UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: February 9, 1977

SUBJECT: Velsicol Vegetrol A-1D Herbicide; EPA Reg. No. 576-222 (2,4-D)

FROM: Toxicology Branch

TO: Mr. Richard F. Mountfort; Product Manager # 23

Presumably, the applicant wishes to amend the labeling for subject pesticide to provide for added claims for:

1. water hyacinth control by government agencies
2. water milfoil control by TVA.

Toxicology Branch has no questions concerning the safety of such uses as provided in § 180.142, CFR, so long as the established tolerance of 1 part per million in or on the raw agricultural commodity fish is not exceeded. From the data referenced in the application, this could not be determined.

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Toxicology Branch

EPA Form 1220-6 (Rev. 3-76)
Chapter I—Environmental Protection Agency § 180.142

3.5 parts per million combined residues of DDT and toxaphene in or on soybeans (dry form), of which residues DDT shall and not exceed 1.5 parts per million and toxaphene shall not exceed 2 parts per million.

3 parts per million in or on bananas (of which residue not more than 0.3 part per million shall be in the pulp after the peel is removed and discarded), pineapples.

2 parts per million in or on soybeans (dry form).

0.1 part per million in or on sunflower seeds.

§ 180.139 1,1-Dichloro-2,2-bis(p-ethylphenyl) ethane; tolerances for residues.

Tolerances are established for residues of the insecticide 1,1-dichloro-2,2-bis (p-ethylphenyl) ethane in or on raw agricultural commodities as follows:

15 parts per million in or on apples; brocolli, brussels sprouts, cabbage, cauliflower, cherries, kohlrabi, lettuce, pears, peaches, prunes, pumpkins, spinach, squash (summer and winter), strawberries, Swiss chard, and tomatoes.

0.01 part per million (negligible residue) in or on pecans.

§ 180.141 Biphenvl; tolerances for residues.

A tolerance of 110 parts per million in or on residues of the fungicide biphenvl (also known as diphenyl) from postharvest use is established in or on each of the following raw agricultural commodities: Citrus citron, grapefruit, kumquats, lemons, limes, oranges, tangerines, other citrus fruits and hybrids thereof.

§ 180.142 2,4-D; tolerances for residues.

(a) Tolerances are established for residues of the herbicide and plant regulator 2,4-D (2,4-dichlorophenoxyacetic acid) in or on raw agricultural commodities as follows:

5 parts per million in or on apples, citrus fruits, pears, and quinces. The tolerance on citrus fruits also includes residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from the preharvest application of 2,4-D isopropyl ester and 2,4-D butoxyethyl ester to citrus fruits and from the postharvest application of the 2,4-D isopropyl ester to lemons.

0.2 part per million in or on potatoes.

(b) Tolerances are established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) at:

100 parts per million in or on grasses (pasture and rangeland);

300 parts per million in or on grass hay;

20 parts per million in or on the forage of barley, oats, rye, and wheat, corn fodder and forage, rice straw, sorghum fodder and forage, and sugar cane forage;

2 parts per million in or on sugarcane;

0.5 part per million in or on the grain of barley, oats, rye, and wheat, corn grain and fresh corn including sweet corn (kernels plus cob with husks removed), cranberries, grapes, and sorghum;

0.1 part per million in or on blueberries and rice.

from application of 2,4-D in acid form, or in the form of one or more of the following salts or esters:

(1) The inorganic salts: Ammonium, lithium, potassium and sodium.

(2) The amine salts: Alkanolamines of the ethanol and isopropanol series, alkyl (C-12), alkyl (C-13), alkyl (C-14), alkylamines derived from tall oil, amylamine, diethanolamine, diethylylamine, diisopropanolamine, dimethylamine, N,N-dimethyl-1,1,2,2-tetraethylelamine, N,N-dimethyl-1,2,2-triethylelamine, isopropanolamine, isopropylamine, linoleylamine, methylamine, octylamine, oleic, oleum, N-oleyl-1,3-propylenediamine, propylamine, trithanolamine, trimethylenediamine, triisopropanolamine, and trimethylamine.

(3) The esters: Amyl (pentyl), butoxyethoxypropyl, butoxypropyl, butyl, diisopropylglycidisobutyler, ethoxyethoxyethyl, ethoxyethoxypropyl, ethyl, ethoxypropyl, butoxyethyl, butoxypropyl-
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ethylene glycol butyl ether, isobutyl, isooctyl (including, but not limited to, 2-ethylhexyl, 2-ethyl-1,4-hexanediol, and 2-ocetyl), propylene glycol methyl, polyethylene glycol 200, polypropoxybutyl, polypropylene glycols, glycol, propylene glycol, propylene glycol butyl ether, propylene glycol isobutyl ether, tetrahydrofurfuryl, and tripolypropylene glycol isobutyl ether.

(c) Tolerances are established for negligible residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from application of its dimethylamine salt to irrigation ditch banks in the Western United States in programs of the Bureau of Reclamation; cooperating water user organizations; and the Bureau of Sport Fisheries, U.S. Department of the Interior; Agricultural Research Service, U.S. Department of Agriculture and the Corps of Engineers, U.S. Department of Defense, at 0.1 part per million in or on the crop groupings: Cereals and grain; forage legumes; grain crops; leafy vegetables; nuts; pome fruits; root crop vegetables; seed and pod vegetables; small fruits; stone fruits; and the individual raw agricultural commodities: avocados, cottonseed, hops, and strawberries. Where tolerances are established at higher levels from other uses of the dimethylamine salt of 2,4-D on crops included within these commodity groups, the higher tolerances also apply to residues from the aquatic uses cited above.

(g) [Reserved]

(b) Tolerances are established for residues of 2,4-dichlorophenoxyacetic acid (2,4-D) and/or its metabolites 2,4-dichlorophenol (2,4-DCP) in food products of animal origin at:

2 parts per million in kidney of cattle, goats, hogs, horses, and sheep;
0.2 parts per million in meat, fat, and meat by-products (other than kidney) of cattle, goats, hogs, horses, and sheep;
0.1 part per million in milk;
0.05 part per million in poultry and eggs.

(d) A tolerance is established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) for applications of its dimethylamine salt or its butoxyethanol ester for Eusbian Watermilfoil control in programs conducted by the Tennessee Valley Authority in dams and reservoirs of the TVA system at 1.0 part per million in or on the raw agricultural commodity fish.

3 parts per million in berries.
2 parts per million in citrus, and pears.
1 part per million in (fresh prunes).
0.5 part per million in and walnuts.
0.5 part per million in ney of cattle, goats, hogs, and sheep.
0.2 part per million in meat byproducts (exclusive of kidney) of cattle, goats, hogs, and sheep.
0.05 part per million in:

(1) Negligible residues in:

37 FR 16903, Aug. 19, 1972
38 FR 14165, May 30, 1973
40 FR 12544, Apr. 12, 1975
39 FR 10904, 8/10/74.

§ 180.145 Fluorine compounds for residues.

A tolerance of 7 parts per million for fluorine is established for the insecticidal compounds: chloropicrin and thiophos (sodium aluminum fluoride); each of the following: a, c, m, e, and f commodities: apples, apricots, beans (with or without green leaves); blackberries, boysenberries, brussels sprouts, cabbage, cauliflower, citrus fruits, corn, cucumbers, dates, peppers, pears, plumains, quinces, radish; rutabagas; squashes; tomatoes; turnips.