

MCFA

Minor Crop Farmer Alliance

Via Electronic Docket Submission <http://www.regulations.gov>

September 23, 2022

Mary E. Reaves, Ph.D.
Director
Pesticide Re-Evaluation Division
Office of Pesticide Programs
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460-0001

Re: Comments of the Minor Crop Farmer Alliance on the Petition to Revoke Tolerances and Cancel Registrations for Certain Organophosphate Uses, Docket ID Number EPA-HQ-OPP-2022-0490

Dear Dr. Reaves,

The Minor Crop Farmer Alliance (MCFA) appreciates the opportunity to submit these comments on the “Petition to Revoke Tolerances and Cancel Registrations for Certain Organophosphate Uses” (referred to herein as the “Earthjustice petition”), published in the Federal Register on July 12, 2022 (87 Fed. Reg. 41,310-12). We appreciate the Environmental Protection Agency (“EPA” or “Agency”) extending the comment period in response to the request from MCFA and other stakeholders.¹

MCFA is an alliance of national and regional organizations and individuals representing growers, shippers, packers, handlers and processors of various agricultural commodities, including food, fiber, turf grass, nursery and landscape crops, and organizations involved with public health pesticides. MCFA’s members are extremely interested in the development and safe use of pest management tools including crop protection chemicals that are environmentally sound, safe for applicators, workers and the public, and do not represent an unreasonable adverse risk to the environment, including humans. While our commodities are often called “minor crops” or “specialty crops,” they contribute to the diverse and highly nutritious diets available for the global population, and to safe and aesthetic surroundings for our homes, schools, and places of business. These U.S. farmers grow more than 500 types of fruit, vegetable, tree nut, flower, ornamental nursery and turf grass crops in addition to the major bulk (row) commodity crops. Specialty crop production accounts for more than \$60 billion, or approximately 40% of total U.S. crop receipts.

¹ See, EPA Memorandum, August 4, 2022, “Authorization to Extend the Public Comment Period by 45 days for the Earthjustice Petition to Revoke Tolerances and Cancel Registrations for Certain Organophosphate Uses”.

The Earthjustice petition should be denied. It is a blatant attempt to short-circuit the administrative regulatory review process that Congress and the Agency have established to assess pesticide chemicals. The Earthjustice petition itself notes that to the extent it relies on the human health risk assessments (“HHRAs”) associated with the pesticides for which it is seeking tolerance revocation, each of these is in draft or preliminary form. Rather than allowing the Agency the time needed to carefully consider the substantial complex scientific issues involved, as well as the comments from all stakeholders received by the Agency on various risk assessments applicable to each of the organophosphate pesticides (“OPs”) covered by the Earthjustice petition, the petitioners pre-emptively seek to constrain the Agency by demanding it take immediate regulatory action predicated on those draft or preliminary HHRAs. Therefore, petitioners’ request is inappropriate and directly contrary to the Agency’s regulations and policies.

The Agency has established regulations governing the registration review process.² These requirements are intended to provide transparency to its review process as well as affording all interested stakeholders’ opportunities to participate in the review process. The regulations specifically provide that:

(a) The Agency will publish a notice in the Federal Register announcing the availability of a proposed registration review decision or a proposed interim registration review decision. At that time, the Agency will place in the pesticide's registration review docket the Agency's proposed decision and the bases for the decision. There will be a comment period of at least 60 calendar days on the proposed decision.

(b) In its proposed decision, the Agency will, among other things:

(1) State its proposed findings with respect to the FIFRA standard for registration and describe the basis for such proposed findings.

(2) Identify proposed risk mitigation measures or other remedies as needed and describe the basis for such proposed requirements.

(3) State whether it believes that additional data are needed and, if so, describe what is needed. A FIFRA 3(c)(2)(B) notice requiring such data may be issued in conjunction with a proposed or final decision on the registration review case or a proposed or final interim decision on a registration review case.

(4) Specify proposed labeling changes; and

(5) Identify deadlines that it intends to set for completing any required actions.

