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COUNCIL OF PRODUCERS & DISTRIBUTORS OF AGROTECHNOLOGY
THE BUSINESS COUNCIL FOR AGROTECHNOLOGY

July 17, 2026

U.S. Environmental Protection Agency
Office of Pesticide Programs
Office of Chemical Safety and Pollution Prevention
1200 Pennsylvania Avenue NW
Washington, DC 20460

Submitted via Regulations.gov

Re: Docket ID No. EPA-HQ-OPP-2026-2973, Draft Fungicide Strategy to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Fungicides

Dear Ms. Bray:

The Council of Producers & Distributors of Agrotechnology (CPDA) appreciates the opportunity to submit comments on the U.S. Environmental Protection Agency's Draft Fungicide Strategy to Reduce Exposure of Federally Listed Endangered and Threatened Species and Designated Critical Habitats from the Use of Conventional Agricultural Fungicides.

CPDA is the Business Council for Agrotechnology, representing formulators, distributors, manufacturers, and suppliers of adjuvants, biopesticides, inert ingredients, and post-patent pesticide products. CPDA's members comprise a nationwide network that accounts for nearly 90 percent of the \$15 billion U.S. crop protection market. For nearly four decades, CPDA has worked to advance science-based, predictable policies that protect the environment while ensuring farmers have access to the tools needed to produce safe, affordable food.

CPDA supports EPA's effort to develop a transparent, predictable, and workable framework for meeting its obligations under the Endangered Species Act (ESA) while preserving access to important crop protection tools. CPDA also appreciates EPA's recognition in the Draft Fungicide Strategy that drift reducing adjuvants (DRAs) can provide practical, measurable mitigation to reduce off-site movement of pesticides and support more flexible implementation of ESA mitigation measures.

CPDA is especially appreciative that EPA has proposed to expand the availability of oil emulsion DRAs and to add guar gum DRAs as spray drift mitigation options across fungicides, insecticides, and herbicides. That is an important step toward a mitigation framework that is not only protective, but also practical for growers, applicators, registrants, and the broader crop protection value chain.

At the same time, CPDA believes the final strategy can be improved in several important respects. EPA should:

1. Revise the proposed guar DRA language to specify a minimum guar solids concentration in the final tank mixture, rather than using GPA-differentiated formulated use-rate language.
2. Recognize polymer/polyacrylamide DRAs as a critical and established class of drift mitigation tools, including for ground and aerial application scenarios where supported by data.
3. Provide a clear pathway for shear-resistant polymer DRAs to qualify for mitigation credit through a consensus ASTM standard and appropriate product label communication.
4. Correct and harmonize oil emulsion DRA minimum-rate language across the Fungicide Strategy, Ecological Mitigation Support Document, Mitigation Menu, and pesticide labeling.
5. Recognize the environmental and agronomic benefits of professional seed treatment and seed-coating technologies when evaluating potential exposure from treated seeds.
6. Continue to implement ESA mitigation through transparent, practical tools that can be updated as science, technology, and field practices evolve.

These comments focus on the areas where CPDA members have specific technical expertise: adjuvant technologies, drift mitigation, seed treatment, formulation, and practical implementation.

I. CPDA Supports EPA's Recognition of Drift Reducing Adjuvants as Practical ESA Mitigation Tools

CPDA supports EPA's decision to include additional DRA mitigation options in the Draft Fungicide Strategy. DRAs are among the most practical tools available to reduce spray drift because they can be incorporated directly into spray applications without requiring major changes to agricultural production systems. When properly matched with nozzle selection, application parameters, and product use instructions, DRAs can reduce the fraction of fine droplets most susceptible to off-site movement.

EPA's proposal to expand oil emulsion adjuvant buffer reductions beyond herbicides and to recognize guar gum adjuvants across multiple pesticide categories reflects an important evolution in the Agency's ESA mitigation framework. This approach is consistent with EPA's stated interest in identifying mitigation measures that reduce off-site transport while providing growers and applicators flexibility.

CPDA encourages EPA to maintain a clear, science-based process for evaluating additional DRA technologies as new data become available. EPA's mitigation framework should be capable of

incorporating additional DRA classes, including polymer/polyacrylamide DRAs, where data demonstrate drift-reduction performance and, where relevant, resistance to pump-shear effects under recognized testing methods. This is especially important because a workable ESA mitigation framework must provide applicators with more than one adjuvant pathway.

CPDA also supports the DRA-related comments submitted by CropLife America in this docket, which are complementary to CPDA's comments.

II. EPA Should Revise the Guar DRA Language to Use a Minimum 130 ppm Guar Solids Concentration in the Final Tank Mixture

EPA's proposed guar DRA language should be revised to better reflect how guar-based DRAs function in actual spray systems. CPDA recommends that EPA replace the current GPA-differentiated and formulated product rate guar DRA language with a criterion based on the concentration of guar solids in the final tank mixture.

