

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

AMERICAN SOYBEAN ASSOCIATION,
12647 Olive Boulevard, Ste. 410
St. Louis, MO 63141

and

PLAINS COTTON GROWERS, INC.,
8303 Aberdeen Avenue
Lubbock, TX 79424

Plaintiffs,

vs.

ANDREW R. WHEELER, in his official
capacity as the Administrator of the U.S.
Environmental Protection Agency,
1200 Pennsylvania Avenue, NW
Washington, DC 20460

and

MARIETTA ECHEVERRIA, in her official
capacity as Acting Division Director of the
U.S. Environmental Protection Agency,
Office of Pesticide Programs, Registration
Division,
1200 Pennsylvania Avenue, NW
Washington, DC 20460

and

UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY,
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Defendants.

Case No.:

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

Plaintiffs American Soybean Association and Plains Cotton Growers (collectively, “Plaintiffs” or “Growers”), bring this complaint against defendants Andrew R. Wheeler, Administrator of the U.S. Environmental Protection Agency; Marietta Echeverria, Acting Division Director of the U.S. Environmental Protection Agency, Office of Pesticide Programs, Registration Division; and the U.S. Environmental Protection Agency, and state as follows:

INTRODUCTION

1. This case concerns the United States Environmental Protection Agency’s (“EPA”) registration of the herbicide dicamba for use on soybean and cotton crops genetically engineered to withstand “over-the-top” applications of dicamba.

2. Dicamba, coupled with dicamba-tolerant (“DT”) soybean and cotton, are critical tools in American farmers’ efforts to combat herbicide-resistant weeds.

3. Herbicide-resistant weeds are a growing scourge, capable of crushing crop yields, overwhelming entire fields, and financially harming farmers. Dicamba and DT crops are critical weapons for farmers in their fight against these weeds.

4. Plaintiffs are cotton and soybean growers’ associations, whose members depend on dicamba and DT crops to keep their fields full, the nation’s supermarkets stocked, and the world fed, fueled, and clothed.

5. EPA recently registered dicamba for use on DT soybeans and cotton under the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”). In so doing, EPA imposed an array of application and use conditions on soybean and cotton growers, who are the end users of the dicamba product.

6. EPA's registration decision will arm Growers with an essential weed-management tool for the 2021 growing season and beyond. But some aspects of the registration decision are problematic for Growers, who depend on reasonable, consistent access to dicamba for use on DT soybeans and cotton.

7. In particular, several registration conditions impose growing restrictions and disrupt growing seasons which will diminish crop yields, cut productivity, and drive up operational costs. Some of these conditions are significantly more stringent than those found in past dicamba registrations.

8. This action challenges those conditions as arbitrary and capricious and beyond the agency's authority under FIFRA, the Endangered Species Act ("ESA"), and the Administrative Procedures Act. More specifically, this case seeks remand of EPA's temporal dicamba application restrictions and spatial application buffers.

9. This action also seeks to confirm that the remainder of EPA's registration decision satisfies FIFRA, the ESA, and the Administrative Procedures Act. Resolving these legal uncertainties is important because Growers are already making planting and seed-selection decisions for the 2021 growing season. Indeed, Growers are already investing billions of dollars into dicamba, DT soybean and cotton seed, and related products—investments that will be lost if EPA's broader registration decision were undone.

PARTIES

10. Plaintiffs are agricultural trade associations that represent farmers and their families nationwide. Their members' soybean and cotton crops provide the United States and the world with food, fuel, feed, and fiber.

11. Founded 100 years ago, Plaintiff American Soybean Association (“ASA”) is a national, not-for-profit trade association representing U.S. soybean growers on domestic and international issues of importance to the American soybean industry. ASA represents the interests of more than 300,000 soybean farmers nationwide.

12. Advocating and advising on pesticide and environmental regulation is one of the core tenets of ASA’s mission.¹ In addition to its advocacy efforts, ASA devotes substantial time and resources to grower education, regulatory compliance, and advising services, including advising growers on working through and complying with current and past dicamba registrations.² ASA’s efforts include diverting significant resources to advising, educating, and advocating on EPA’s recent dicamba registrations.

13. Established in 1956 by cotton producers from across the Texas High Plains production region, Plains Cotton Growers, Inc. is a non-profit producer organization composed of regional cotton producers. Plains Cotton Growers members annually plant between 3.5–4.5 million acres of cotton. The High Plains region represents the largest cotton production region in the United States and accounts for approximately one third of all planted U.S. cotton acreage.

14. Defendant Andrew R. Wheeler is the EPA Administrator and is sued in his official capacity. Under FIFRA, Administrator Wheeler—as head of the EPA—is the federal official responsible for pesticide registration, including the decisions challenged here.

¹ ASA, *Key Issues & Initiatives – Pesticide and Environment Regulations*, available at <https://soygrowers.com/key-issues-initiatives/key-issues/regulatory/> (last visited Oct. 22, 2020).

² ASA, *Grower Education*, available at <https://soygrowers.com/education-resources/grower-education/> (last visited Oct. 22, 2020).

15. Defendant Marietta Echeverria is Acting Division Director of the EPA's Office of Pesticide Programs, Registration Division, and is sued in her official capacity. In that role, Acting Director Echeverria approves and administers FIFRA registrations, including the decisions challenged here. Acting Director Echeverria reports to EPA Administrator Wheeler.

16. Defendant EPA is an agency of the United States federal government. FIFRA vests EPA with responsibility for registering pesticides, including the decisions challenged here. EPA is also responsible for ensuring that pesticide registrations comply with all applicable law.

JURISDICTION AND VENUE

17. This Court has subject matter jurisdiction over Plaintiffs' claims under 28 U.S.C. § 1331 (federal question jurisdiction), 5 U.S.C. § 702 (the Administrative Procedure Act or "APA"), and 7 U.S.C. § 136n(a) (FIFRA).

