UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

In re FIFRA Section 6(e) Notice of Intent to Cancel Flubendiamide Registrations	)	Docket No. FIFRA-HQ-2016-0001

Motion for Leave to File Amicus Curiae Brief and Brief of The American Soybean Association, Agricultural Council of California, Agricultural Retailers Association, Almond Hullers & Processors Association, American Peanut Council, American Pistachio Growers, California Alfalfa and Forage Association, California Cherry Board, California Cotton Ginners and Growers Association, California Farm Bureau Federation, California Fresh Fruit Association, California League of Food Processors, California Pear Advisory Board, California Specialty Crops Council, California Tomato Growers Association, California Tomato Research Institute, Inc., California Walnut Commission, Delta Council, Florida Fertilizer & Agrichemical Association, Florida Fruit & Vegetable Association, Grower-Shipper Association of Central California, Minnesota Agri-Growth Council, National Corn Growers Association, National Cotton Council, National Potato Council, National Sorghum Producers, Northwest Horticultural Council, Oregonians for Food & Shelter, Pacific Northwest Vegetable Association, South Dakota Corn Growers Association, Tobacco Growers Association of North Carolina, Inc., US Apple Association, Washington Asparagus Commission, Washington Blueberry Commission, Washington Friends of Farms & Forests, Western Agricultural Processors Association, as Amicus Curiae in Support of Objections to EPA's Notice of Cancellation

TABLE OF CONTENTS

TABLE OF AUTHORITIES

FEDERAL CASES

STATUTORY PROVISIONS

REGULATORY PROVISIONS

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I. MOTION FOR LEAVE TO FILE AMICUS CURIAE BRIEF

The American Soybean Association, Agricultural Council of California, Agricultural Retailers Association, Almond Hullers & Processors Association, American Peanut Council, American Pistachio Growers, California Alfalfa and Forage Association, California Cherry Board, California Cotton Ginners and Growers Association, California Farm Bureau Federation, California Fresh Fruit Association, California League of Food Processors, California Pear Advisory Board, California Specialty Crops Council, California Tomato Growers Association, California Tomato Research Institute, Inc., California Walnut Commission, Delta Council, Florida Fertilizer & Agrichemical Association, Florida Fruit & Vegetable Association, Grower-Shipper Association of Central California, Minnesota Agri-Growth Council, National Corn Growers Association, National Cotton Council, National Potato Council, National Sorghum Producers, Northwest Horticultural Council, Oregonians for Food & Shelter, Pacific Northwest Vegetable Association, South Dakota Corn Growers Association, Tobacco Growers Association of North Carolina, Inc., US Apple Association, Washington Asparagus Commission, Washington Blueberry Commission, Washington Friends of Farms & Forests, Western Agricultural Processors Association, and Western Growers Association (together the "Growers"), hereby move for leave to file the amicus memorandum set forth below.

1. The Growers use pesticides to prevent or remedy disease, infestation, and other

harmful invasion of pests that would otherwise threaten crops on which the public depends. The Growers' operations, which are essential to our nation's food supply, are vitally affected by the Environmental Protection Agency's ("EPA") cancellation of flubendiamide. Flubendiamide products provide targeted, specific, non-systemic control, are compatible with Integrated Pest Management ("IPM") practices, and combat insect resistance, in a cost effective manner. Growers have an interest in pesticide product availability, including multiple pesticide options to help ensure best pest control, maximum yields, minimum environmental impacts, resistance management now and in the future, and the benefits of cost competition among products. Cancellation will therefore impede the Growers' ability to respond effectively to harmful pests, risking significant losses and imposing crippling costs on the Growers.

2. Moreover, if EPA's proposed cancellation of flubendiamide registrations is approved, the Growers will be denied the protections of a lawful cancellation procedure, including required consultation with the United States Department of Agriculture (USDA), opportunity for full grower input, scientific peer review, and the opportunity for a full evidentiary administrative hearing challenging the merits of EPA's scientific and regulatory determinations.

3. For these reasons and as described in detail below, the Growers support the objections filed by registrants Bayer CropScience ("Bayer) and Nichino America, Inc. ("Nichino") to EPA's Notice of Intent to Cancel the registration for pesticide products containing the active ingredient flubendiamide, and request that the Administrative Law Judge ("ALJ") issue a decision:

a. finding that EPA's condition of registration requiring voluntary cancellation is unlawful,

b. denying EPA's request for cancellation under FIFRA § 6(e), and

c. requiring EPA to proceed with the full cancellation process required under FIFRA §§ 6(b) & 6(d) if EPA wishes to cancel existing flubendiamide registrations for failure to meet the FIFRA registration standard.

II. MEMORANDUM IN SUPPORT OF OBJECTIONS TO EPA'S NOTICE OF CANCELLATION

A. Statements of Interest of Amicus Curiae

The parties joining this amicus brief in support of Bayer's and Nichino's objections to the Notice of Intent to Cancel represent a diverse array of grower associations, food processors, and food retailers with direct interests in the pesticide products containing flubendiamide proposed to be cancelled (collectively "flubendiamide"), in pesticide availability and choice, and in ensuring a lawful and transparent process for any pesticide cancellation determination.

American Soybean Association

American Soybean Association (ASA) is the national trade association representing U.S. soybean farmers on domestic and international issues of importance to the soybean industry. ASA's advocacy and representational efforts are made possible through the voluntary membership of approximately 22,000 farmers in 31 states. ASA represents the interests of soybean growers who grow soybeans on 301,000 farms in the United States. The farm-gate crop value of soybeans in 2015 was over $34 billion.

Agricultural Council of California

Founded in 1919, Agricultural Council of California is a member-supported organization advocating for more than 15,000 farmers across California, ranging from farmer-owned businesses to the world's best-known brands. Agricultural Council of California works tirelessly to keep its members productive and competitive so that agriculture can remain California's

number-one industry and members can continue to produce the highest quality food for the entire world.

Agricultural Retailers Association

The Agricultural Retailers Association (ARA) is a national, non-profit trade organization for agricultural retailers and distributors of agronomic crop inputs with members covering virtually all of the 50 states and representing over 70% of all crop input materials sold to America's farmers. These inputs are used to nourish and protect a wide variety of crops, from major row crop commodities to specialty crops. Members not only sell agronomic crop inputs but actually apply with their own equipment basic crop nutrients and crop protection products; over half of ARA's members custom apply fertilizer for their customers on about 45% of their total acres served. ARA membership is diverse, from small family-run businesses of 10 employees to farmer cooperatives with one thousand or more employees and large corporations with thousands of employees and multiple branches. Suppliers of the products sold by retailers are also members of the association. ARA members are trusted resources for its farmer customers concerning products and techniques needed to produce crops which also help to preserve and protect the crops, the soil and the environment. ARA members have been instrumental in educating its farmer customers as to the benefits of no-till, limited till, and conservation tillage, technologies which in turn produce less runoff of nutrients and pesticides.

Almond Hullers & Processors Association

Established in 1980 the Almond Hullers & Processors Association (AHPA) is a trade association that represents 90% of the California almond industry based on volume. The association is dedicated to innovative leadership and advocacy, ensuring the sustainability and success of the California almond community. AHPA provides an array of services to the almond industry

including technical assistance and resources to address an ever changing regulatory environment. California almonds are California's #1 agricultural export and #2 agricultural crop valued at $5.9 billion in 2014 according to the California Department of Food & Agriculture. California produces 80% of the world's almonds and 100% of the U.S. commercial supply. The California almond industry supports California's economic well-being by generating more than 100,000 jobs and more than $21 billion gross revenue across all industries in the state, adding about $11 billion dollars to the size of the state's total economy.

American Peanut Council

The American Peanut Council is the trade association which represents all segments of the peanut industry. Members include peanut growers, peanut shellers, brokers, peanut product manufacturers, and suppliers of goods and services to the industry. Its goals are to provide a forum for all industry segments to exchange and process information, provide leadership in issues management, serve as the voice for the industry, promote the consumption of U.S. peanuts internationally, and fund, monitor, and prioritize selected research that affects the peanut industry.

American Pistachio Growers

American Pistachio Growers (APG) is a voluntary agricultural trade association representing members who are pistachio producers and processors in California, Arizona and New Mexico. APG is governed by an 18-member Board of Directors and is headquartered in Fresno, California. APG has over 620 producer members, which comprises over half of the U.S. pistachio industry. APG provides programs and services vital to American pistachio growers, including: Domestic and International Marketing, Public Relations & Promotion Programs; Government Relations at the California State and Federal Levels; A Democratic Forum for

Members to Discuss Industry Issues and Determine Appropriate Direction; Leadership Development for Future Industry Leaders; and Industry Communications and Educational Programs. Collectively, the states of California, Arizona and New Mexico represent 100% of the nation's commercial pistachio production. California comprises 98.5% of the total with over 300,000 acres planted throughout 22 counties. There are 950 producers within the U.S. pistachio community, and the annual "farm gate" value of pistachios represents over $1.16 billion to the California economy and over $15 million to the states of Arizona and New Mexico.

