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25 FIRST AMENDED COMPLAINT FOR DECLARATORY
26 AND INJUNCTIVE RELIEF (CV04-0099C) - 1 -

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1 UNITED STATES DISTRICT COURT
2 FOR THE WESTERN DISTRICT OF WASHINGTON

3 UNITED FARM WORKERS OF AMERICA,) Civ. No. CV04-0099C
4 AFL-CIO; SEA MAR COMMUNITY)
5 HEALTH CENTER; PINEROS Y)
6 CAMPESINOS UNIDOS DEL NOROESTE) FIRST AMENDED COMPLAINT FOR
7 (“PCUN”); BEYOND PESTICIDES, FRENTE) DECLARATORY AND INJUNCTIVE
8 INDIGENA OAXAQUENO BINACIONAL) RELIEF
9 (“FRENTE INDIGENA”), and ARNULFO)
10 LOPEZ,)
11)
12 Plaintiffs,)
13)
14 v.)
15)
16 ADMINISTRATOR, U.S.)
17 ENVIRONMENTAL PROTECTION)
18 AGENCY,)
19)
20 Defendant.)

21 INTRODUCTION

22 1. This case challenges the re-registration determinations made by defendant
23 Administrator of the Environmental Protection Agency (“EPA”) under the Federal Insecticide,
24 Fungicide and Rodenticide Act (“FIFRA”) for azinphos-methyl and phosmet, two insecticides
25 that pose extensive risks to workers. EPA authorized the continuation of numerous uses of these
26 pesticides: (1) based on a flawed risk-benefit analysis: (a) that accounted for economic benefits
to crop producers but not the full harm to workers, their families, communities, and the
environment; and (b) that relied on assumptions and data contradicted by peer reviewed and
other scientific information provided in public comments, but never addressed by EPA; and (2)
based on data on worker exposure to pesticide residues that have never been made available for
public review and comment and that deviate from the data and methods used consistently by
EPA in the past.

2. First, based on its chosen standard of protection, EPA determined that most

1 azinphos-methyl and many phosmet uses pose unacceptable risks to workers. Nonetheless, EPA
2 allowed numerous uses of these insecticides to continue based on its conclusion that the
3 economic benefits from their use outweigh the harm to workers and the environment. Although
4 EPA conducted benefits assessments that quantified the economic benefits of these insecticides
5 to crop producers, it never quantified or otherwise assessed the economic costs of subjecting
6 workers, their children, or the environment to excessive risks from these pesticide uses.

7 3. Second, EPA assessed the benefits of continued uses of azinphos-methyl and
8 phosmet based on undisclosed data, its “professional judgment,” and input from growers, even
9 though plaintiffs and others submitted published, peer reviewed scientific articles and other data
10 that disproved those assumptions. EPA made final re-registration and cancellation
11 determinations based on its initial assumptions without taking into account or explaining its
12 reasons for disregarding the credible evidence to the contrary. EPA relied on its flawed benefits
13 assessments in deciding to allow continuation of azinphos-methyl and phosmet uses that subject
14 workers to health risks that far exceed the levels EPA has determined to be unacceptable.

15 4. Third, EPA based its exposure assessments on re-entry data produced by an
16 industry task force that depart from the data and methods previously used by EPA to estimate
17 worker exposure. EPA sought public comment on its re-registration eligibility decision without
18 making the worker re-entry data available to the general public, despite the statutory mandates
19 that data on a pesticide’s effects on humans be made available to the public. 7 U.S.C. §§
20 136a(c)(2)(A) and 136h(d). The public, therefore, never had an opportunity to comment on
21 whether the exposure estimates are accurate and valid.

