PATTI GOLDMAN (WSB #24426)
JOSHUA OSBORNE-KLEIN (WSB #36736)
KRISTEN L. BOYLES (CSB #158450)
Earthjustice
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 *[FAX]*
pgoldman@earthjustice.org
josborne-klein@earthjustice.org
kboyles@earthjustice.org

SHELLEY DAVIS (DCB #41331)
VIRGINIA RUIZ (DCB #483800)
Farmworker Justice
1126 – 16th Street, N.W., Suite 270
Washington, D.C. 20036
(202) 293-5420
(202) 293-5427 *[FAX]*
sdavis@nclr.org
vruiz@nclr.org

AARON COLANGELO (DCB #468448)
Natural Resources Defense Council
1200 New York Avenue, N.W.
Washington, D.C. 20005
(202) 289-6868
(202) 289-1060 *[FAX]*
acolangelo@nrdc.org

Attorneys for Plaintiffs United Farm Workers, AFL-CIO; Sea Mar Community Health Center; Pineros Y Campesinos Unidos Del Noroeste; Beyond Pesticides; Frente Indigena de Organizaciones Binacionales; Farm Labor Organizing Committee, AFL-CIO; and Teamsters Local 890

MICHAEL MEUTER (CSB #161554
JONATHAN GETTLEMAN (CSB #243560))
California Rural Legal Assistance, Inc.
3 Williams Road
Salinas, CA 93905
(831) 757-5221
(831) 757-6212
mmeuter@crla.org
jgettleman@crla.org
Attorney for Plaintiffs Martha Rodriguez and Silvina Canez

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

UNITED FARM WORKERS, AFL-CIO; SEA MAR COMMUNITY HEALTH CENTER; PINEROS Y CAMPESINOS UNIDOS DEL NOROESTE; BEYOND PESTICIDES; FRENTE INDIGENA de ORGANIZACIONES BINACIONALES; FARM LABOR ORGANIZING COMMITTEE, AFL-CIO; TEAMSTERS LOCAL 890; MARTHA RODRIGUEZ; and SILVINA CANEZ, Plaintiffs, v. ADMINISTRATOR, U.S. ENVIRONMENTAL PROTECTION AGENCY, Defendant.	Civ. No. COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

INTRODUCTION

1. Chlorpyrifos is a dangerous organophosphate insecticide that threatens the health of people and the environment. To be sold, distributed, or used in the United States, defendant Administrator of the Environmental Protection Agency ("EPA") must license the pesticide for the particular use by granting what is called a registration or re-registration. In 2001, EPA re-registered numerous uses of chlorpyrifos that pose risks of concern to workers without conducting the risk-benefit analysis and making the unreasonable adverse effects findings that are a prerequisite to re-registration under the Federal Insecticide, Fungicide and Rodenticide Act ("FIFRA"), 7 U.S.C. §§ 136-136y. EPA acknowledged that it had inadequate data to guard against unreasonable adverse effects from some exposures to chlorpyrifos, yet it nonetheless re-registered uses presenting such exposures. EPA directed the manufacturers seeking registration (the "registrants") to submit additional data and solicited public comment on its re-registration decisions, but it never addressed the issues or data provided, despite making the decision in 2006 to retain all of the re-registered uses without imposing any greater restrictions or additional mitigation. In addition, EPA reduced worker protections from some uses based on data that EPA did not make available to the public for review in the public comment period on the re-registration decisions.

2. Plaintiffs United Farm Workers, Sea Mar Community Health Center, Pineros y Campesinos Unidos del Noroeste, Beyond Pesticides, Frente Indigena de Organizaciones Binacionales, Farm Labor Organizing Committee, Teamsters Local 890, Martha Rodriguez and Silvina Canez (collectively the "Workers") seek a declaration that EPA acted arbitrarily, capriciously, and in violation of FIFRA in re-registering the chlorpyrifos uses. The Workers seek an injunction prohibiting EPA from re-registering chlorpyrifos uses in the absence of sufficient data to make the unreasonable adverse effect determination that is a prerequisite for re-

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

registration under FIFRA. The Workers also seek an injunction ordering EPA to make re-registration eligibility decisions for chlorpyrifos based on unreasonable adverse effects findings and risk-benefit analyses that incorporate all health, environmental, economic, and social risks and benefits of each use as well as public comments and data submitted to fill gaps in the 2001 IRED.

