No. 17-71636

IN THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, ET AL., *Petitioners,*

STATE OF NEW YORK, ET AL., *Petitioner-Intervenors*,

v.

ANDREW WHEELER, ACTING ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, ET AL., *Respondents.*

On Petition for Review of an Order of the U.S. Environmental Protection Agency

---

MOTION OF AGRIBUSINESS COUNCIL OF INDIANA, AGRICULTURAL RETAILERS ASSOCIATION, ALMOND ALLIANCE OF CALIFORNIA, AMERICAN FARM BUREAU FEDERATION, AMERICANHORT, AMERICAN SEED TRADE ASSOCIATION, AMERICAN SOYBEAN ASSOCIATION, AMERICAN SUGARBEET GROWERS ASSOCIATION, BEET SUGAR DEVELOPMENT FOUNDATION, CALIFORNIA ALFALFA & FORAGE ASSOCIATION, CALIFORNIA CITRUS MUTUAL, CALIFORNIA COTTON GINNERS AND GROWERS ASSOCIATION, CALIFORNIA FRESH FRUIT ASSOCIATION, CALIFORNIA SPECIALTY CROPS COUNCIL, CRANBERRY INSTITUTE, MINNESOTA SOYBEAN GROWERS ASSOCIATION, NATIONAL AGRICULTURAL AVIATION ASSOCIATION, NATIONAL ASSOCIATION OF WHEAT GROWERS, NATIONAL CORN GROWERS ASSOCIATION, NATIONAL COTTON COUNCIL, NATIONAL SORGHUM PRODUCERS, NORTHWEST HORTICULTURAL COUNCIL, OREGONIANS FOR FOOD & SHELTER, WASHINGTON FRIENDS OF FARMS & FORESTS, WESTERN AGRICULTURAL PROCESSORS ASSOCIATION, WESTERN GROWERS, WESTERN PLANT HEALTH ASSOCIATION, AND WYOMING AGRICULTURAL BUSINESS ASSOCIATION FOR LEAVE TO FILE BRIEF AS *AMICI CURIAE* SUPPORTING PETITION FOR *EN BANC* AND PANEL REHEARING

David Y. Chung
Kirsten L. Nathanson
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004
dchung@crowell.com
(202) 624-2500

Counsel for Amici Curiae

Pursuant to Circuit Rule 29-2, Agribusiness Council of Indiana, Agricultural Retailers Association, Almond Alliance of California, American Farm Bureau Federation, AmericanHort, American Seed Trade Association, American Soybean Association, American Sugarbeet Growers Association, Beet Sugar Development Foundation, California Alfalfa & Forage Association, California Citrus Mutual, California Cotton Ginners and Growers Association, California Fresh Fruit Association, California Specialty Crops Council, Cranberry Institute, Minnesota Soybean Growers Association, National Agricultural Aviation Association, National Association of Wheat Growers, National Corn Growers Association, National Cotton Council, National Sorghum Producers, Northwest Horticultural Council, Oregonians for Food & Shelter, Washington Friends of Farms & Forests, Western Agricultural Processors Association, Western Growers, Western Plant Health Association, and Wyoming Agricultural Business Association (collectively, "Agricultural *Amici*") respectfully request leave to file an *amicus* brief in support of the Respondents' petition for *en banc* and panel rehearing of this Court's August 9, 2018 opinion vacating an Order from the U.S. Environmental Protection Agency ("EPA") regarding chlorpyrifos and remanding to EPA directing the Agency to "revoke all tolerances and cancel all registrations for chlorpyrifos within 60 days."

899 F.3d 814, 829. A copy of Agricultural *Amici*'s proposed brief accompanies this motion.

As required by Circuit Rule 29-3, counsel for proposed *amici* have endeavored to obtain the consent of the parties in this case. The parties' respective positions are as follows:

- Petitioners League of United Latin American Citizens, *et al.* oppose the motion because they have only 15 pages for their response. If the Court grants the motion, Petitioners ask for an additional five pages in their response.
- Intervenor states New York, Massachusetts, Washington, California, Hawaii, Maryland, and Vermont, and the District of Columbia, take no position on the motion.
- Respondents EPA, *et al.* do not oppose the motion.

In support of this Motion, Agricultural *Amici* state as follows:

AGRICULTURAL *AMICI*'S INTEREST

Proposed *amici* represent a broad cross-section of American agriculture: their members include millions of farm and ranch member families; retailers and distributors of nearly three-quarters of all crop input materials sold to America's farmers; processors, manufacturers, and retailers of food and food products, and

other entities that support growers. Agricultural *Amici*'s crops provide the United States and the world with food, fuel, feed, and fiber. These crops play a major role in domestic and international agricultural economies, food security, and global nutrition.

Agricultural *Amici* have a direct and immediate interest in the Court's rehearing the panel's decision. The active ingredient at issue here, chlorpyrifos, is an organophosphate pesticide registered for use in the U.S. since 1974. Agricultural *Amici* represent farmers who depend upon products containing chlorpyrifos to provide safe and effective crop protection, as well as upstream and downstream participants in the agricultural economy reliant on the farming, processing, and distribution of those crops. Agricultural *Amici*'s direct experience with chlorpyrifos gives them unique perspectives on the importance of the product that are likely to be helpful to the Court. Further, Agricultural *Amici* are uniquely positioned to address the numerous negative impacts of the panel's decision on Agricultural *Amici*'s contributions to the agricultural economy and the world's supplies of food, fuel, feed, and fiber.

The panel's Order directing EPA to revoke all tolerances and cancel all registrations of products containing chlorpyrifos threatens to wreak havoc on Agricultural *Amici*'s crop protection plans for the coming growing seasons.

Agricultural *Amici* seek leave from this Court to participate as *amicus curiae* to defend their members' important interests, which are not fully represented by the EPA or any other party or *amicus* in prior stages of this case. This panel has not yet heard from representatives of American agriculture, and no party has fully addressed the substantial adverse practical consequences of removal of chlorpyrifos from the marketplace. For these reasons, Agricultural *Amici* have a substantial interest in this matter.

ARGUMENT

Agricultural *Amici*'s participation in this matter is desirable and will benefit the Court due to their broad perspective and extensive experience with chlorpyrifos. As state, regional, and national trade associations, *amici* can provide substantial knowledge and expertise about the practical implications of this Court's order, which will promote a full and fair adjudication of the petition for rehearing. Individual proposed *amici* regularly participate in cases addressing the practical consequences of litigation involving crop protection products. *E.g.*, *Ctr. for Biological Diversity v. EPA*, 847 F.3d 1075 (9th Cir. 2017); *Nat'l Family Farm Coalition v. EPA*, No. 17-70196, Doc. ID 10855960, Dkt. No. 118-1 (9th Cir. Apr. 30, 2018) (Motion for Leave to File Brief of National Cotton Council of America as *Amicus Curiae*). Given Agricultural *Amici*'s experience in these types of cases,

they are well positioned to inform the Court about the ramifications of the Court's order.

