

ENVIRONMENTAL PROTECTION AGENCY

REPLY TO
ATTN OF:

DATE: November 23, 1973

SUBJECT:

PP #2E1293. 2,4-D on apricots. Comments on amendments of 1/9/73 and 10/3/73.

TO:

- Coordination Branch
and Toxicology Branch, RD

In our reject letter (W. H. Morgan, 12/20/72), the petitioner was informed of the following two deficiencies:

1. Additional information is needed so that we can determine whether or not bound residues constitute a problem. We suggest that you investigate the method of Chow in which an initial combined alkaline digestion and hydrolysis procedure is used to determine bound residues.
2. A label restriction is needed against grazing of livestock in treated areas.

Petitioner's Response and Our Comments

In response to the first deficiency, the petitioner submitted a revised analytical method and tables of residue data. The "revised" method is identical to the original method but includes an addition of "20 ml of 3N HCl" to the initial CH_3CN extraction (see memo of D. Duffy, 12/7/72). The acidic CH_3CN extract is filtered from the crop material and taken to dryness in a flash evaporator. In our opinion, the procedure of taking acidic solutions of 2,4-D acid to dryness makes the quantitative recoveries questionable. We would normally question this point but an examination of the accompanying residue data indicates that the "revised" method was never used. The residue data contain no new data but simply another tabular form of the original data compiled with the "unrevised" method. Therefore, we conclude that the method and the data submitted in this amendment do not resolve the first deficiency.

The petitioner submitted revised labeling which includes the suggested feeding restriction. We conclude that this submittal satisfies our second deficiency.

For further consideration, the petitioner should submit additional residue data obtained with a validated analytical method which includes the suggested alkaline hydrolysis and is capable of determining bound and free residues of 2,4-D. The petitioner may not need to conduct additional field studies if he can demonstrate that the original method can recover weathered 2,4-D residues in apricots comparable to that obtained with the suggested method employing alkaline hydrolysis.

Richard Beyak
Richard Beyak
Chemistry Branch, RD

KJH