18. This Court has authority to issue the requested declaratory and injunctive relief under 5 U.S.C. §§ 701–706 (APA) and 28 U.S.C. §§ 2201–2202 (declaratory and injunctive relief).

19. This Court has personal jurisdiction over Administrator Wheeler, Acting Division Director Echeverria, and EPA, as each is an agency or official of the United States federal government, working and seated in Washington, D.C.

20. Venue is proper in this District under 28 U.S.C. § 1391(b) and 28 U.S.C. § 1391(e) because Defendants reside in this District and because a substantial part of the events giving rise to Plaintiffs' claims occurred in this District. Nearly everything concerning this case occurred in the District of Columbia, including EPA's decision-making process and EPA's actual registration decisions, which occurred out of its headquarters.

STATUTORY AND REGULATORY FRAMEWORK

A. The Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”)

21. FIFRA is the core federal statute regulating the distribution, sale, and use of pesticides in the United States. Approximately 18,000 pesticides were in use across the country as of 2012.³

22. FIFRA generally requires EPA to register (or license) a pesticide before it can be sold or distributed. *See* 7 U.S.C. § 136 et seq. “Pesticides,” under FIFRA, include “any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.” *Id.* § 136(u).

23. Under FIFRA, EPA “shall register a pesticide” if a pesticide, among other things, “will perform its intended function without unreasonable adverse effects on the environment.” 7 U.S.C. 136a(c)(5).

24. When registering a pesticide, FIFRA authorizes EPA to establish rules for pesticide use, including how and when a pesticide may be used. *See* 7 U.S.C. § 136a.

25. Any registration restrictions imposed under FIFRA are judicially reviewable under the statute itself, 7 U.S.C. § 136n, and the APA, 5 U.S.C. § 706.

B. The Endangered Species Act (“ESA”)

26. The ESA aims to protect “endangered species and threatened species.” 16 U.S.C. § 1531(b). Under the ESA, federal agencies usually need to “insure that any action authorized . . . or carried out” by the agency “is not likely to jeopardize the continued existence of any endangered species or threatened species.” 16 U.S.C. § 1536(a)(2).

³ *See* Congressional Research Service, *Pesticide Law: A Summary of the Statutes* at 1 (Nov. 12, 2012), available at <https://crsreports.congress.gov/product/pdf/RL/RL31921>.

27. Before undertaking most federal actions, the ESA and its implementing regulations require that federal agencies assess whether the action “may affect” threatened or endangered species (“Listed Species”) or their designated “critical habitat.” 50 C.F.R. § 402.14(a)–(b). If the agency’s answer is yes, the agency usually consults with the U.S. Fish and Wildlife Service (“FWS”) or the National Marine Fisheries Service (“NMFS”). *Id.*

28. If the agency’s “may affect” analysis finds that the action is “not likely to adversely affect” Listed Species or critical habitat, the agency-to-agency consultation ends with FWS’s or NMFS’s written concurrence. *Id.* § 402.14(b)(1). But if the agency action is likely to adversely affect Listed Species, the acting agency must open “formal consultation” with FWS or NMFS. *Id.* § 402.14(c)–(h).

29. During formal consultation, FWS or NMFS can conclude that a proposed action is not likely to jeopardize Listed Species or result in the destruction or adverse modification of Listed Species’ critical habitat, but still potentially result in “incidental take” of Listed Species. *Id.* § 402.14(i). In that event, FWS or NMFS usually proposes “reasonable and prudent measures” to minimize the scope of any incidental “take.”⁴ *Id.*

30. If, on the other hand, FWS or NMFS finds that the agency action is likely to jeopardize the continued existence of Listed Species or result in critical habitat destruction or adverse modification, FWS and NMFS will propose “reasonable and prudent alternatives” intended to avoid those impacts. *Id.* § 402.14(g)–(h).

⁴ The ESA defines “take” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect or to attempt to engage in any such conduct.” 16 U.S.C. § 1532(19).

FACTUAL BACKGROUND

31. This case concerns EPA’s decision to register dicamba for use, including over-the-top use, on DT soybean and cotton as described in EPA’s Memorandum Supporting Decision to Approve Registration for the Uses of Dicamba on Dicamba Tolerant Cotton and Soybean (the “Dicamba Memorandum,” a true and correct copy of which is attached as **Exhibit A**). The Dicamba Memorandum is an agency document that underpins three individual registrations and their product labels (the labels are included in the registration documents), each applicable to three specific products manufactured and distributed by different manufacturers (the “Registrants”).

32. The Dicamba Memorandum and registrations are, in turn, supported by several additional EPA analyses, including benefits assessments for dicamba use on soybean and cotton, an ecological and ESA effects determination, an updated human health risk assessment, and an analysis of incidents and impacts to dicamba users and non-users. All of these documents together—the Dicamba Memorandum, the individual registrations, and the supporting analyses—constitute the “Dicamba Decision.”

33. Soybean and cotton form the backbone of the U.S. agricultural sector. And dicamba is a critical tool in Growers’ growing fight against herbicide-resistant weeds, which threaten soybean and cotton farms nationwide.

34. EPA’s Dicamba Decision arms Growers with an essential weed-management tool for the 2021 growing season and beyond. But some aspects of the Dicamba Decision are not legally sound and are problematic for Growers, who depend on reasonable, consistent

access to dicamba for uses on DT soybeans and cotton. The Dicamba Decision’s spatial- and temporal-use conditions, in particular, will undermine the products’ benefits.

35. Unless these restrictions are remanded back to EPA for further consideration, American soybean and cotton farmers will be harmed. So, too, will downstream consumers—who rely on soy and cotton to feed and clothe their families—and businesses—who depend on soy and cotton to stock their grocery and clothing aisles.