Agricultural *Amici*'s proposed brief offers background on the use and benefits of the pesticide this Court's order would remove from the marketplace. Such removal would deprive growers of an important tool in protecting crops essential to the Nation's supply of food, fiber, feed, and fuel. *Amici*'s proposed brief also discusses the lack of viable alternatives to chlorpyrifos in many instances, and the ramifications of this Court's order on insect pest resistance and the ability to combat new invasive pests. Finally, Agricultural *Amici*'s proposed brief discusses the economic and international trade implications of revocation of tolerances for chlorpyrifos in a world where not all countries have approved tolerances for alternatives to chlorpyrifos. Put simply, Agricultural *Amici* have "unique information or perspective that can help the court beyond the help that the lawyers for the parties are able to provide," a circumstance in which *amicus* participation "should normally be allowed." *Ryan v. Commodity Futures Trading Comm'n*, 125 F.3d 1062, 1063 (7th Cir. 1997).

CONCLUSION

For the foregoing reasons, Agricultural *Amici* respectfully request this Court to grant their motion for leave and accept the proposed *amicus* brief in support of Respondents' petition for *en banc* and panel rehearing.

DATED this 4th day of October, 2018.

/s/ David Y. Chung
David Y. Chung
Kirsten L. Nathanson
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Avenue, N.W.
Washington, DC 20004
knathanson@crowell.com
dchung@crowell.com
edawson@crowell.com
(202) 624-2500

Counsel for Amici Curiae

CERTIFICATE OF SERVICE

I certify that on October 4, 2018, I electronically filed a copy of the foregoing motion with the Clerk of Court for the U.S. Court of Appeals for the Ninth Circuit via the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ David Y. Chung
David Y. Chung

No. 17-71636

IN THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

LEAGUE OF UNITED LATIN AMERICAN CITIZENS, ET AL., *Petitioners,*

STATE OF NEW YORK, ET AL., *Petitioner-Intervenors*,

v.

ANDREW WHEELER, ACTING ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, ET AL., *Respondents.*

On Petition for Review of an Order of the U.S. Environmental Protection Agency

---

BRIEF OF *AMICI CURIAE* AGRIBUSINESS COUNCIL OF INDIANA, AGRICULTURAL RETAILERS ASSOCIATION, ALMOND ALLIANCE OF CALIFORNIA, AMERICAN FARM BUREAU FEDERATION, AMERICANHORT, AMERICAN SEED TRADE ASSOCIATION, AMERICAN SOYBEAN ASSOCIATION, AMERICAN SUGARBEET GROWERS ASSOCIATION, BEET SUGAR DEVELOPMENT FOUNDATION, CALIFORNIA ALFALFA & FORAGE ASSOCIATION, CALIFORNIA CITRUS MUTUAL, CALIFORNIA COTTON GINNERS AND GROWERS ASSOCIATION, CALIFORNIA FRESH FRUIT ASSOCIATION, CALIFORNIA SPECIALTY CROPS COUNCIL, CRANBERRY INSTITUTE, MINNESOTA SOYBEAN GROWERS ASSOCIATION, NATIONAL AGRICULTURAL AVIATION ASSOCIATION, NATIONAL ASSOCIATION OF WHEAT GROWERS, NATIONAL CORN GROWERS ASSOCIATION, NATIONAL COTTON COUNCIL, NATIONAL SORGHUM PRODUCERS, NORTHWEST HORTICULTURAL COUNCIL, OREGONIANS FOR FOOD & SHELTER, WASHINGTON FRIENDS OF FARMS & FORESTS, WESTERN AGRICULTURAL PROCESSORS ASSOCIATION, WESTERN GROWERS, WESTERN PLANT HEALTH ASSOCIATION, AND WYOMING AGRICULTURAL BUSINESS ASSOCIATION IN SUPPORT OF PETITION FOR *EN BANC* AND PANEL REHEARING

David Y. Chung
Kirsten L. Nathanson
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004
dchung@crowell.com
(202) 624-2500

Counsel for Amici Curiae

RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1, *amici curiae* state as follows:

1. **Agribusiness Council of Indiana** ("ACI") was formed by mergers of agribusiness associations that handle grain, feed, seed, plant food, and agricultural chemicals for farmers, with members in every county of the State of Indiana. ACI has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

2. **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 materials sold to America's farmers. ARA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

3. **Almond Alliance of California** represents over 80% of the almonds processed in California. Its members include growers, hullers, shellers, processors and handlers, and its associate members provide products and services used by its members. Almond Alliance has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

4. **American Farm Bureau Federation** ("AFBF") is an independent, non-governmental, voluntary organization governed by and representing farmers

and ranchers working to enhance and strengthen the lives of rural Americans and to build strong, prosperous agricultural communities. Through Farm Bureau organizations operating at the state and county level nationwide, AFBF represents nearly six million member families and is the nation's largest general farm organization. AFBF has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

5. **AmericanHort** represents the entire horticulture industry, including breeders, greenhouse and nursery growers, retailers, distributors, interior and exterior landscapers, florists, students, educators, researchers, and all who are part of the industry market chain. AmericanHort has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

6. **American Seed Trade Association** ("ASTA") seeks to enhance the development and movement of quality seed worldwide. Founded in 1883, ASTA's diverse membership consists of over 700 companies involved in seed production, distribution, plant breeding and related industries in North America. ASTA represents all varieties of seeds, including grasses, forages, flowers, vegetables, row crops and cereals. ASTA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

7. **American Soybean Association** ("ASA") is a national, private, not-for-profit trade association representing U.S. soybean growers on domestic and

international issues of importance to the soybean industry. With members in 30 states, ASA represents the interests of more than 300,000 soybean farmers nationwide. ASA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

8. **American Sugarbeet Growers Association** ("ASGA") is a trade association that promotes the common interest of sugarbeet growers and state and local beet grower associations. It represents all the 10,000 family farmers who grow sugarbeets in eleven sugarbeet producing states (California, Colorado, Idaho, Michigan, Minnesota, Montana, Nebraska, North Dakota, Oregon, Washington, and Wyoming). ASGA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

9. **Beet Sugar Development Foundation** is an organization whose membership consists of beet sugar processing companies and sugarbeet seed related companies. It has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

10. **California Alfalfa & Forage Association** ("CAFA") has represented alfalfa and forage growers and allied industry partners across California since 1998. CAFA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

