



VIA ELECTRONIC MAIL: dmcclure@waterboards.ca.gov

15 January 2010

Mr. Daniel McClure, P.E.
Water Resource Control Engineer/Project Manager TMDL Unit
Central Valley Regional Water Quality Control Board (CVWRQCB)
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

RE: Phase-III Water Quality Criteria (WQC) Derivation Method Developed for Malathion

Dear Mr. McClure:

The Western Plant Health Association (WPHA) welcomes the opportunity to comment on the technical document authored by Isabel Faria, Ph.D., Amanda Palumbo, Ph.D., Tessa Fojut, Ph.D., and Ronald Tjeerdema, Ph.D., of the Environmental Toxicology Department, University of California at Davis, concerning their updated methodology for deriving freshwater water quality criteria for the protection of aquatic life that was previously developed (TenBrook et al. 2009); entitled "Malathion Criteria Derivation - Draft."

WPHA supports the more comprehensive technical comments provided by the major registrant of malathion – Cheminova, Inc. WPHA represents the interests of fertilizer and crop protection manufacturers, distributors, formulators and retailers in California, Arizona, and Hawaii, and our members comprise more than ninety percent of all the companies marketing crop protection products in these states.

WPHA restates our previous concerns about the CVRWQCB embarking on a quickly and narrowly focused policy towards developing an excessively conservative WQC Method for 7 active ingredients to then be applied to listed "waterbodies" just within the Central Valley. In the interest of brevity, please refer to our previously submitted comment letter on diuron (dated & submitted on 4 December 2009) that had outlined our reasoning for objecting to this initiative, and had offered in its place our recommendation to closely monitor and adhere to US EPA's national program to address issues you have raised over limited aquatic toxicity data from pesticides.

In accordance with the request for public comments, WPHA is providing the following items for your sincere consideration before finalization of this WQC Method for malathion:

1. We request that the UCD authors of this Method (Faria et al.) clearly define the proposed numeric criteria which do not have a "detrimental physiological responses" in aquatic life.
2. Impurities in older materials may contribute to toxicity. For older studies, the quality of malathion would be very different from that currently produced by the major registrant. Studies should be screened thoroughly to determine the source and purity of the test material. This should include identifying and quantifying levels of any impurities, and those not equivalent should be discarded.

Many studies performed by the major registrant of malathion determined to be acceptable by US EPA were not included by the UCD authors. Registrant studies follow Good Laboratory Practice (GLP) requirements and standard study guidelines. These studies are reviewed stringently by US EPA based on meeting the guideline requirements and GLP. This should take precedence in the development of the Method.

3. The removal of certain taxa (e.g., rotifers, annelids, and mollusks) from consideration is inconsistent with the goal of a representative “unbiased” species sensitivity distribution (SSD). The purpose of the SSD is to represent the entire community. The CVRWQCB and UCD authors should consider a broader range of statistical distributions for estimating SSDs, including polynomial, Fisher Tippett, Weibull and Gompertz distributions.
4. The UCD authors of this Method incorrectly imply that the disappearance of a single species will lead to community-wide effects in an ecosystem. In fact, such occurrences are rare and for malathion, there is specific data to rebut this claim. Mesocosm and field studies demonstrated that at relatively high malathion concentrations (up to 30 ppb) there were no community-level effects in aquatic ecosystems. This appears to have been overlooked or not considered by the UCD authors. These studies should be considered in a multiple lines of evidence (MLOE) approach.
5. We strongly disagree with the UCD author’s conclusion – that 3 years is required before recovery following a contaminant pulse. Even in the citations provided to justify this point, most studies show recovery on the order of days to weeks. Mesocosm data available for malathion show rapid recovery of sensitive invertebrate species such as daphnids.

Thank you for your consideration of WPHA’s comments concerning the updated methodology for deriving freshwater WQC for the protection of aquatic life authored by Dr. Faria et al. WPHA looks forward to reviewing your responses to our letter. We continue to welcome all opportunities to work with CVRWQCB on this and other important water quality issues.

Sincerely,



Nasser Dean
Director, Environmental & Regulatory Affairs

cc via email: Ken Landau, Assistant Executive Officer
Jerry Bruns, Environmental Program Manager
Ronald Tjeerdema, Ph.D., University of California at Davis
Tessa Fojut, Ph.D., University of California at Davis