A. U.S. Soybean

36. Soybeans are an essential agricultural staple. Soybeans and soybean oil underpin myriad domestic supply chains: soybeans are an important ingredient in innumerable food, industrial, and pharmaceutical products, in addition to a significant volume of animal feed and biodiesel fuel.

37. According to the U.S. Department of Agriculture (“USDA”), processed soybeans are the world’s largest source of animal protein feed, while soybean oil comprises almost 70% of American household vegetable oil consumption.⁵ Additionally, more than half of all U.S. biodiesel comes from soybean oil.⁶

38. For these reasons, soybeans are a cornerstone of America’s agricultural economy. In 2018, for example, soybeans accounted for a full third of all crop area planted in the United States—more than 80 million acres of soybean plants dot the U.S.⁷

⁵ See USDA, *Monsanto Pets. (10-188-01p and 12-185-01p) for Determinations of Nonregulated Status for Dicamba-Resistant Soybean and Cotton Varieties, Final Env'tl. Impact Statement* (“Soybean FEIS”) (2014) at 93, available at https://www.aphis.usda.gov/brs/aphisdocs/dicamba_feis.pdf.

⁶ See United Soybean Board, *Issue Briefs: Biodiesel* <https://www.unitedsoybean.org/media-center/issue-briefs/biodiesel/> (last visited November 4, 2020).

⁷ See ASA, *SoyStats*, https://soygrowers.com/wp-content/uploads/2019/10/Soy-Stats-2019_FNL-Web.pdf (last visited November 4, 2020).

39. U.S. soybean sales are a key driver of the U.S. farm economy. Last year, domestic soybean crop value exceeded \$34 billion.⁸

40. American soybeans are also a major player in the global agricultural market. The United States is the world's largest soybean producer and second-largest exporter.⁹ In 2019, Americans exported a record 49.7 million metric tons of soybeans around the world, comprising a significant share of American agricultural exports.¹⁰

41. Perhaps unsurprisingly, American soybeans are an international and domestic dietary staple. Historically, American soybeans are a key element of global diets because they are healthy (soybeans are a good source of protein, carbohydrates, fat, calcium, folic acid, iron, and dietary fiber, all while being heart-healthy), versatile (soybeans are ground into flour, made into meat alternatives like tofu and tempeh, prepared as beverages, and blended into nut butter), and affordable.¹¹ In fact, soybeans are a complete source of protein because they contain every amino acid essential for human growth and development.¹²

42. For these reasons, the United States has a long history of providing soybeans and soy-fortified foods to developing countries for emergency and development assistance.¹³

⁸ See USDA Economic Research Service, <https://data.ers.usda.gov/reports.aspx?ID=17845> (last visited November 4, 2020).

⁹ See USDA Economic Research Service, <https://www.ers.usda.gov/topics/crops/soybeans-oil-crops/> (last visited November 4, 2020).

¹⁰ See ASA, *SoyStats*, <http://soystats.com/international-world-soybean-exports/> (last visited November 4, 2020).

¹¹ See U.S. Agency for International Development (“USAID”), *Soybeans Commodity Fact Sheet*, <https://2012-2017.usaid.gov/what-we-do/agriculture-and-food-security/food-assistance/resources/soybeans-commodity-fact-sheet> (last visited November 4, 2020).

¹² *Id.*

¹³ *Id.*

43. Simply put, American soybeans are an essential link in the domestic and international food supply chain. And American soybean farmers, in turn, depend on dicamba and DT soybeans to keep the world fed and fueled.

B. U.S. Cotton

44. Cotton is also an important cash crop, and one that underpins much of the domestic and global textile trade. As a key textile fiber, cotton accounts for a quarter of total world fiber use.¹⁴

45. In the United States alone, harvested area for the 2020 crop of upland cotton is projected at approximately 9 million acres across the country, with an expected yield of 16.5 million bales—equivalent to about 7.9 billion pounds of cotton.¹⁵ Cotton growers pump an average of \$5.6 billion into the U.S. economy annually, through labor, fertilizer, seed, and farm equipment inputs.¹⁶

46. The Texas High Plains, on its own, produces an average of 3.5 million bales of upland cotton annually—equal to 1.7 billion pounds. Indeed, the High Plains produces enough cotton to qualify, standing alone, as one of the top ten cotton-producing countries in the world.

47. American cotton growers stimulate more than \$75 billion in annual domestic economic activity, supporting more than 125,000 jobs from field to textile mill.¹⁷

¹⁴ See USDA Economic Research Service, <https://www.ers.usda.gov/topics/crops/cotton-wool/> (last visited November 4, 2020).

¹⁵ See USDA Economic Research Service, *Situation and Outlook Report: Cotton and Wool Outlook*, October 14, 2020, at 2-3, available at <https://www.ers.usda.gov/webdocs/outlooks/99557/cws-20j.pdf?v=3388>

¹⁶ See National Cotton Council (“NCC”), *World of Cotton*, <http://www.cotton.org/econ/world/index.cfm> (last visited November 4, 2020).

¹⁷ *Id.*; see also NCC, *2018 NCC Report to Members Summary*, available at <https://www.cotton.org/about/report/2018/> (last visited November 4, 2020).