PARTIES

3. Plaintiff United Farm Workers ("UFW"), the nation's oldest farm worker membership organization, is based in California and has more than 27,000 members in Washington, Oregon, California, and other states across the nation. UFW works to protect the health and safety of farm workers from occupational injuries, including injuries caused by exposure to chlorpyrifos. UFW members have been and will continue to be injured when they mix, load, and apply chlorpyrifos to crops; prune, thin or harvest crops that contain chlorpyrifos; and work or live in areas where chlorpyrifos drifts and settles.

4. Plaintiff Sea Mar Community Health Center ("Sea Mar"), headquartered in Seattle, Washington, is dedicated to caring for the medically underserved Latino population in the Washington State towns and cities of Seattle, Bellingham, Bonney Lake, Des Moines, Everett, Everson, Marysville, Mt. Vernon, Olympia, Tacoma, and Vancouver. Sea Mar provides comprehensive medical services, including general medical treatment, laboratory services, adult medicine, health education, social work, mental health counseling, and ambulatory care. Sea Mar serves approximately 75,000 individuals each year. Many of Sea Mar's patients are migrant and seasonal farm workers who work in crops that are treated with chlorpyrifos. Sea Mar clinicians have treated patients that manifest signs and symptoms of organophosphate poisoning, including headaches, vomiting, disorientation, abdominal cramps, spasms, and neurobehavioral impairments.

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

5. Plaintiff Pineros y Campesinos Unidos del Noroeste (Northwest Treeplanters and Farmworkers United, or "PCUN"), is based in Woodburn, Oregon, and is the state's only union of farm workers, nursery, and reforestation workers. PCUN's mission is to establish better working and living conditions for its members. PCUN's members are exposed to chlorpyrifos work on crops treated with this pesticide and when they are in or around their homes located where chlorpyrifos drifts or is tracked in following application. PCUN's members have been and will continue to be injured by such exposures.

6. Plaintiff Beyond Pesticides is a nonprofit organization based in Washington, D.C., that serves a nationwide network of more than 1,000 individual and organizational members by working to reduce threats to human health and environmental quality from the use of dangerous pesticides. Beyond Pesticides' primary goal is to assist and advocate for the safe use of pesticides and to reduce or end the use of dangerous pesticides. Chlorpyrifos drifts and settles in areas where members of Beyond Pesticides live and work. Beyond Pesticides' members are also injured by the environmental effects of chlorpyrifos uses, such as the loss of beneficial insects and injury to threatened and endangered species.

7. Plaintiff Frente Indigena de Organizaciones Binacionales ("FIOB") is a coalition of individuals, communities, and organizations of indigenous origin (from the Mixtec, Zapotec, and Triqui regions of the Mexican state of Oaxaca). Headquartered in Fresno, California, it has approximately 10,000 members working and residing in Oregon, Washington, California, and the Mexican states of Oaxaca and Baja California Norte. FIOB works to promote and defend the human, labor, and civil rights of the indigenous peoples of Oaxaca, and to promote the economic, social, and cultural development of indigenous communities in both the United States and Mexico. Nearly all of FIOB's members are migrant and seasonal farm workers, and many

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

are exposed to chlorpyrifos through their work on crops treated with this pesticide and their activities in close proximity to fields treated with chlorpyrifos.

8. Plaintiff Farm Labor Organizing Committee, AFL-CIO ("FLOC") is a national union, founded in 1968, that represents migrant and seasonal farmworkers. It is based in Toledo, Ohio, and currently has approximately 12,000 members under contract in Ohio, Michigan, North Carolina, and Virginia. FLOC members work in more than two dozen different crops, including cucumbers, tomatoes, potatoes, peppers, string beans, onions, strawberries, blueberries, apples, tobacco, and Christmas trees. FLOC members also work in greenhouses and nurseries. In the course of their agricultural work activities, FLOC members are exposed to pesticides, including chlorpyrifos. Every year, FLOC members experience adverse health effects from exposure to pesticides. FLOC's mission is to organize farmworkers so that they can secure more power to improve their working conditions, including reducing their exposure to pesticides.

9. Plaintiff Teamsters Local 890 is a union founded in 1943. It represents approximately 12,000 workers in southern and central California and southwestern Arizona. Its members include workers who harvest and haul fresh fruits and vegetables, including crops treated with chlorpyrifos. Teamsters 890 members are also exposed to chlorpyrifos when they work in or near fields where chlorpyrifos is applied.

