



June 17, 2016

[filed via www.regulations.gov]

Susan Lewis
Director, Registration Division
Office of Pesticide Programs
U.S. Environmental Protection Agency

RE: Proposed Registration of Sulfoxaflor for Use on Agricultural Crops, Ornamentals and Turf. Docket No. EPA-HQ-2010-0889.

Dear Susan:

EPA has sought public comment on its proposed registration of sulfoxaflor, without publication of a notice in the Federal Register (Docket No. [EPA-HQ-OPP-2010-0889-0407](http://www.regulations.gov)). CropLife America (CLA) wishes to comment on tank mixes in the context of this sulfoxaflor docket.

CLA is the national trade association that represents the manufacturers, formulators and distributors of crop protection products. CLA's member companies produce, sell and distribute virtually all the crop protection and biotechnology products used by farmers, ranchers and landowners in the United States. CLA comments publicly on issues of general importance and concern to our member companies.

In the *Proposed Registration of Sulfoxaflor for Use on Agricultural Crops, Ornamentals and Turf* (Docket No. [EPA-HQ-OPP-2010-0889-0411](http://www.regulations.gov)), p. 10, EPA clearly spelled out several benefits of the use of tank mixes of pesticide products in production agriculture:

A common agricultural practice involves tank mixing of pesticides, resulting in the co-occurrence of multiple chemical stressors to target pests. The practice of tank mixing can result in significant economic benefits to the grower by allowing control of a wider variety of pests in a single application without incurring the expense of sequential applications. Additionally, by reducing the number of visits to the agricultural field, the grower is also reducing fossil fuel use and emissions from large agricultural equipment, as well as the potential exposure to pesticides that can result from multiple visits to the same area being treated. It is also widely accepted that the practice of mixing products with different modes of action is essential to the management of insect resistance. Because insect resistance is known to have a very costly impact to overall crop yields, which in turn negatively impacts growers' harvests and the price of commodities to the consumer, tools that aid in the prevention of resistance are considered to be a very important benefit to agriculture.

In recent comments to EPA on dicamba (Docket No. [EPA-HQ-OPP-2016-0187-0857](http://www.regulations.gov)), the Weed Science Societies cited research demonstrating the benefits of tank mixes over sequential use of different pesticides (in rotation) —

... tank mixes, including two or more effective herbicide mechanisms of action (MOAs), in a simultaneous application is one of the most effective herbicide strategies for delaying the evolution of herbicide resistance ... While herbicide (MOA) use rotation, rather than tank mixtures, is often recommended as a useful strategy for delaying resistance evolution, it is not considered as effective as tank mixing for this objective. A part of the best management practices for delaying resistance ..., rotations were seen as “useful but not sufficient because they subject a weed population to a single [herbicide mode of action] at a time”. However, recent work ... suggests that rotation actually increases the likelihood of finding herbicide-resistant weeds.

Dow explains in a letter to its customers:

DAS [Dow AgroSciences] believes tank mixes with other active ingredients are vital to American agriculture as they provide broad spectrum control and reduce the time required by multiple applications. Prohibiting or limiting such tank mixes would severely inhibit the ability of growers to manage pests effectively, while greatly increasing application costs and the resulting carbon footprint created by multiple applications.

In commenting on the dicamba docket ([EPA-HQ-OPP-2016-0187-0806](#)), CLA stated:

CLA opposes the prohibition of tank mixes included in this proposed registration decision. ... CLA also is concerned about the impact a broad tank mix prohibition will have on agriculture more broadly. If farmers are unable to use tank mixes they would need to apply pesticides individually, costing the farmers time and money and unnecessarily increasing agriculture’s carbon foot print.

Access to fields with application equipment can be severely limited by weather events, predicted or not. The window of susceptibility to control specific weed, pest, and disease problems may be very narrow. Application delays caused by weather can allow weeds, diseases, and pest infestations to grow beyond that stage where they can be controlled effectively, with significant negative implications for subsequent crop management and ultimate crop yield. Growers and applicators must take full advantage of each window of opportunity for weed, pest, and disease control, which often means combining pesticide applications in tank mixes, including herbicides, insecticides, and fungicides. For these reasons, CLA asks that EPA not adopt a broad policy prohibiting tank mixes.

Timing of pest control

In addition, tank mixes can facilitate proper timing of pesticide application to treat pest problems when they are most susceptible to control. The optimum period for pest control may be fairly short. If it can be combined with another treatment for a different pest, weed or disease problem through use of a tank mix, all of the benefits outlined above accrue. Waiting to apply one pesticide in order to avoid using a tank mix can miss the optimum window of opportunity, thus reducing pest control achieved, or requiring a higher use rate to achieve desired control, or requiring use of another product with less desirable characteristics of environmental safety or

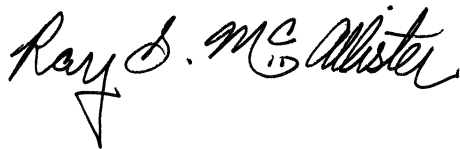
pest control or crop safety. All of these factors then can increase production costs and reduce crop yield, if tank mixes are prohibited.

Costs of prohibiting tank mixes

Surveys of custom machinery rates for farming operations, conducted by representative states¹, estimate the cost of pesticide application in the range of \$6 to \$13 per acre. Production costs would increase by this amount for each additional field application made necessary by a prohibition on tank mixes. Such estimates would account for the costs of fuel, machinery maintenance, depreciation, and labor. The surveys would not necessarily account for:

- soil compaction and unavoidable crop damage, caused by addition trips across the field, and their subsequent effects on crop management and yield; and
- investment in additional application equipment required to service the same amount of acres.

Sincerely,

A handwritten signature in black ink that reads "Ray S. McAllister". The signature is written in a cursive style with a small triangle at the end of the last name.

Ray S. McAllister
Senior Director, Regulatory Policy

Cc: Sheryl Kunickis, USDA/OPMP

¹ Halich, G (2016) Custom machinery rates applicable to Kentucky (2016). University of Kentucky Cooperative Extension Service. [AEC 2016-01](#)
Ibendahl, G (2016) Custom Rate Comparison for 2016. Kansas State University Department of Agricultural Economics. Publication: [GI-2016.1](#)