48. As with soybeans, the United States is an internationally important cotton producer and exporter. The United States is the world's third-largest cotton producer and the world's leading cotton exporter.¹⁸

49. In fact, U.S. cotton farmers are the foundation of the international cotton market: the approximately 14.6 million bales of U.S. cotton that are projected for export this year will make up approximately 35% of the total world cotton export market.¹⁹ On top of these raw cotton exports, the U.S. also exports on average more than 3.5 million bale equivalents of processed cotton textiles annually.²⁰

50. Most cotton fiber ends up in apparel, with the remainder going into home furnishing and industrial products.²¹

51. Cotton creates cottonseed too. Every year, approximately 6 billion pounds of whole cottonseed and cottonseed meal makes its way into feed for livestock, dairy cattle, and poultry.²²

52. Like soybean farmers, cotton farmers also rely on dicamba and DT seed. Without them, cotton farmers would struggle to meet the demands of the world's ever-expanding population.

C. The Rise of Herbicide-Resistant Weeds and Growers' Answer: Dicamba

53. Soy and cotton, together, form the backbone of the American farm economy. Domestically, soy and cotton account for more than three of every ten acres of U.S.

¹⁸ See *supra* n.13.

¹⁹ See *supra* n.14, at 3.

²⁰ See *supra* n.15.

²¹ *Id.*

²² *Id.*

cropland.²³ Internationally, American soybean and cotton exports generated over \$27 billion in 2017, with soybeans qualifying as the United States' top agricultural export, and cotton being the United States' eighth most valuable agricultural export.²⁴

i. Growers' Fight Against Weeds

54. Yet American soybean and cotton farmers face an ever-growing litany of financial and physical threats each growing season. Inclement weather, pests, price fluctuations, unstable global markets, uneven trade policies, and persistent weeds all threaten soybean and cotton farmers' livelihoods.

55. Weeds pose a particularly dire threat to soybean and cotton growers. Weeds compete with crops for light, nutrients, and water; harbor insects and diseases; undermine harvests; and wear down farm equipment.²⁵

56. Soybeans are a case in point. Weeds alone pose a greater threat to soybeans than either insects or diseases, and independently drive soybean yields down 37% worldwide.²⁶ Experts estimate that, without herbicides, weeds would cut soybean yields in half.²⁷

57. The impact of weeds on cotton is similarly devastating. According to the National Cotton Council, research conducted prior to the availability of DT-tolerant cotton

²³ ASA, *Soy Stats – U.S. Planting Data: Crop Area Planted*, available at <http://soystats.com/planting-data-crop-area-planted/> (last visited November 4, 2020).

²⁴ See USDA, Foreign Agricultural Service, *Top U.S. Agricultural Exports in 2017*, available at <https://www.fas.usda.gov/data/top-us-agricultural-exports-2017> (last visited November 4, 2020).

²⁵ See Soybean FEIS at 69.

²⁶ *Id.*

²⁷ See Weed Science Society of America, *Perspectives on soybean yield losses due to weeds in North America*, available at <http://wssa.net/wp-content/uploads/WSSA-2016-Soybean-Yield-Loss-poster.pdf> (last visited November 4, 2020)

varieties reported a minimum of 50% yield loss due to pressure from glyphosate-resistant palmer amaranth (commonly known as “pigweed”).²⁸

ii. The Emergence of Glyphosate-Resistant Weeds

58. Glyphosate-tolerant (“GT”) soybeans and cotton (and related herbicide-resistant technologies) revolutionized farming for growers. Developed in the mid-1990s, GT crops let farmers spray glyphosate—a broad-spectrum herbicide—“over-the-top” of soybean and cotton crops during growing season (*i.e.*, post-emergence). This technique effectively kills most weeds, while leaving soybean and cotton plants unaffected.

59. The development of GT crops was a game changer for Growers, springing weed-management and farm-management in the future all at once. Indeed, GT crops generated a suite of benefits for farmers, consumers, and the environment.

60. Farmers, and their down-market customers, immediately reaped significant productivity, reliability, and economic gains.

61. Before GT crops, growers mostly relied on tillage-based weed management practices.²⁹ Tillage-heavy weed control increased growers’ fuel and labor costs, triggered soil erosion, and required significant water use.³⁰ GT seeds also facilitated crop rotation flexibility and reduced weather-related planting delays. These developments improved crop productivity and yield, creating significant cost savings for farmers and their customers.

62. The advent of GT crops brought environmental benefits, too. For example, between 1980 and 2011, American soybean production increased by nearly 96% while

²⁸ See Letter from NCC to EPA Administrator Andrew Wheeler (the “NCC Letter”) at 2, September 10, 2020. A true and correct copy of the NCC Letter is attached as **Exhibit B**.

²⁹ See Soybean FEIS at 73.

³⁰ See Soybean FEIS at 39, 47.

yields soared to 55%.³¹ At the same time, resource efficiency also skyrocketed: one bushel of soybeans required 35% less land, caused 66% less soil erosion, used 42% less water, and emitted 41% less greenhouse gas.³²

63. This bevy of benefits understandably led soybean and cotton farmers to invest quickly and heavily in GT seeds. By 2010, approximately 90% of soybean fields and 75% of cotton fields used GT seeds.³³

iii. The Emergence of Glyphosate-Resistant Weeds

64. Around the turn of the last decade, however, glyphosate-resistant weeds emerged. Glyphosate-resistant weeds pose serious problems to soybean and cotton growers. Indeed, these weeds can undo many of the productivity, yield, economic, and environmental gains generated by glyphosate-resistant crops.

65. Glyphosate-resistant weeds are increasingly widespread. In 2012, for example, the USDA estimated that 61 million acres of U.S. farmland suffered from glyphosate-resistant weeds.³⁴ Pigweed, ragweed, horseweed, kochia, waterhemp, goosegrass, Italian ryegrass, and Johnsongrass are just a few of the growing laundry list of glyphosate-resistant weeds.³⁵

³¹ See Keystone Alliance for Sustainable Agriculture, *Environmental and Socioeconomic Indicators for Measuring Outcomes of On-Farm Agricultural Production in the United States* (2d Report, July 2012) at ix, available at https://ussec.org/wp-content/uploads/2015/10/Field-to-Market_Environmental-Indicator_Report_2012.pdf (last visited November 4, 2020). Yield generally refers to amount of crop grown per unit of land, while productivity refers to total harvest volume.