California Alfalfa and Forage Association

California Alfalfa and Forage Association (CAFA) is a nonprofit agricultural trade association which represents the California alfalfa and forage industry. CAFA's membership includes over 450 growers and allied industry partners who cooperate to achieve industry-wide goals ranging from educating the public to directing research priorities. Founded in 1998, CAFA is led by growers and exists to represent and protect industry interests for growers across California.

California Cherry Board

The California Cherry Board was established in 2012 to provide research, industry statistics, address industry issues and facilitate export promotion for the entire California cherry industry. California has over 600 cherry growers, 25 packing operations and cherries are grown on approximately 40,000 acres. 2014 California statistics report cherry value at $425 million.

California Cotton Ginners and Growers Association

The California Cotton Ginners and Growers Associations represent 100% of the ginners and growers, which farm over 160,000 acres in 2015. Cotton represented about $855 million in 2014.

California Farm Bureau Federation

The California Farm Bureau Federation (Farm Bureau) is a non-governmental, non-profit, voluntary membership California corporation whose purpose is to protect and promote agricultural interests throughout the state of California and to find solutions to the problems of the farm, the farm home and the rural community. Farm Bureau is California's largest farm organization, comprised of 53 county farm bureaus currently representing more than 57,000 agricultural, associate and collegiate members in 56 counties. Farm Bureau strives to protect and improve the ability of farmers and ranchers engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of California's resources.

California Fresh Fruit Association

The California Fresh Fruit Association (CFFA) (formerly the California Grape & Tree Fruit League) is a voluntary, nonprofit agricultural trade association that represents California's fresh fruit industry. CFFA is one of the oldest agricultural trade associations in California, with its origins dating back to 1921 with the California Growers and Shippers Protective League and 1936 with the California Grape Growers and Shippers Association. In 2014, recognizing its growth and the expanded representation of numerous permanent fresh fruit crops the organization underwent a name change from the California Grape & Tree Fruit League to the more encompassing California Fresh Fruit Association. CFFA's membership is comprised of more than 300 members, including growers, shippers and marketers of fresh grapes, blueberries and tree fruit, and it also includes associate members who are indirectly involved with these commodities (for example, labeling equipment, container/packaging suppliers, commodity groups). The membership is primarily located in the San Joaquin Valley, though there are members located as far north as Lake County and as far south as Coachella Valley. The CFFA-

represented commodities include apricots, apples, blueberries, cherries, figs, kiwis, nectarines, peaches, pears, persimmons, plums, pomegranates and fresh grapes. These crops account for a combined farm gate value of almost $3 billion. Membership of CFFA represents approximately 85% of the volume of fresh grapes and 95% percent of volume for deciduous tree fruit shipped from California.

California League of Food Processors

Established in 1905, the California League of Food Processors represents the business interests of California's dynamic food processing industry. Its food processing members supply the nation's consumers with premium quality fruits, vegetables, juices, sauces, cheeses, snacks, nuts, seasonings and many other foods.

California Pear Advisory Board

The California Pear Advisory Board (CPAB) represents farmers who proudly grow California pears with safety, tradition and the environment always in mind. Established in March 1992, the CPAB is a state agricultural marketing order organized under the California Agricultural Marketing Act of 1937, which allows farmers to assess themselves to fund various industry programs. The marketing order covers both fresh and processed Bartlett pears produced in California. Mandated programs include promotion, research, standardization, policy, and the cumulating of industry statistics and information. CPAB is headquartered in Sacramento – the heart of one of the nation’s leading Bartlett pear growing regions.

California Specialty Crops Council

The California Specialty Crops Council (CSCC), a 501(c)5 non-profit organization, is a trusted source of field based information spanning horticultural crop production, pest management, food safety and stewardship activities in fruit, root, vegetable, vine and berry crops (fresh, dried, and

processed). Its diverse partnership of agricultural organizations also includes beekeepers. Combined, CSCC growers generate $4.1 billion annually on approximately 522,000 acres of California farmland. Its members include: CA Cherry Board; CA Dried Plum Board; CA Fresh Carrot Advisory Board; CA Garlic and Onion Research Advisory Board; CA Leafy Greens Research Program; CA Melon Research Board; CA Pear Advisory Board; CA Pepper Commission; and CA State Beekeepers Association. The CSCC is committed to transparent scientific and technical exchange, responsible agricultural practices and effective public policy solutions developed through partnerships with the scientific community, policymakers and other stakeholders in agriculture.

California Tomato Growers Association

The California Tomato Growers Association (CTGA) was formed in 1947 as an association for growers of processing tomatoes. Grower owned and operated, CTGA ensures stability for California's tomato growers through economic, public policy, bargaining and business leadership.

California Tomato Research Institute, Inc.

Founded in 1968, the California Tomato Research Institute, Inc. (Institute) is a non-profit organization of processing tomato growers. As the industry's research sponsor, the Institute's purpose is to identify, fund and direct research to maintain and enhance the economic viability of California's processing tomato industry with emphasis on production, product quality and the environment.

California Walnut Commission

The California Walnut Commission (CWC), established in 1987, is funded by mandatory assessments of the growers. The CWC is an agency of the State of California that works in

concurrence with the California Department of Food and Agriculture (CDFA). The CWC is mainly involved in health research and export market development activities. The CWC represents the California walnut industry, made up of over 4,000 growers and more than 100 handlers.

Delta Council

Delta Council is an area economic development organization representing the eighteen Delta and part-Delta counties of northwest Mississippi. Delta Council was started in 1935 by a group of far-sighted citizens to provide a medium through which the agricultural, business, and professional leadership of the area could work together. Delta Council now pioneers the effort to solve common problems and promote the development of the economy in the area.

Florida Fertilizer & Agrichemical Association

From its roots as a research organization, the Florida Fertilizer & Agrichemical Association (FFAA) has branched out to represent its fertilizer, limestone, crop protection, and agriculture biotech member companies professionally in the legislative, regulatory and public opinion arenas. FFAA's main objectives today are to promote the responsible use of plant protection and nutrient products in Florida.

Florida Fruit & Vegetable Association

The Florida Fruit and Vegetable Association (FFVA) is a non-profit, agricultural trade organization headquartered in Orlando, Florida. Its mission is to enhance the competitive and business environment for producing and marketing fruits, vegetables, and other crops. The FFVA represents and assists its membership on a broad range of farming issues, including environmental protection, marketing, labor, food safety, and pest management. These services

help Florida growers set the standard for competitively producing an abundant supply of safe, affordable fruits, vegetables and other crops.

Grower-Shipper Association of Central California

Growers, shippers, packers, harvesters, processors and countless other related businesses – come together as the voice of the Grower-Shipper Association of Central California. Almost 400 members span the coastal region encompassing Monterey, Santa Cruz, San Benito and Santa Clara counties. This diversity is reflected in the produce grown from vegetables and wine grapes to strawberries and mushrooms. More than 100 different crops flourish in the fertile soil found in this world-renowned coastal agricultural area. From small, run-by-one farming operations to large, vertically-integrated agribusiness firms, the Grower-Shipper Association of Central California represents the best-of-the-best in the industry. The gross production value of crops produced in the coastal region exceeds $10 billion.

Minnesota AgriGrowth Council

Formed in 1968, the Minnesota AgriGrowth Council is a nonprofit, non partisan organization representing approximately 180 members from all areas of Minnesota's food systems and agricultural sectors. A key part of AgriGrowth's mission is to advocate for a positive business climate for Minnesota's agriculture and food sector. Minnesota's agricultural sector ranks second (after manufacturing) in terms of economic impact to the state's economy. 400,000 jobs are tied directly or indirectly to agriculture in Minnesota. Minnesota ranks 5th among states in crop production, including 4th among states in the production of corn and soybeans.

National Corn Growers Association

Founded in 1957, the National Corn Growers Association (NCGA) represents more than 40,000 corn farmers nationwide as well as the interests of more than 300,000 growers who contribute

through corn check-off programs in their states. NCGA and its 48 affiliated state organizations work together to create and increase opportunities for corn growers. NCGA's mission is to create and increase opportunities for corn growers.

National Cotton Council

The National Cotton Council of America's (Council) mission is to ensure the ability of all U.S. cotton industry segments to compete effectively and profitably in the raw cotton, oilseed and U.S.-manufactured product markets at home and abroad. The Council serves as the central forum for consensus-building among producers, ginners, warehousers, merchants, cottonseed processors/dealers, cooperatives and textile manufacturers.

National Potato Council

National Potato Council (NPC) was formed in 1948 for U.S. potato growers. NPC represents more than 90% of the approximately 6,000 potato farmers in the U.S. on regulatory and legislative issues that affect potato production nationwide.

National Sorghum Producers

National Sorghum Producers (NSP) is an agricultural commodity organization that represents sorghum farmers nationwide on regulatory and legislative issues. Representing sorghum farmers, NSP focuses efforts on conservation, energy and traditional agriculture issues. NSP also speaks for the sorghum industry as a whole, representing the interests of companies who depend upon sorghum farmers for their livelihoods. The sorghum industry is made up of 50,000 sorghum farmers and has a presence in every state in the continental U.S. With 8.7 million acres planted in 2015 the crop will earn farmers $2.5 billion in gross receipts. Sorghum is a water-sipping crop with an environmental footprint smaller than many similar crops. Integrated pest

management is a critical part of sorghum best management practices. Maintaining a diverse set of chemical options for pest control is critical to the sustainability of its crop.