11. **California Citrus Mutual** ("CCM") is a trade association representing California citrus growers on economic, regulatory, and political issues. Its 2,500 member growers represent 75% of California's 270,000 acre, $3.3 billion citrus industry. CCM has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

12. **California Cotton Ginners and Growers Association** ("CCGGA") represents all of the cotton growers in California. Its members produce 100% of California's total cotton production. CCGGA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

13. **California Fresh Fruit Association** ("CFFA") is a public policy agricultural trade association that represents California's permanent fresh fruit (except citrus and avocados) industry on legislative and regulatory issues at state, federal, and international levels. Its membership is comprised of growers, packers, shippers, and marketers of the approximate $3 billion fresh grape, blueberry, stone fruit, pomegranate, and other tree fruit crops. CFFA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

14. **California Specialty Crops Council** ("CSCC") is a nonprofit organization and a trusted source of field-based information spanning horticultural crop production, pest management, food safety and stewardship activities in fruit, root, vegetable, and vine crops (fresh, dried, and processed). CSCC's member

growers generate a combined $5.0 billion annually on approximately 513,000 acres of California farmland. CSCC has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

15. **Cranberry Institute** ("CI") is a not-for-profit organization founded in 1951 to further the success of cranberry growers and the industry through health, agricultural and environmental stewardship research, as well as cranberry promotion and education. CI has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

16. **Minnesota Soybean Growers Association** ("MSGA") is a non-profit, farmer-controlled advocacy organization that has advocated on behalf of soybean farmers since 1962. MSGA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

17. **National Agricultural Aviation Association** ("NAAA") consists of more than 1,800 members in 46 states, and represents the interests of small business owners and pilots licensed as commercial applicators that use aircraft to enhance the production of food, fiber, and biofuel; protect forestry; protect waterways and ranchland from invasive species; and provide services to agencies and homeowner groups for the control of mosquitoes and other health-threatening pests. NAAA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

18. **National Association of Wheat Growers** ("NAWG") is the primary representative in Washington, D.C. for wheat growers, working with a team of 21 state wheat grower organizations to benefit America's wheat producers. NAWG has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

19. **National Corn Growers Association** ("NCGA") is the trade association for U.S. corn growers. It represents the interests of more than 300,000 corn growers and works with 49 affiliated state organizations to create and increase opportunities for corn growers. NCGA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

20. **National Cotton Council** ("NCC") is the trade association for the U.S. cotton industry, representing the seven segments of the raw cotton industry: producers, ginners, warehousers, merchants, cottonseed processors and merchandisers, cooperatives, and textile manufacturers. NCC has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

21. **National Sorghum Producers** ("NSP") represents sorghum growers nationwide in education, legislative, and regulatory matters impacting the sorghum industry. NSP has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

22. **Northwest Horticultural Council** ("NHC") represents the growers, packers, and shippers of apples, pears, and cherries in Idaho, Oregon, and Washington. The Pacific Northwest produces 67% of the fresh apples, 81% of the fresh sweet cherries, and 88% of the fresh pears grown in the United States. Approximately 30% of the fresh apples, pears, and sweet cherries grown in the Pacific Northwest are exported to over 60 countries. Historically, some 90% of U.S. apples, 95% of U.S. pears, and 83% of U.S. sweet cherry exports originate from the Pacific Northwest. NHC has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

23. **Oregonians for Food & Shelter** ("OFS") is an over 10,000 member grassroots coalition of farmers, foresters, and other pesticide users. OFS has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

24. **Washington Friends of Farms & Forests** ("WFFF") is a 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. WFFF has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

25. **Western Agricultural Processors Association** ("WAPA") represents facilities involved in the processing of almonds, pecans, pistachios, and walnuts.

WAPA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

26. **Western Growers** is an agricultural trade association that represents local and regional family farmers growing fresh produce in Arizona, California, Colorado and New Mexico. Western Growers' members and their workers provide half the nation's fresh fruits, vegetables and tree nuts, including half of America's fresh organic produce. Western Growers Association has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

27. **Western Plant Health Association** ("WPHA") represents fertilizer and crop protection manufacturers, biotechnology providers, distributors, and agricultural retailers in California, Arizona, and Hawaii. WPHA has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

28. **Wyoming Agricultural Business Association** represents retailers, distributors, manufacturers, seed suppliers, elevators, and feed suppliers that supply inputs to Wyoming's farming and ranching communities. It has no parent corporation, and there is no public corporation that owns 10% or more of its stock.

/s/ David Y. Chung
David Y. Chung

Dated: October 4, 2018

TABLE OF CONTENTS

RULE 26.1 DISCLOSURE STATEMENT ii

TABLE OF AUTHORITIES xi

INTERESTS OF THE *AMICI* 1

INTRODUCTION 3

REASONS FOR GRANTING REHEARING 5

THE QUESTIONS PRESENTED ARE EXCEPTIONALLY IMPORTANT BECAUSE OF THE SUBSTANTIAL ADVERSE PRACTICAL CONSEQUENCES OF THE PANEL'S DECISION. 5

A. The Numerous Benefits of Chlorpyrifos Demonstrate Why It Has Become So Widely Used. 5

B. The Panel's Decision Threatens Many Crops for Which Effective, Affordable Substitutes for Chlorpyrifos Are Not Readily Available 9

C. The Abrupt Removal of Chlorpyrifos From the Marketplace Could Exacerbate Pest Resistance and Decrease Crop Resistance to New Pests 17

D. The Negative Consequences of the Panel's Decision Would Ripple Throughout the Economy. 20

CONCLUSION 23

CERTIFICATE OF COMPLIANCE 25

CERTIFICATE OF SERVICE 26

TABLE OF AUTHORITIES

Page(s)

Rules

Ninth Circuit Local Rule 29-2 ..... 1, 4

Fed. R. App. P. 29(b)(4) 1

Other Authorities

Comment of Am. Farm Bureau Fed'n (Jan. 14, 2017), EPA-HQ-OPP-2015-0653-0581 18

Comment of Am. Soybean Ass'n (Jan. 5, 2015), EPA-HQ-OPP-2015-0653-0269 14

Comment of Am. Sugarbeet Growers Ass'n (Jan. 13, 2017), EPA-HQ-OPP-2015-0653-0580 7

Comment of Australia Dept. of Agric. and Water Resources (Jan. 17, 2017), EPA-HQ-OPP-2015-0653-0656 22

Comment of B. Lewis, Asst. Prof.,/Economic Entomologist, N.M. State Univ. (Jan. 4, 2015), EPA-HQ-OPP-2015-0653-0242 15

