, do not count heptachlor or heptachlor epoxide found at a level below 0.1 ppm for fish, 0.05 ppm (fat basis) for milk, and 0.01 ppm for nonfatty foods.

Commodity (See [Note "A" below](#)) Action Levels (ppm)

Animal feed, processed 0.03

Artichokes 0.05

Asparagus 0.05

Beans, except snap beans 0.05

Citrus fruits 0.05

Cucumbers 0.05

Eggs 0.05

Eggplant 0.03

Figs 0.05

Fish (edible portion) 0.3

Hay 0.03

Leafy vegetables 0.05

Melons 0.05

Okra 0.05

Pears 0.05

Pimentos 0.05

Pumpkins 0.05

Quinces 0.05

Rice 0.03

Small fruits a,b 0.05

Stone fruits a,b 0.05

Squash 0.05

Note A: Refer to 40 CFR 180.34(f) for commodities covered by this food group.

Note B: Other than those commodities specified in 40 CFR 180.104 and 180.319.

LINDANE

Commodity Action Level (ppm)

Animal feed, processed 0.1
Artichokes 0.5
Barley 0.1
Beans 0.5
Citrus fruits (see [Note "A"](#)) 0.5
Cocoa beans, whole raw bean 0.5
Corn, fresh sweet 0.5
Corn 0.1
Eggs 0.5
Endive 0.5
Figs 0.5
Hay 0.1
Milk (fat basis) 0.3
Oats 0.1
Peas 0.5
Rice 0.1
Root vegetables (see Notes ["A"](#) and ["B"](#)) 0.5
Rye 0.1
Small fruits (see Notes ["A"](#) and ["B"](#)) 0.5
Sorghum (milo) 0.1
Turnip greens 0.5
Wheat 0.1

Note A: Refer to 40 CFR 180.34(f) for commodities covered by this food group.

Note B: Other than those commodities specified in 40 CFR 180.133.

MIREX

Commodity Action Level (ppm)

Fish (edible portion) 0.1

Material between asterisks is new or revised.*

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