10. Plaintiff Martha Rodriguez is a farm worker who has supported herself and her family since 1995 by working in fields in California. Ms. Rodriguez has worked in and around fields treated with chlorpyrifos.

11. Plaintiff Silvina Canez is a farm worker who has supported herself and her family since 1987 by working in fields in California. Ms. Canez has worked in and around fields treated with chlorpyrifos.

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

12. Defendant Stephen L. Johnson, Administrator of the U.S. Environmental Protection Agency ("EPA"), is the Administrator of EPA, which is a federal agency. The Administrator is charged with registering and re-registering pesticides under FIFRA and with ensuring that the pesticide uses EPA authorizes will not cause unreasonable adverse effects on the environment. FIFRA, 7 U.S.C. §§ 136-136y.

JURISDICTION

13. This Court has jurisdiction pursuant to 7 U.S.C.§ 136n(a) and 28 U.S.C. § 1331.

BACKGROUND

I. CHLORPYRIFOS

14. Chlorpyrifos is an organophosphate insecticide. Organophosphate insecticides were derived from nerve gas developed by the Nazis in World War II. Chlorpyrifos is acutely toxic and causes systemic illnesses to workers by inhibiting the body's ability to produce cholinesterase, an enzyme necessary for the proper transmission of nerve impulses.

15. Exposure to just a few drops of chlorpyrifos can cause harmful effects to humans. Symptoms of cholinesterase inhibition caused by chlorpyrifos poisoning include muscle spasms, confusion, dizziness, loss of consciousness, seizures, abdominal cramps, vomiting, diarrhea, cessation of breathing, paralysis, and death. Acute poisonings can cause chronic (long-term) effects, such as permanent nerve damage, loss of intellectual functions, and neurobehavioral effects. In addition to cholinesterase inhibition, scientific studies associate exposure to chlorpyrifos with other toxicological effects, such as asthma, in utero developmental brain impairments, low birth weights, and endocrine disruption.

16. Workers are exposed to chlorpyrifos primarily through inhalation and dermal contact when they mix, handle, or apply the pesticide or come into contact with treated crops. People are also exposed to chlorpyrifos from eating food with chlorpyrifos residues. Children

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

are exposed to chlorpyrifos from being exposed to drift, eating contaminated food, and having contact with residues on treated surfaces, clothing, or soils.

17. Chlorpyrifos is a semi-volatile chemical that can become airborne after being deposited on leaf or soil surfaces. This phenomenon occurs more frequently when temperatures are high. As a result, chlorpyrifos can be present in the air near schools and homes in agricultural communities. Air monitoring has detected chlorpyrifos near schools and homes above levels deemed acceptable by EPA.

18. Chlorpyrifos is one of the most widely used organophosphate insecticides in the United States. Between 1987 and 1998, approximately 21-24 million pounds of chlorpyrifos active ingredient were used annually on approximately eight million acres across the United States. Even after most residential chlorpyrifos uses were phased out, EPA estimates that approximately 11 million pounds are still used annually nationwide. In California alone, over two million pounds of chlorpyrifos active ingredient were used on 1.6 million acres in 2005.

19. Chlorpyrifos was first registered for use in the United States in 1965 for both residential and agricultural purposes. Pursuant to a 2000 agreement, most residential uses of chlorpyrifos have been cancelled. As of the 2001 re-registration decision, the largest agricultural market for chlorpyrifos was corn, followed by Brussels sprouts, cranberries, apples, broccoli, and cauliflower.

II. STATUTORY FRAMEWORK FOR REGISTERING AND RE-REGISTERING PESTICIDES

20. FIFRA establishes a registration scheme for pesticides. Under FIFRA, a pesticide may generally not be sold or used in the United States unless it has an EPA registration for specified uses. 7 U.S.C. § 136a(a). To register or re-register a pesticide, EPA must determine that:

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

(A) its composition is such as to warrant the proposed claims for it;
(B) its labeling and other material required to be submitted comply with the requirements of this Act;
(C) it will perform its intended function without unreasonable adverse effects on the environment; and
(D) when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

Id. § 136a(c)(5); see also id. § 136a-1(a)(2).

21. FIFRA defines "unreasonable adverse effects on the environment" to mean "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide . . . ." Id. § 136(bb).

22. The culmination of the registration process is EPA's approval of both a registration and a label for the particular pesticide use. FIFRA makes it unlawful to use a pesticide in a manner inconsistent with the label, id. § 136j(2)(G), or to make any claims that differ substantially from the label, id. § 136j(1)(B).