22 5. Plaintiffs ask the Court to declare that EPA acted arbitrarily, capriciously, and
23 contrary to FIFRA: (1) in allowing the continuation of azinphos-methyl and phosmet uses that
24

1 pose unacceptable worker risks based on a one-sided risk-benefit analysis that quantified the
2 economic benefits to crop producers but not the human and societal costs of exposing
3 farmworkers, their children, and the environment to these insecticides; (2) in relying on
4 assumptions and data in the agency’s azinphos-methyl and phosmet benefits assessments that run
5 counter to published articles and other data made available to EPA in public comments; and (3)
6 in using new industry agricultural re-entry data to estimate worker exposure without making the
7 data and methods available to the public during the public comment period. Plaintiffs ask the
8 Court to enjoin EPA to conduct on an expeditious basis a new re-registration determination for
9 azinphos-methyl and phosmet: (1) based on a full assessment of the human and societal costs of
10 exposing workers to risks that exceed EPA’s established level of worker protection; (2) based on
11 the best available data on alternative pest control methods in its benefits assessments or a
12 complete and well-reasoned rationale for rejecting the published articles, data, and critiques
13 submitted by plaintiffs and other members of the public that undermine EPA’s assumptions and
14 data in its benefits assessments; and (3) without relying on industry data on human exposure and
15 effects that have not been made available to the general public for public comment.

16 PARTIES

17 6. Plaintiff United Farm Workers of America (“UFW”), the nation’s leading farm
18 worker membership organization, is based in California and has more than 27,000 members in
19 Washington, Oregon, California and other states located across the nation. UFW works to
20 protect the health and safety of farm workers from occupational injuries, including injuries caused
21 by exposure to pesticides. UFW members have been and will continue to be injured when they
22 mix, load, and apply pesticides, including azinphos-methyl and phosmet, to crops; prune, thin or
23 harvest crops that contain residues from such pesticides; or work or live in areas where these
24 pesticides drift and settle.

1 7. Plaintiff Sea Mar Community Health Center (“Sea Mar”), headquartered in
2 Seattle, Washington, is dedicated to caring for the medically underserved Latino population in
3 the Washington State towns and cities of Seattle, Bellingham, Bonney Lake, Des Moines,
4 Everett, Everson, Marysville, Mt. Vernon, Olympia, Tacoma, and Vancouver. Sea Mar provides
5 comprehensive medical services, including general medical treatment, laboratory services, adult
6 medicine, health education, social work, mental health counseling, and ambulatory care. Sea
7 Mar serves approximately 75,000 individuals each year. Many of Sea Mar’s patients are migrant
8 and seasonal farmworkers who work in crops that are treated with azinphos-methyl and phosmet,
9 including apples, pears, and cherries. Sea Mar clinicians have treated patients that manifest signs
10 and symptoms of organophosphate pesticide poisonings, including headaches, vomiting,
11 disorientation, abdominal cramps, spasms, and neurobehavioral impairments.

12 8. Plaintiff Pineros y Campesinos Unidos del Noroeste (Northwest Treeplanters and
13 Farmworkers United, or “PCUN”), is based in Woodburn, Oregon, and is the state’s only union
14 of farmworkers, nursery and reforestation workers. PCUN’s mission is to establish better
15 working and living conditions for its members. PCUN’s members are exposed to azinphos-
16 methyl and phosmet when they prune, thin, or harvest crops such as apples and pears on which
17 these pesticides are applied, and/or when they are in or around their homes located throughout
18 Oregon in areas where these pesticides drift following application. PCUN’s members have been
19 and will continue to be injured by such exposures.

20 9. Beyond Pesticides is a nonprofit organization, based in Washington, D.C., that
21 serves a nationwide network of more than 1,000 individual and organizational members by
22 working to reduce threats to human health and environmental quality from the use of dangerous
23 pesticides. Beyond Pesticides’ primary goal is to assist and advocate for the safe use of
24

1 pesticides and to reduce or end the use of dangerous pesticides. Pesticides, including azinphos-
2 methyl and phosmet, drift and settle in areas where members of Beyond Pesticides live and
3 work. Beyond Pesticides members are also injured by the loss of beneficial insects, such as bees,
4 following application of azinphos-methyl and phosmet.