Comment of B. Shirley, County Extension Agent, Univ. of Ga. (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0090 13

Comment of Cal. Citrus Quality Council, at 4 (Dec. 31, 2015), EPA-HQ-OPP-2015-0653-0244 12

Comment of Canada Dep't of Agric. and Agri-Food (Dec. 22, 2015), EPA-HQ-OPP-2015-0653-0198 21

Comment of The Cranberry Institute, at 4 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0298 12

Comment of D. Fox (Dec. 16, 2015), EPA-HQ-OPP-2015-0653-0076 11

Comment of D. Horton, Professor Emeritus, Entomology, Univ. of Ga. (Dec. 3, 2015), EPA-HQ-OPP-2015-0653-0054 13

Comment of Dr. M. Boetel, Prof. of Entomology, N. Dak. State Univ. (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0361 15

Comment of G.D. Buntin, Prof. of Entomology, Univ. of Ga. (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0296 14

Comment of Israel Ministry of Economy and Industry, Foreign Trade Admin. (Jan. 17, 2017), EPA-HQ-OPP-2015-0653-0634 22

Comment of J. Bakker (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0308 8

Comment of J.E. Nelson & L.L. Schneider, Dow AgroSciences LLC (*The Impact of Revoking Chlorpyrifos Tolerances (MRLs) on U.S. Agricultural Imports from Key Food Exporting Countries* (Dec. 21, 2016), EPA-HQ-OPP-2015-0653-0526 ..... 21, 23

Comment of J.E. Nelson & L.L. Schneider, Dow AgroSciences LLC, *Use and Benefits of Chlorpyrifos in Agriculture* (Jan. 4, 2016), EPA-HQ-OPP-2015-0653-0227 ..... *passim*

Comment of J.G. Morse, Prof. of Entomology, Univ. of Cal. – Riverside (Dec. 29, 2016), EPA-HQ-OPP-2015-0653-0567 11

Comment of M. Abney, Peanut Entomologist, Univ. of Ga. (Jan. 3, 2016), EPA-HQ-OPP-2015-0653-0219 13

Comment of Mich. Agri-Business Ass'n (Dec. 15, 2016), EPA-HQ-OPP-2015-0653-0147 ..... 8, 16

Comment of Mich. Farm Bur. (Dec. 21, 2015), EPA-HQ-OPP-2015-0653-0400 16

Comment of Nat'l Sorghum Producers (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0330 14

Comment of Or. Strawberry Comm'n (Dec. 23, 2015), EPA-HQ-OAR-2015-0653-0197 15

Comment of Pac. Nw. Vegetable Growers Ass'n (Dec. 8, 2015), EPA-HQ-OPP-2015-0653-0100 18

Comment of U.S. Dep't of Agric. (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0369 ..... *passim*

Comment of Univ. of Cal. Statewide Integrated Pest Mgmt. Prog. (UC IPM Comment) (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0346 ..... 10, 12

Comment of W. Integrated Pest Mgmt. Ctr. (Dec. 17, 2015), EPA-HQ-OPP-2015-0653-0143 19

Cover Letter to USDA Comments (Jan. 5, 2016) 9

Letter from Agric. Retailers Ass'n to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r, EPA (Aug. 23, 2018) 19

Letter from Am. Crystal Sugar Co. to Elizabeth T. Bennett, Assoc. Adm'r, EPA (Aug, 27, 2018) 7

Letter from Cal. Cotton Ginners and Growers Ass'ns to Nancy Beck, Deputy Assistant Adm'r, EPA (Aug. 28, 2018) 6, 12

Letter from Mich. Farm Bur. to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r., EPA (Sept. 11, 2018) 8

Letter from Minn. Soybean Growers to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r, EPA (Aug. 24, 2018) 18

Letter from Nat'l Cotton Council of Am. to Nancy Beck, Deputy Assistant Adm'r, EPA (Aug. 22, 2018) 6

Letter from W. Agric. Processors Ass'n to Nancy Beck, Deputy Ass't Admin, EPA (Aug. 28, 2018) 10

LMC Int'l, *The Economic Importance of the Sugar Industry to the U.S. Economy – Jobs & Revenues* (Aug. 2011) 7

USDA Comments on the Revised Human Health Risk Assessment (Apr. 30, 2015), EPA-HQ-OPP-2008-0850 ..... 9, 15

INTERESTS OF THE *AMICI*[1]

Amici Curiae ("Agricultural *Amici*") represent a broad cross-section of American agriculture and file this brief in support of Respondents' Petition for *En Banc* and Panel Rehearing. They are the Agribusiness Council of Indiana, Agricultural Retailers Association, Almond Alliance of California, American Farm Bureau Federation, AmericanHort, American Seed Trade Association, American Soybean Association, American Sugarbeet Growers Association, Beet Sugar Development Foundation, California Alfalfa & Forage Association, California Citrus Mutual, California Cotton Ginners and Growers Association, California Fresh Fruit Association, California Specialty Crops Council, Cranberry Institute, Minnesota Soybean Growers Association, National Agricultural Aviation Association, National Association of Wheat Growers, National Corn Growers Association, National Cotton Council, National Sorghum Producers, Northwest Horticultural Council, Oregonians for Food & Shelter, Washington Friends of Farms & Forests, Western Agricultural Processors Association, Western Growers,

---

[1] This *amicus curiae* brief is submitted with an accompanying motion for leave under Circuit Rule 29-2. This brief was not authored in whole, or in part, by counsel for a party, and no party or party's counsel contributed money intended to fund the preparation or submission of the brief. *See* Fed. R. App. P. 29(b)(4). Dow AgroSciences LLC, the primary registrant for chlorpyrifos, contributed money intended to fund the preparation and submission of this brief. *Id.*

Western Plant Health Association, and Wyoming Agricultural Business Association.

Together, Agricultural *Amici* represent millions of farm and ranch member families; retailers and distributors of nearly three-quarters of all crop input materials sold to America's farmers; processors, manufacturers, and retailers of food and food products; and many other entities that support growers. Agricultural *Amici*'s members supply the United States and the world with food, fuel, feed, and fiber, which play a major role in domestic and international agricultural economies, food security, and global nutrition.