Specifically, CPDA recommends that EPA revise the final Fungicide Strategy, Ecological Mitigation Support Document, Mitigation Menu, and related implementation materials to recognize formulated guar-containing DRAs when used at a rate that delivers at least 130 ppm guar solids in the final tank mixture.

Guar-based DRA products are used to modify the droplet size distribution of pesticide spray applications. These products have been developed over many years by multiple manufacturers and are formulated to meet specific application needs. Some guar products are relatively simple, while others include additional inert components such as surfactants, humectants, fertilizers, or carriers designed to optimize performance in particular spray systems.

Because guar-based DRAs function by changing the extensional viscosity of the spray solution, their efficacy is driven primarily by the concentration of guar solids in the final tank mixture, with performance also influenced by nozzle selection, tank-mixture composition, and other application parameters. In practical terms, guar products treat the spray solution, not the acre. As a result, gallons per acre (GPA) is less technically relevant than the concentration of guar solids in the spray solution.

The proposed language in the Draft Fungicide Strategy differentiates guar DRA use by spray volume. CPDA believes that approach is more complicated than necessary and less technically precise than a final tank concentration standard.

CPDA's review of data previously submitted to EPA indicates that, when guar concentration and similar nozzles are isolated, the available data do not show a meaningful or consistent relationship between GPA and fines reduction. CPDA therefore recommends that EPA use a minimum tank concentration of 130 ppm guar solids as the qualifying criterion for guar-based DRA mitigation credit.

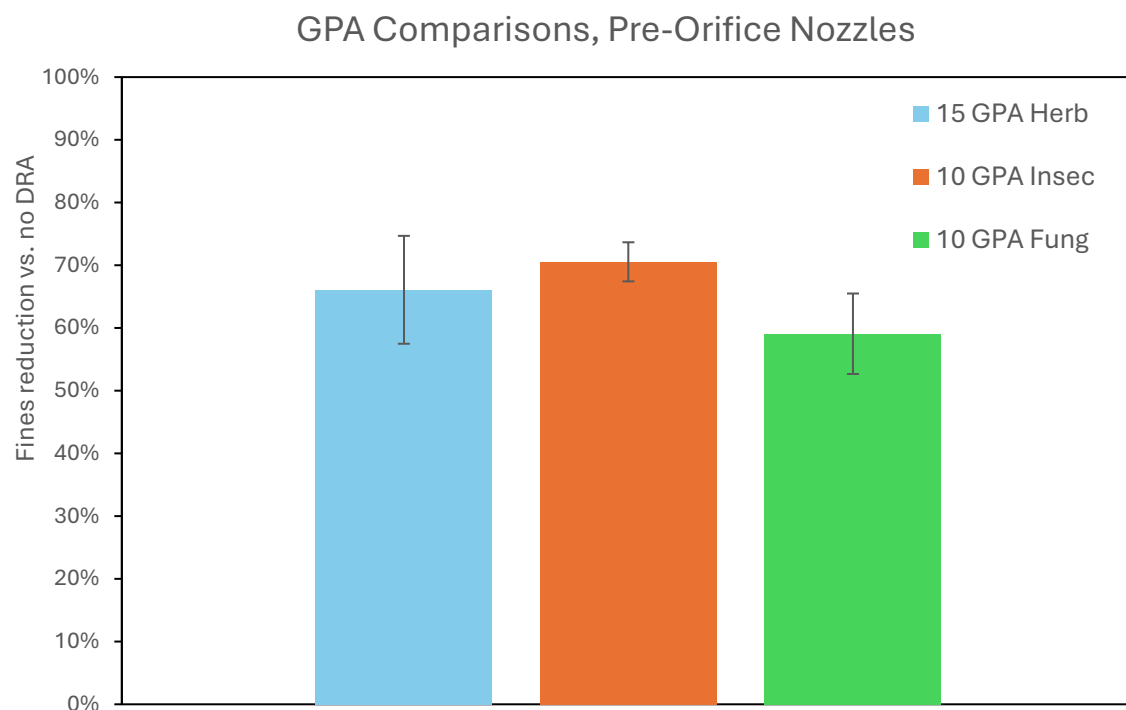


Figure 1. *Fines reduction comparisons between 10 and 15 GPA at 600 ppm guar solids tank concentration, pre-orifice nozzles. Error bars represent one standard deviation.*

