DO YOU WANT PESTICIDES WITH YOUR SHELLFISH AND OYSTERS?

I. BACKGROUND

CARBARYL

CARBARYL (Sevin) is a toxic insecticide used on a large scale in forestry application to kill insects such as bark beetles. When used on forests, label restrictions require stream buffer zones to keep Carbaryl out of water bodies. Carbaryl is a cholinesterase inhibitor and is toxic to humans. It is classified as a likely human carcinogen by the United States Environmental Protection Agency (EPA.) It kills various beneficial insect and crustacean species along with intended pest victims. Carbaryl is acutely toxic to honeybees, destroying colonies of bees foraging in an area where the chemical has been applied. Carbaryl is illegal in several countries, including the United Kingdom, Austria, Denmark, Sweden, Germany and Angola.

Carbaryl is sprayed by shellfish growers in Washington State directly in estuaries and on mudflats to kill ghost shrimp. As a result, EPA allows oysters containing up to 0.25 parts per million (ppm) Carbaryl to be consumed by the public.

IMIDACLOPRID

IMIDACLOPRID is a relatively new, systemic insecticide chemically related to the tobacco toxin nicotine. Like nicotine, it acts on the nervous system. Worldwide, it is considered to be one of the insecticides used in the largest volume. It has a wide diversity of uses: in agriculture, on turf, on pets, and for household pests.

Imidacloprid is proposed for spraying by shellfish growers in Willapa Bay and Grays Harbor directly in estuaries and on mudflats to kill ghost shrimp. EPA allows fish and shellfish to contain up to 0.05 ppm Imidacloprid to be consumed by the public over twice the tolerance for milk. Milk has an Imidacloprid tolerance of 0.02 ppm!

GLYPHOSATE

GYPYOSATE (Roundup/Rodeo) is a broad-spectrum systemic herbicide used to kill weeds, especially perennials. It is typically sprayed and absorbed through the leaves, injected into the trunk, or applied to the stump of a tree, or broadcast or used in the cut-stump treatment as a forestry herbicide. Glyphosate is the most used herbicide in the USA. In the US, 5-8 million pounds are used every year on lawns and yards and 85-90 million pounds are used annually in US agriculture. When used on forests, label restrictions Glyphosate state that it should not be applied directly to surface water.

Glyphosate is sprayed by shellfish growers, federal and state agencies, and others in Washington State directly in estuaries and on mudflats to kill Spartina, a form of cord grass. As a result, EPA allows shellfish containing up to 3.0 ppm of Glyphosate and fish containing up to 0.25 ppm to be consumed by the public.

IMAZAPYR

Imazapyr (Arsenal, Assault) is a non-selective herbicide used for the control of a broad range of weeds including terrestrial annual and perennial grasses and broadleaved herbs, woody species, and riparian and emergent aquatic species. It is used for vegetation control in forests. Label restrictions include warnings to not treat irrigation ditches or water used for irrigating crops.

Imazapyr is sprayed by shellfish growers, federal and state agencies, and others in Washington State directly in estuaries and on mudflats to kill Spartina, in Washington State directly in estuaries and on mudflats to kill Spartina, because Glyphosate was not doing the job. EPA allows fish to contain up to 1.00 ppm and shellfish 0.10 ppm of Imazapry. Milk has a Imazapry tolerance of 0.01 ppm!

II. SHELLFISH PESTICIDE/HERBIDE RESIDUE TOLERANCES

SUMMARY: Environmental Protection Agency (EPA) **Carbaryl** residue tolerance in **oysters** is 0.25 parts per million (ppm). This is **higher** than residue tolerances for sweet potatoes. Almonds, chestnuts, hazelnuts, pecans, pistachios, sunflower seeds and walnuts have Carbaryl residue tolerances of 1.0 ppm.

EPA **Gylphosate** residue tolerance in **shellfish** is 3.0 ppm. This is 30 times **higher** than coconuts, peanuts, pineapple, and sunflower seeds; 15 times **higher** than bamboo shoots, bananas, cranberry, figs, grapes, kiwifruit, olives, strawberry, and leafy vegetables; **12 times higher than fish**; 3 times **higher** than coffee beans and pine nuts.

EPA **Imazapyr** residue tolerance in fish is 1.00 ppm and shellfish 0.10 ppm of Imazapry. This is 100 times and 10 times **higher** respectively than milk.

EPA **Imidacloprid** residue tolerance in **fish and shellfish** is 0.05 parts per million (ppm). This is over twice the tolerance for milk. Milk has an Imidacloprid tolerance of 0.02 ppm!

CARBARYL

[Code of Federal Regulations]
[Title 40, Volume 23]
[Revised as of July 1, 2008]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR180.169]

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TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)
PART 180_TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN

Subpart C_Specific Tolerances

Sec. 180.169 Carbaryl; tolerances for residues.

(a) General. (1) Tolerances are established for residues of the insecticide carbaryl (1-naphthyl N-methylcarbamate), including its hydrolysis product 1-naphthol, calculated as 1-naphthyl N-methylcarbamate, in or on the following food commodities:

Commodity	Parts per million
Almond	1
Beet, garden, roots	5
Chestnut	1
Hazelnut	1
Oyster	**0.25**
Peanut	5
Pecan	1

Pistachio	1
Potato	0.2(N)

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Sunflower, seed	1
Sweet potato, roots	0.2
Walnut	1

(b) Section 18 emergency exemptions. [Reserved]

(c) Tolerances with regional registrations. Tolerances with regional registration are established for the insecticide carbaryl (1-napthyl N-methylcarbamate) in or on the following food commodities.