5 10. Plaintiff Frente Indigena Oaxaqueno Binacional (“FIOB”) is a coalition of
6 individuals, communities, and organizations of indigenous origin (from the Mixtec, Zapotec, and
7 Triqui regions of the Mexican state of Oaxaca). Headquartered in Fresno, California, it has
8 about 10,000 members working and residing in Oregon, Washington, and the Mexican states of
9 Oaxaca and Baja California Norte. The FIOB works to promote and defend the human, labor,
10 and civil rights of the indigenous peoples of Oaxaca, and to promote the economic, social, and
11 cultural development of indigenous communities in both the United States and Mexico. Nearly
12 all of FIOB’s members are migrant and seasonal farmworkers, and many are exposed to
13 azinphos-methyl and phosmet through their work on crops that are treated with these pesticides.

14 11. Plaintiff Arnulfo Lopez (“Mr. Lopez”) is a migrant farmworker who has
15 supported himself and his family since 1982 by working in fields and orchards in California,
16 Oregon, and Idaho. Mr. Lopez has worked primarily on several major crops, including
17 strawberries, blueberries, blackberries, almonds, raisin grapes, and potatoes. Mr. Lopez has
18 worked in and around fields treated with azinphos-methyl. Additionally, Mr. Lopez has applied
19 other pesticides to control rodents while working in almond orchards in Fresno County,
20 California.

21 12. Defendant Administrator of the U.S. Environmental Protection Agency (“EPA”)
22 is the Administrator of EPA, which is a federal agency. The Administrator and EPA are charged
23 with registering pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act
24

1 (“FIFRA”) and with ensuring that the pesticide uses it authorizes will not have unreasonable
2 adverse effects on the environment, including on human health and on threatened and
3 endangered species and their habitat. FIFRA, 7 U.S.C. §§ 136-136y.

4 JURISDICTION

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

6 VENUE

7 14. Venue lies in this judicial district under 28 U.S.C. § 1391(e) because plaintiff Sea
8 Mar resides in this district.

9 BACKGROUND

10 I. THE INSECTICIDES

11 A. Azinphos-methyl

12 15. Azinphos-methyl is a highly toxic organophosphate insecticide derived from a
13 nerve gas used during World War II. Approximately two million pounds of azinphos-methyl are
14 applied each year to fruit, nut, and vegetable crops to control a variety of pests. EPA first
15 registered azinphos-methyl for use in the United States in 1959.

16 16. Azinphos-methyl is used on apples, pears, and other labor-intensive crops. For
17 example, azinphos-methyl is used extensively in Washington State on apples to control codling
18 moths. Given the widespread use of azinphos-methyl on labor-intensive crops, workers are
19 frequently exposed to this chemical.

20 17. Azinphos-methyl is acutely toxic and causes systemic illnesses to workers by
21 lowering the level of cholinesterase, an enzyme in the blood. It poisons the nervous system by
22 inhibiting the breakdown of the neurotransmitter acetylcholine. Most poisonings and deaths of
23 farmworkers have been attributed to cholinesterase-inhibiting chemicals, like azinphos-methyl.

24 18. Just a few drops of this pesticide can cause harmful effects. Symptoms include

1 muscle spasms, confusion, dizziness, loss of consciousness, seizures, abdominal cramps,
2 vomiting, diarrhea, cessation of breathing, paralysis, and death. Acute poisonings can cause
3 chronic (long-term) effects, such as permanent nerve damage, loss of intellectual functions, and
4 neurobehavioral effects.

5 19. Azinphos-methyl is among the registered pesticides responsible for the largest
6 number of farmworker poisonings. Poisoning incident data from California, which has the most
7 comprehensive human incident data, confirm that farmworkers have been subjected to a
8 significant incidence of poisonings from this chemical. In the early 1990s, EPA reviewed
9 poisoning incident data and determined that farmworker risks from azinphos-methyl are
10 excessive and in need of mitigation. In 1998, the California Department of Pesticide Regulation
11 adopted emergency regulations to protect farmworkers exposed to azinphos-methyl on tree crops
12 and grapes. The required mitigation included extended periods during which treated fields could
13 not be entered, reduced application rates, additional protective equipment, some closed mixing
14 and loading systems, and some deleted uses. EPA worked with the registrant to extend the
15 mitigation nationwide and to other uses. Despite EPA's past efforts to reduce some human
16 exposure to azinphos-methyl, EPA still allows numerous uses of this toxic pesticide that present
17 excessive health risks to farmworkers.

