



CHEMICAL PRODUCT DEVELOPMENT
AND DEFENSE

MEMORANDUM

Via E-Mail

DATE: December 8, 2009

TO: Clients and Friends

FROM: The Acta Group, L.L.C.

RE: SAP Considers Scientific Issues Associated with Field Volatilization of Conventional Pesticides

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Scientific Advisory Panel (SAP) met December 1-3, 2009, to consider and review scientific issues associated with field volatilization of conventional pesticides. The U.S. Environmental Protection Agency (EPA) stated that its goal is “to have a set of procedures that include transparent methodologies and data inputs that will guide the assessment of bystander exposure resulting from field volatilization of conventional pesticides in a straight-forward and user-friendly fashion.” EPA is seeking comment from SAP on the adequacy of the toxicological and exposure assessment methodologies; the applicability, analysis, and use of available air monitoring data; the strengths and limitations of the models being considered by EPA for predicting flux of conventional pesticides; and the overall presentation of the issues related to field volatilization of conventional pesticides with respect to the overall clarity and transparency of the science. The docket, which includes comments submitted to SAP and meeting materials, is available at <http://www.regulations.gov/search/Regs/home.html#docketDetail?R=EPA-HQ-OPP-2009-0687>.

The first day of the meeting was spent with EPA experts, from both the Office of Pesticide Programs (OPP) Health Effects Division and the Environmental Fate and Effects Division, presenting the methodologies for: (1) estimating the amount of pesticide volatilizing; (2) estimating the movement of the pesticide and the amount that bystanders might be exposed to; (3) estimating the inhalation toxicity benchmark either from inhalation or oral toxicity

The Acta Group, L.L.C.
1203 Nineteenth Street, N.W.
Suite 300
Washington, D.C. 20036
TEL: 202/266-5020 • FAX: 202/557-3836
WEB: WWW.ACTAGROUP.COM

The Acta Group EU, Ltd
Avanta Royal Mills
17 Redhill Street
Ancoats Urban Village
Manchester M4 5BA
TEL: +44 (0) 161 216 4260 • FAX: +44 (0) 161 216 4261
WEB: WWW.ACTAGROUP.COM

Registered in England No. 5307852
Registered office: The Acta Group EU, Ltd, c/o PKF (UK),
LLP Sovereign House, Queen Street, Manchester M2 5HR096



CHEMICAL PRODUCT DEVELOPMENT
AND DEFENSE

Memorandum to Clients and Friends

December 8, 2009

Page 2

studies; and (4) characterizing the risk based on the exposure values from Step 2 and the toxicity values from Step 3. Our separate memorandum reports on today's announced revised risk assessment methods for workers, children of workers in agricultural fields, and pesticides with no food uses.

EPA told SAP that data on pesticide volatilization are limited for all pesticides except fumigants. EPA is trying to address volatilization concerning bystander exposure for the last ten years. EPA stated that most available studies for conventional pesticides are done for aerosols (particulates) and not vapors (gas phase) and that the available data for vapors are very limited in terms of number and quality.

The SAP had many questions about the models EPA chose to estimate the movement of the pesticide concerning bystander exposure (*i.e.*, the Pesticide Emission Assessment at Regional and Local scales (PEARL) 3.3.3 and Pesticide Root Zone Model (PRZM) 3.12.2.). Some SAP members stated outright that these models were "wrong" because PEARL appeared to over-predict while PRZM under-predicted. SAP questioned a number of EPA's assumptions and disagreed with EPA's contention that these models and methods would "reasonably predict in a conservative sense." EPA stated in many ways that these models are still at their infant stage and can only be considered for screening purposes.

SAP proposed changes in the conduct of both monitoring and inhalation toxicity studies. SAP's conclusions will be available in 60 to 90 days.

* * * * *

We hope this information is helpful. As always, please call if you have any questions.