June 30, 2014

SUBMITTED ELECTRONICALLY

Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

RE: Docket No. EPA-HQ-OPP-2014-0195; Evaluation of 2,4-D Choline Salt Herbicide on Enlist Corn and Soybeans

Dear Sir or Madam:

On behalf of the members of the Iowa Farmers Union (IFU), thank you for accepting our written comments regarding the application by Dow AgroSciences to amend their 2,4-D choline salt herbicide for use on 2,4-D tolerant varieties of corn and soybeans.

Iowa Farmers Union is the oldest farm organization in the state of Iowa. Our family farmer members represent a diverse mix of farming types, including conventional corn and soybean farms, livestock and dairy operations, organic farms, and direct market fruit and vegetable operations.

Many of our conventional commodity farmers rely on commercial pesticides as a standard part of their farming operations, and we recognize the integral role of responsibly deployed pesticide technology in modern production agriculture. At the same time, our membership includes an increasing number of organic farmers, specialty crop producers and direct market fruit and vegetable farmers whose operations are vulnerable to significant damage from pesticides such as glyphosate or 2,4-D. In 2013, there were nearly 800 certified organic farms in Iowa, a number that has grown substantially over the past decade. Many of our beginning farmers in particular rely on high-value organic, fruit and vegetable, and specialty crops that allow them to begin new farming operations on a relatively small number of acres of increasingly expensive Iowa farmland.

As more of Iowa’s conventional commodity production is inter-mixed with parcels of organic, fruit and vegetable, and specialty crops, we have witnessed a greatly increased need for improvements to the rules and best management practices for pesticide use that will allow many different types of family farms to exist and thrive side-by-side. As seed and chemical companies seek approval of new technologies such as the Enlist seed varieties and herbicide, policy makers and regulators have a responsibility to take the initiative to meaningfully address the challenges that farmers already have faced as a result of the widespread adoption of pesticide tolerant seed varieties and related commercial pesticides and to ensure that we are not simply repeating the mistakes of the past. The diversity and integrity of our food supply, as well as the economic viability of the independent family farm hangs in the balance.

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The application by Dow AgroSciences to approve new uses for the 2,4-D choline salt herbicide is paired with an application to the U.S. Department of Agriculture (USDA) for approval of 2,4-D tolerant varieties of corn and soybeans. The USDA’s Animal and Plant Health Inspection Service (APHIS) conducted a review of the 2,4-D tolerant seed varieties and published a draft environmental impact statement (Docket No. APHIS-2013-0042), which raised a number of environmental impacts of concern to our farmers:

**Increased potential for new varieties of pesticide tolerant weeds.** As the use of glyphosate and glyphosate tolerant corn and soybean varieties has become nearly ubiquitous across Iowa, our farmers have seen widespread problems with glyphosate resistant weeds. As these super-weeds have spread, farmers have lost much of the economic and environmental benefit that was promised by industry and federal regulators when this technology was first introduced. In exchange for paying a higher price for genetically modified seed, accompanied by unprecedented legal restrictions on the grower of the seed, farmers were promised higher yields, less chemical use, less need for extensive tillage and less labor overall. The higher seed prices and cumbersome legal restrictions incurred by farmers have not gone away, but the promised benefits have continued to evaporate with each passing year. As more glyphosate resistant weeds pop up, more chemicals and different varieties of chemicals are necessary on the farm; more tillage is required; and farmers have to work harder and burn more tractor fuel to keep weeds down and yields level. The continued high rate of topsoil loss across Iowa, a state that has enthusiastically embraced glyphosate tolerant corn and soybeans, is a testament to the failure of the technology to reduce tillage or improve soil conservation practices.