³² *Id.* at IX-X.

³³ See USDA, Economic Research Service, *Recent Trends in GE Adoption*, available at <https://www.ers.usda.gov/data-products/adoption-of-genetically-engineered-crops-in-the-us/recent-trends-in-ge-adoption.aspx> (last visited November, 2020).

³⁴ See Soybean FEIS at 121.

³⁵ See *id.* at 6-8 (Appendix 6). The appendices to the Soybean FEIS are available at https://www.aphis.usda.gov/brs/aphisdocs/dicamba_feis_appendices.pdf (last visited November 4, 2020)

66. These weeds are also particularly devastating. By way of example, a single female Palmer amaranth plant can produce more than 600,000 seeds in a season, rapidly spreading its glyphosate-resistant offspring across cotton and soybean fields.³⁶ Palmer amaranth weeds can quickly overwhelm crops, growing two to three inches per day, reaching heights of eight feet tall, and diverting water, nutrients, and other critical resources away from crops.³⁷

67. Glyphosate-resistant weeds functionally drag growers backwards in time. Combating these weeds forces farmers into applying antiquated weed management technology like aggressive tillage and hand-weeding.³⁸ Growers often need to apply additional herbicides as well, further rolling back economic and environmental gains.³⁹ These costs are not insignificant, either. Growers can spend an additional \$20 to \$40 per acre on additional herbicides needed to fight glyphosate-resistant weeds.

68. According to the USDA, glyphosate-resistant weeds also unwind the significant sustainability and environmental benefits that glyphosate-resistant crops ushered in. As the agency sees it, ceding further ground to glyphosate-resistant weeds will undermine water quality, erode air quality, harm soil quality, increase greenhouse gas emission, and undercut biodiversity.⁴⁰

³⁶ See Eric Sfiligoj, *The Weed Resistance Problem: A Matter of Billions*, CropLife (April 1, 2014), available at <http://www.croplife.com/crop-inputs/herbicides/the-weedresistance-problem-a-matter-of-billions/> (last visited November 4, 2020).

³⁷ See Eric Sfiligoj, *Herbicide Resistance: The Numbing Numbers from the Weed Wars*, CropLife (April 2, 2017), available at <http://www.croplife.com/cropinputs/herbicide-resistance-the-numbing-numbers-from-the-weed-wars/>.

³⁸ See Soybean FEIS at 109, 121 152, 181.

³⁹ See *id.* at 113.

⁴⁰ See Soybean FEIS at ix.

iv. Dicamba: Growers' Answer to Glyphosate-Resistant Weeds

69. Dicamba-based pesticides and DT crops were developed to address these issues.

70. Three dicamba-based pesticides are relevant here: ABN Tavium Plus VaporGrip Technology (aka, A21472 Plus VaporGrip Technology, produced by Syngenta), XtendiMax with VaporGrip Technology (produced by Bayer CropScience), and Engenia Herbicide (produced by BASF) (collectively, the “Dicamba Products”).

71. The Dicamba Products effectively fight glyphosate-resistant weeds by allowing farmers to combine dicamba—another broad-spectrum herbicide—with DT soybean and cotton. Because weeds are not generally resistant to dicamba, growers can apply the Dicamba Products over-the-top of their DT crops, killing weeds (including glyphosate-resistant weeds) without harming the soybean and cotton plants.

72. The Dicamba Products, paired with DT crops, offer two significant benefits. First, unlike many herbicides, the Dicamba Products can be applied during the growing season, after crops and weeds emerge (i.e., “post-emergence”), without hurting the crop. Applying dicamba during the growing season kills both glyphosate-resistant weeds and glyphosate-resistant seed banks, bringing growers immediate and longer-lasting relief from those weeds. Because the Dicamba Products are available post-emergence, they also allow Growers to fight late-season weeds, which can otherwise overwhelm crops.

73. The Dicamba Products also promise to delay the emergence of herbicide-resistant weed populations. USDA reported, as early as 2014, that “[n]ew technologies such

as dicamba could be used to delay resistance development.”⁴¹ The Dicamba Products are gamechangers in farmers’ battle against glyphosate-resistant weeds.

74. Many growers started using this technology shortly after the initial November 2016 registration, immediately reaping massive benefits.

75. Considering dicamba’s effectiveness, soybean and cotton growers invested heavily into DT seeds and dicamba-based herbicides. Over the last few years alone, growers have invested billions into DT seeds and hundreds of millions of dollars into dicamba-based herbicides.

76. Without Dicamba Products in their arsenal, many farms would be largely defenseless in their fight against weeds. A handful of other herbicides remain available but are often only partially effective, if at all.

77. That leaves hand-weeding. But hand-weeding is, practically speaking, no option at all. Hand-weeding is overwhelmingly expensive, pinched by pandemic labor restrictions, limited by recent immigration policy changes, and arduous to administer and implement. Hand-weeding, in short, leaves farmers functionally weaponless in their fight to de-weed nearly 90 million acres of U.S. soybean and cotton crops.

78. Removing dicamba from Growers’ toolboxes not only leaves farmers dangerously exposed to dozens of weeds resistant to other herbicides, but also expedites the emergence of weeds resistant to those other products. That, in turn, erodes herbicide effectiveness across the board—for all farmers—who will find themselves reliant on ever-fewer effective anti-weeding tools over time.

⁴¹ See Soybean FEIS at 148.

79. American soybean and cotton farmers, in short, rely on Dicamba Products to protect their fields—and keep the world fed, fueled, and clothed along the way.