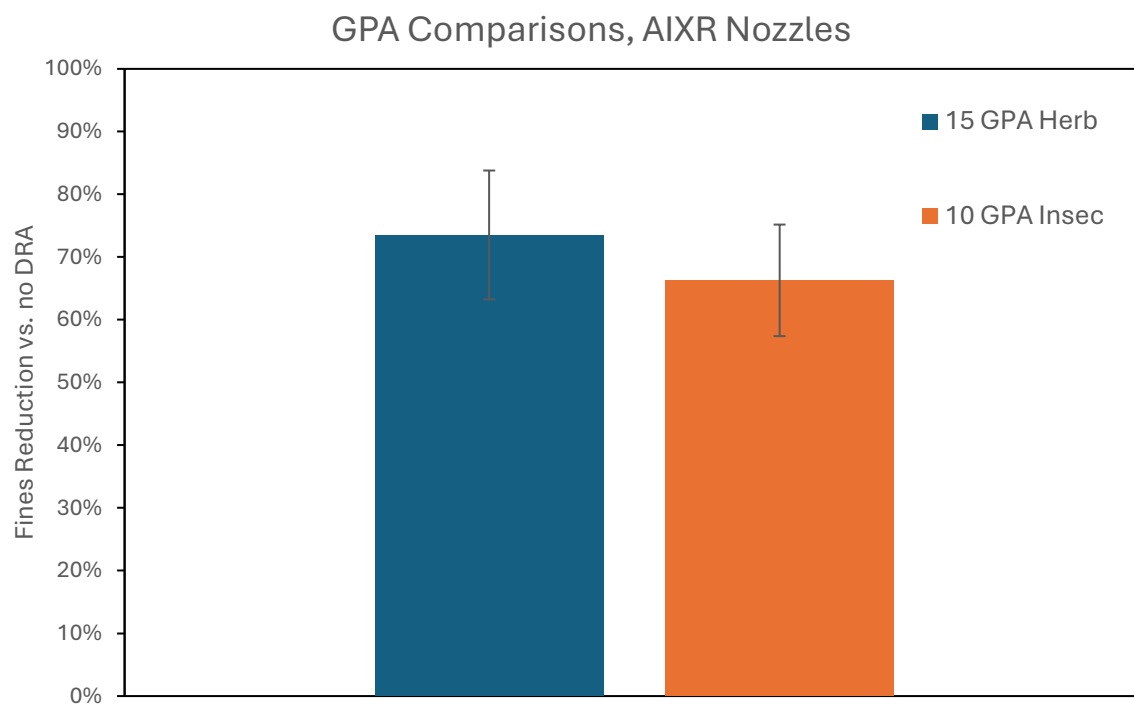


Figure 2. *Fines reduction comparisons between 10 and 15 GPA at 600 ppm guar solids tank concentration, AIXR nozzles. Error bars represent one standard deviation.*

Figures 1 and 2 compare tank mixes containing the same guar solids concentration, 600 ppm, using similar nozzles and pressures across herbicide, insecticide, and fungicide data sets. This 600 ppm comparison is not proposed as the qualifying use rate. Rather, it is used to isolate the effect of GPA while holding guar concentration constant. When concentration and similar nozzles are held constant, the data do not indicate that the change from 10 GPA to 15 GPA produces a meaningful difference in fines reduction.

CPDA also evaluated data comparing two guar products that delivered different guar solids concentrations to the tank mixture: one delivering 600 ppm guar solids and one delivering 130 ppm guar solids. These two concentrations provide useful upper and lower reference points for guar-based DRAs currently in commerce.