Northwest Horticultural Council

The Northwest Horticultural Council, located in Yakima, Washington, represents the growers, packers, and shippers of apples, pears, and cherries in Idaho, Oregon, and Washington. The Washington state apple industry alone generated $7.5 billion of economic activity in 2012-2013, with exports accounting for 30% or more of annual sales. Historically, some 90% of U.S. apples, 92% of U.S. pears, and 75% of U.S. sweet cherry exports originate from the Pacific Northwest, predominately from Washington.

Oregonians for Food & Shelter

Oregonians for Food & Shelter (OFS) is an over 10,000 member grassroots coalition of farmers, foresters, and other pesticide users. OFS supports a science-based regulatory system and promotes the responsible use of pesticides, fertilizer, and biotechnology. OFS's membership represents the diversity of Oregon agriculture. Oregon raises over 200 crops and leads the nation in the production of thirteen crops including hazelnuts, several varieties of berries and Christmas trees. Oregon has the nation's third largest nursery sector at nearly a $1 billion value.

Pacific Northwest Vegetable Association

The Pacific Northwest Vegetable Association (PNVA) represents vegetable growers from Idaho, Oregon, and Washington and is dedicated to education, research, production, promotion and representation relative to the Northwest vegetable industry and its markets. The economic value of vegetables in the Pacific Northwest is about $500 million.

South Dakota Corn Growers Association

South Dakota Corn Growers Association (SDCGA) is among the most active commodity groups in the state, serving as a powerful legislative voice for South Dakota corn producers. SDCGA works to: promote corn and improve producer profitability; influence public policy and legislative efforts; educate South Dakota consumers; and increase corn usage through livestock feeding and new domestic products that improve the quality of life in a changing world. South Dakota corn producers formed the SDCGA membership organization in 1986 to serve as a collective voice on legislative issues on the state and national levels.

Tobacco Growers Association of North Carolina, Inc.

For more than three decades the Tobacco Growers Association of North Carolina (TGANC) has served the farm families of North Carolina as the commodity advocacy voice specific to all facets of the crop and its related commerce. TGANC represents more than 2,200 farmers directly engaged in tobacco production and accounting for approximately 180,000 acres planted in the state on an average annual basis. TGANC is a 501(c)5 non profit that is governed by a voluntary 50 member board of directors who are all elected by the membership.

Tobacco is the leading cash crop grown in North Carolina. Its average farm gate value will gross nearly $1 billion annually. The economic success of the farm families in the state depends very much on the options and availability of highly developed and proven performance crop protection products that may contain the active ingredient flubendiamide.

U.S. Apple Association

The U.S. Apple Association (USApple) is the national voice and the national resource serving the interests of the entire American apple industry. Its members include 40 state and regional apple associations representing the nation´s 7,500 apple growers, as well as more than 1,000

individual firms involved in the apple business. It represents the interests of the entire US Apple industry on national issues, including matters concerning pesticides used on apples. Apples are the third most valuable fruit crop in the U.S., with an annual farm-gate value of approximately $3.5-4 billion and a downstream value of $12-14 billion. Apples are the most valuable fruit export from the U.S., with exports from the 2014 crop valued at over $1 billion by USDA's Global Agricultural Trade System (GATS).

Washington Asparagus Commission

The Washington Asparagus Commission's mission is to support the economic and environment sustainability of the Washington asparagus industry. The main function of the Washington Asparagus Commission is to promote Washington asparagus as a product of unsurpassed quality and nutrition both domestically and in the foreign markets, monitor and address trade issues, and to advance environmentally sound production and practices through research. The Washington Asparagus Commission represents the growers' interests in areas and issues relating to the asparagus industry. Washington Asparagus Commission was established in 1991 when it was approved by referendum vote of the Washington asparagus growers. Its budget is funded by an assessment collected from growers which is 1% of the gross receipt at the first point of sale. The assessment requirement became effective in 1991. The Board of the Washington Asparagus Commission consists of nine members. Six members are asparagus producers who are elected from designated districts. One member represents fresh handlers of asparagus and one member represents processors who are each elected by their respective groups. One board member represents the Washington Department of Agriculture. There are 75 asparagus growers in Washington.

Washington Blueberry Commission

The Washington Blueberry Commission was formed in 1969 under a marketing order from the Director of Agriculture. At present, it has about 15,000 acres in production in the state. Washington is now the leading producer of blueberries in the United States. Much of that acreage is less than 10 years old and is therefore not in full production. Blueberry consumption has increased over 50% in the last 10 years and the nutritional value in the blueberry has caught the public's attention. The Washington Blueberry Commission focuses on research, export market development and grower outreach and education. There are 250 blueberry growers in Washington.

Washington Friends of Farms & Forests

Washington Friends of Farms & Forests (WFFF) is a business trade association made up of farmers, timber producers, nursery owners, landscapers and others who promote the responsible stewardship of Washington's land, air and water. Many of its two hundred members are other trade associations including most of the agricultural commodity groups in Washington State. Washington leads the nation in the production of eleven crops including apples, cherries, pears, mint, peas, juice grapes and hops. It is second in production of potatoes, nectarines, apricots, plums, blueberries, raspberries, sweet corn and carrots for processing. Washington produces 25% of the nation’s frozen vegetables. WFFF supports producers of food and fiber by working to ensure a science-based regulatory system. WFFF works for greater public understanding of the challenges faced by producers of food and fiber.

Western Agricultural Processors Association

The Western Agricultural Processors Association represents 110 tree nut hullers and processors throughout California. Tree nuts were about $8 billion in income in 2014.

Western Growers Association

Western Growers, founded in 1926, is a trade association of California, Arizona and Colorado farmers who grow, pack and ship almost 50% of our nation's produce and a third of America's fresh organic produce. Our mission is to enhance the competitiveness and profitability of our members. With offices and dedicated staff in our nation's and states' capitals, Western Growers is the leading public policy advocate for the fresh produce industry and has a longstanding interest in environmental matters impacting the agriculture industry.

B. EPA's Proposed Cancellation Approach Unlawfully Circumvents Required Statutory Process and Deprives the Growers of an Opportunity To Be Heard.

Growers rely on administrative agencies to provide a fair process prior to cancelling a pesticide because it is critical to their operations that they have choice and availability of effective and safe pesticides. In recognition of this reality, Congress provided a process by which growers can have the opportunity to provide meaningful input on the proposed cancellation of a pesticide's registration, and the proposed cancellation is subjected to rigorous scientific analysis. *See* 7 U.S.C. § 136d(b)(2).

The Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 et seq., and agency regulations promulgated thereunder establish a "detailed, multi-step process that the Environmental Protection Agency must follow when it wants to cancel or suspend a registration." *Reckitt Benckiser, Inc. v. Jackson*, 762 F. Supp.2d 34, 42 (D.C. 2011). This process involves input from stakeholders and requires EPA to undertake a comprehensive evaluation of risks, benefits, and possible risk-mitigation options before initiating cancellation action. 7 U.S.C § 136d; 40 C.F.R. §§ 164.20-164.111.

In determining whether a notice of intent to cancel should be issued, EPA must "take into account the impact of the action proposed in such notice on production and prices of agricultural

commodities, retail food prices and otherwise on the agricultural economy." 7 U.S.C. § 136d(b)(2). EPA must also send a copy of the proposed cancellation to the Secretary of Agriculture, along with an analysis of the impact of the proposed cancellation on the agricultural economy. *Id*. If a proposed cancellation would affect a public health use, EPA must provide notice and similar opportunity to comment to the Secretary of Health and Human Services. FIFRA § 6(b). Each of these requirements are designed, in part, to ensure that the impact of cancellation on growers is taken into consideration.

FIFRA also requires EPA's underlying scientific determinations supporting a proposed cancellation be subjected to rigorous scientific analysis. 7 U.S.C. § 136w(d). EPA must submit the proposed cancellation to the FIFRA Scientific Advisory Panel ("SAP"), a panel of independent scientists who evaluate whether the EPA's determinations are based on reliable data and methods. *Id*.

Once all of the EPA's obligations under FIFRA's cancellation provisions have been met—and only once all of those obligations have been met—EPA may issue a notice of intent to cancel, which in turn is subject to administrative review. The administrative hearing provides interested parties, including growers, with an opportunity to provide input and voice support or opposition to the cancellation decision. 7 U.S.C. § 136d. Parties to the administrative proceeding may also request that "relevant questions of scientific fact" be examined by a Committee of the National Academy of Sciences. 7 U.S.C. § 136d(d).

Through the public hearing process, growers are afforded an opportunity to weigh in on the risks and benefits of the pesticide on their operations and confirm the validity of the science underlying the cancellation determination. Because of their wealth of practical experience and sector expertise using the product being considered for cancellation, growers provide a critical

perspective to be considered in the administrative process. Once the ALJ renders a decision, the decision is subject to further administrative and judicial review. 7 U.S.C. § 136n(b); 40 C.F.R. §§ 164.100-111.