Commodity	Parts per million
Dill, fresh	0.2

(d) Indirect or inadvertent residues. [Reserved]

[65 FR 33695, May 24, 2000, as amended at 66 FR 38955, July 26, 2001; 67 FR 49615, July 31, 2002; 70 FR 44492, Aug. 3, 2005]

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GLYPHOSATE

[CITE: 40CFR180.364]
[Page 507-509]

Sec. 180.364 Glyphosate; tolerances for residues.

(a) General. Tolerances are established for residues of glyphosate N-(phosphonomethyl)glycine resulting from the application of glyphosate, the isopropylamine salt of glyphosate, the ethanolamine salt of glyphosate, the dimethylamine salt of glyphosate, the ammonium salt of glyphosate, and the potassium salt of glyphosate in or on the following food commodities:

Commodity	Parts per million
Asparagus	0.5
Bamboo, shoots	0.2
Banana	0.2

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Coconut..... 0.1
Coffee, bean..... 1.0
Cranberry..... 0.2
Egg..... 0.05
Fig..... 0.2
Fish..... 0.25
Grape..... 0.2
Kiwifruit..... 0.2
Nut, pine..... 1.0
Olive..... 0.2
Peanut..... 0.1
Pineapple..... 0.1
Shellfish..... 3.0
Strawberry..... 0.2
Sunflower, seed..... 0.1
Vegetable, leafy, except brassica, group 4..... 0.2

(b) Section 18 emergency exemptions. [Reserved]
(c) Tolerances with regional registrations. [Reserved]
(d) Indirect or inadvertent residues. [Reserved]

[45 FR 64911, Oct. 1, 1980]

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IMAZAPYR

Code of Federal Regulations]
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TITLE 40--PROTECTION OF ENVIRONMENT
CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)
PART 180_TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN
Subpart C_Specific Tolerances

Sec. 180.500 Imazapyr; tolerances for residues.
(a) General. Tolerances are being established for residues of the herbicide imazapyr, [2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-

imidazol-2-yl]-3-pyridinecarboxylic acid], applied as the acid or ammonium salt, in or on the following raw agricultural commodities:

Commodity	Parts per million
Cattle, fat	0.05
Cattle, kidney	0.20
Cattle, meat	0.05
Cattle, meat byproducts, except kidney	0.05
Corn, field, forage	0.05
Corn, field, grain	0.05
Corn, field, stover	0.05
Fish	**1.0**
Goat, fat	0.05
Goat, kidney	0.20
Goat, meat	0.05
Goats, meat byproducts, except kidney	0.05
Grass, forage	100
Grass, hay	30
Horse, fat	0.05
Horse, kidney	0.20
Horse, meat	0.05
Horse, meat byproducts, except kidney	0.05
Milk	0.01
Sheep, fat	0.05
Sheep, kidney	0.20
Sheep, meat	0.05
Sheep, meat byproducts, except kidney	0.05
Shellfish	**0.10**

(b) Section 18 emergency exemptions. [Reserved]
(c) Tolerances with regional registrations. [Reserved]
(d) Indirect or inadvertent residues. [Reserved]

[68 FR 55484, Sept. 26, 2003]

Imidacloprid

40 CFR 180.472

Title 40: Protection of Environment
PART 180—TOLERANCES AND EXEMPTIONS FOR PESTICIDE CHEMICAL RESIDUES IN FOOD
Subpart C—Specific Tolerances

§180.472 Imidacloprid; tolerances for residues.

(a) General. Tolerances are established for residues of the insecticide imidacloprid, including its metabolites and degradates, in or on the commodities in the table below. Compliance with the tolerance levels specified below is to be determined by measuring only the sum of imidacloprid (1-[6-chloro-3-pyridinyl) methyl]-N-nitro-2-imidazolidinimine) and its metabolites containing the 6-chloropyridinyl moiety, calculated as the stoichiometric equivalent of imidacloprid, in or on the following commodities:

Commodity		Parts per million
Beet, sugar, roots	0.05	
Beet, sugar, tops	0.50	
Borage, seed		0.05
Canola, seed		0.05
Crambe, seed		0.05
Cranberry		0.05
Egg		0.02
Fish		0.05
Fish-shellfish, mollusc	0.05	
Grain, cereal, group 15, except rice	0.05	
Mustard, black, seed		0.05
Mustard, field, seed		0.05
Mustard, Indian, seed		0.05
Mustard, rapeseed, seed	0.05	
Mustard, seed		0.05
Nut, tree, group 14	0.05	
Pecan		0.05
Pistachio	0.05	
Poultry, fat		0.05
Poultry, meat		0.05
Poultry, meat byproducts	0.05	
Rapeseed, seed		0.05
Safflower, seed		0.05
Sunflower, seed		0.05

75 FR 22251, Apr. 28, 2010, as amended at 78 FR 33743, June