23. EPA has the authority to cancel pesticide registrations whenever "a pesticide or its labeling or other material required to be submitted does not comply with the provisions of this Act or, when used in accordance with widespread and commonly recognized practice, generally causes unreasonable adverse effects on the environment." Id. § 136d(b).

24. As part of the pesticide re-registration process, EPA conducts human health risk assessments by evaluating human risks from pesticides through such exposure routes as diet, drinking water, and occupational activities. In its human health risk assessments, EPA first determines the dose in scientific studies that caused no observed adverse effects, known as the No Observed Adverse Effect Level ("NOAEL"). In determining the NOAEL, EPA uses a tenfold interspecies safety factor to account for the uncertainties inherent in extrapolating from

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

animal studies to humans and a tenfold intraspecies safety factor to account for the varying sensitivities to pesticide exposures among individual human beings.

25. EPA then assesses how close occupational exposures will come to the NOAEL, which it calls the Margin of Exposure ("MOE"). EPA takes the position that a MOE greater than 100 does not generally pose a risk of concern, but a MOE less than 100 poses a risk of concern to workers. The lower the MOE, the greater the risk to workers.

26. When EPA deems an occupational exposure to have a MOE of less than 100, the agency requires the adoption of mitigation measures, beginning with increased personal protective equipment ("PPE") and escalating to engineering controls, such as "closed" pesticide mixing and loading and application systems in which farm workers who mix and load pesticides have little or no contact with the chemicals. If these protective measures fail to produce a MOE below 100, EPA normally finds that the pesticide use poses risks that are "unacceptable." Under FIFRA, EPA cannot register or re-register pesticides for uses that pose such risks of concern unless the pesticide registrant can prove that the pesticide's benefits outweigh the risks posed by the use. 7 U.S.C. §§ 136a(c)(5)(C)-(D), 136a-1(a)(2).

27. EPA also prepares an ecological risk assessment to determine whether the pesticide use will unreasonably affect the environment. To assess ecological risk, EPA establishes "levels of concern" for test species based on registrant-studies that assess lethal toxicity to such species and estimates of the environmental concentrations of the pesticide likely to reach the test species' habitat under the authorized uses. In its ecological risk assessments, EPA identifies risks of concern to such species as fish, birds, and mammals and may impose mitigation to eliminate such risks. If ecological risks of concern persist, EPA cannot register the pesticide use unless the pesticide registrant proves that the pesticide's benefits outweigh these

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

risks. EPA must also ensure that its pesticide registrations protect threatened and endangered species in keeping with the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531-1544.

28. Under FIFRA's risk-benefit standard, EPA cannot allow risks of concern unless the benefits of a pesticide use outweigh the risks (considering all risks and benefits). EPA has no regulation or policy establishing a uniform process for assessing benefits of pesticide uses that pose risks of concern. Expert bodies, such as the National Academy of Sciences, have recommended that EPA develop such a policy to avoid arbitrary and unprincipled risk-benefit decisionmaking under FIFRA. In the absence of such a regulation or policy, EPA staff compile information on the risks and benefits of pesticides on an ad hoc basis.

III. EPA'S RE-REGISTRATION OF CHLORPYRIFOS USES

A. The 2001 Chlorpyrifos IRED

29. In 2001, EPA issued an Interim Re-registration Eligibility Decision ("IRED") for chlorpyrifos authorizing re-registration of numerous uses of chlorpyrifos, including on food and feed crops and greenhouse and nursery uses.

30. EPA separately assessed application risks and post-application risks. With respect to the former, EPA found that "[o]ccupational exposure to chlorpyrifos is of concern to the Agency" with respect to mixers, loaders, and applicators. Chlorpyrifos IRED at x. EPA specifically identified the following exposures as posing risks of concern: mixing/loading liquids for aerial/chemigation and groundboom application; mixing wettable powder for groundboom application, aerial application, and application by backpack sprayer; high-pressure hand wand, and hand-held sprayer or duster. Id. EPA found that most then-existing chlorpyrifos uses pose unacceptable adverse effects to health and the environment. It believed that requiring additional engineering controls or personal protective equipment could eliminate risks of concern for many uses and make the uses eligible for re-registration. However, it identified various occupational

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

risk scenarios that would still be below the target MOE of 100 even with all feasible personal protective equipment or engineering controls. Chlorpyrifos Facts at 3 (Feb. 2002).