(c) After considering any comments on the proposed decision, the Agency will issue a registration review decision or interim registration review decision. This decision will include an explanation of any changes to the proposed decision and the Agency's response to significant comments. The Agency will publish a notice in the Federal Register announcing the availability of a registration review decision or interim registration review decision. The

² 40 CFR Part 155.

registration review case docket will remain open until all actions required in the final decision on the registration review case have been completed....³

Granting the request of the petitioners would call into question the Agency's commitment to the public participation process and the science underlying its risk assessments and ultimately its proposed and interim registration review decisions. MCFA believes that the Agency remains committed to basing its decisions on sound science, following the administrative review process and regulations, and therefore will deny the Earthjustice petition.

Further, the petitioners would require the Agency to deviate from its traditional review approach namely considering first whether the labeled uses of a pesticide meet the standards for continued registration, followed by any appropriate adjustments to applicable tolerances based on the final conclusions of that registration review. Instead, the petitioners, apparently adopting the process associated with the review of chlorpyrifos, would have the Agency act on existing tolerances before the Agency completes action on the underlying registrations and associated uses of the covered pesticides. However, the situation involving the chlorpyrifos tolerances was unique and inapposite to the instant situation. In reviewing a tolerance revocation petition that had been submitted many years earlier on chlorpyrifos⁴, the Agency made clear that it was reviewing various substantial scientific issues involved with chlorpyrifos. EPA wanted the ability to complete its scientific assessment of those issues before making a final decision on the petition including the requested revocation of the pesticide's tolerances. Instead, the 9th Circuit intervened, basically determining that there was unreasonable delay by the Agency in responding to that petition⁵, and accelerated the time by which EPA had to issue a final decision on the petition. In the opinion of MCFA, the approach dictated by that court was not supportive of a sound science-based decision. That approach prematurely curtailed the Agency's ability to consider all the science, which the Agency recognized was evolving, and make a final regulatory decision once EPA thoroughly understood the relevant science.

In the current situation, there is no question that the Agency is in good faith diligently pursuing its regulatory review of the pesticides that are the subject of the Earthjustice petition. There is no undue delay in the administrative review process. Consequently, there is no legitimate legal basis for the Agency to short-circuit its registration review process as was done in the case of chlorpyrifos.⁶

³ 40 CFR 155.58.

⁴ The chlorpyrifos petition was submitted to EPA in 2007.

⁵ The chlorpyrifos petition had been pending more than 10 years before the court ordered the Agency to issue a final decision on the petition.

⁶ The regulatory system established by Congress does allow the Agency to take extraordinary action against a chemical registration to protect man and the environment in appropriate circumstances. Specifically, section 6 of the Federal Insecticide, Fungicide and Rodenticide Act as amended ("FIFRA"), 7 U.S.C. 136d, authorizes the Agency to take emergency action, including issuing an order suspending a product's registration when it concludes that based on the information it has, there is an imminent hazard requiring immediate action. An "imminent hazard" is defined under FIFRA as "a situation which exists when the continued use of a pesticide during the time required for cancellation proceeding would be likely to result in unreasonable adverse effects on the environment or will involve unreasonable hazard to the survival of a species declared endangered by the Secretary pursuant to the Endangered Species Act of 1973." 7 U.S.C. 136(l). "Environment" is defined to include "water, air, land, and all plants and man and other animals living therein, and the interrelationships which exist among these." *Id.* at 136(j).

There are numerous other reasons that the Earthjustice petition should be denied. It is fundamentally flawed in that it treats all the OPs as essentially one and the same chemical. However, this is scientifically inappropriate. Each of the 15 OPs listed in the Earthjustice petition vary in their toxicity, data sets, exposures and permitted uses, and therefore are different in their overall risk profiles. It is true that the OPs do share a common mechanism of toxicity in that they all are cholinesterase inhibitors. However, this is their only established common mechanism of toxicity. Further, as it concerns cholinesterase inhibition, the Agency as well as its expert Scientific Advisory Panel have reaffirmed that regulating these chemicals based on 10% Acetylcholinesterase inhibition (“AChE”) is protective of human health, including infants and children.