Here, the EPA bypassed all of these established regulatory procedures and simply demanded voluntary cancellation.[1] Not only are EPA's actions unlawful, they have effectively silenced growers from having any input in a decision that directly impacts them.

1. The attempted cancellation of flubendiamide is EPA's latest attempt to make an end-run around Congress' intention that growers' interests be considered before a pesticide is cancelled.

In 1972, Congress amended FIFRA in order to "ensure that the economic interest of farmers and other consumers would be fully considered before any pesticide was withdrawn from the market." *McGill v. Environmental Protection Agency*, 593 F.2d 631, 634 (5th Cir. 1979). These amendments reflect Congress' recognition of the importance of pesticide choice and availability to growers and the country. *Id.* at 635.

Here, EPA issued a public determination that flubendiamide must be cancelled absent any process or procedures whatsoever. In doing so, EPA has cut growers, USDA and other affected parties out of the process. EPA's actions are in direct contravention of Congress' intent and the resulting statutory scheme that requires repeated evaluation of growers' interests. *See McGill*, 593 F.2d at 635; 7 U.S.C § 136d(b), (d); 40 C.F.R. §§ 164.20-164.111.

The Growers are increasingly concerned by EPA's continued efforts to circumvent statutory procedures in order to summarily cancel pesticides, rendering stakeholders impotent. These concerns are warranted. *See, e.g., Ciba-Geigy Corp. v. United States EPA*, 801 F.2d 430

[1] A copy of EPA's Decision Memorandum (January 29, 2016) is attached hereto as Exhibit 1 and incorporated by reference herein.

(U.S. App. D.C. 1986) (EPA sought to deny hearing on cancellation of pesticide by claiming entitlement to effectuate cancellation via procedures governing "misbranded" pesticides); *In the Matter of American Food Security Coalition*, 1993 EPA ALJ LEXIS 46 (holding that the "conclusion seems inescapable" that sole purpose of EPA's actions was to "oust [growers] from the hearing and make the cancellation of the contested issues final"); *see also Crop Life America v. EPA*, 329 F.3d 876, 882 (U.S. App. D.C. 2003) (holding that EPA's action was unlawful because it constituted a binding regulation that was issued without the notice of proposed rulemaking and period for public comment mandated by FIFRA).

EPA's efforts to sidestep the statutory cancellation process have only grown more bold over time, prompting a legal challenge and ruling of direct relevance to this action. In 2011, EPA sought to effectuate cancellation of a pesticide manufactured by Reckitt Benckiser by arguing that it was allowed to demand voluntary cancellation of the pesticide via a misbranding enforcement action rather than the appropriate process established under Section 6 of FIFRA. *Reckitt Benckiser, Inc. v. EPA*, 762 F. Supp. 2d 34 (U.S. App. D.C. 2011). The registrant challenged EPA's action, seeking declaratory and injunctive relief to bar EPA from circumventing the statutory cancellation regime. *Id.* In rejecting EPA's cancellation process, the District Court of Columbia held that EPA's interpretation of FIFRA "not only renders Section 6 superfluous; it also allows EPA to avoid the rigorous cancellation process Congress provided for in the statute." *Id.* at 43.

More recently, EPA attempted to circumvent the cancellation procedures with respect the "Enlist Duo" herbicide by requesting that a federal court summarily vacate the registration. Order, Dkt. #128, *Natural Res. Def. Council v. EPA*, No. 14-73353 (9th Cir. December 7, 2015) (order denying EPA's motion for voluntary vacature of the Enlist Duo registration). The United

States Court of Appeals for the Ninth Circuit declined EPA's request to vacate the registration without resort to the statutory cancellation procedures, and remanded the case back to EPA for further consideration under FIFRA's established procedure. *Id.*

Having failed to compel voluntary cancellation of pesticides without resort to due process through a misbranding enforcement action and a request for judicial vacature, EPA now seeks to invoke § 6(e) to achieve the same goal. EPA has not initiated cancellation under 7 U.S.C. § 136d(e) in more than 20 years. It is illogical to suggest that Congress intended for §6(e) to be used in these circumstances and deprive growers of any opportunity to have their interests in the cancellation be considered. *See Reckitt Benckiser*, 762 F. Supp. 2d at 43. The Growers request EPA be required to proceed with the full cancellation process required under FIFRA §§ 6(b) & 6(d) if EPA wishes to cancel existing flubendiamide registrations, and allow the Growers an opportunity to weigh in on this decision that directly impacts them.

2. EPA's unlawful cancellation shields its scientific methods and determinations from review.

FIFRA requires science determinations supporting cancellation to undergo scientific peer review by SAP, and the parties to the administrative proceeding are permitted to request further review by a Committee of the National Academy of Sciences. 7 U.S.C. §§ 136d(d); w(d). EPA's unlawful demand for voluntary cancellation effectively shields EPA's determination from review and challenge. Growers rely on this transparent procedure and independent oversight to

ensure that their interests will not be subjected to arbitrary or ill-considered regulation, as well as safeguard their interests in a choice of pesticide availability.[2]

The Growers are especially concerned with the lack of oversight and independent evaluation in light of the fact that EPA seems to be moving the goalposts to accomplish its goal of cancellation. It arrived at its decision by adopting new toxicity, epidemiology and exposure assumptions for residues of flubendiamide and over-relying on theoretical monitoring.[3] In order to provide the Growers with predictability, it is important that EPA use sound science and real world monitoring data in making their risk assessments and regulatory decisions.

To support its findings, EPA now relies on a toxicity endpoint that is 70 times lower than the endpoint previously relied on by EPA and Bayer. *See* Exhibit 1, p. 2. EPA guidance, in addition to well-accepted toxicological practice, even suggest that the appropriate study to evaluate potential toxicity to sediment dwelling organisms is a spiked sediment study.[4] EPA is now ignoring the spiked sediment study and this guidance, in favor of a less appropriate study

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[2] A copy of correspondence from Jane Townsend, California Alfalfa & Forage Association, to Carmen J. Rodia, Jr., EPA (Apr 30, 2015) is attached hereto as Exhibit 2 and incorporated by reference herein.

[3] A copy of correspondence from W. Daren Coppock, Agricultural Retailers Association, to Jim Jones, EPA (Mar 4, 2016) is attached hereto as Exhibit 3 and incorporated by reference herein; a copy of correspondence from Renee T. Rianda, The Morning Star Company, to Carmen J. Rodia, Jr., EPA (Apr 22, 2015) is attached hereto as Exhibit 4 and incorporated by reference herein.

[4] A copy of Bayer CropScience's Response to Request to Submit Voluntary Cancellation Requests for Flubendiamide Technical Registration and Associated End Use Products to EPA (February 5, 2016) is attached hereto as Exhibit 5 and incorporated by reference herein.

with a different endpoint. *Id*. Despite the shifting threshold, not one of the monitoring samples required by EPA has met or exceeded this new, lower endpoint, even after seven years of flubendiamide use and monitoring. *Id*.

EPA's determination also appears to rely on theoretical modeling rather than empirical data.[5] This theoretical modeling is based on highly unrealistic assumptions, including a farm pond model that assumes thirty years of substantial agricultural runoff carrying flubendiamide residues into ponds without any outflow. *See* Exhibit 1. Real world data, however, shows when flubendiamide and its metabolite, des-iodo, are present, it is in quantities well below levels of concern. *See* Exhibits 2 and 6. Growers corroborate these results, noting the absence of any harm to organisms dwelling in lakes and ponds on farms.[6]

EPA's attempted cancellation would avoid peer review or any challenge to these scientific determinations during a hearing on the merits. Accordingly, the Growers request that EPA be forced to proceed with the full cancellation process under FIFRA §§ 6(b) & 6(d), which would ensure grower and USDA input, as well as rigorous scientific analysis.

C. EPA's Regulatory Determination Misstates and Ignores the Substantial Benefits of Flubendiamide.

The biggest problem facing commercial farmers is pest control. Insects and worms can dramatically reduce crop yields, interfere with harvesting efficiency and diminish harvest

[5] A copy of correspondence from Richard Matoian, American Pistachio Growers, to Carmen J. Rodia, Jr., EPA is attached hereto as Exhibit 6 and incorporated by reference herein.

[6] The Declaration of Cliff Keel is attached hereto as Exhibit 7 and incorporated by reference herein; *see also* Exhibits 2 and 6.

quality. Flubendiamide provides growers with a necessary weapon in their arsenal of strategies for IPM and Insect Resistance Management (IRM).[7]

As demonstrated above, Congress intended for the benefits of a pesticide to growers' operations be repeatedly and thoroughly evaluated in the cancellation process. EPA purports to engage in a benefits analysis, and in doing so, is forced to concede that flubendiamide offers growers an array of important benefits.[8] Yet, EPA systematically disregards or discounts all of these benefits in favor of cancellation. Contrary to the EPA's conclusions, there are not comparable alternatives in many markets, and elimination of flubendiamide will adversely affect the growers' operations, IRM and IPM programs, and the environment.