Now our farmers are being asked to pay yet more money for essentially the same technological approach to weed control that likely will lead to the same end result, and there is high probability that we will be introducing a new family of super-weeds into our ecosystem. To date, we have seen little in either the USDA or the EPA approval process that would result in any meaningful changes to prevent this scenario from playing out in exactly the same way with 2,4-D tolerant seed varieties. The proposed label for the 2,4-D choline salt herbicide contains very general language relating to herbicide resistance management, but the practices identified (crop rotations, cover cropping, tillage, timing the application properly, avoiding over-reliance on a single pesticide, etc.) are hardly recent innovations in agricultural research. These very same recommended practices failed to prevent the problems seen with glyphosate tolerant seed varieties and glyphosate resistant weeds, with many farmers only adopting different management practices after the resistant weeds had already appeared in their fields. Something more is required than deploying a nearly identical technology with a nearly identical set of admonishments and hoping for a better result.

**Increased potential for spray drift and volatilization drift damage to non-pesticide tolerant crops.** As part of its environmental review of proposed 2,4-D tolerant corn and soybean seed varieties, APHIS declined to analyze the cumulative environmental impacts on non-pesticide tolerant crops and other natural and biologic resources that would result from the widespread application of the 2,4-D choline salt herbicide. APHIS stated as its justification for this omission that the EPA would perform this review and fully address this set of impacts as part of its pesticide approval process. To date, we have not seen the full environmental review of this issue that APHIS seemed to promise as part of the EPA approval process and that the National Environmental Policy Act (NEPA) requires. Neither USDA nor EPA has proposed any rules or protocols for usage that alleviate our concerns about the ecological and

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economic risks to organic, fruit and vegetable, and specialty crop farms if the 2,4-D choline salt herbicide becomes widely used. While pesticide spray drift already is an issue for many farmers with the current widespread applications of glyphosate, the 2,4-D choline salt herbicide raises the added concern of having a high potential for volatilization drift.

The proposed label for the 2,4-D choline salt herbicide does contain general language related to spray drift management. No aerial application and a minimum upwind buffer both are important protections against the high level of volatility of this chemical and the dangers that it poses to human and ecological health. However, given the known potential for volatilization drift that comes with 2,4-D, a 30-foot buffer often would not be adequate to protect nearby crops that are sensitive to the chemical. We also are concerned that the proposed label suggests that applicators should rely on state sensitive crop registries to locate neighboring crops that may be especially sensitive to damage from drift or drift volatilization. The label itself acknowledges that these registries are not always available, and in practice, where they are available, they are often inadequate or incomplete.

The remaining management practices simply repeat what farmers and applicators have long known: that applicators should adequately consider wind speed, wind direction, temperature and humidity and proximity to sensitive areas before deciding whether and when to apply a pesticide. Despite this general knowledge of drift management practices, we still see too many instances of pesticide drift negatively impacting neighbors. Even a modest amount of off-site spray drift can cause catastrophic damages to a neighboring farm, including losses to the current crop, loss of organic certification, loss of business reputation with local consumers, and potential health impacts for the farm family and farm workers. We have received reports from farmers, faced with both economic losses and negative health impacts from multiple instances of off-site spray drift, who have been unable to continue farming. If the applicator can claim to have followed the very general and minimal requirements of the EPA label, this may limit the ability of damaged parties to fully recover losses incurred through no fault of their own.

Iowa farmers have a long history of negative impacts from 2,4-D - including decimation of the state’s grape growing industry several decades ago - that more than justifies our caution and concern with the current application by Dow AgroSciences. While the proposed formulation and usage of the 2,4-D choline salt herbicide may be somewhat different or improved from past practices, no detailed review has been made available to demonstrate that our organic, fruit and vegetable and specialty crop farmers in particular should not be extremely nervous about re-introducing this highly volatile chemical into widespread application. Farm neighbors should not be forced to hash out these contentious issues on their own, on an ad hoc basis and after damages have already occurred. Leadership by the EPA and other responsible agencies is critical in recognizing and responding to past problems and deploying new technologies only in the context of rules and protocols that ensure safe, responsible and effective use.

Thank you for your consideration of these comments.

Sincerely,

Jana M. Linderman
President

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