Additionally, the petition inappropriately relies on epidemiological literature reports applicable to chlorpyrifos to further its false equivalence argument that all OPs are the same. In particular, the Earthjustice petition draws heavily on the *Mothers and Newborn Study of North Manhattan and South Bronx conducted by Columbia Children’s Center for Environmental Health (“CCCEH”), Columbia University*, in support of its requested relief. MCFA continues to maintain that this report is not appropriate to underpin a regulatory decision for chlorpyrifos, and certainly not for the 15 OPs targeted by the petition. The Agency still does not know whether the conclusions in the CCCEH report are consistent with the underlying information/data associated with the report. Before relying on the conclusions of this report, the Agency needs to validate it by determining: (1) whether the participants were actually exposed to chlorpyrifos, and if so, (2) at what dose, (3) over what time period, (4) whether the reported effects actually occurred, (5) that the measurements were accurate, and, (6) if the measurements were accurate, whether there were factors other than exposure to chlorpyrifos which caused the purported effect.⁷ Additionally, as noted above, there is no scientifically valid link of exposure for any of the 15 OPs included in the petition to the epidemiological study associated with chlorpyrifos. Just because there may be a data point for chlorpyrifos, does not mean that every OP has the same chemical properties.

A subset of registrants who are members of the Coalition of OP Registrants, namely ADAMA, AMVAC, FMC and Gowan are filing comments on the Earthjustice petition. Those comments carefully describe in great detail the myriad of scientific and procedural infirmities associated with the petition. Rather than simply repeating those comments, MCFA fully endorses them. The OPs covered by the petition are very important to the agricultural community. They are often critical components of Integrated Pest Management (“IPM”) programs. They provide an excellent quick knock-down of insect pest populations. Under an IPM program, growers use as “soft” a pest control tool as possible to try and address insect populations that threaten their crop. However, growers can find themselves in a situation where they must quickly respond to a large invasive and/or emergent pest population in their commodity. OPs provide that rapid response tool. Additionally, OPs degrade at high speed by hydrolysis in soils, air and sunlight; these characteristics can make the OPs a desirable choice in numerous situations and strategies. OPs also are “softer” on beneficial insects than some alternative chemistries, such as pyrethroids. Many alternatives to OPs are more persistent in the environment. Further, the availability of OPs

⁷ Despite repeated requests, EPA was never furnished the underlying raw data associated with this epidemiological report. Without such access to the raw data, the data cannot be verified. In the absence of such verification, the usefulness of the report for regulatory purposes is suspect.

substantially helps with resistance management. Eliminating OPs would lead to growers relying more heavily on other pesticides. If OPs are not available to farmers, there are at least three reasons why the overall use of pesticides may increase. Firstly, alternative pesticides may not be as effective as OPs. If the alternative pesticide is less effective at controlling a pest species, a greater number of applications of the alternative pesticide may be required. Therefore, use of non-OP alternatives may require the combination of two or more pesticides, compared with one for the OP. This would likely accelerate an increase in insect resistance to those other alternative chemistries, and pest resistance only compounds the problem of alternative pesticide effectiveness. As pesticide resistance increases, users often react in the short run by increasing the quantity of the pesticide used. This increase in resistance to alternatives may require an additional increase in the number and intensity of pesticide applications.

Secondly, pesticide use could increase if non-OP alternatives control fewer pest species. Without the broadly effective OP pesticides, farmers may need to use a greater number of pesticides to control the same pests. This is counter to the efforts to reduce carbon emissions in agriculture and thus would contribute to the problem of global warming. Additionally, newer insecticides may be more targeted to specific pest species.

Thirdly, some alternative strategies to OPs are more harmful to beneficial insects. Fewer beneficial insects could cause an increase in pesticide use as farmers apply pesticides to do the job that the predatory insects once did.

The following are just a few examples of the role of several of the OPs in specialty crop production.

Acephate

Acephate is important to the control of the western flower thrip, which is the vector for Impatiens Necrotic Spot Virus (INSV) in lettuce. A flare-up of this virus in 2020 caused approximately \$100 million in lost revenue for the lettuce industry.

Bensulide

Bensulide is a pre-emergent herbicide –the only OP herbicide. It has critical uses in lettuce, cucurbits and melons. Almost every acre of lettuce production in Yuma Arizona and the Imperial Valley of California is first treated with bensulide. Bensulide is particularly effective against annual grasses, Pigweed, Purslane, goosefoot and lambsquarters. There are very few effective herbicides registered for use on lettuce that are also safe to lettuce.