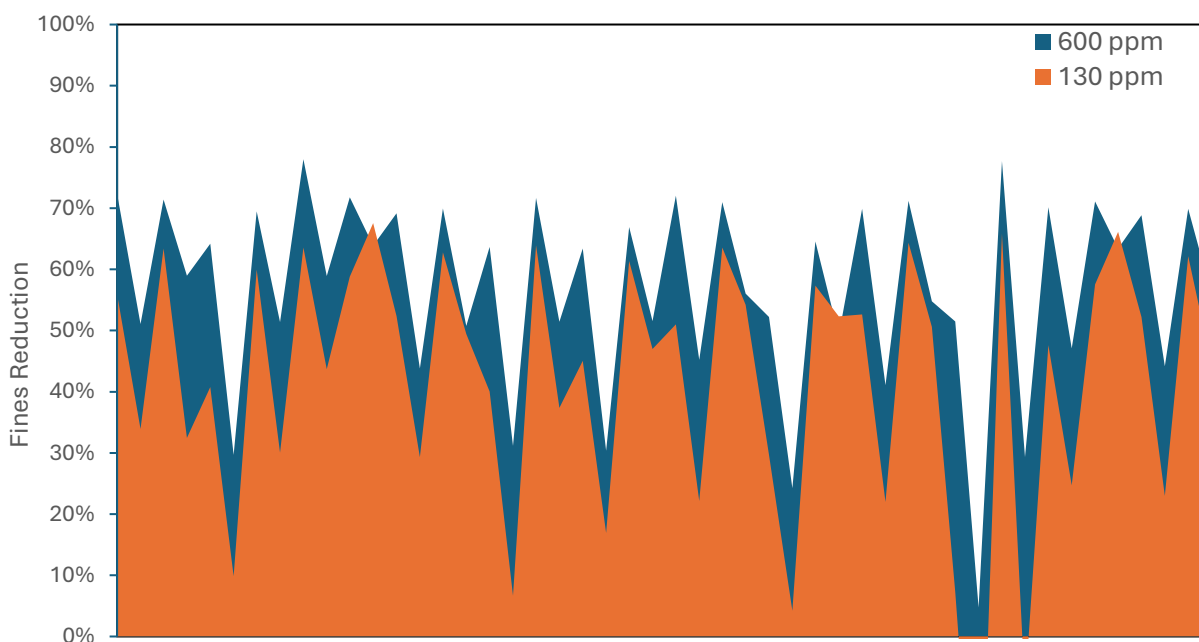


Figure 3. All insecticide data comparing reduction in fines percentage at 600 ppm and 130 ppm guar solids.

Although 130 ppm guar solids produced somewhat lower fines reduction than 600 ppm in the data reviewed, the difference was not proportional to the difference in guar concentration. The concentration ratio of 600 ppm to 130 ppm is approximately 4.62, while the average ratio of fines reduction for 600 ppm compared with 130 ppm across the insecticide data was approximately 1.53. This indicates that fines reduction over this range is not linearly dependent on guar concentration. Rather, the data support use of a minimum qualifying concentration: once at least 130 ppm guar solids is present in the spray mixture, adequate fines reduction is achieved for purposes of recognizing guar-based DRAs as a mitigation option (Figure 3).

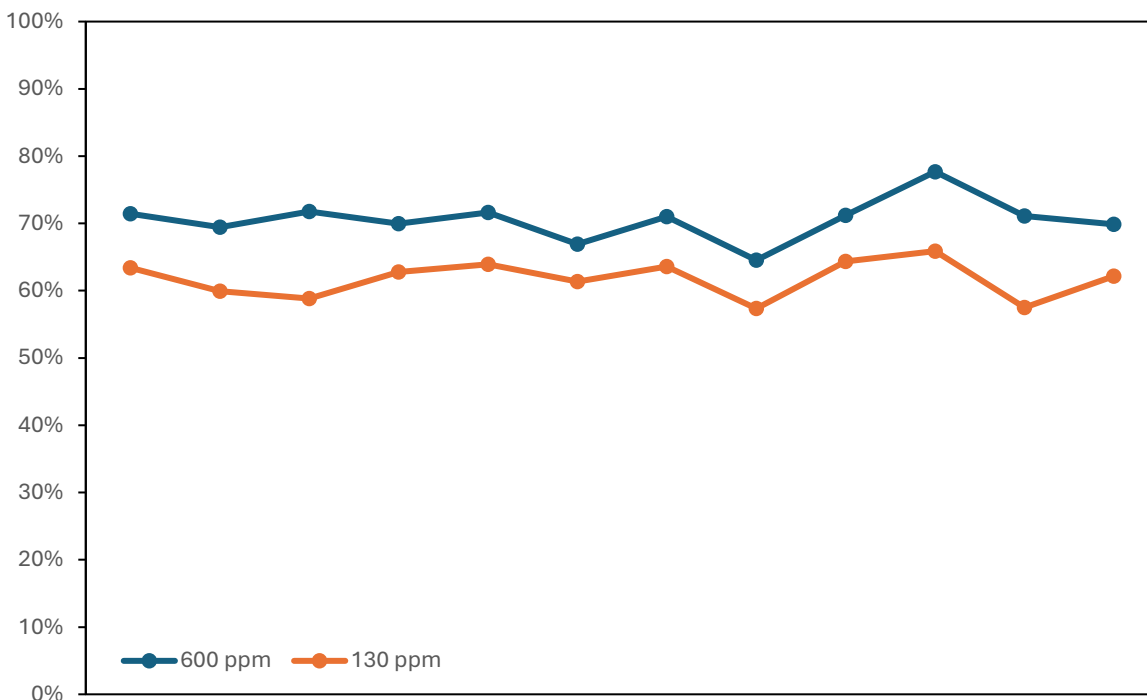


Figure 4. *Fines reduction comparisons between 600 ppm and 130 ppm guar solids concentration from the insecticide data set using TT11003 and AIXR11003 nozzles.*

Figure 4 further illustrates that while the 130 ppm guar concentration results in slightly lower fines reduction than 600 ppm, both concentrations provide strong DRA performance. CPDA therefore believes 130 ppm guar solids is an appropriate minimum qualifying concentration for guar-based DRA mitigation credit.