D. The Dicamba Decision and its Application Restrictions

80. With all of this in mind, EPA registered the Dicamba Products on October 27, 2020, through the Dicamba Decision.⁴² As described in the Dicamba Memorandum, EPA registered the Dicamba Products for over-the-top use on DT soybean and cotton, for a five-year period ending December 20, 2025.

i. EPA’s Latest Dicamba Registration

81. EPA has analyzed and authorized over-the-top application of dicamba numerous times since 2016, including the Dicamba Decision.⁴³

82. The Dicamba Decision includes a suite of supporting documents detailing EPA’s regulatory decisions and analyses. EPA’s Dicamba Memorandum (**Exhibit A**) describes EPA’s core findings and decision-making process.

83. The three individual registrations are the heart of the Dicamba Decision: the Engenia Herbicide Registration (the “Engenia Registration,” a true and correct copy of which is attached as **Exhibit C**), the A21472 Plus VaporGrip Technology Registration (the “Tavium Registration,” a true and correct copy of which is attached as **Exhibit D**), and the XtendiMax with VaporGrip Technology Registration (the “XtendiMax Registration,” a true and correct copy of which is attached as **Exhibit E**).

84. Several benefits assessments further undergird the Dicamba Decision. Specifically, EPA’s Assessment of the Benefits of Dicamba Use in Genetically Modified,

⁴² As explained *supra*, unless otherwise stated, the “Dicamba Decision” includes the full suite of EPA’s supporting documents, i.e., the actual product-specific registrations, the decision memorandum, and the other EPA analyses.

⁴³ See the Dicamba Memorandum at 6-8.

Dicamba-Tolerant Cotton Production (the “Cotton Benefits Assessment,” a true and correct copy of which is attached as **Exhibit F**) and Assessment of the Benefits of Dicamba Use in Genetically Modified, Dicamba-Tolerant Soybean Production (the “Soybean Benefits Assessment,” a true and correct copy of which is attached as **Exhibit G**) reinforce the decision.

85. EPA also included three impact assessments: “Dicamba Use on Genetically Modified Dicamba-Tolerant (DT) Cotton and Soybean: Incidents and Impacts to Users and Non-Users from Proposed Registrations” (the “Incidents and Impacts Report,” a true and correct copy of which is attached as **Exhibit H**), “Consideration of Newly Submitted Mutagenicity Data and Human Health Risk Assessment Summary” (the “HRA Report,” a true and correct copy of which is attached as **Exhibit I**), and “Dicamba DGA and BAPMA Salts – 2020 Ecological Assessment of Dicamba Use on Dicamba-Tolerant (DT) Cotton and Soybean Including Effects Determinations for Federally Listed Threatened and Endangered Species” (the “ESA Assessment,” a true and correct copy of which is attached as **Exhibit J**).

86. Before issuing the Dicamba Decision, EPA exerted significant effort assessing potential impacts to human health and the environment (using the latest data), analyzing possible biodiversity impacts (including impacts on protected species), and considering usage conditions (imposing many). EPA also relied on the wealth of already available information on the dicamba, generated by the past half-decade’s worth of regular use.⁴⁴

⁴⁴ Dicamba, generally speaking, was first registered in the United States in 1967 and has enjoyed “wide use” ever since. *See* Incidents and Impacts Report at 7.

87. EPA’s benefits and impacts analyses were thorough too, spanning over 450 pages.⁴⁵ Both the Soy Benefits Assessment and Cotton Benefits Assessment concluded that registering dicamba “gives many growers increased flexibility,” creates “a cost-effective way to control problematic broadleaf weed species,” and adds “an additional tool to delay the further development of herbicide resistance.”⁴⁶

88. Despite these findings, the Dicamba Decision imposed a range of conditions on growers, including several that will limit yields, increase operational costs, and erode productivity. Three conditions are particularly limiting: date-dependent application restrictions (the “Application Restrictions”), ESA-based application buffers (the “ESA Buffers”), and FIFRA-based application buffers (the “FIFRA Buffers”).

89. Growers even submitted several letters to EPA urging the agency to craft flexible, practical conditions, in lieu of the more rigid restrictions Growers now face.⁴⁷

90. Although EPA imposed somewhat similar conditions in past dicamba registrations, these new conditions are significantly more restrictive than past practice.

ii. The Application Restrictions

91. The Dicamba Decision imposes Application Restrictions that will limit Growers’ ability to respond to weather, pestilence, and other acts of God that significantly reduce yields and increase operational costs. Specifically, the Dicamba Decision prevents

⁴⁵ See generally HRA Report, Incidents and Impacts Report, ESA Assessment, Cotton Benefits Assessment, and Soy Benefits Assessment.

⁴⁶ See Cotton Benefits Assessment at 24; Soybean Benefits Assessment at 27.

⁴⁷ See, e.g., ASA, August 10, 2020 Letter to Administrator Wheeler (a true and correct copy of which is attached as **Exhibit K**); ASA, September 15, 2020 Letter to Administrator Wheeler (a true and correct copy of which is attached as **Exhibit L**).

soybean growers from applying Dicamba Products after June 30 each year.⁴⁸ Cotton growers are blocked from using Dicamba Products after July 30.⁴⁹

92. These restrictions confine Growers' flexibility, cabining their ability to respond to unforeseeable conditions. Every growing season brings its own unpredictable whims—severe weather, pest and weed infestations, market swings, and more—which often demand farm management flexibility. For example, heavy spring rains, flooding, wind and hail from severe storms, and other acts of God can force soybean and cotton growers into planting or replanting⁵⁰ their crops as late as June.

93. For these reasons, many cotton and soybean growers will be harmed by the Application Restrictions. Cotton, for example, typically begins flowering 55–60 days after planting. And cotton growers need effective weed control options through at *least* the mid-bloom growth stage—usually 90 days after planting.