31. The most pervasive risks of concern to applicators arose from open cab applications. EPA determined that airblast and groundboom tractor applications in open cabs pose risks of concern to workers. For both airblast and groundboom applications, EPA determined that "[t]he biological monitoring results indicate that open cabs are insufficient." Chlorpyrifos IRED at 77. EPA found that mitigation in the form of enclosed cabs could eliminate these risks of concern. Specifically, the MOEs for enclosed cabs for airblast applications and for groundboom tractor applications exceed 100. Id. While the IRED requires enclosed cockpits for pilots for aerial applications, it fails to require enclosed cabs for motorized ground application equipment. Instead, it requires personal protective clothing for mixers and loaders that still results in MOEs of less than 100, and it provides that the PPE requirements can be relaxed when handlers use closed systems or closed cab motorized ground application equipment. Id. at 99-104, 109-12.

32. Similarly, EPA found that use of high pressure hand wands in greenhouses poses risks of concern for applicators, which result in MOEs of 21 and 41 depending on the application rate. Chlorpyrifos IRED at 78. EPA disclosed that "the risk estimates . . . are of low confidence due to a lack of information on the types or sprayers and volumes used in the studies." Id. at 83. EPA re-registered these uses despite the low MOEs and lack of pertinent information.

33. EPA acknowledged the special susceptibility and sensitivity of children to developmental and neurological effects from exposure to chlorpyrifos. Id. at 12. EPA also recognized that the children and families of workers would be exposed to chlorpyrifos as a result of drift of the insecticide from application sites and from the tracking of chlorpyrifos residue into

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

homes on the clothing of workers. Id. at 37. EPA never estimated the magnitude or impact of such exposures or the costs of mitigation measures that would protect the workers' children and families. Instead, EPA noted that it lacked adequate data to quantify these exposures and risks. It promised to develop "standard methodologies and guidance to evaluate these exposures" and to modify the chlorpyrifos risk assessment "as that guidance becomes available." Id.

34. For post-application risks, EPA found risks of concern from existing uses. Most post-application risks could be brought within "acceptable" levels with the longer Restricted Entry Intervals ("REIs") required in the IRED. An exception is the 24-hour REI for sweet corn required by the IRED, which results in an MOE of 83.

35. EPA recognized that post-application activities in greenhouses and nurseries, such as pruning, transplanting, and burlap/balling, pose risks of concerns for workers. Chlorpyrifos IRED at 36. EPA did not impose mitigation measures to reduce such risks of concern. EPA justified its failure to impose such mitigation measures on the lack of data "concerning the timing of the applications in relation to the post-application activities and a lack of residue data (foliar and bark treatments) to assess the REIs for the ornamental/greenhouse uses." Id.; see also id. at 85-86 ("Post-application risks to greenhouse/nursery workers were not assessed due to a lack of data."). The IRED requires registrants to submit additional data pertaining to the risks facing greenhouse and nursery workers. Id. at 96.

36. EPA acknowledged other harmful effects of chlorpyrifos that need to be taken into account in a risk-benefit balancing analysis under FIFRA. For example, chlorpyrifos is highly toxic to bees, Chlorpyrifos IRED at 50, it has been associated with bird and fish kills, id. at 60, monitoring in the 1990s revealed widespread and persistent occurrence in aquatic areas throughout the United States, id. at 51, and chlorpyrifos has been detected at levels that exceed

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

water quality criterion, id. at 52. EPA's ecological risk assessment found surface water contamination, and ecological risks of concern from single applications to small mammals, birds, fish, and aquatic invertebrates for nearly all outdoor uses with multiple applications increasing the risks and prolonging the exposures. Id. at 3, 44. EPA imposed some measures to mitigate these environmental effects, but the mitigation is insufficient to eliminate ecological risks of concern. Id. at 87-91.

37. Under FIFRA, when EPA finds risks of concern to workers, it cannot re-register the pesticide use unless benefits outweigh the risks. For other pesticides where EPA has found risks of concern to workers, EPA has conducted benefits assessments to provide a basis for conducting the risk-benefit balancing mandated by FIFRA. On information and belief, EPA conducted no comparable benefits assessments for chlorpyrifos uses that pose risks of concern to workers or the environment. In the absence of benefits assessments or other evidence of the health, social, economic, and environmental risks and benefits of each such use, EPA had no basis for finding that the benefits outweighed the risks of the re-registered uses.