CPDA recommends that EPA revise the final strategy and related implementation documents to use language similar to the following:

“Apply this product in combination with a formulated, guar-containing drift reducing adjuvant at a rate that delivers at least 130 ppm guar solids to the final tank mixture.”

CPDA further recommends that guar-based adjuvant manufacturers be allowed to include corresponding label language, such as:

“When used at the labeled rates, this product delivers at least 130 ppm guar solids in the final tank mixture.”

This approach would improve clarity for registrants, adjuvant manufacturers, applicators, and enforcement personnel. It would also avoid unnecessary complexity created by separate GPA-dependent use instructions.

	Oil Emulsion Drift Reducing Adjuvants		Guar Gum Drift Rerducing Adjuvants	
ASABE Droplet size Distribution	Ground Application (minimum rate of 0.3% v:v and minimum spray volume of 15 GPA)	Aerial Application (minimum rate of 2.5% v:v)	Ground Application (minimum rate of 130 ppm guar solids and minimum spray volume of 10 GPA ¹	Aerial Application
Fine	30%	N/A	50%	N/A
Medium	30%	30%		
Coarse	15%	15%		
Very Coarse				
Extremely Coarse	N/A	N/A		
Ultra Coarse				
1 - Applicators must use a formulated guar-containing adjuvant at a rate that delivers at least 130 ppm guar solids into the spray solution, regardless of spray volume per acre.				

Table 1. *Proposed revision to EPA's adjuvant buffer-reduction table to replace GPA-differentiated guar DRA language with a minimum 130 ppm guar solids concentration in the final tank mixture.*

III. EPA Should Recognize Polymer/Polyacrylamide DRAs as a Critical and Established DRA Class

CPDA also urges EPA to recognize polymer DRAs, including polyacrylamide-based DRAs, as an important class of drift mitigation tools. Polymer DRAs have been used in agriculture for decades and remain an important tool for optimizing spray deposition and reducing off-target movement.

For CPDA members and the applicators and growers they serve, recognition of polymer/polyacrylamide DRAs is not a secondary issue. Polymer DRAs are a long-standing and widely used drift management tool across many agricultural settings. A final strategy that recognizes only a limited set of DRA chemistries could unintentionally narrow practical mitigation options and, in some cases, steer applicators toward adjuvant classes that may not be the most appropriate choice for a particular crop, tank mix, or application scenario. This concern is particularly important for specialty crops and for large-scale aerial application, where applicators need flexibility to select a drift mitigation tool that is both effective and agronomically appropriate.

High molecular weight polymers are among the original and most widely accepted DRA chemistries. They have been used in broadacre crops, row crops, high-value crops, forestry, tree and vine crops, and other agricultural settings, particularly in North America. Their utility is based on their ability to increase viscosity, especially extensional viscosity, even at low concentrations.

Increasing the viscosity of the spray liquid generally increases Dv0.5 and can reduce the portion of the spray volume contained in fine droplets, including droplets below 150 micrometers.

Reducing the fine-droplet fraction lowers spray drift potential. Polymer DRAs also may reduce droplet bounce off leaves, which can reduce additional losses of pesticide to soil and may help address secondary movement pathways such as runoff and leaching.

The scientific literature includes numerous examples of polymer DRAs reducing spray drift potential when paired with appropriate nozzles and application conditions. Examples include:

- Ozkan (2001), which evaluated several polymer adjuvants and reported reductions in driftable fines below 100 micrometers of 30 to 68 percent in crop protection product droplet size studies using XR8004 nozzles, depending on the product.
- Kannan et al. (2024), which observed that a polymer adjuvant was effective at reducing fines and thereby reducing spray drift potential of insecticides.
- Williams et al. (2008), which found a correlation between measured spray drift and the percentage of droplets below 150 micrometers and found that drift decreased with increasing extensional viscosity caused by polymer addition.
- Wang et al. (2014, 2016), which observed that optimized combinations of associative surfactants and polymers could reduce fines to minimal levels in droplet-size testing and reduce drift in drift-potential testing.
- Lewis et al. (2019) showed that polymers formulated in modern designs were effective at reducing fines and therefore spray drift potential. Lewis, R.W., Malic, N., Saito, K., Evans, R.A. and Cameron, N.R., 2019. Ultra-high molecular weight linear coordination polymers with terpyridine ligands. *Chemical science*, 10(24), pp.6174-6183.

These studies support the broader point that polymer and all DRAs can provide meaningful drift reduction. They also reinforce the importance of evaluating DRA performance in the context of nozzle selection, tank-mixture composition, and intended use. Similarly, Hewitt (2024) provides detailed context on the value of DRAs. CPDA's DRA program has consistently emphasized that optimal drift reduction is achieved when effective nozzles and effective DRAs work together rather than in opposition.