94. Yet many cotton growers rely on late planting and replanting, often during May and June, to keep their fields full. Thus, the Application Restrictions' July 30 application cutoff date exposes many Growers to potentially devastating weed pressure during the heart of cotton's growth cycle, often deep into August and September.

95. The Application Restrictions are particularly troublesome for Texas High Plains cotton growers. That region, because of its unique climate, includes an area with four separate final planting dates (as governed by the USDA Risk Management Agency, which

⁴⁸ *See, e.g.*, Dicamba Memorandum at 14.

⁴⁹ *Id.*

⁵⁰ Extreme weather events can destroy previously planted fields, forcing farmers to replant the impacted fields.

oversees several federal crop insurance programs). Those independent planting dates range from May 31 to June 20 (with an associated seven-day late planting window for each).

96. Because the High Plains routinely experiences extreme weather during the planting period, significant volumes of High Plains cotton are planted, or replanted, up to these planting deadlines. As a result, High Plains growers, who plant or replant cotton more often than the average cotton grower, are particularly impacted by the Application Restrictions.

97. Soybean growers will suffer too. June 30 presents a particularly problematic cutoff for at least two reasons.

98. First, weather, pestilence, and other acts of God often push soybean growers, like cotton growers, into late season planting and replanting. The June 30 cutoff, then, likely leaves thousands of late season soybean growers largely defenseless against weeds.

99. Compounding this, soybean growers annually battle late-emerging weeds, many of which are glyphosate-resistant. For example, waterhemp routinely emerges as late as July and August, and often in glyphosate-resistant form. Banning farmers from using dicamba against these doubly dangerous weeds essentially forces farmers to capitulate to these weeds.

100. Therefore, in any given growing season, some Growers will need to make their post-emergent application(s) of dicamba after June 30 (soybean) or July 30 (cotton). If Growers are unable to make post-emergent applications, their fields may suffer from weed infestations—which, in turn, would lead to reduced yield and increased weed management costs.

101. In the end, the Application Restrictions will likely cost Growers in lost harvests and additional weed control costs. EPA even recognized as much, finding that “cutoff days

may prevent some growers from making applications for late season weed control,” leading to “increase[d] applicator/grower costs.”⁵¹

iii. The ESA and FIFRA Buffers

102. The Dicamba Decision also imposes two application buffers—one tied to the ESA and another to FIFRA.

103. Cotton and soybean growers planting in the nearly 300 counties nationwide potentially inhabited by Listed Species are subject to 310-foot downwind application buffers, and a 57-foot omnidirectional buffer, each ostensibly designed to achieve ESA compliance.⁵² Growers must also abide by a 240-foot, universally controlling, downwind FIFRA application buffer.⁵³

104. While some of these buffers might appear to afford some degree of flexibility, they are, as a practical matter, very difficult to manage.

105. Because wind direction changes daily, so too can these buffers. Therefore, in reality, these “downwind” buffers can transform into significant omnidirectional growing restrictions.

106. The on-the-ground effect of these “buffers” will lead to significant acreage of farmland being taken out of production for fear of violating the buffer rules. In practice, these buffers chop huge swaths of farmable land off the edges of Growers’ fields.

107. By way of example, assume the average soybean Grower—who farms a 54-acre field—happens to live in one of the several hundred ESA-restricted counties. Under the Application Restrictions, that Grower loses almost a *third* of her farmable land to the ESA

⁵¹ Dicamba Memorandum at 18.

⁵² Dicamba Memorandum at 24.

⁵³ *Id.*

Buffer.⁵⁴ In other words, that Grower, and thousands like her, must either leave 15 acres fallow every year, or sacrifice almost a third of her soybean harvest.

108. Like the Application Restrictions, the ESA and FIFRA Buffers are also inconsistent with past practice. Indeed, the ESA Buffers are almost three times larger than the 2018 Decision's buffers.⁵⁵ For the average soybean farmer, these 310-foot buffers can conservatively⁵⁶ push over 650,000 square feet out of production.

109. The FIFRA Buffers, for their part, are more than twice the size of their 2018 Registration precursors.⁵⁷ These 240-foot buffers can conservatively require the average soybean grower to set aside over 520,000 square feet of cropland.⁵⁸

110. These new buffers require Growers to leave cropland empty, driving down farm profitability, and financially harming Growers. In short, these buffers often functionally "require growers to remove land from production."⁵⁹

COUNT ONE
Application Restrictions

111. Growers incorporate and re-allege paragraphs 1–110 as if fully set forth herein.

112. Defendants issued the Dicamba Decision under FIFRA and included the Application Restrictions pursuant to their FIFRA authority. 7 U.S.C. § 136 et seq.

113. As such, the Dicamba Decision is judicially reviewable under FIFRA, as an EPA decision issued without a hearing and not otherwise committed to Defendants' discretion, and under the APA, as a final agency action. 7 U.S.C. § 136n(a); 5 U.S.C. § 706.

⁵⁴ See Incidents and Impacts Report at 22-23. One acre equals 43,560 square feet.

⁵⁵ See Dicamba Memorandum at 4.

⁵⁶ These calculations assume the downwind buffer is, in fact, only applied downwind.

⁵⁷ See Dicamba Memorandum at 4.

⁵⁸ Incidents and Impacts Report at 21-24.

⁵⁹ Incidents and Impacts Report at 21-24.

114. The Application Restrictions exceed Defendants' authority under FIFRA and are unnecessary to comply with the statute.

115. The Application Restrictions are also arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law, in violation of the APA.

116. Defendants' actions, through the Application Restrictions, harm Growers by imposing unreasonable and expensive growing and herbicide conditions on Growers and their farmland.