This case has serious implications for Agricultural *Amici*'s operations and their efforts to meet the growing global demand for food and agriculture products. Chlorpyrifos has provided reliable, safe crop protection for decades and is vitally important to agriculture. Agricultural *Amici* present this brief to provide the Court their unique perspective as to the importance of chlorpyrifos and the harm that would result from its unavailability. This panel has not yet heard from representatives of American agriculture, and no party has fully addressed the

substantial adverse practical consequences of removing chlorpyrifos from the marketplace.[2]

INTRODUCTION

Agricultural *Amici* and the world have benefitted tremendously from decades of progress in crop protection science. Before the widespread use of pesticides, insects consumed approximately *50%* of the Nation's crops.[3] As a result of innovations like chlorpyrifos, growers have increased production to meet rising global demand for food and agricultural products, while simultaneously implementing conservation measures to improve soil, water, and air quality. U.S. growers' participation in the global agricultural economy is more important than ever as the global population and demand continue to rise.[4]

Registered for crop use in the U.S. since 1974, chlorpyrifos has long played

---

[2] Some of the Agricultural *Amici* filed an *amicus curiae* brief in earlier, related litigation before a different panel. Brief of *Amici Curiae*, *Pesticide Action Network N. Amer. v. EPA*, No. 14-72794, Doc. ID 10039469, Dkt. No. 40-2 (July 5, 2016).

[3] Comment of J.E. Nelson & L.L. Schneider, Dow AgroSciences LLC, *Use and Benefits of Chlorpyrifos in Agriculture*, at 37 (Jan. 4, 2016), EPA-HQ-OPP-2015-0653-0227 ("Use and Benefits"), *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0227.

[4] *See* U.S. Agency for Int'l Dev., "Feed the Future," https://www.usaid.gov/what-we-do/agriculture-and-food-security/increasing-food-security-through-feed-future (last visited Oct. 3, 2018).

a vital role in growers' ability to maintain a steady, safe, and affordable supply of food and fiber. Chlorpyrifos provides protection for over fifty valuable crops in the U.S., such as soybeans, alfalfa, fruit, vegetables, sugarbeets, and cotton, among others. It is the leading active ingredient to control many insects in crops, and it is the *only* option to control certain insects.[5] Because of its broad-spectrum control and its reliability, chlorpyrifos is often the first line of defense against new or unknown insect pests.[6]

Respondents' petition explains why rehearing is needed because the panel majority's decision conflicts with decisions from this Court and the Supreme Court of the United States.[7] But the questions presented in that petition are exceptionally important for an additional reason: the panel's Order directing EPA to revoke all tolerances and cancel all registrations of products containing chlorpyrifos threatens to wreak havoc on Agricultural *Amici* in the coming growing seasons. As the

---

[5] *See* Use and Benefits at 33 & 179; *see also* Comment of U.S. Dep't of Agric., at 10-12 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0369 (emphasis added) ("USDA Comments"), *available at* https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2015-0653-0369&attachmentNumber=2&contentType=pdf.

[6] *See* Use and Benefits at 34.

[7] In accordance with Circuit Advisory Committee Note to Rule 29-1, Agricultural *Amici* wholly support and adopt the arguments of EPA in its petition for *en banc* and panel rehearing but do not repeat those arguments here.

Secretary of Agriculture succinctly stated, "[f]or some crops and target pests, chlorpyrifos is the *only* line of defense, with *no viable alternatives,*" and the "immediate, and total loss of this crop protection tool endangers agricultural industries and is expected to have wide economic impacts."[8] Rehearing is therefore warranted.

REASONS FOR GRANTING REHEARING

THE QUESTIONS PRESENTED ARE EXCEPTIONALLY IMPORTANT BECAUSE OF THE SUBSTANTIAL ADVERSE PRACTICAL CONSEQUENCES OF THE PANEL'S DECISION.

A. The Numerous Benefits of Chlorpyrifos Demonstrate Why It Has Become So Widely Used.

First registered in the United States in 1965 and first approved for crop use in 1974, chlorpyrifos has come to be registered in more than ninety-eight countries for use on various crops to protect against damage from a broad range of insect pests.[9] In the United States, chlorpyrifos protects against insect pests for over fifty valuable crops, such as cotton, which has a farm gate value of over $5 billion,

---

[8] Sec. Perdue Statement on DOJ filing in 9th Circuit Chlorpyrifos Ruling (Sept. 24, 2018), *available at* https://content.govdelivery.com/accounts/USDAOC/bulletins/20f976e (emphasis added).

[9] *See, e.g.*, Use and Benefits at 38; *see also* USDA Comments at 10-12.

engendering economic activity of almost $100 billion.[10] Chlorpyrifos is one of the few remaining crop protection products capable of controlling many cotton insect pests at once.[11] According to the California Ginners and Cotton Growers Association, chlorpyrifos "is one of the *only active ingredients* that have efficacy and plant canopy penetration to manage late season Cotton Aphid."[12] Equally important, chlorpyrifos can control cotton pests in one application, which can reduce the number of insecticide applications overall.[13] Chlorpyrifos is also more effective, and less harmful to beneficial populations, than another popular category of insecticides, while being a cost-effective tool for growers.[14]

Additionally, chlorpyrifos is essential for the continued viability of sugarbeet production. Sugar from sugarbeets comprises 58% of all sugar produced

---

[10] Letter from Nat'l Cotton Council of Am. to Nancy Beck, Deputy Assistant Adm'r, EPA (Aug. 22, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf.

[11] *Id.*

[12] Letter from Cal. Cotton Ginners and Growers Ass'ns to Nancy Beck, Deputy Assistant Adm'r, EPA (Aug. 28, 2018) (emphasis in original), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf; *see also* Use and Benefits at 101.

[13] Use and Benefits at 98.

[14] *Id.*

in the United States.[15] The sugarbeet industry overall contributes about $10 billion to the U.S. economy each year.[16] No practical non-chemical alternative to chlorpyrifos is available to control particular pests that affect sugarbeets.[17] Chlorpyrifos is the only liquid insecticide available for managing sugarbeet root maggot and is necessary when the at-plant granule application is insufficient to control the maggot.[18] Chlorpyrifos is also less hazardous to handle than an alternative product also labeled for sugarbeets.[19]

Chlorpyrifos serves an important role in protecting a wide variety of fruits and vegetables, sometimes referred to as "specialty crops." To use an example from just one state, "chlorpyrifos is the most effective control of American plum borer" in cherries, which is an especially "economically important" crop in

---

[15] Comment of Am. Sugarbeet Growers Ass'n (Jan. 13, 2017), EPA-HQ-OPP-2015-0653-0580, *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf.

[16] LMC Int'l, *The Economic Importance of the Sugar Industry to the U.S. Economy – Jobs & Revenues* (Aug. 2011), *available at* https://sugaralliance.org/wp-content/uploads/2015/08/LMC-Jobs-2011.pdf.

[17] *Id.*; *see also* Use and Benefits at 200.

[18] Letter from Am. Crystal Sugar Co. to Elizabeth T. Bennett, Assoc. Adm'r, EPA (Aug, 27, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf; *see also* Use and Benefits at 197.