EPA should not exclude polymer DRAs from the final strategy merely because some older or less stable polymer formulations may be susceptible to shear degradation. Polymer DRA technology has evolved considerably. Modern products may include optimized polymers, associative components, or other formulation elements designed to improve stability under shear and elongation.

CPDA recommends that EPA include polymer/polyacrylamide DRAs in the final strategy through a clear, data-based pathway. CPDA recognizes EPA's concern regarding pump-shear effects for some polymer-based DRAs. That concern can be addressed through the consensus ASTM pathway described below. Once a polymer/polyacrylamide DRA demonstrates drift-reduction performance and, where relevant, resistance to pump-shear effects under an

appropriate recognized method, it should be eligible for mitigation credit. CPDA also encourages EPA to maintain a process for evaluating aerial application data for DRAs, including polymer/polyacrylamide DRAs, so that mitigation credit can be extended to aerial applications where the data support such use.

IV. CPDA Supports a Consensus ASTM Pathway to Address EPA's Pump-Shear Concerns for Polymer DRAs

CPDA recognizes EPA's concern that some polymer-based DRAs may experience performance degradation when exposed to pump shear in the recirculation or bypass line of a sprayer. CPDA also recognizes that even where shear-resistant polymer DRAs have been developed and commercialized, the product's resistance to pump shear may not always be clearly communicated to the end user.

To address this concern, CPDA has initiated a working group within the ASTM E35.22 Subcommittee on Pesticide Formulations and Delivery Systems. The working group is focused on developing a standard method to evaluate the shear resistance of polymer-based DRAs.

Although the standard has not yet been finalized, CPDA anticipates that the method will use a recirculating pump loop based on equipment and approaches described in the literature, in which an agricultural tank mix is exposed to a standardized shear condition representative of pump shear produced by a commercial sprayer recirculation or bypass pump.

Under the contemplated approach, a sample of the recirculating tank mix would be taken at a standardized interval or after a standardized number of cycles through the recirculation pump. The sample would then be evaluated using ASTM E2798, Standard Test Method for Characterization of Performance of Pesticide Spray Drift Reduction Adjuvants for Ground Application. The performance of the sheared sample would be compared against a fresh, un-sheared sample. This would allow any degradation in DRA performance caused by pump shear to be quantified.

This type of consensus method would directly address EPA's concern by providing a practical, reproducible mechanism to determine whether a polymer-based DRA maintains drift-reduction performance after representative pump shear exposure. The results could then be communicated on DRA product labels.

CPDA recommends that EPA identify this pathway in the final Fungicide Strategy and related implementation materials and allow shear-resistant polymer DRAs to qualify for mitigation credit once a consensus method is ratified. EPA could include these products in the existing DRA table through a new category for shear-resistant polymer/polyacrylamide DRAs.

ASABE Droplet Size Distribution	Oil Emulsion DRAs		Guar Gum (Polysaccharide) DRAs		Shear Resistant ¹ Polymer (Polyacrylamide) DRAs	
	Ground Application (0.3%v/v minimum rate)	Aerial Application (2.5%v/v minimum rate)	Ground Application (130 ppm dissolved solids)	Aerial Application	Ground Application	Aerial Application
	Fine		50%	N/A	50%	N/A
	Medium					
	Coarse					
	Very Coarse					
	Extremely Coarse	N/A				
Ultra Coarse						
¹ Shear resistance is based on ASTM Standard Method ####, with shear resistance indicated on the DRA product label.						

Table 2. Proposed table concept adding a category for shear-resistant polymer/polyacrylamide DRAs, with shear resistance based on an ASTM standard method and indicated on the DRA product label.

CPDA recommends label language such as:

“This DRA is resistant to pump shear as evaluated by ASTM Standard Method [#####].”

CPDA recognizes that ASTM standards require time to develop, build consensus, and validate through appropriate testing. However, EPA should make clear in the final strategy that a ratified consensus standard can support future recognition of shear-resistant polymer DRAs across the herbicide, insecticide, and fungicide strategies. Doing so would encourage continued innovation and provide a transparent path for additional scientifically supported mitigation tools to be incorporated into EPA’s ESA framework.

V. EPA Should Correct and Harmonize Oil Emulsion DRA Minimum-Rate Language

CPDA also recommends that EPA correct and harmonize oil emulsion DRA language across the final Fungicide Strategy, Ecological Mitigation Support Document, Mitigation Menu, and pesticide labels.

The qualifying DRA rate should be described as a minimum rate. For ground applications, CPDA recommends that EPA consistently use “minimum rate of 0.3% v/v” for oil emulsion DRAs. For aerial applications, EPA should likewise use “minimum rate of 2.5% v/v” where applicable.

CPDA has identified examples where current or draft label language does not consistently use “minimum rate of” or incorrectly presents the ground rate. EPA should review and correct oil emulsion DRA language across relevant materials, including current dicamba labels, Liberty Ultra, draft trifludimoxazin labels, and epyrafenacil labels, as appropriate.

