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Dow AgroSciences Perspectives on the Recent EPA Preliminary Human Health Assessment for Chlorpyrifos

- Dow AgroSciences is conducting a thorough evaluation of EPA's recently issued preliminary human health assessment for the insecticide chlorpyrifos, released for comment as part of the Registration Review program.
- We welcome this opportunity to offer comment and believe that stakeholder input on the preliminary assessment can assist the Agency in producing a revised and updated final assessment.
- Current uses of chlorpyrifos are supported by health surveillance of workers and applicators, more than 5,000 studies and reports evaluating health and safety and four decades of practical experience with the product in use.
- Dow AgroSciences cooperated with EPA's review, supplying new data as requested to support the preliminary assessment. We are confident that the issues raised in this draft can be resolved with a comprehensive evaluation of the data.

Dow AgroSciences will respond to all issues noted by EPA once we have thoroughly reviewed the preliminary assessment. In the interim, we offer the following perspectives.

EPA's assessment is part of an ongoing review program applicable to all pesticides.

- Registration Review is a 15-year program during which EPA is required by law to reevaluate all existing pesticides and approved uses for potential human health and environmental impacts. The preliminary chlorpyrifos assessment is being completed by EPA as part of this standardized program applicable to all pesticides.
- The Registration Review program is designed to occur in phases for each pesticide, with a high degree of transparency and multiple opportunities for stakeholder inputs. Release of a preliminary human health assessment is only an intermediate phase in a lengthy regulatory process.

Chlorpyrifos meets important grower needs.

- Growers use chlorpyrifos because it's reliable and well-established. It controls most insect pests. It's authorized for use on most crops via a wide range of delivery systems. It doesn't persist in the environment. It's much less detrimental to beneficial insects than many common alternatives. It allows rotation with other products to avoid insect resistance, and

it serves as a key input in many grower integrated pest management programs, especially for minor use crops.

Use of chlorpyrifos has been authorized in about 100 nations by regulatory authorities charged with the protection of public health.

- Nations with well established regulatory systems in which chlorpyrifos is registered for use include the U.S., Canada, the United Kingdom, Spain, France, Italy, Japan, Australia and New Zealand.

Over the past decade, chlorpyrifos use in the U.S. has been tightened to reduce exposures. Uses that remain represent significant agricultural needs.

- As a result of regulatory initiatives and changes in agronomic practices, since the year 2000 the amount of chlorpyrifos used in the U.S. (by weight) has been cut by about two-thirds.
- Most U.S. residential uses of chlorpyrifos were eliminated in 2000, and since that time use of chlorpyrifos in agriculture has been reduced by about 40 percent.
- Additionally, remaining U.S. agricultural uses of chlorpyrifos have been significantly revised in many cases to reduce the potential for residues on produce. With apples, for example, use of the product is only allowed on dormant trees or tree trunks (i.e., so the treatment never touches the fruit).

Dietary exposures from remaining chlorpyrifos uses are very low

- Based on the most recent U.S. government produce monitoring, dietary exposures to chlorpyrifos are very low. While results differ by commodity, monitoring in the latest year of record found chlorpyrifos on just under two percent of produce tested (USDA Pesticide Data Program 2009).
- Also, in the latest year of record, government monitoring showed in the few instances in which chlorpyrifos residues were found on produce that the levels were generally a hundred or more times below exposures shown to produce no biological response in laboratory tests.

Growers have an increased need for chlorpyrifos due to the phase-out or elimination of other products.

- Just as uses of chlorpyrifos have been reduced since 2000, potential alternative products have been eliminated by regulatory initiatives as well. Growers of many minor use crops now have few reliable options for replacement technology if chlorpyrifos were less available.

- No product has been more thoroughly tested than chlorpyrifos. Of the crop protection products still remaining to growers, chlorpyrifos is clearly the most thoroughly researched and in many instances offers the greatest flexibility and utility in terms of crops and insect control options.

Dow AgroSciences expects to request more time for stakeholder review and comment.

EPA's preliminary assessment contains hundreds of pages of technical information, and has taken the EPA a year longer than originally anticipated to develop. Given the complexities of the issues involved and the importance to agriculture of chlorpyrifos, Dow AgroSciences intends to ask EPA for an additional 60 days for public comment. This would ensure that all interested parties have an opportunity to evaluate the draft and provide thorough responses.

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