38. The chlorpyrifos IRED contains conclusory statements asserting that benefits outweighed the risks of the re-registered chlorpyrifos uses. The sole discussion in the IRED of benefits pertains to four crops and spans three pages. Id. at 71-73. In this section of the IRED, EPA identifies the amount of chlorpyrifos used on the crop, the pests targeted, and available alternatives. For corn, the IRED notes that a non-chemical alternative for managing corn rootworm is practiced on the majority of corn acreage. Based on the mere identification of these alternatives, the IRED asserts that EPA considered the benefits of chlorpyrifos use.

39. The IRED never aggregates the total risks posed by the chlorpyrifos uses that pose risks of concern to workers, the environment, or children. EPA found risks of concern to

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

both workers and the environment from the same chlorpyrifos uses, yet it never considered whether benefits outweighed the cumulative impacts of these types of risks. EPA underestimated the risks of chlorpyrifos by failing to assess fully and to incorporate the risks to children and bystanders exposed to chlorpyrifos through drift or take-home residues.

40. To the extent that the IRED addressed some benefits of selected chlorpyrifos uses, it focused on an identification of the targeted pest and available chemical alternatives. EPA never assessed the health, environmental, social, and economic costs of the harm chlorpyrifos poses to workers, children, communities, and the environment.

B. 2006 Organophosphate Cumulative Risk Assessment.

41. The chlorpyrifos IRED is called "interim" because EPA still had to complete a cumulative risk assessment for all organophosphates and make appropriate adjustments in food tolerances in order to comply with the Food Quality Protection Act ("FQPA"), Pub. L. No. 104-170, 110 Stat. 1489 (1996).

42. While FIFRA regulates pesticide use, the Federal Food Drug and Cosmetic Act ("FFDCA"), 21 U.S.C. §§ 301-394, regulates consumer exposure to pesticide residues through food, drinking water, and all other aggregate sources of exposure. Under the FFDCA, EPA establishes tolerances that authorize and place limits on the amount of pesticide residues lawfully permitted on foods. 21 U.S.C. § 346a.

43. The FQPA substantially amended the standards governing issuance of tolerances under the FFDCA. The FQPA also requires EPA to re-register pesticides and re-assess tolerances according to a statutory schedule. 7 U.S.C. § 136a-1. EPA included organophosphate pesticides in the first group of pesticides slated for re-assessment because organophosphates are among the pesticides that "pose the greatest risk to public health." 65 Fed. Reg. 42,021 (Aug. 4, 1997).

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

44. On July 31, 2006, upon completing its organophosphate Cumulative Risk Assessment ("CRA"), EPA re-affirmed its IRED for chlorpyrifos without change. It concluded that the CRA compelled no changes in the IRED and that the chlorpyrifos uses covered by the IRED continue to be eligible for re-registration. EPA Memorandum Finalizing IREDs for Organophosphate Pesticides (July 31, 2006). In making this determination, EPA did not address or incorporate the data submitted in response to the previous data call-ins described in the IRED. Nor did EPA revisit the troubling risks posed to children from chlorpyrifos use.

CAUSES OF ACTION

I. FIRST CAUSE OF ACTION— EPA ACTED ARBITRARILY, CAPRICIOUSLY, AND IN VIOLATION OF FIFRA IN RE-REGISTERING CHLORPYRIFOS USES THAT POSE RISKS OF CONCERN TO WORKERS WITHOUT BALANCING ALL OF THE RISKS AND BENEFITS AND FINDING THAT THE BENEFITS OF EACH USE OUTWEIGH THE RISKS.

45. Paragraphs 14 through 44 are hereby realleged as though set out in full.

46. In order to register or re-register a pesticide use, EPA must determine that the use "will not generally cause unreasonable adverse effects on the environment." 7 U.S.C. §§ 136a(c)(5), 136a-1(a)(2). FIFRA defines "unreasonable adverse effects on the environment" to mean "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide . . . ." Id. § 136(bb). In order to satisfy this standard, EPA must balance the health, environmental, economic, and social risks and benefits and determine that the benefits of the pesticide use outweigh its risks.

47. The registrant bears the burden of proving that the benefits of a pesticide use outweigh the risks of that use. The registrant bears this burden at all times. EPA cannot re-register a pesticide use unless the registrant has met its burden with respect to that use.

