

PPC 9444.1984(03)

TOXICITY OF 2,4-D WASTE

APR 1984

RE: SMBASCIA32

Mr. John D. Nalewaja, President  
Weed Science Society of America  
c/o Agronomy Department  
North Dakota State University  
Fargo, ND 58105

Dear Mr. Nalewaja:

I am writing in response to your letter of March 20, 1984, and the resolution of the Weed Science Society of America requesting the removal of 2, 4-D waste from regulation under the Resource Conservation and Recovery Act (RCRA).

The toxic Properties of 2, 4-D were evaluated by the EPA's Office of Drinking Water as part of the process leading to the development of the National Interim Primary Drinking Water Standards (NIPDWS). Inclusion of 2, 4-D in the list of toxicants regulated under 40 CFR 261.24 and 261.33 of the RCRA regulations was based on the evaluation that was conducted in support of the NIPDWS.

The NIPDWS for 2, 4-D was derived assuming that the lowest long term level with minimal or no effects for the rat and the dog is 50 and 8 mg/kg/day respectively. Based on these values, a "safe level" for man was derived of 1.12 mg/man/day. (See National Interim Primary Drinking Water Regulations, EPA-570/9-76-003, Environmental Protection Agency, Office of Water Supply). Verschueren (Handbook of Environmental Data on Organic Chemicals, Van Nostrand Reinhold, New York, NY, 1953) indicates that 2, 4-D is significantly toxic to mammals (i.e., oral rat LD50 300-1000 mg/kg, oral mouse LD50 375-521 mg/kg, oral dog LD50 100 mg/kg). In addition, 2, 4-D exhibits acutely toxic effects at the mg/l level in a variety of aquatic species which indicates that its uncontrolled release into the environment can also affect the ecological balance. For the above

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reasons, 2, 4-D and its salts have been listed under the hazardous waste identification regulations.

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DUE DATE: 4/9/84

You may petition the Agency to change its regulations; for OSW to remove 2, 4-D from regulation under RCRA, you must demonstrate that the chemical would not pose a hazard to human health or the environment even if improperly disposed of. For more information, please contact David Friedman of my staff (202-382-4770). Requests or inquiries related to the NIPDWS and their rationale should be directed to:

Dr. Joseph Cotruvo  
Director  
Criteria and Standards Division  
Office of Drinking Water, WH-550  
401 M Street, SW  
Washington, DC 20460  
(202) 382-7575

Sincerely yours,

John H. Skinner  
Director  
Office of Solid Waste (WH-562B)

cc: J. Cotruvo