The Mitigation Menu should also be updated to reflect the correct oil emulsion DRA language. In particular, EPA should make clear that the ground application rate is a minimum of 0.3% v/v and should not be listed as 2.5% v/v.

These corrections are important for implementation. Growers, applicators, state lead agencies, registrants, and adjuvant manufacturers need consistent language across product labels, EPA web tools, and mitigation documents. Inconsistent language creates avoidable confusion and may undermine compliance with ESA mitigation requirements.

VI. EPA Should Recognize the Environmental and Agronomic Benefits of Professional Seed Treatment

EPA specifically requests information regarding seed treatments, including information on seed treatment usage, pesticide availability on the seed coat to runoff, non-commercial seed treatment practices, effects of handling and planting on seed-coat quality and pesticide availability, and agronomic practices that may reduce potential runoff from treated seeds.

CPDA appreciates EPA's request for this information and encourages the Agency to evaluate seed treatment in a manner that reflects the precision, efficiency, and environmental benefits of professional seed treatment technology.

The application of pesticides to commercial seed, when done in a professional manner and in accordance with label guidance, is a precise and effective tool that supports sustainable agriculture. Professional seed treatment technology balances the need for early-season pest control with the need to reduce environmental exposure. By applying protective coatings directly to the seed before planting, seed treatment can deliver important benefits.

First, seed treatment can significantly reduce the total amount of pesticide used compared with traditional broad application methods. Targeted application directly to seed requires a small fraction of the pesticide that may be applied through broader spray applications.

Second, seed treatment can reduce spray drift exposure. Placing the pesticide directly on the seed and planting the seed below ground avoids the airborne drift associated with broadcast or foliar applications.

Third, seed treatment provides early-season crop protection. Seeds and seedlings are vulnerable to disease and pests during early development. Fungicide seed treatments can help protect seedlings during this critical period, supporting stand establishment and reducing the risk of replanting.

Fourth, seed treatment can support conservation practices. Early-season crop protection can help growers more confidently adopt practices such as no-till farming and cover cropping, which support soil health and reduce erosion.

Fifth, seed treatment can improve resource efficiency. Protecting early crop stands helps optimize the use of land, water, fertilizer, labor, and fuel. These benefits are directly relevant to EPA's FIFRA balancing and to the Agency's objective of developing ESA mitigation that is protective without unnecessarily disrupting agricultural production.

EPA should therefore avoid treating seed treatment solely as a potential exposure source without also recognizing the exposure reductions that seed treatment may provide relative to alternative application methods.

VII. EPA Should Distinguish Commercial Seed Treatment and Film-Coating Technology from Less Controlled Treatment Scenarios

CPDA encourages EPA to distinguish between professional commercial seed treatment and less controlled treatment scenarios when evaluating potential exposure from treated seeds.

Commercial seed treatment often uses specialized equipment, controlled processes, and film-coating technologies designed to improve uniformity, adherence, dust reduction, seed flowability, and planting performance. Film coating liquids can help bind pesticide active ingredients to the seed surface, reduce abrasion, reduce dust-off during handling and planting, and improve the consistency of pesticide placement.

These factors are directly relevant to the questions EPA has posed regarding the availability of pesticide on the seed coat to runoff, the effect of handling and planting on seed-coat quality, and the potential for treated seed exposure. Commercial seed treatment and film coating technologies can reduce the amount of pesticide available to move off the seed through dust, loose particles, spillage, or rapid detachment. They can also improve planting performance, which supports proper seed placement below the soil surface.

EPA should not assume that all treated-seed scenarios present the same exposure profile. Commercially treated seed using modern film-coating technology, treated in accordance with label directions and planted according to agronomic best practices, should be evaluated differently from less controlled on-farm or on-site treatment scenarios where equipment, coverage, dust control, and coating quality may vary.

CPDA recommends that EPA incorporate the following principles into the final Fungicide Strategy and future risk characterization for treated seeds:

1. Evaluate treated seed exposure in light of actual seed treatment practices, including the distinction between commercial seed treatment and on-farm or on-site treatment.
2. Consider the role of film coatings and other seed enhancement technologies in reducing dust-off, abrasion, and pesticide detachment from the seed surface.
3. Recognize that proper planting depth, seed incorporation, spill prevention, and disposal practices can meaningfully reduce exposure to non-target organisms.

4. Avoid mitigation approaches that unintentionally discourage professional seed treatment and thereby shift growers toward application methods that may increase overall pesticide loading or off-site exposure.
5. Maintain flexibility for both commercial and non-commercial seed treatment where appropriate, while recognizing that exposure assumptions and mitigation needs may differ by treatment scenario.