48. EPA has established a level of protection for worker risks based on Margins of Exposure. EPA has determined that a pesticide use poses risks of concern for workers when the

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

MOE is less than 100. Where a pesticide use poses risks of concern to workers, EPA will often require engineering controls and the use of PPE to eliminate such risks of concern.

49. EPA re-registered numerous chlorpyrifos uses that it found will pose risks of concern to workers. Even after it required engineering controls and use of PPE, risks of concern will persist for various chlorpyrifos uses. In particular, EPA found that open cabs will not protect workers from risks of concern from airblast and groundboom tractor applications. EPA did not, however, require enclosed cabs for such applications.

50. These re-registered uses pose other risks of concern in addition to the identified worker risks. In the IRED, EPA found that chlorpyrifos poses risks of concern to the environment. EPA also identified risks to children and other bystanders from drift and to workers' families from take-home exposure to chlorpyrifos.

51. EPA also found that post-application workers would be exposed to risks of concern when re-entering corn fields, but it did not extend REIs to eliminate such risks of concern. It further identified risks of concern for greenhouse and nursery workers, but it did not require engineering controls, PPEs, or REIs to eliminate such risks of concern.

52. Under FIFRA, EPA cannot re-register a chlorpyrifos use that poses risks of concern to workers unless the registrant has proven that the benefits of the chlorpyrifos use outweigh all of the health, environmental, economic, and social risks posed by that use. EPA re-registered chlorpyrifos uses that pose risks of concern to workers without determining whether the health, environmental, economic, and social benefits of each use outweigh the aggregate risks. In the absence of a full assessment and comparison of all such risks and benefits, EPA lacked a sufficient basis to determine that the benefits of each chlorpyrifos use outweighed the risks and would therefore not have unreasonable adverse effects on human health and the

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

environment. By re-registering chlorpyrifos uses that pose risks of concern to workers or the environment without an adequate basis to make the FIFRA-mandated risk-benefit findings, EPA acted arbitrarily, capriciously, and contrary to FIFRA.

II. SECOND CAUSE OF ACTION — EPA ACTED ARBITRARILY, CAPRICIOUSLY, AND IN VIOLATION OF FIFRA IN RE-REGISTERING CHLORPYRIFOS USES WHEN EPA LACKED SUFFICIENT DATA TO FIND THAT THE USES WOULD NOT POSE UNREASONABLE ADVERSE EFFECTS.

53. Paragraphs 14 through 44 are hereby realleged as though set out in full.

54. In order to register or re-register a pesticide use, EPA must first determine that the use "will not generally cause unreasonable adverse effects" on human health or the environment. 7 U.S.C. §§ 136a(c)(5), 136a-1(a)(2), 136(bb). In order to satisfy this standard, EPA must determine that the economic, social, health, and environmental benefits of the pesticide use outweigh its risks. The burden of establishing that a pesticide use will not cause unreasonable adverse effects on human health and the environment is at all times on the pesticide registrant. 7 U.S.C. §§ 136a(c), 136a-1(a), 136d(a)(2).

55. Congress has established a deadline for re-registering food use pesticides. 7 U.S.C. § 136a-1. Congress imposed this deadline to put an end to the delays in bringing EPA's pesticide registrations into compliance with FIFRA's requirements. Many pesticides, including chlorpyrifos, had remained on the market and in use in the United States, despite never having been determined by EPA to be in compliance with FIFRA, as amended in 1972 and since. For chlorpyrifos, EPA had to make final re-registration decisions for all food uses by July 31, 2006. By that date, EPA had to determine whether each chlorpyrifos use would pose unreasonable adverse effects. If a chlorpyrifos use poses such unreasonable adverse effects, it is ineligible for re-registration. EPA may not re-register a pesticide use if EPA lacks adequate data to assess the

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

human and environmental risks and benefits of that use and if it lacks data to make the FIFRA-mandated unreasonable adverse effects determination that is a prerequisite for re-registration.

56. In the 2001 chlorpyrifos IRED, EPA identified gaps in data that prevented it from assessing fully the risks posed to workers and their families. For example, EPA found that it lacked sufficient data to assess accurately and fully the risks of chlorpyrifos uses on the children and families of workers who are exposed to chlorpyrifos from drift and track-in. Chlorpyrifos IRED at 37.

57. EPA also found that it lacked data sufficient to assess the application and post application risks to greenhouse and nursery workers. In the chlorpyrifos IRED, EPA directed registrants to supply data to fill gaps that prevented EPA from fully assessing risks and making the FIFRA-mandated risk-benefit determination for particular chlorpyrifos uses.