1. Flubendiamide is safe and this is critically important to growers.

Growers are on the front lines when it comes to the safety of pesticides, facing the most serious consequences of exposure to toxic or harmful chemicals. Therefore, growers have a strong interest in using pesticides that are protective of the health and safety of agricultural workers, their land and that ensure a safe public food supply. Flubendiamide is such a pesticide.

[7] The Declaration of Edward Greer is attached hereto as Exhibit 8 and incorporated by reference herein; the Declaration of Ben Guthrie is attached hereto as Exhibit 9 and incorporated by reference herein.

[8] A copy of EPA's Benefits and Economic Analysis Division (BEAD) Review of Bayer CropScience Flubendiamide Benefits Document (July 24, 2015) is attached hereto as Exhibit 10 and incorporated by reference herein.

Flubendiamide has a very positive human health profile.[9] Indeed, EPA agrees that "no human health concerns have been identified with the use of flubendiamide" and it unlikely to be carcinogenic. *See* Exhibit 1, p. 2. Flubendiamide provides growers with a pesticide which is safe for their workers and farms. *See* Exhibit 7.

Flubendiamide is also superior to alternatives when evaluating toxicity to fish and aquatic organisms, beneficial insect populations and bees. *See* Exhibits 2 and 6. Notably, flubendiamide is much less toxic to bees than most competitor products, which is important given that many crops depend upon bees and other pollinators for reproduction.[10] Growers have a vested interest in preserving the acreage they depend on to survive and rely on flubendiamide to do so.

While EPA purports to seek cancellation of flubendiamide because of an alleged risk to aquatic invertebrates, it disregards the benefits of flubendiamide's relative safety for applicators, field workers, bees and other beneficial insect populations. *See* Exhibits 1 and 10. As the frontline defense against the use of toxic or otherwise harmful insecticides, the Growers believe it is imperative that flubendiamide's highly favorable safety profile be considered before cancellation.

[9] A copy of correspondence from Hannah Burrack, Ph.D., North Carolina State University, to Carmen J. Rodia, Jr., EPA (April 22, 2015) is attached hereto as Exhibit 11 and incorporated by reference herein.

[10] A copy of correspondence from Troy Hesse, Precision Seed Production, to Frank Rittemann, Bayer CropScience (March 8, 2016) is attached hereto as Exhibit 12 and incorporated by reference herein.

2. Flubendiamide provides effective and selective control.

Extensive research and testing confirms that flubendiamide is effective against more than 95 lepidopteran insect pests and has enabled its use on more than 200 crops.[11] As growers affirm from real-world experience, the efficacy of flubendiamide makes it an essential tool in their IPM strategies.[12] Mike Sturdivant, a fifth-generation farmer in the Mississippi Delta, reports "I have no other tools in my arsenal that are as effective as Belt, especially from a cost standpoint." Exhibit 14.

One of the most significant and unique aspects of flubendiamide is its selective control.[13] The selective nature of flubendiamide helps conserve many species of beneficial arthropods that naturally help regulate pest populations. *Id*. This natural control is an integral part of IPM and IRM programs. *Id*.; *see also* Exhibit 13. Allowing natural enemies to control pest populations minimizes the amount of active ingredients that need to be released into the environment. *See* Exhibit 15.

Flubendiamide's selectivity also serves an important purpose in preventing target pest resurgence and a secondary pest outbreak. Many of the alternatives to flubendiamide are IPM

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[11] A copy of correspondence from Eric T. Natwick, University of California Cooperative Extension, to Carmen J. Rodia, Jr., EPA (April 17, 2015) is attached hereto as Exhibit 13 and incorporated by reference herein.

[12] The Declaration of Mike Sturdivant is attached hereto as Exhibit 14 and incorporated by reference herein; *see also* Exhibits 8 and 9.

[13] A copy of correspondence from Dr. Jeremy K. Greene and Dr. Francis Reay-Jones, Clemson University, to Carmen J. Rodia, Jr., EPA (April 16, 2015) is attached hereto as Exhibit 15 and incorporated by reference herein.

disruptive, meaning they destroy natural predators and parasitoids.[14] The use of IPM disruptive insecticides can result in a rapid resurgence of the target pest. *See* Exhibit 13. It can also cause secondary pest outbreaks, including, for example, a flare of spider mites.[15] Spider mite flares can be disastrous for growers as there are no miticides that will effectively manage a spider mite infestation in certain crops, and spider mites drastically reduce yield. *Id*.

EPA acknowledges the significant benefits of effectiveness and selectivity of flubendiamide, concluding: "flubendiamide is specific and effective against Lepidopteran pests in the selected crops." *See* Exhibit 10, p. 4. It further concludes "flubendiamide is relatively protective of beneficial arthropods, and does play a role in IPM." *Id*. Given the importance of IPM strategies in managing pests and protecting the environment, these significant benefits of flubendiamide should not be cast aside in favor of unilateral cancellation.

3. There is no known cross-resistance to Flubendiamide.

Insecticide resistance is a constant threat and evolving issue in pest management strategies. Currently, there are insects resistant to every synthetic chemical insecticide used. *See e.g.* Exhibits 11and 15. In order to combat resistance, IRM programs recommend Mode of Action ("MOA") rotation. Flubendiamide has unique properties within its MOA group and no

[14] A copy of correspondence from Frank G. Zalom, University of California, Davis, to Carmen J. Rodia, Jr., EPA (April 22, 2015) is attached hereto as Exhibit 16 and incorporated by reference herein.

[15] A copy of correspondence from Jeffrey Gore, Mississippi State University Delta Research and Extension Center, to Carmen J. Rodia, Jr., EPA (April 29, 2015) is attached hereto as Exhibit 17 and incorporated by reference herein.

known cross-resistance to other MOA groups. *See* Exhibits 4, 11, and 13. Consequently, flubendiamide controls pests that have developed resistance to other classes of pesticides.[16]

Insecticide MOA rotation is the best way to combat resistance.[17] In order to effectively rotate insecticides, growers must have a sufficient number of options available with different MOA.[18] Given flubendiamide's unique properties within its MOA group and no known cross-resistance, growers have come to rely on flubendiamide. *See* Exhibits 7, 8, 9, 14, and 20.

EPA acknowledges that the elimination of flubendiamide "reduces the ability to manage IRM by using insecticides with different MOA," but disregards this benefit because "few" acres are treated with flubendiamide. Exhibit 10, p. 8. This misses the point. The advantage of flubendiamide should not be measured by the amount of acres that are treated, but by the unique role it plays in IPM programs and in managing specific pests on specific crops. Flubendiamide is not, nor would it likely ever be, the most commonly used product, but Growers rely on

[16] *See* Exhibits 15 and 17; *see also* a copy of correspondence from Chris Daum, Helena Chemical Company, to Frank Rittemann, Bayer CropScience (March 9, 2016) is attached hereto as Exhibit 18 and incorporated by reference herein.

[17] *See* Exhibit 14; *see also* a copy of Insecticide Resistance Action Committee's (IRAC) Overview of an Insect Resistance Management (IRM) Plan for Plant Protection Insecticides attached hereto as Exhibit 19 and incorporated by reference herein.

[18] A copy of correspondence from Don Parker, Ph.D, National Cotton Council of America to Carmen J. Rodia, Jr., EPA (April 30, 2015) is attached hereto as Exhibit 20 and incorporated by reference herein.

flubendiamide as part of their rotation of treatments to control crop pests while preventing resistance.[19]

EPA's next attempt to disregard the benefits of flubendiamide in combating resistance is its asserting that "chlorantraniliprole and cyantraniliprole may be used equally for resistance management." Exhibit 10, p. 3. This claim is undermined on the very next page of the BEAD analysis, which acknowledges that flubendiamide's non-systemic characteristic is "unique to flubendiamide and makes it very suitable for IRM and IPM strategies in many crops." Exhibit 10, at p. 4. It further acknowledges that entomologists favor non-systemic insecticides (such as flubendiamide) over the systemic chlorantraniliprole and cyantraniliprole for certain pests because it "reduces selection pressure on the pest insects and fits in well with both IRM and IPM strategies." *Id*. By all accounts, if chlorantraniliprole and cyantraniliprole are substituted for flubendiamide, resistance prevention may be sacrificed. *See* Exhibits 10 and 13.

As resistance increases across America, growers need more, not fewer, tools in their arsenal to combat resistance. *See* Exhibits 8, 9, and 14. Elimination of one of the few remaining chemistries to combat resistance will significantly impact growers' ability to combat resistance. *See* Exhibits 8, 9, and 14. As demonstrated by the correspondence and Declarations attached hereto, the availability of flubendiamide to prevent resistance is critically important to the Growers' operations. EPA's claim that chlorantraniliprole and cyantraniliprole are equivalent substitutes is inaccurate and should therefore be disregarded.

[19] A copy of correspondence from Mark A. Abney, University of Georgia, to Carmen J. Rodia, Jr., EPA (April 15, 2015) is attached hereto as Exhibit 21 and incorporated by reference herein.

