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U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC), 28221T
1300 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: Docket No. EPA-HQ-OPP-2009-0326-0053; Registration Review: Proposed Interim Decision for Several Pesticides – Pronamide

To Whom It May Concern:

The Arizona Farm Bureau Federation represents farmers and ranchers from across Arizona. Our members produce an array of crops and livestock that contribute over $23.3 billion of economic impact to the state. Our comments below address the Environmental Protection Agency's (EPA) amended proposed interim decision (APID) for pronamide, as this chemistry plays a critically important role in the production of lettuce in Arizona.

**Pronamide Applications in Arizona**

Approximately 95% of the leafy vegetables consumed in the in the U.S. from November to March are produced in Arizona, primarily in the Yuma area. Growers deal with a host of challenges during the growing process including weeds which are an ever-persistent problem. If weeds are not managed quickly and effectively, they can choke out a crop by competing for light, nutrients, and moisture and serve as a refuge for insects and diseases. High value crops, like head and leaf lettuce, have strict quality standards that allow for little to no damage or contamination of the harvested product.

There are limited options for weed control in lettuce including pronamide, bensulide, and benfluralin. Pronamide is considered an effective herbicide in Arizona to address a broad spectrum of broadleaf weeds and grasses. The alternatives while effective have a more limited spectrum, or in the case of benflaralin are applied in conjunction with pronamide and bensulide. Consequently, maintaining the current product availability is important not only for weed management, but for maintaining resistance management.

Since 2016 an average of 72,820 acres of lettuce were planted annually. The average annual application of pronamide during that same time period was about 41,000 acres, according to the Arizona Pest Management Center (APMC) use database. While this indicates that pronamide is applied to well over half of the total planted acres, this is an underestimate of actual use. Because Arizona does not require 100% use reporting, APMC's data tends to underestimate applications made by private growers, which

do not require reporting in all cases. Despite the shortcoming in the data, it is clear that pronamide is an important crop protection tool for Arizona's lettuce growers.

Nearly all pronamide applications in Arizona lettuce production are done through chemigation. According to Barry Tickes, University of Arizona County Agent and researcher, who works closely with growers to address weed management, more than 90% of pronamide applications on Arizona lettuce are done through chemigation. Chemigation works well because it allows the product to remain in the soil profile for optimum weed management. Application takes place just before the first true leaves appear.

**Concerns with Amended Preliminary Interim Decision**

The APID issued by EPA replaces its 2016 PID and includes a 10x uncertainty factor in the absence of a Comparative Thyroid Assay (CTA). As result, the APID includes new requirements based on the 10 x uncertainty factor. However, the registrant of pronamide has stated the CTA study is in progress with an expected completion date of late Summer 2021. We believe it is premature for EPA to move forward with the current APID until it has received and reviewed the CTA.

Even in the absence of the CTA, we have concerns with EPA's APID and the proposed requirement for engineering controls (i.e. closed handling systems) for mixing and loading of chemigation applications, as this the primary application method used by Arizona growers. In reaching out to our members, we learned that closed handling systems are not widely used. Additionally, we found through inquiries with a local equipment dealer that the cost of these systems ranges from $750 to $2,000. Because many of the lettuce growers have large operations spread out in different areas, some indicated that they would need to purchase more than one system.

However, what is more problematic is that it appears the human health and occupational risk assessment exposure scenario which led the EPA to propose engineering controls for the mixing and loading chemigation applications is overstated and does not accurately reflect real world exposure in typical Arizona lettuce production. We encourage EPA to refine is exposure scenario based on the information provided below.

<u>Revise the Application Rate for Chemigation</u>

In its analysis, EPA used an application rate for chemigation (2lb a.i./acre or 5 pints product/acre) that is two times higher than what is on the product label. While in fact, the product label application rate for lettuce chemigation is 0.5 – 1 lb a.i./acre or 1.25 – 2.5 pints/acre. An analysis conducted by APMC for chemigation applications in lettuce found the mean application rate across all formulations of pronamide to be .617 lbs. a.i./acre. Higher rates of usage do occur as was reported in the APMC data to help with contact activity.

EPA should revise the application rate of pronamide for chemigation to levels that match the product's label for lettuce. Furthermore, EPA should consider data compiled and submitted during the open comment period by the APMC noting its estimation of application rates in Arizona.

<u>Revise the Number of Acres Treated</u>

In its analysis, EPA assumed a worker treats 350 acres in an eight-hour day. This risk assessment is based on average crop circle acreage of 100 to 120 acre per circle, with three circles treated

per day. However, this is not an accurate representation of what takes place in Arizona lettuce production. Lettuce fields in Arizona are not planted in circles, and field sizes range from 10 to 40 acres. Lettuce is continually planted in small fields to support continual harvest. Additionally, in conversations with our members they indicated that the range of acres one worker can treat in an eight-hour day is generally 40 to 80 acres.

EPA should revise the number of acres treated to 40 to 80 acres to account for actual exposure scenarios that occur in lettuce production.

Account for Minimal Exposure Time of the Mixing and Loading Process

The mixing and loading exposure time for a worker is limited compared to length of the overall chemigation job. According to our growers, the mixing and loading process for pronamide chemigation takes about 15 minutes and the overall application time ranges from 1 to 2 hours and treating up to 40 acres per job. The overall process takes roughly 3.5 to 4 hours from set up to tear down; given this length of time, one worker is only able to do up to two chemigations in one 8-hour day. The applicator/worker remains present for the duration of the chemigation, but generally in vehicle nearby to make sure there are no issues with the equipment and application.

EPA should consider the limited amount of time in which workers conduct the mixing and loading process of a chemigation job.

Pronamide is an important crop protection tool for many growers in our state and has been used for many years without evidence of an unreasonable risk to human or environmental health. Lettuce crops grown in Arizona on which pronamide is used would be negatively impacted if major restrictions were put on its use as a crop protection tool.

In addition to our comments, we support those submitted by the Arizona Pest Management Center and the Yuma Fresh Vegetable Association. We encourage EPA to consider our comments as the agency awaits receipt of the registrant's CTA.

Sincerely,

Stefanie A. Smallhouse

Stefanie Smallhouse, President
Arizona Farm Bureau Federation