[19] *See* Use and Benefits at 197.

Michigan.[20] Also in Michigan, before the introduction of chlorpyrifos, asparagus growers saw "cutworms destroying in excess of 25 percent of the season's crop." For asparagus, chlorpyrifos "is the only chemistry proven effective in the variable weather encountered in April – May in Michigan."[21] And on Michigan specialty crops, it is important to note that farmers use chlorpyrifos "as a onetime application . . . primarily as a trunk application, meaning it is applied early in the season to the base of the plant, not touching any part of the harvestable fruit or vegetable."[22]

More broadly, growers often turn to chlorpyrifos as the first line of defense when attempting to control new or unknown insect pests due to its broad-spectrum control and effectiveness.[23] Not surprisingly, USDA has proclaimed that chlorpyrifos "is incredibly important to U.S. agriculture and related industries as it

---

[20] Comment of Mich. Agri-Business Ass'n, at 2 (Dec. 15, 2016), EPA-HQ-OPP-2015-0653-0147, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0147.

[21] Comment of J. Bakker (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0308, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0308.

[22] Letter from Mich. Farm Bur. to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r., EPA (Sept. 11, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf.

[23] Use and Benefits at 34.

is often the key defense against numerous unpredictable pests."[24] Apart from protecting American farmers' livelihoods from crop destruction due to pests, chlorpyrifos also allows beneficial insects that help control pests to thrive. Relative to some alternative insecticides, chlorpyrifos has fewer negative effects on beneficial populations.[25]

B. The Panel's Decision Threatens Many Crops for Which Effective, Affordable Substitutes for Chlorpyrifos Are Not Readily Available.

The flipside to the importance of chlorpyrifos is that, without chlorpyrifos, some crops, and hence their growers, would be left without a viable replacement option, putting the crops and growers' livelihoods at risk. Recognizing this risk, the USDA has cautioned that revoking tolerances for chlorpyrifos would have "a significantly negative impact on the production capabilities and economic stability of producers of many human and animal food crops, particularly where few or no

---

[24] Cover Letter to USDA Comments (Jan. 5, 2016), *available at* https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2015-0653-0369&attachmentNumber=1&contentType=pdf.

[25] Use and Benefits at 36; *see also* USDA Comments on the Revised Human Health Risk Assessment (Apr. 30, 2015), EPA-HQ-OPP-2008-0850 (attached to USDA Comments and *available at* https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2015-0653-0369&attachmentNumber=3&contentType=pdf) ("Many of the alternatives to chlorpyrifos . . . are lethal to beneficial natural enemies, thereby requiring additional spray applications to control secondary pests.").

efficacious alternatives are available."[26] To put a finer point on the adverse practical consequences of the panel's decision, the following crops will be especially vulnerable in the coming growing seasons if EPA imminently revokes all tolerances and cancels all registrations for chlorpyrifos:

- Alfalfa: Few or no alternatives to chlorpyrifos exist for alfalfa pests such as alfalfa weevils, blue alfalfa and cowpea aphids.[27]
- Almonds: Few or no alternatives exist for the leaf-footed bug and stink bugs affecting almonds.[28] In particular, the leaf-footed bug "can only be managed with chlorpyrifos because it is the most effective and economical tool for growers," being "ideal . . . as it provides effective control over pests without damaging beneficials or causing flare up of mites."[29]

---

[26] *See* USDA Comments at 10.

[27] Comment of Univ. of Cal. Statewide Integrated Pest Mgmt. Prog. ("UC IPM Comment"), at 2 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0346, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0346.

[28] USDA Comments at 11.

[29] Letter from W. Agric. Processors Ass'n to Nancy Beck, Deputy Ass't Adm'r, EPA (Aug. 28, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf.

- Apples: A New York State apple grower explained that chlorpyrifos is used on apple flower buds to control the Woolly Apple Aphid, a damaging pest that is "hard to control and if not controlled can be very damaging to the apples and apple trees as well."[30] In this farmer's experience, "[n]ewer chemistries do not achieve the same level of control and are much more expensive and typically require more than one application. The economic impact can be severe."[31] By contrast, chlorpyrifos "is economical" and "is typically used once."[32]
- Citrus: In California, "*the use of [chlorpyrifos] for control of Argentine ant and native grey ant is absolutely essential*."[33] Loss of chlorpyrifos "will leave citrus growers without a good alternative."[34]

---

[30] Comment of D. Fox (Dec. 16, 2015), EPA-HQ-OPP-2015-0653-0076, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0076; *see also* USDA Comments at 10-11 (highlighting that new or few alternatives exist for controlling insect pests in apple such as the Dogwood Borer, American plum borer, and the ambrosia beetle).

[31] Comment of D. Fox (Dec. 16, 2015), EPA-HQ-OPP-2015-0653-0076, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0076.

[32] *Id.*

[33] Comment of J.G. Morse, Prof. of Entomology, Univ. of Cal. – Riverside (Dec. 29, 2016), EPA-HQ-OPP-2015-0653-0567 (emphasis in original), *available*
(Continued...)

- Cotton: Growers have few or no alternatives to control late season aphids and whiteflies besides chlorpyrifos.[35] As one state organization put it, "[t]he revocation of tolerances and cancellations of registrations would be a death sentence for the California cotton industry."[36]
- Cranberries: "Broad spectrum materials are [] vitally important for [New Jersey] cranberry growers and chlorpyrifos is a mainstay. . . . Aerial application remains the predominant mode of application in [New Jersey] and the logical alternative to chlorpyrifos, diazinon, is no longer labeled for aerial application."[37]

---

at https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2015-0653-0567&attachmentNumber=1&contentType=pdf.

[34] Comment of Cal. Citrus Quality Council, at 4 (Dec. 31, 2015), EPA-HQ-OPP-2015-0653-0244, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0244.

[35] UC IPM Comment at 2, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0346

[36] Letter from Cal. Cotton Ginners and Growers Ass'ns to Nancy Beck, Deputy Ass't Adm'r, EPA (Aug. 28, 2018); *see also* Use and Benefits at 101.

[37] Comment of The Cranberry Institute, at 4 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0298, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0298.

- Peaches: Chlorpyrifos is used as a post-harvest tree spray to manage the peachtree borer; chlorpyrifos is "crucial" because no alternative exists.[38]
- Peanuts: Four peanut pests that feed on peanut pods directly can only be controlled with chlorpyrifos; there are no effective alternatives at this time.[39]
- Peas: "[T]he loss of chlorpyrifos would mean a complete failure to control the Cowpea Curculio (resistant to all pyrethroids) in Southern pea production [] in the state of Georgia," effectively decimating pea production in the Southeast.[40]
- Pineapple: Chlorpyrifos is the *only* insecticide registered to control the mealybug, reducing the transmission of mealybug wilt disease in pineapple.[41]

---

[38] Comment of D. Horton, Prof. Emeritus, Entomology, Univ. of Ga. (Dec. 3, 2015), EPA-HQ-OPP-2015-0653-0054, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0054.