Diazinon

Diazinon has highly important uses in management of tree fruit insect pest of the Pacific Northwest, including San Jose Scale (*Quadraspidiotus perniciosus*), wooly apple aphid (*Eriosoma lanigerum*), tarnished plant bug (*Lygus lineolaris*), campylomma (*Campylomma verbasci*). It has more limited use against stink bugs (*Halyomorpha halys*, *Euschistus conspersus*, and *Acrosternum hilare*). One dormant and one in-season foliar application is allowed. Diazinon use has increased in 2022 as a result of the tolerance revocation of chlorpyrifos, particularly for control of wooly apple aphid.

Dimethoate

Dimethoate helps control a wide variety of insect pests in specialty crops including vegetables, tree fruit, and horticulture. It provides broad-spectrum control of key piercing-sucking and chewing insect pests, including aphids, leafhoppers, plant bugs, caterpillars, and beetles. It has unique properties that make it especially suited to provide control of insect larvae in fruit. For example, it has unique technical attributes that provide highly efficient insect control such as:

- Translaminar and systemic activity that ensures exceptional availability to insect pests, including those not easily reached by foliar contact sprays, for example, leaf miners and whitefly feeding on undersides of leaves or insects feeding on plant parts missed by the application.
- The plant-systemic activity of dimethoate provides longer control, reducing the need for reapplication sprays.

For the potato industry, dimethoate is highly important in the control of aphids, leaf hoppers and flea beetles. It is used infrequently for chinch bugs and tarnished plant bugs when pest populations exceed established thresholds. Dimethoate is primarily used as the second option in IPM plan rotation to help prevent pest resistance. In some production systems, it is the only product used to control leaf hoppers.

Ethoprop

Ethoprop (ethoprophos) is highly important to potato growers in the control of wireworms and is occasionally used for nematode control. Bifenthrin, thiamethoxam, imidacloprid, oxamyl, fipronil, and chloropicrin may be alternative products in a managed rotation. Bifenthrin is less effective and sometimes fails to control, resulting in need for use of ethoprop. It is also important for pest resistance management as an alternative to imidacloprid, clothianidin, thiamethoxam to control against white grub species (*Phylloghaga* spp).

Malathion

Malathion is a broad spectrum non-systemic insecticide used on an abundance of commercial agriculture crops. These include: Alfalfa; apricot; asparagus; avocado; barley; bean (succulent and dry); beets (table); birdsfoot trefoil; blackberry; blueberry; boysenberry; broccoli; broccoli rabe; Brussels sprout; cabbage (including Chinese); carrot; cauliflower; celery; chayote; cherry; chestnut; clover; collards; corn (field; sweet; and pop); cotton; cucumber; currant; dandelion; date; dewberry; eggplant; endive; escarole; potato; fig; garlic; gooseberry; grape; grapefruit; guava; hay grass; hops; horseradish; kale; kohlrabi; kumquat; leek; lemon; lespedeza; lettuce (head and leaf); lime; loganberry; lupine; macadamia nut; mango; melon; mint; mushroom; mustard greens; nectarines; oats; okra; onion; orange; papaya; parsley; parsnip; passion fruit; pea; peach; pear; pecan; pepper; pineapple; pumpkin; radish; raspberry; rice; rutabaga; rye; salsify; shallot; sorghum; spinach; spring wheat; squash; strawberry; sweet potato; Swiss chard; tangelo; tangerine; tomato (including tomatillo); turnip; vetch; walnut; watercress; watermelon; wheat (spring, and winter); wild rice; and yams. Other uses include, for example, on commercial ornamental nursery stock and in helping to protect against various public health diseases, including Zika, West Nile, etc. Malathion is a key component of various IPM programs.

Malathion also has important quarantine uses either by itself or in combination with other products. For example, malathion, when used in combination with a protein hydrolysate, is a

consistent insecticidal choice for the purpose of managing invasive pests such as the Mediterranean Fruit Fly and the Oriental Fruit Fly. It is similarly used in controlling fruit flies in cherries and other small fruits, including the invasive spotted winged drosophila (*Drosophila suzukii*) that oviposit their eggs into fruit just ahead of harvest. With a short pre-harvest interval, it provides protection at a critical time that other products do not provide. The drosophila is also a threat to various other commodities including blueberries, caneberries and strawberries.