117. Accordingly, Growers request an order declaring that the Application Restrictions are beyond EPA's authority under statute and are arbitrary and capricious, remanding the Dicamba Decision without vacatur to Defendants for further consideration, ordering EPA to take action consistent with the foregoing, awarding Growers their attorneys' fees and costs, and issuing any other appropriate relief.

COUNT TWO
ESA Buffers

118. Growers incorporate and re-allege paragraphs 1–110 as if fully set forth herein.

119. Defendants issued the Dicamba Decision under FIFRA and included the ESA Buffers pursuant to their FIFRA authority and ESA authority. 7 U.S.C. § 136 et seq.; 15 U.S.C. § 1536.

120. As such, the Dicamba Decision is judicially reviewable under FIFRA, as an EPA decision issued without a hearing and not otherwise committed to Defendants' discretion, and under the APA, as a final agency action, and under the ESA, as an agency action taken in compliance therewith. 7 U.S.C. § 136n(a); 5 U.S.C. § 706; 15 U.S.C. § 1536.

121. The ESA Buffers exceed Defendants' authority under FIFRA and the ESA and are unnecessary to comply with either statute.

122. The ESA Buffers are also arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law, in violation of the APA.

123. Defendants' actions, through the ESA Buffers, harm Growers by imposing unreasonable and expensive growing and herbicide conditions on Growers and their farmland.

124. Accordingly, Growers request an order declaring that the ESA Buffers are beyond EPA's authority under statute and are arbitrary and capricious, remanding the Dicamba Decision without vacatur to Defendants for further consideration, ordering EPA to take action consistent with the foregoing, awarding Growers their attorneys' fees and costs, and issuing any other appropriate relief.

COUNT THREE
FIFRA Buffers

125. Growers incorporate and re-allege paragraphs 1–110 as if fully set forth herein.

126. Defendants issued the Dicamba Decision under FIFRA and included the FIFRA Buffers pursuant to their FIFRA authority. 7 U.S.C. § 136 et seq.

127. As such, the Dicamba Decision is judicially reviewable under FIFRA, as an EPA decision issued without a hearing and not otherwise committed to Defendants' discretion, and under the APA, as a final agency action. 7 U.S.C. § 136n(a); 5 U.S.C. § 706.

128. The FIFRA Buffers exceed Defendants' authority under FIFRA and are unnecessary to comply with FIFRA.

129. The FIFRA Buffers are also arbitrary, capricious, an abuse of discretion, and not otherwise in accordance with law, in violation of the APA.

130. Defendants' actions, through the FIFRA Buffers, harm Growers by imposing unreasonable and expensive growing and herbicide conditions on Growers and their farmland.

131. Accordingly, Growers request an order declaring that the FIFRA Buffers are

beyond EPA's authority under statute and are arbitrary and capricious, remanding the Dicamba Decision without vacatur to Defendants for further consideration, ordering EPA to take action consistent with the foregoing, awarding Growers their attorneys' fees and costs, and issuing any other appropriate relief.

COUNT FOUR
ESA Determinations

132. Growers incorporate and re-allege paragraphs 1–109 as if fully set forth herein.

133. Defendants' Dicamba Decision and ESA Assessment found that, under the ESA, registering the Dicamba Products would have "no effect" on certain Listed Species and critical habitat (the "No Effects Determinations").

134. Defendants' Dicamba Decision and ESA Assessment further found that, under the ESA, registering the Dicamba Products was "not likely to adversely affect" a potentially affected species (the "NLAA Determination").

135. As such, the Dicamba Decision is judicially reviewable under the APA and FIFRA, as a final agency action, and under the ESA, as an agency action taken in compliance therewith. 7 U.S.C. § 136n(a); 5 U.S.C. § 706; 15 U.S.C. § 1536.

136. The No Effects Determinations are not arbitrary, capricious, or an abuse of discretion, and are otherwise in accordance with law, consistent with the APA, FIFRA, and the ESA.

137. Likewise, the NLAA Determination was not arbitrary, capricious, or an abuse of decision, and is otherwise in accordance with law, consistent with the APA, FIFRA, and ESA.

138. Defendants' No Effects Determinations and NLAA Determination, through the Dicamba Decision, are essential to Growers' ability to continue using dicamba safely,

consistently, and legally. Growers need certainty that the No Effects Determinations and NLAA Determination, and by extension, the Dicamba Decision, are legally valid. Without regulatory certainty, Growers' access to and investments in the Dicamba Products and DT seeds, are at risk.

139. Accordingly, Growers request an order declaring the No Effects Determinations and NLAA Determination legally valid under the APA, FIFRA, and the ESA, awarding Growers their attorneys' fees and costs, and issuing any other appropriate relief.

PRAYER FOR RELIEF

WHEREFORE, Growers respectfully request that the Court enter judgment as follows:

- A. Declare that the ESA Buffers, FIFRA Buffers, and Application Restrictions exceed EPA's authority under FIFRA, the APA, and the ESA; that the ESA Buffers, FIFRA Buffers, and Application Restrictions are arbitrary, capricious, an abuse of discretion, and otherwise not in accordance with law; that the ESA Buffers, FIFRA Buffers, and Application Restrictions are unnecessary to ensure compliance with FIFRA, the ESA, and the APA; and, that EPA must take action accordingly.
- B. Declare that EPA's No Effects Determinations and NLAA Determination fully comply with all applicable law, including FIFRA, the APA, and the ESA.
- C. Order EPA to take action consistent with the above declarations.
- D. Remand the Dicamba Decision without vacatur to EPA for the limited purpose of action consistent with this Court's order and declarations.
- E. Award Growers their costs and reasonable attorneys' fees.
- F. Grant such other relief that the Court considers just and proper.

Dated: November 4, 2020

Respectfully submitted,

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