[39] Comment of M. Abney, Peanut Entomologist, Univ. of Ga. (Jan. 3, 2016), EPA-HQ-OPP-2015-0653-0219, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0219.

[40] Comment of B. Shirley, County Extension Agent, Univ. of Ga. (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0090, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0090.

[41] Use and Benefits at 34.

- Sorghum: In its many formulations, chlorpyrifos "is a vital tool used in rotation to control damaging pests such as sorghum midge, various aphid species, and sorghum webworm. These products provide a low cost mode of action, necessary for lower value dryland crops like sorghum."[42]
- Soybeans: Chlorpyrifos is one of the only members of its class of pesticides still available for use on soybean, and it is the leading product to control soybean aphids.[43] In Georgia, it is "uniquely effective against certain lepidopteran soil insect pests" in soybeans.[44]
- Strawberries: Few products besides chlorpyrifos are available to control garden symphylans on strawberries.[45] The Oregon Strawberry Commission explains that "chlorpyrifos is the only registered insecticide

---

[42] Comment of Nat'l Sorghum Producers (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0330, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0330.

[43] Comment of Am. Soybean Ass'n (Jan. 5, 2015), EPA-HQ-OPP-2015-0653-0269, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0269.

[44] Comment of G.D. Buntin, Prof. of Entomology, Univ. of Ga., at 1 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0296, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0296.

[45] Use and Benefits at 34.

for use in strawberries known to control" garden symphylans and strawberry crown moth.[46]

- Sugarbeet: There is a "lack of effective alternatives targeting control of . . . root maggot in sugarbeets, presents serious concern of economic damage if the pest is left uncontrolled."[47] Although used on sugarbeets nationwide, "[t]he potential loss of [chlorpyrifos] for use in sugarbeet pest management would pose a significant threat to profitability for many North Dakota and Minnesota producers."[48]
- Tree nuts: In New Mexico, just one crop—pecans—a crop for which chlorpyrifos is "highly efficacious" in controlling black pecan aphid, contributes $140 million to the state's economy.[49] Due to chlorpyrifos's

---

[46] Comment of Or. Strawberry Comm'n (Dec. 23, 2015), EPA-HQ-OAR-2015-0653-0197, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0197.

[47] Apr. 30, 2015 USDA Comments at 8, *available at* https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OPP-2015-0653-0369&attachmentNumber=3&contentType=pdf.

[48] Comment of Dr. M. Boetel, Prof. of Entomology, N. Dak. State Univ., at 1 (Jan. 5, 2016), EPA-HQ-OPP-2015-0653-0361, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0361.

[49] Comment of B. Lewis, Asst. Prof./Economic Entomologist, N.M. State Univ. (Jan. 4, 2015), EPA-HQ-OPP-2015-0653-0242, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0242.

"moderate fumigant activity," growers are able to "reduce the amount of active ingredient applied by spraying every other tree row."[50]

As the state with the second-largest variety of crops, Michigan is home to growers who are particularly endangered by the panel's decision. In that state, "[c]hlorpyrifos is the only seed treatment control option for seed corn maggot, a major pest of field corn, seed corn, sweet corn, edible beans and peas. At several crop stages chlorpyrifos is the only control option of cabbage maggot in garden greens, radish, cauliflower, and turnips."[51] Overall, growers in Michigan estimate a *staggering crop loss percentage of 50-95%* if chlorpyrifos tolerances are revoked.[52] Indeed, some growers expressed concern that "they would have no choice but to forego production" of a vegetable for which chlorpyrifos tolerances were revoked.[53]

Beyond these crop-specific impacts, the panel's decision could push growers to use more expensive—and less effective—pesticides to try to control insect

---

50 *Id.*

51 Comment of Mich. Agri-Business Ass'n, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0147.

52 Comment of Mich. Farm Bur., at 2 (Dec. 21, 2015), EPA-HQ-OPP-2015-0653-0400, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0400.

53 *Id.*

pests.[54] This would have the perverse results of: (1) costing growers who have done nothing more than use products lawfully on the market; and (2) increasing the use of chemicals introduced into the environment.

C. The Abrupt Removal of Chlorpyrifos From the Marketplace Could Exacerbate Pest Resistance and Decrease Crop Resistance to New Pests.

Insecticide resistance is a continuing threat to crop yields and is becoming an increasing problem both in the United States and worldwide. Hundreds of insect pests have developed resistance to one or more pesticides. As such resistance increases, growers will need access to *more* crop protection products. They must rotate among pesticides with different modes of action to combat resistance.[55] In USDA's words, "[r]otation of insecticide active ingredient classes from different [mode of action] groups for management of each seasonal insect generation is a foundational tenet for managing insecticide resistance."[56] And while growers welcome new chemistries, they "still need chlorpyrifos to be used in rotation with

---

54 Use and Benefits at 35; *see also* USDA Comments at 10.

55 Use and Benefits at 35; *see also* USDA Comments at 12.

56 USDA Comments at 12.

other insecticides to slow the development of insecticide resistance."[57] In Minnesota, for example, "a limited number of options" exist to control soybean aphids and spider mites. Removal of chlorpyrifos "would result in a rapid buildup of insecticide resistance" to pyrethroids and neonicotinoids.[58] Soybean aphids are an increasing problem in the Midwest and Great and North Plains regions, making the continued availability of chlorpyrifos all the more important.[59]

In addition to increasingly resistant extant pests, invasive pests create new and different problems. The occurrence of invasive pests in agricultural crops, such as the glassy-winged sharpshooter and the Asian citrus psyllid, has risen with expanded global trade and travel.[60] Such pests "often increase to damaging levels quickly and may vector disease pathogens, creating emergency situations."[61] "For

---

[57] Comment of Pac. Nw. Vegetable Growers Ass'n, at 1 (Dec. 8, 2015), EPA-HQ-OPP-2015-0653-0100, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0100.

[58] Letter from Minn. Soybean Growers to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r, EPA (Aug. 24, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf.

[59] Comment of Am. Farm Bureau Fed'n, at 2 (Jan. 14, 2017), EPA-HQ-OPP-2015-0653-0581, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0581.

[60] *See* USDA Comments at 13.