58. In 2001, EPA re-registered chlorpyrifos uses despite acknowledging that it lacked sufficient data to assess fully and accurately the risks posed to workers and children. The IRED indicates that chlorpyrifos uses are eligible for re-registration in accordance with the IRED "provided that . . . current data gaps and additional data needs are addressed." Id. at 61. EPA also represented that it "would address any outstanding risk concerns" at the time a cumulative risk assessment is conducted. Id. In 2006, EPA re-affirmed all of its chlorpyrifos re-registration determinations without change. EPA acted arbitrarily, capriciously, and in violation of FIFRA by reaffirming these re-registration decisions without addressing the data and comments submitted in response to the 2001 IRED. EPA acted arbitrarily, capriciously, and contrary to FIFRA in re-registrating chlorpyrifos uses in the absence of sufficient data to make the unreasonable adverse effects determination mandated by FIFRA as a prerequisite for re-registration.

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

PRAYER FOR RELIEF

WHEREFORE, the Workers pray that this Court:

A. Declare that EPA acted arbitrarily, capriciously, and contrary to FIFRA in re-registering chlorpyrifos uses that pose risks of concern to workers without conducting a full assessment and comparison of all health, environmental, economic, and social risks and benefits and finding that the benefits outweigh the aggregate risks of each re-registered use;

B. Declare that EPA acted arbitrarily, capriciously, and contrary to FIFRA in re-registering chlorpyrifos uses for which EPA lacked sufficient data to make an affirmative finding that the pesticide use would not cause unreasonable adverse effects on the environment and in re-affirming the 2001 IRED without considering the data subsequently submitted with respect to adverse effects for which it previously lacked sufficient data or methods of analysis;

C. Order EPA to make new re-registration eligibility decisions for chlorpyrifos uses on an expeditious basis in which EPA: (1) makes unreasonable adverse effects determinations based on consideration, aggregation, and balancing of all health, environmental, economic, and social risks and benefits from the use; and (2) re-registers a chlorpyrifos use only when the data demonstrate that the health, environmental, economic, and social benefits outweigh the risks.

D. Award plaintiffs UFW, Sea Mar, PCUN, Beyond Pesticides, FIOB, and Teamsters Local 890, and their counsel Earthjustice, Farmworker Justice, and Natural Resources Defense Council only their attorneys' fees in this action pursuant to the Equal Access to Justice Act, 28, U.S.C. § 2412;

and

E. Grant such other and further relief as the Court deems just and proper.

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340

Respectfully submitted this 30th day of July, 2007.

PATTI GOLDMAN (WSB #24426)
JOSHUA OSBORNE-KLEIN (WSB #36736)
KRISTEN L. BOYLES (CSB #158450)
Earthjustice
705 Second Avenue, Suite 203
Seattle, WA 98104
(206) 343-7340
(206) 343-1526 *[FAX]*
pgoldman@earthjustice.org
josborne-klein@earthjustice.org
kboyles@earthjustice.org

SHELLEY DAVIS (DCB #41331)
VIRGINIA RUIZ (DCB #483800)
Farmworker Justice
1126 – 16th Street, N.W., Suite 270
Washington, D.C. 20036
(202) 293-5420
(202) 293-5427 *[FAX]*
sdavis@nclr.org
vruiz@nclr.org

AARON COLANGELO (DCB #468448)
Natural Resources Defense Council
1200 New York Avenue, N.W.
Washington, D.C. 20005
(202) 289-6868
(202) 289-1060 *[FAX]*
acolangelo@nrdc.org

Attorneys for Plaintiffs United Farm Workers, AFL-CIO; Sea Mar Community Health Center; Pineros Y Campesinos Unidos Del Noroeste; Beyond Pesticides; Frente Indigena de Organizaciones Binacionales; Farm Labor Organizing Committee, AFL-CIO; and Teamsters Local 890.

MICHAEL MEUTER (CSB #161554)
JONATHAN GETTLEMAN (CSB #243560)
California Rural Legal Assistance, Inc.
3 Williams Road
Salinas, CA 93905
(831) 757-5221
(831) 757-6212
mmeuter@crla.org
jgettleman@crla.org

Attorney for Plaintiffs Martha Rodriguez and Silvina Canez

Earthjustice
705 Second Ave., Suite 203
Seattle, WA 98104
(206) 343-7340