

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Acephate and Methamidophos Method Evaluation - Report No. ECM0069S1-S2. "Method Evaluation for the Determination of Acephate and Methamidophos in Soil (ECM 0069S1-S2)." Method Validated by BEAD/ACB/ECS.

TO: Richard Dumas/Monica Spann, PM Team #61
Special Review and Reregistration Division (7508W)

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The Environmental Chemistry Section (ECS) of BEAD/ACB has completed the validation of the analytical method referenced above. In summary, it was found that the method can be used to monitor soil for the presence of acephate and its degradate, methamidophos, at the levels claimed by the registrant.

Method performance met recovery (70-120%) and precision (RSD $\leq 20\%$) objectives at all spiking levels. Slightly lower recoveries were observed for samples taken through the cleanup procedure as compared to the samples not cleaned up. The results obtained were comparable to those reported by the registrant.

It was stated by ECS that the method reported limits of detectability as 0.020 $\mu\text{g/g}$ for acephate and 0.010 $\mu\text{g/g}$ for methamidophos, but does not describe how these values were determined. The lowest fortification levels for which data were reported are 0.250 $\mu\text{g/g}$ for acephate and 0.10 $\mu\text{g/g}$ for methamidophos. The Method Detection Limit (MDL) was set a 0.05 $\mu\text{g/g}$ and 0.025 $\mu\text{g/g}$, respectively, for acephate and methamidophos; while the Limit of Quantitation (LOQ) was set at 0.20 and 0.10, for acephate and methamidophos, respectively.

Please request that the registrant send a copy of the non-confidential method to the following address for inclusion in the new ECM manual:

Laboratory Chief
U.S. Environmental Protection Agency
Environmental Chemistry Laboratory
Building No. 1105
Stennis Space Center, MS 39529

If you have questions, please call me at (703) 305-7991.