[61] *Id.*

many invasive pests, growers face limited or no viable alternatives, and when an outbreak of a new pest occurs, users look to chlorpyrifos as a proven first-line of defense."[62] In California, where nearly one new invasive pest emerged each year over the past decade, the availability of chlorpyrifos is essential given its wide applicability and the relatively narrow applications of newer products.[63] In a nutshell, "[t]he economic sustainability of California agriculture is reliant on the use of chlorpyrifos."[64] Narrowing the varieties of pest management products applicable to extant or new pests means increased use of fewer products overall, which in turn exacerbates the resistance problem.

---

62 Letter from Agric. Retailers Ass'n to Hon. Sonny Perdue, Sec'y, USDA, & Hon. Andrew Wheeler, Acting Adm'r, EPA (Aug. 23, 2018), *available at* https://www.epa.gov/sites/production/files/2018-09/documents/chlorpyrifos_letters_508.pdf; *see also* USDA Comments at 13 ("Chlorpyrifos is a broad-spectrum material . . . that can be used to quickly and effectively control invasive pests.").

63 Comment of W. Integrated Pest Mgmt. Ctr. (Dec. 17, 2015), EPA-HQ-OPP-2015-0653-0143, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0143. The Western Integrated Pest Management Center is one of four regional pest management centers established by the USDA. USDA Nat'l Inst. of Food and Agric., Regional Integrated Pest Management (IPM) Centers, https://nifa.usda.gov/regional-integrated-pest-management-ipm-centers (last visited Oct. 3, 2018).

64 *Id.*

D. The Negative Consequences of the Panel's Decision Would Ripple Throughout the Economy.

Revocation of tolerances and cancellation of registrations will harm not only growers, but also the broader economy. "A sampling of crops for which chlorpyrifos use is critical" represents tens of billions of dollars of production value in the United States alone: cotton ($5.1 billion); alfalfa ($10.8 billion); non-citrus fruit ($16.3 billion); citrus fruit ($3.4 billion); tree nuts ($10 billion); and vegetables ($13.1 billion).[65] It is enormously important to our economy for growers to effectively protect these crops from destruction due to insect pests. Given its relatively low cost, chlorpyrifos is a necessary tool to allow U.S. vegetable growers to stay competitive with foreign producers that have already taken away a significant portion of market share. According to these growers, "[t]he loss of chlorpyrifos in the United States may accelerate this process."[66]

Beyond our borders, revocation of tolerances would disrupt trade with numerous international partners.[67] Not all foreign markets have established

---

[65] USDA Comments at 10.

[66] Comment of Pac. Nw. Vegetable Growers Ass'n, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0100.

[67] USDA Comments at 12; *see also* Use and Benefits at 32.

maximum residue limits for new insecticides that are alternatives to chlorpyrifos.[68] As such, U.S. growers who must rely on those alternatives to grow their crops might not be able to export crops to countries where maximum residue limits for alternatives are not harmonized, causing significant losses for producers of commodities with large export markets, such as citrus, almonds, applies, and cherries.[69]

Revocation of tolerances could also disrupt U.S. *imports*. Take Canada, for example, an agriculture trade partner whose relationship with the United States totaled $50 billion in 2014. Canada has approved chlorpyrifos for use "on a wide range of food commodities."[70] If, as a result of the panel's decision, all tolerances are revoked in the United States, no crops grown abroad with chlorpyrifos can be imported.[71] Such an outcome "may unfairly impact Canadian products exported to

---

68 USDA Comments at 12.

69 *Id.*

70 Comment of Canada Dep't of Agric. and Agri-Food (Dec. 22, 2015), EPA-HQ-OPP-2015-0653-0198, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0198.

71 Comment of J.E. Nelson & L.L. Schneider, Dow AgroSciences LLC (*The Impact of Revoking Chlorpyrifos Tolerances (MRLs) on U.S. Agricultural Imports from Key Food Exporting Countries)*, at 2-3 ("Impact on Imports") (Dec. 21, 2016), EPA-HQ-OPP-2015-0653-0526, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0526.

the U.S. market."[72] The Australia Department of Agriculture and Water Resources has likewise expressed concern that revocation of chlorpyrifos tolerances will affect exports of plant and animal-based food commodities to the United States that may contain residues of chlorpyrifos, such as citrus, cattle, goat, and sheep meat.[73] Foreign producers should not be expected to discontinue the use of products—or forego exports to the United States that may contain residues of products—that their own governments and an international body, the United Nations World Health and Food and Agriculture Organizations' Codex Alimentarius Commission, have found to be safe.[74]

If the panel's decision stands, it could have the unintended consequence of reducing the availability of safe and affordable imported food for the U.S.

---

[72] *Id.*

[73] Comment of Australia Dept. of Agric. and Water Resources, at 3 (Jan. 17, 2017), EPA-HQ-OPP-2015-0653-0656, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0656 (requesting that "the USA maintains tolerances for chlorpyrifos in citrus and cattle, goat, and sheep meat to facilitate continuing trade between our two countries and that the Australian maximum residue limits (MRLs) could be adopted as import tolerances").

[74] Comment of Israel Ministry of Economy and Industry, Foreign Trade Admin. (Jan. 17, 2017), EPA-HQ-OPP-2015-0653-0634, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0634 (describing the consequences to trade with Israel from revocation of chlorpyrifos tolerances).

consumer and harming important trade relationships. Moreover, revocation of tolerances and cancellation of registrations would "create a new set of winners and losers as market participants adapt to regulatory changes."[75]

CONCLUSION

The panel's ruling and order would drastically alter growers' ability to protect their crops and bring those crops to market. Removing one of the most widely used and effective pest management tools available would also have significant negative consequences for our economy and supply of food and fiber. The Court should grant EPA's petition.

DATED this 4th day of October, 2018.

---

[75] *See* Impact on Imports at 5, *available at* https://www.regulations.gov/document?D=EPA-HQ-OPP-2015-0653-0526.

/s/ David Y. Chung
David Y. Chung
Kirsten L. Nathanson
Elizabeth B. Dawson
CROWELL & MORING LLP
1001 Pennsylvania Avenue, N.W.
Washington, DC 20004
knathanson@crowell.com
dchung@crowell.com
edawson@crowell.com
(202) 624-2500

Counsel for Amici Curiae

CERTIFICATE OF COMPLIANCE

I certify pursuant to Circuit Rule 29-2(c)(2) that this brief contains 4,174 words as counted by the word-count feature of Microsoft Word and has been prepared in 14-point Times New Roman proportionally spaced typeface.

/s/ David Y. Chung
David Y. Chung

CERTIFICATE OF SERVICE

I certify that on October 4, 2018, I caused to be filed an electronic copy of the foregoing brief with the Clerk of Court for the U.S. Court of Appeals for the Ninth Circuit via the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ David Y. Chung
David Y. Chung