Malathion is also important to the potato industry to help control chinch bug, tarnished plant bug, and other sap feeding insects. Potato growers use it in a managed rotation program with beta-cyfluthrin, acetamiprid, lambda-cyhalothrin, thiamethoxam, sulfoxaflor and bifenthrin in controlling aphids and leafhoppers to help prevent potential pest resistance issues.

Malathion has demonstrated its excellent efficacy in controlling labeled pests for many years. It is a very cost-effective product with relatively short re-entry intervals and pre-harvest intervals. It has well-established worldwide Maximum Residue Limits (MRLs), a necessary prerequisite to shipping treated commodities into various export markets. Clearly the product is important to agriculture and public health sectors.

Phorate

Phorate was first registered for use in the U.S. in 1959 and since then has been used extensively for pest management purposes in numerous crops such as sugarcane for many years. This product is a popular form of insecticidal protection around the world because of its broad-spectrum of control, lack of any documented resistance, its effectiveness and favorable economic cost profile.

Because of its chemical makeup/multi-target site characteristics, phorate has an unparalleled importance in IPM and Resistant Management programs. Its spectrum of control is superior in many situations to any alternative product.

Phorate is one of the most effective crop production tools available to manage important insect pests such as wireworms. Wireworms, the larval stage of the click beetle, cause severe damage to numerous crops including sugarcane. At least 12 species of wireworms have been found, and the “corn wireworm” is abundant enough in sugarcane to cause significant economic damage to this crop. Wireworms must be managed at planting to establish an acceptable stand, and often the only way to provide confident wireworm efficacy at this critical point in crop phenology is by administering the full rate of phorate. Failure to gain acceptable wireworm management at planting assures continued wireworm problems and subsequent yield reductions/losses through the next production season, both from continued presence/feeding of the wireworm and the fact that the resulting stand reduction within sugarcane rows leads to extra pressure and populations of weeds, necessitating additional herbicide applications.

For potato growers, phorate is important in controlling aphids, flea beetles and leafhoppers.

Phosmet

Phosmet is very important in apple production in managing codling moth (*Cydia pomonella*), grape mealybug (*Pseudococcus maritimus*), and apple maggot (*Rhagoletis pomonella*). While it

may not be the chemical of first choice for these target pests, it is a part of many season-long rotation programs to manage pest resistance.

Phosmet is particularly important to the tart cherry industry. It provides an effective tool for control of spotted wing drosophila (SWD), plum curculio (PC) and cherry fruit fly (CFF), cherry growers three biggest insect pest challenges. Each of these pests can deposit their eggs within cherry fruit, resulting in larvae in the fruit at harvest time. This will render the crops unsaleable. Phosmet is excellent in controlling these pests.

Phosmet is also an important crop protection tool for the U.S. blueberry/citrus industries in managing a multitude of insect/mite pests that attack blueberry and citrus foliage and fruit. Blueberry maggots, root weevils, fruitworms, flea beetles, Japanese beetles, plum curculios, leafrollers, rose chafers and spotted wing drosophila all are insect pests constantly attacking blueberries. Asian citrus psyllids, rust mites, spider mites, broad mites, scales, Diaprepes root weevils and even snails historically all cause economic damage to commercially grown citrus in Florida as well. All these pests are targeted directly and managed effectively by the application of phosmet.

Phosmet is of high importance to potato growers in the control of Colorado Potato Beetle (CBP), tuber moth, aphids, flea beetles and leafhoppers. For CBP it is often used as an early season foliar application, primarily targeting colonizing adults.

In closing, MCFA appreciates the opportunity to submit these comments. Our members look forward to EPA's consideration of them. We remain optimistic that after considering all the substantive comments submitted, and the relevant law, regulations and policies, the Agency ultimately will deny the Earthjustice petition.

Sincerely,

A handwritten signature in black ink, appearing to read "JRCranney Jr". The signature is written in a cursive, somewhat stylized font.

James R. Cranney, Jr.
Chairman, MCFA