VIII. Seed Treatment Stewardship and Communication Should Be Practical and Compatible with Existing Labeling Systems

EPA also requests feedback regarding treated seed labeling and communication. CPDA supports effective communication to growers, applicators, seed dealers, and other users regarding the proper handling, planting, storage, and disposal of treated seed.

Seed bag tags are an important communication tool and should remain part of the stewardship framework. However, EPA should ensure that any ESA-related treated seed language is practical, understandable, and capable of being implemented within existing seed distribution systems. EPA should also avoid duplicative or conflicting language across pesticide labels, seed tags, Bulletins Live! Two, the Mitigation Menu, and PALM.

EPA should consider approaches that allow seed tags to direct users to current stewardship resources and location-specific requirements where appropriate. Digital tools, including QR codes, may be useful where they provide access to updated information without overloading seed tags with complex or changing requirements. Any such approach should be designed to preserve legal clarity, avoid conflicting instructions, and ensure users can reasonably determine applicable requirements before planting.

CPDA also encourages EPA to recognize and build upon existing stewardship resources, including the Guide to Seed Treatment Stewardship and Growing Matters. These resources provide practical information on treated seed handling, planting, dust reduction, disposal, and pollinator protection.

Importantly, the Fungicide Strategy should not be used to pre-judge broader regulatory questions regarding treated seed or the treated article exemption. The final Fungicide Strategy should recognize that treated seed is already addressed through an existing regulatory and stewardship framework, including EPA's registration of pesticide products used to treat seed, treated seed labeling, seed bag tags, and established industry stewardship resources. EPA should maintain a practical approach that recognizes the agronomic, environmental, and stewardship benefits of professional seed treatment while addressing specific exposure concerns through science-based, targeted mitigation.

IX. EPA Should Maintain a Flexible, Transparent, and Updateable Implementation Framework

The Draft Fungicide Strategy relies heavily on EPA's Ecological Mitigation Support Document, Mitigation Menu, Bulletins Live! Two, and PALM. CPDA supports EPA's efforts to create tools that help growers and applicators understand and implement mitigation requirements. These tools will be essential to whether the strategy succeeds in practice.

To improve implementation, CPDA recommends that EPA:

1. Clearly identify which mitigation requirements appear on FIFRA section 3 labeling and which requirements are implemented through Bulletins Live! Two.
2. Ensure that PALM, the Mitigation Menu, and any related web tools are aligned with product labeling and updated promptly when EPA revises mitigation options.
3. Provide clear version control and effective dates for updates to the Mitigation Menu and PALM.
4. Provide a transparent process for adding new mitigation technologies, including additional DRA chemistries, seed treatment technologies, application technologies, and conservation practices.
5. Ensure state lead agencies, registrants, crop consultants, applicators, and growers receive adequate implementation guidance before new requirements become effective.
6. Continue to use public comment opportunities in registration and registration review actions when applying strategy-derived mitigation to specific pesticide uses.
7. When applying the final strategy in specific registration or registration review actions, allow active ingredient-, use-, and formulation-specific information to refine mitigation requirements and avoid imposing mitigation where the record does not support it.

EPA has acknowledged that mitigation options will continue to evolve, and CPDA agrees. The final Fungicide Strategy should be built to accommodate new data and new technologies. This is especially important for adjuvants, application technologies, seed treatments, and conservation practices, where field-relevant innovations can provide measurable exposure reductions without removing important crop protection tools from growers.

X. Conclusion

CPDA supports EPA's efforts to develop a practical and predictable ESA mitigation framework for conventional agricultural fungicides. The Draft Fungicide Strategy represents an important step toward more transparent and consistent implementation of ESA obligations under FIFRA.

CPDA especially appreciates EPA's proposal to expand DRA mitigation options by recognizing oil emulsion and guar DRAs for fungicides. CPDA recommends that EPA build on that progress

by revising the guar DRA language to use a minimum 130 ppm guar solids concentration in the final tank mixture, recognizing polymer/polyacrylamide DRAs through a performance-based pathway, supporting an ASTM consensus standard for shear-resistant polymer DRAs, correcting oil emulsion minimum-rate language, and incorporating a more complete understanding of professional seed treatment and seed-coating technologies into the final strategy.

These revisions would improve the scientific basis, clarity, and workability of the final Fungicide Strategy while maintaining EPA's goal of reducing exposure to listed species and designated critical habitat. CPDA and its members stand ready to continue working with EPA to support science-based mitigation measures that protect the environment while preserving farmer access to essential crop protection tools.

Sincerely,

A handwritten signature in black ink, appearing to read "Terry Kippley". The signature is fluid and cursive, with the first name "Terry" and last name "Kippley" clearly distinguishable.

Terry Kippley
President & CEO
Council of Producers & Distributors of Agrotechnology