4. Flubendiamide is rainfast and has longer residual activity compared to alternatives.

Because of flubendiamide's extended residual control, fewer applications are required. *See* Exhibit 15. This is a significant benefit to the environment. First, it reduces the amount of active ingredient released into the environment. *Id.* Second, it cuts down on other application inputs and use of natural resources, such as fuel for spray equipment. *Id.*

Flubendiamide's superior control is also important to growers because it reduces costs.[20] Other insecticides require multiple applications to effectively control pest populations, doubling or tripling the costs to growers. *Id.* EPA ignores the benefits to growers and the environment of flubendiamide's residual activity.

5. Flubendiamide has important crop specific benefits which the EPA generally ignored or mistakenly concluded alternative insecticides are available.

a. Soybeans

Of all the crops grown in the United States, flubendiamide is most commonly applied to soybeans. Exhibit 10, p. 5. EPA asserts that "since very little soybean acreage is treated with flubendiamide, BEAD concludes that it does not provide much benefit to soybean growers." *Id*. As soybean growers can attest, EPA is wrong to dismiss the significance of flubendiamide's cancellation on soybean growers and crops. Assessing flubendiamide's importance simply by

[20] A copy of correspondence from Stan J. Winslow, Tidewater Agronomics, Inc., to Carmen J. Rodia, Jr., EPA is attached hereto as Exhibit 22 and incorporated by reference herein; a copy of correspondence from Angus Catchot, Mississippi State University Department of Entomology and Plant Pathology, to EPA is attached hereto as Exhibit 23 and incorporated by reference herein.

calculating the percentage of soybean acres on which it is applied ignores the effectiveness of flubendiamide in soybeans, the benefits of rotating MOA to prevent resistance and the significant environmental harm of replacing flubendiamide with synthetic pyrethroids.

i. Flubendiamide offers soybean growers superior control and plays a critical role in resistance management.

Flubendiamide selectively targets lepidopteran pests, and is by far the most popular, "IPM friendly"[21] option for controlling lepidopteran pests on soybeans.[22] The efficacy of flubendiamide on soybeans has been proven by multiple trials conducted by IPM practitioners. *See* Exhibits 15 and 23. Growers and researchers have concluded that flubendiamide is superior to available alternatives on soybeans. *See* Exhibits 25, 22, 23, and 24. In fact, flubendiamide is used for lepidopteran pests on 6 times more acres than the next most favored IPM friendly insecticide. Exhibit 10, p. 3. Ben Guthrie, a farm manager overseeing 13,000 acres of soybean, cotton, wheat and grain sorghum in Northeast Louisiana, reports: "Belt is one the few remaining chemistries to control pests. If we lose Belt, this will put our food and fiber industry at risk." Exhibit 9.

EPA attempts to discount the substantial benefits of flubendiamide by arguing it is used on "very few" soybean acres, but this ignores the advantages of flubendiamide in an IPM program. Exhibit 10, p. 3. An important component of an IRM program is rotating the MOA.

[21] "IPM friendly" is a term used to describe a pesticide that combats pests, with minimal impacts to beneficial insects and the environment. In contrast, an "IPM disruptive" pesticide has high negative impacts to beneficial insects and the environment.

[22] *See* Exhibit 23; the Declaration of Chris Ward is also attached hereto as Exhibit 24 and incorporated by reference herein.

See Exhibit 19. Since flubendiamide has unique properties within its MOA group, growers need flubendiamide as a tool in its arsenal to combat resistance. *See* Exhibits 15, 22, and 23.

By fixating solely on the percentage of soybean acres on which flubendiamide is annually applied, EPA overlooks that because soybeans are such a common crop in the United States, the small percentage of the total acreage on which flubendiamide is applied still corresponds to an enormous amount of farmland. Soybeans are the second largest crop in the United States. In 2015, soybean planted area was estimated at 82.7 million acres according to the USDA. Therefore, 1% of total soybean acreage equals 827,000 acres, an area larger than the size of Rhode Island.

ii. The likely replacement for flubendiamide are synthetic pyrethroids which are not as effective and are IPM disruptive.

EPA concedes that growers will likely use synthetic pyrethroids in place of flubendiamide if it is cancelled, and acknowledges that they are not an equivalent alternative. Exhibit 10, pp. 7-8. EPA concedes that synthetic pyrethroids will kill many beneficial insects and create secondary pest problems. *See* Exhibit 10, pp. 7-8. Additionally, pyrethroids (and other broad spectrum insecticides) typically require additional applications. *See* Exhibit 15. In contrast, when flubendiamide is used, additional applications are not required and beneficial insects are preserved. *Id*.

Furthermore, pyrethroids are simply not an efficacious replacement for flubendiamide for the control of certain pests. Corn earworm is the soybean growers' most significant threat. Pyrethroids no longer provide adequate control. *See* Exhibit 23. Beginning in 2009-2010, growers in Mississippi reported erratic control of corn earworm and outright failure using pyrethroids. *Id.* Many other species, including bollworms, have also developed resistance to pyrethroids. *See* Exhibit 15.

iii. Eliminating flubendiamide will increase costs to growers.

Elimination of flubendiamide will have a significant economic impact on broad acre crops like soybeans. Flubendiamide is among the least expensive IPM friendly insecticides, and less than half the average cost of its major diamide competitor. *See* Exhibits 8, 9, 14, 22, and 24. Additionally, its superior residual activity results in fewer applications, thus further conserving costs. Crop consultant, Chris Ward, recommends flubendiamide to soybean growers 80%-90% of the time because it is the most economical and effective option. Exhibit 14. Because cost control is especially important in broad acre crops like soybeans, the cancellation of flubendiamide will negatively impact the ability of soybean growers to continue to practice IPM and IRM. *See* Exhibits 15, 22, 23, and 24.

b. Almonds

Usage of flubendiamide on specialty crops like almonds is very important to the agricultural economy nationally and locally, even if acreage is smaller than broadacre crops. The United States comprises approximately 80% of the world's almond supply. Due to its hot, dry climate, almond production is concentrated in California, with almonds being California's third-leading agricultural product, its top agricultural export in 2008, and 100% of the U.S. commercial supply.

Almonds constitute the second largest use of flubendiamide. Exhibit 10, p. 6. EPA concedes that there are "high benefits to flubendiamide in almonds." *Id*. Growers select flubendiamide because it offers better control and much lower cost than IPM alternatives for critical lepidopteran pests, including navel orange worm and peach twig borer. *See* Exhibit 16.

EPA discounts these benefits, claiming that growers will simply choose other IPM friendly insecticides if flubendiamide is cancelled. Such an assumption overlooks the substantial

cost increase of choosing an IPM friendly alternative. Given the increased cost, growers are more likely to revert to pyrethroids, which will harm IPM and resistance management goals. *See* Exhibit 16. Additionally, the use of pyrethroids is becoming highly regulated and limited due to water quality concerns in California. The use of pyrethroids has also already undermined the nonchemical mite management in some growing regions in California. *Id.*

Even if growers are willing to pay the increased cost of an alternative IPM friendly insecticide, these products will not deliver the same performance as flubendiamide. Unlike chlorantraniliprole, flubendiamide is non-systemic, which allows a more flexible treatment window approach and fewer resistance issues. Distinguished Professor and entomologist from the University of California, Frank Zalom, has extensively researched the effects of flubendiamide on almond crops. *See* Exhibit 16. His research revealed that the other available IPM friendly insecticide, Intrepid, "does not satisfactorily control peach twig borer while diamide insecticides such as Belt provide excellent control—even better than the pyrethroids." *Id.*

EPA is willing to disregard these significant benefits to almond growers due to a remote risk of runoff. It does not rain in California when flubendiamide is applied and the vast majority of almond acreage is drip or microsprinkler irrigated. *See* Exhibit 16. Therefore, the likelihood that the use of flubendiamide on California's almond trees will result in runoff into waterways is remote. *Id*. Given the remote risk of runoff, growers should not be forced to choose less effective and more expensive alternatives.

c. Cotton.

The annual economic activity generated by cotton and its products in the United States economy is estimated to be in excess of $120 billion. *See* Exhibit 20. Despite flubendiamide's

use on one of the most economically significant crops in the country, EPA wholly ignored cotton in its benefit analysis. The impact of the cancellation of flubendiamide on this major industry cannot be ignored.

Caterpillars are one of the most damaging pests facing cotton growers. Flubendiamide provides "excellent control" of bollworm, tobacco budworm, fall armyworm, beet armyworm, soybean looper and numerous other caterpillar pests. *See* Exhibit 15. Research demonstrates that flubendiamide is comparable to or more effective than alternatives and is therefore a critical tool for cotton growers. *See* Exhibits 15 and 20.

Elimination of flubendiamide will result in increased use of pyrethroids. Even if growers select a less effective and more expensive IPM friendly alternative, this will increase selection pressure and resistance issues for these alternatives. *See* Exhibits 15 and 20. Given EPA's general acknowledgement that pyrethroids are a poor substitute for flubendiamide and the importance of rotation in IPM programs, EPA should have properly considered the negative impacts that cancellation will have on cotton growers.

d. Tobacco

Flubendiamide provides significant and unique benefits to tobacco farmers. Tobacco is a labor-intensive and hands-on crop. *See* Exhibit 11. Workers may come into direct contact with the crop several times during the growing season, including periods of activity of key foliar tobacco pests. *Id.*

EPA agrees that "no human health concerns have been identified with the use of flubendiamide." *See* Exhibit 1, p. 2. Additionally, flubendiamide is "not a skin irritant and is not a skin sensitizer." *Id.* It is not likely to be carcinogenic. *Id.* Although acknowledging the

reliance and "high benefits" for tobacco growers, EPA makes no mention of the unique and critical safety aspects of flubendiamide for tobacco growers in its cancellation decision.

For tobacco growers like Cliff Keel, EPA's failure to take into account the safety profile of flubendiamide is disconcerting. *See* Exhibit 7. He operates a family farm with his brother and son. *Id.* The safety of an insecticide is very important to him, especially because his son is involved in spraying and harvesting. *Id.* He relies on flubendiamide because it is safe for his workers, family and farm. *Id.*

Flubendiamide also offers tobacco growers an important tool in their arsenal to combat significant pests such as tobacco budworm and tobacco/tomato horn worm. *See* Exhibit 11. Tobacco budworm has a history of developing resistance to insecticides when a single MOA is overused. *Id*. Flubendiamide provides a different MOA and, thus, is a key component of resistance-management. *Id*.

Because flubendiamide is selective and non-systemic, it can be used effectively with a treatment window approach, an important function of IRM. *See* Exhibit 10, pp. 3-4. It selectively targets only caterpillars and beneficial insects are preserved. *See* Exhibit 11. These beneficial insects play an important part in pest reduction and minimizing the amount of sprays needed. *Id*.

EPA concludes growers will likely replace flubendiamide with other IPM friendly alternatives, but this conclusion overlooks the substantial cost increase associated with alternatives. Grower interviews suggest that cost considerations will force them to replace flubendiamide with insecticides which are not compatible with IPM and IRM strategies, such as organophosphates and pyrethroids. *See* Exhibits 7 and 11.

e. Peanuts

EPA agrees that synthetic pyrethroids are the likely replacement for flubendiamide if the registration is cancelled for peanut growers. Exhibit 10, p. 7. EPA further concedes that using a synthetic pyrethroid as a replacement will require multiple insecticide applications and will also cause secondary pest problems (mites). *Id.* EPA again dismisses these significant repercussions by pointing out that flubendiamide is used on "very few" peanut acres (6%). *Id.* In doing so, the EPA has ignored the significant role of peanut production in the southern agriculture economy, as well as the considerable benefits of flubendiamide to peanut growers.[23]

Foliage feeding caterpillars are the greatest threat to peanut crops. *See* Exhibit 21. Broad spectrum pyrethroids are the standard chemistry for combating caterpillars. *Id*. Nevertheless, "problems associated with pyrethroid use in peanut are significant, and the availability of alternate chemistries is important." *Id*. Many of the caterpillar species have developed resistance to pyrethroid and, thus, flubendiamide is an essential tool in combating these pests. *Id*. Growers have found that flubendiamide provides "excellent control" of a broad range of foliage feeding caterpillar. *See* Exhibit 17.

Unlike pyrethroids, flubendiamide is highly selective for lepidoptera species and does not flare secondary pests such as spider mites. *See* Exhibit 17. In fact, spider mites are almost exclusively found in fields sprayed with a broad spectrum insecticide. *Id*.

Spider mites can suck the juices out of a peanut leaf, which then turns yellow or even black. The result is a drastic reduction in yield. Prevention of spider mite infestation is the best management strategy because there are no miticides labeled in peanuts that will effectively manage a spider mite infestation. *See* Exhibit 17. Accordingly, many peanut growers depend on

[23] For example, Georgia growers produce nearly 50% of the U.S peanut crop annually.

flubendiamide to target Lepidoptera species and prevent secondary pest outbreaks. *See* Exhibit 21. While flubendiamide may not be the most common pesticide used by peanut growers overall, for growers facing pest resistance issues or spider mite outbreaks, flubendiamide is a critical and irreplaceable tool.

f. Tomatoes

The United States is one of the world's leading producers of tomatoes. Despite the significance of tomatoes to the agricultural economy, EPA ignores the benefits of flubendiamide to tomato growers. As with many of the other crops described above, flubendiamide offers tomato growers the opportunity to apply a treatment window approach for easy integration into a comprehensive IPM program. *See* Exhibit 4. Thus, the continued registration of flubendiamide for these growers provides an economic and efficacious alternative to pyrethroids. In addition, when compared to other IPM-alternatives, flubendiamide is rainfast, and its narrow spectrum of activity minimizes the risk of resistance developing in other insecticide pests, such as leafminers, whose resistance to chlorantraniliprole has been well documented in Florida. *Id*.

Notably, over 80% of the nearly 300,000 acres of tomatoes grown annually in California use drip irrigation, resulting in virtually no irrigation water runoff. *Id*. Because flubendiamide is typically used during periods with very little rain, storm water runoff containing flubendiamide or its metabolite is also very unlikely. *Id*. As a result, there is no significant accumulation of flubendiamide or its degradate in the water, pore water, or sediment of farm ponds, intermittent streams, or perennial streams. *Id*. In light of the significant advantages of flubendiamide to tomato growers and the low risk to aquatic invertebrates, particularly in California, cancellation would unnecessarily deprive growers of a valuable tool.

D. EPA's Proposed Cancellation Decision Ignores the Substantial Benefits to Growers and Society of Pesticide Choice and Availability.

In response to each of the substantial benefits of flubendiamide to growers, EPA provides one of three responses: ignore, diminish or distract. EPA's simplistic analysis failed to take into consideration the significant benefits to growers and society of pesticide choice and availability.

1. EPA's one-size-fits-all approach reduces grower choice.

Growers face a multitude of potential variables in each growing season, including drought, flood, extreme hot or cold, early frost and untimely rains. Growers around the country also deal with diverse growing conditions influenced by geography, climate and the crop. All of these variables, as well as growing resistance, mean that pest issues are diverse, unpredictable and evolving. It is more important than ever that growers be equipped with a variety of pesticide choices in order to combat these varying conditions each growing season. [24]

EPA discounts the variables facing growers and the benefits of flubendiamide if there is at least one existing alternative for a particular crop. Restricting growers to as few as a single (or couple) of potential alternatives is an unreasonable restriction on growers' operations. Growers need a choice of pesticides in order to respond to pressures as they arise, respond to variation in price and/or supply, to exercise flexibility when a different MOA is required, and effectively combat pests. *See* Exhibits 7, 8, 9, 14, 15, 16, and 24. Ultimately, restriction of pesticide choice will result in restriction of food choice to consumers.

[24] *See* Exhibits 20 and 21; *see also* a copy of correspondence from Charles J. Rivara, California Tomato Research Institute, to Carmen J. Rodia, Jr., EPA (April 23, 2015) attached hereto as Exhibit 25 and incorporated by reference herein.

2. Choice and availability is essential to effective integrated pest management and insecticide resistance management strategies.

A point of utmost importance to the Growers on the proposed cancellation is the fact that insecticide resistance is increasing and flubendiamide is a necessary tool in their arsenal to combat insecticide resistance. *See* Exhibits 7, 8, 9, 14, and 24. Elimination of flubendiamide will drastically and detrimentally impact Growers' operations. *Id.*

Effective IRM strategies seek to minimize the selection of resistance to any one type of insecticide by preventing or delaying the evolution of insecticide resistance or to help regain susceptibility in pest populations where resistance has already arisen. *See* Exhibit 19. The MOA classification system serves as the foundation for successful and sustainable resistance management because it provides growers with a guide to the selection of insecticides for use in an effective IRM strategy. *Id*.

Alternations and sequences or rotations of compounds from different MOA groups provide a sustainable and effective IRM approach and ensure selection from active ingredients in any one MOA group is minimized. *Id*. Therefore, the ability for growers to choose an insecticide from a variety of compounds in different MOA groups is paramount to developing a comprehensive IPM and IRM strategy. *See* Exhibits 2, 6, 8, 9, 13, 14, 15, 17, 18, 19, 20, 21, 23, and 24. This is affirmed by Ed Greer, a grower in Rayville, Louisiana, who attests: "because we rotate chemistries throughout the growing season, we need a variety of insecticides to choose from." Exhibit 8.

EPA's misplaced conclusion "that there are efficacious alternatives for flubendiamide" ignores the very fundamentals of effective pest management. Exhibit 1, p. 10. IPM is a complex, *integrated* strategy based on sound IRM principles, which includes the availability of targeted, compatible options needed for growers to preserve the maximum efficacy of

insecticides over an extended period of time. *See* Exhibit 19. It is not simply a "one stop shop" where a grower selects only one insecticide for repeated use on a particular crop over and over again. *Id*. Rather, IPM incorporates several insecticides and numerous alternate control methods for use at a specific time and for a specific purpose. *Id*. Thus, insecticide choice and availability is essential to a successful IPM program. *Id*.

Because insect resistance is spreading rapidly and many insecticides are no longer providing consistent control, flubendiamide offers a unique option desperately needed by growers today. *See* Exhibits 20 and 21. Flubendiamide helps manage this resistance because it is more selective to lepidopteran larvae with minimal risk to beneficial arthropods. *See* Exhibit 15. Removing flubendiamide from the marketplace would eliminate an IPM friendly option for growers to choose from in MOA Group 28. *See* Exhibits 20 and 21.

The cancellation of flubendiamide would increase the risk of growers returning to IPM disruptive chemistries, such as synthetic pyrethroids. *See* Exhibit 10, p. 8. In addition, many of these same IPM disruptive insecticides currently used to control lepidopteran pests also cause secondary pest outbreaks. *See* Exhibit 17. As such, eliminating flubendiamide from the market will not only eliminate a grower's ability to choose the most effective and efficient product to protect his or her crops, but also the ability to combat resistance. *See* Exhibits 20 and 21. Growers need flubendiamide as an available tool in their arsenal. *See* Exhibits 7, 8, 9, 14, and 24.

3. Flubendiamide is more cost-effective than other alternatives.

Insecticide choice and availability can also have a significant impact on overall insecticide cost because it leads to competition. Product competition in the marketplace should

not be underestimated because it forces producers to lower prices and/or improve their product in order to attract consumers.

Flubendiamide is among the least expensive, IPM friendly insecticides and is less than half the average cost of chlorantraniliprole, its major phthalic diamide competitor. *See* Exhibit 24. In addition, flubendiamide is more cost-effective for many growers than many of its competitors because growers do not have to expend additional time and labor applying multiple applications and rechecking their crops, as they are required to do with other products. *See* Exhibit 15. This is an especially important consideration for growers of low-margin broad-acre crops, such as alfalfa, peanuts and soybeans. *See* Exhibits 8 and 24. Flubendiamide's low relative cost is also critical to promoting the use of IPM friendly insecticides for these low-margin crops. *Id*. Thus, growers need access to economical, high performance, IPM friendly insecticides, such as flubendiamide, that promote these important IPM practices and reduce overall insecticide cost and use.

4. EPA ignores the importance of pesticide choice and availability to growers of specialty crops.

EPA argues that flubendiamide brings little benefit if it is not widely used on a given crop. By using acreage and volume as the measure of benefits, EPA ignores the critical role pesticides play in speciality crops.

Specialty crops are an important part of the agricultural economy.[25] In recent years, specialty crops have accounted for 30%-40% of the total value of U.S. crops. While these crops may not require a significant volume of flubendiamide, the agricultural economy is substantially

[25] Specialty crops include fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture.

benefitted by flubendiamide's ability to provide effective pest control on these economically significant crops.[26]

For example, flubendiamide is used as an effective tool for distinctive issues facing sunflower growers. *See* Exhibit 12. One of the principal threats to the quality of the sunflower seed is the head moth. *Id*. At the same time, sunflowers depend upon pollination by honeybees to reproduce. *Id.* Therefore, sunflower growers require an insecticide that can effectively control the head moth population without harming non-target pests, such as the honeybee. Flubendiamide does just that. *See* Exhibit 12. If flubendiamide were no longer available on the market, sunflower growers would not have an available alternative that could provide this control without harming bees. *Id*.

As with sunflower growers, fruit growers around the country are speaking up to express the importance of flubendiamide in their operations.[27] Grape growers explained that

[26] A copy of correspondence from Jerry J. Baron, The IR-4 Project, to Jack E. Housenger, EPA (March 28, 2016) is attached hereto as Exhibit 26 and incorporated by reference herein.

[27] A copy of correspondence from Jeff Alicandro, Agr.Assistance, to Frank Rittemann, Bayer CropScience is attached hereto as Exhibit 27 and incorporated by reference herein; a copy of correspondence from Christopher Valadez, California Fresh Fruit Association, to Carmen J. Rodia, Jr., EPA (April 30, 2015) is attached hereto as Exhibit 28 and incorporated by reference herein; a copy of correspondence from John Ivison, NYSABA, to EPA (March 14, 2016) is attached hereto as Exhibit 29 and incorporated by reference herein.

flubendiamide's "seven day per-harvest interval and two modes of action offer greater flexibility than other products labeled for Grape Berry Moth control."[28]

Likewise, researchers conducting efficacy trials on important insect pests on apples "have not found any registered insecticide equal to Belt for control of late season Codling Moth and Oblique-banded Leafroller damage."[29] Apple growers are facing a loss of up to $500 per acre if these two pests are not controlled. *Id.* Despite these significant consequences of the cancellation of flubendiamide on fruit growers, EPA did not even acknowledge these concerns in its benefits analysis, let alone in its cancellation decision.

Because EPA's analysis failed to take into account the benefit of flubendiamide to growers facing unique, selective or localized issues, its analysis is flawed and incomplete. *See Love v. Thomas,* 858 F.3d 1347, 1361 (9th Cir. 1987) (holding EPA's decision was arbitrary and capricious where it failed to consider specific crop effects or issues facing growers in the Pacific Northwest).

5. Growers need pesticide product availability to ensure optimal pest control, maximum yields, minimum environmental impacts, resistance management and cost competition.

In many industries, growers have found that flubendiamide is the only available option to adequately control problematic pests. *See e.g.* Exhibits 12, 17, and 23. In other industries,

[28] A copy of correspondence from Mark Amidon, Welch's National Grape Co-Op (March 9, 2016) is attached hereto as Exhibit 30 and incorporated by reference herein.

[29] A copy of correspondence from W.H. Palmer, Reality Research, and Scott Palmer, Springbrook Orchards, to Frank Rittemann, Bayer CropScience (March 14, 2016) is attached hereto as Exhibit 31 and incorporated by reference herein.

growers have found that flubendiamide is essential to their IPM strategy.[30] Growers should have the ability to choose the most effective and efficient product to ensure maximum yield. *See* Exhibits 7, 8, 9, 14, 24, and 33.

Growers should also have the opportunity to select a safe pesticide. *See* Exhibits 7, 11 and 33. Flubendiamide provides growers with an option with a low risk to farm workers, handlers and the food supply. Flubendiamide also provides growers with a superior option to selectively target pests while protecting beneficial insects, fish, aquatic organisms and bees. *See* Exhibits 7 and 16.

EPA's mantra in response to many of these important benefits to growers is that alternatives exist. In many instances, EPA acknowledges that those alternatives are inferior products with their own environmental and health risks. Elsewhere, EPA claims other IPM friendly pesticides like chlorantraniliprole and cytraniliprole are equivalent substitutes for flubendiamide. Yet, even EPA concedes that flubendiamide's non-systemic characteristic is

[30] *See* Exhibits 15, 16, 18, 20, 21, 26, 28, and 30; *see also* a copy of correspondence from Henry Giclas, Western Growers, to Carmen J. Rodia, Jr., EPA (April 28, 2015) attached hereto as Exhibit 32 and incorporated by reference herein; a copy of correspondence from Ag Council of Arkansas, Arkansas Farm Bureau Federation, Arkansas Rice Farmers, Arkansas Rice Federation, Louisiana Cotton and Grain Association, Louisiana Farm Bureau Federation, Mississippi Agricultural Consultants Association, Mississippi Corn Growers Association, Mississippi Farm Bureau Federation, Mississippi Feed and Grain Association, Mississippi Peanut Growers Association, Mississippi Rice Council, Mississippi Soybean Association, and National Cotton Council to Administrative Law Judge, EPA (March 30, 2016) attached hereto as Exhibit 33 and incorporated by reference herein.

unique and more compatible with IPM and IRM programs than alternatives. *See* Exhibit 10, pp. 3-4. It further concedes these products will cost growers substantially more. *Id*.

Given the increased cost and resistance issues associated with other IPM friendly pesticides, the more plausible conclusion is that growers will be forced to revert to IPM disruptive pesticides. By all accounts, this is a significant disadvantage to growers, long-term pest control and the environment.

In this nation, where food is abundant, consumers are provided with choices of food within a range of prices. In order to continue providing consumers with these choices, growers require the ability to choose the most effective, safe and economical pesticide to combat whatever pests threaten to destroy their crops. Accordingly, the Growers request that EPA be required to consider the impact of the cancellation on the Growers' operations and the nation's food supply, as required by statute and intended by Congress, before cancellation of flubendiamide.

III. CONCLUSION

For all the foregoing reasons, the Growers request an order denying EPA's request for cancellation under FIFRA § 6(e), and requiring EPA to proceed with the full cancellation process required under FIFRA §§ 6(b) & 6(d), which allows for grower input and further examination of growers' interests before cancellation.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 7th day of April, 2016, a true and correct copy of the foregoing Motion for Leave to File Amicus Curiae Brief and Brief in Support of Objections to EPA's Notice of Cancellation was filed electronically using the EPA OALJ e-filing system; and served in the following manner to the below addressees:

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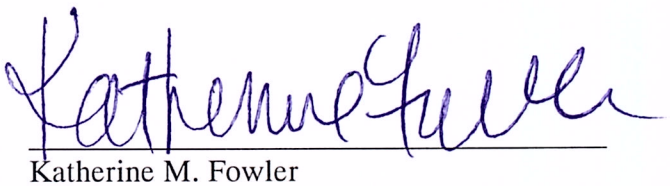

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