18 B. Phosmet

19 20. Phosmet is another highly toxic organophosphate insecticide, first registered for
20 use in the United States in 1966. Approximately one million pounds of phosmet are used each
21 year. Phosmet is used, inter alia, on fruit and nut trees, grapes, berries, and vegetable crops.
22 More phosmet is used on apples, 440,000 pounds annually or one-third of all uses of phosmet,
23 than any other crop. Farmers often spray both phosmet and azinphos-methyl to apples and other
24 crops.

1 21. Like azinphos-methyl, phosmet inhibits the body’s ability to produce
2 cholinesterase, thereby adversely affecting the nervous system. Inhalation or dermal exposure to
3 phosmet can cause convulsions, tremors, exhaustion, neurological impacts, and other adverse
4 human health effects.

5 II. STATUTORY FRAMEWORK FOR REGISTERING PESTICIDES

6 22. FIFRA establishes a registration scheme for pesticides. Under FIFRA, a pesticide
7 may generally not be sold or used in the United States unless it has an EPA registration for
8 specified uses. 7 U.S.C. § 136a(a).

9 23. Under FIFRA, the Administrator “shall register a pesticide if the Administrator
10 determines that, . . .

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

15 7 U.S.C. § 136a(C)(5).

16 24. FIFRA defines “unreasonable adverse effects on the environment” to mean “any
17 unreasonable risk to man or the environment, taking into account the economic, social, and
18 environmental costs and benefits of the use of any pesticide” 7 U.S.C. § 136(bb).

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

23 26. FIFRA also makes it unlawful to sell or distribute a misbranded pesticide. *Id.* §
24

1 136j(1)(E)-(F). A pesticide is misbranded if its label fails to contain warnings, cautionary
2 statements, or directions necessary to protect public health and the environment. 7 U.S.C. §
3 136(q)(F)-(G).

4 27. EPA is in a lengthy process of re-registering pesticides that have been on the
5 market for years and often decades prior to enactment of the environmental registration
6 requirements currently in place. 7 U.S.C. § 136a-1. In making a re-registration determination,
7 the Administrator must make the FIFRA-prescribed findings for a registration, namely, that
8 when used in accordance with widespread and commonly recognized practice, the pesticide will
9 not generally cause unreasonable adverse effects on the environment. 7 U.S.C. § 136a(C)(5).

10 28. The EPA Administrator has the authority to cancel pesticide registrations
11 whenever “a pesticide or its labeling or other material required to be submitted does not comply
12 with the provisions of this Act or, when used in accordance with widespread and commonly
13 recognized practice, generally causes unreasonable adverse effects on the environment.” 7
14 U.S.C. § 136d(b). The Administrator may immediately suspend a pesticide registration to
15 prevent an imminent hazard. *Id.* § 136d(c). An announcement by the Administrator of an intent
16 to cancel a pesticide use often results in the registrant’s voluntary cancellation of, or agreement
17 to further constraints upon, that use.

18 29. While FIFRA regulates pesticide use, the Federal Food Drug and Cosmetic Act
19 (“FFDCA”) regulates consumer exposure to pesticide residues through food, drinking water, and
20 all other aggregate sources of exposure. Under the FFDCA, EPA establishes tolerances that
21 authorize and place limits on the amount of pesticide residues lawfully permitted on foods. 21
22 U.S.C. § 346a. The EPA Administrator must ensure that tolerances are set at levels that are
23 “safe.” *Id.* EPA may not issue a pesticide registration for a food use unless it has established a
24

1 tolerance for that use. 40 C.F.R. § 152.112(g).

2 30. Any pesticide chemical residue in or on a food is deemed unsafe unless a
3 tolerance or exemption is in effect and the residue is in compliance with that tolerance or
4 exemption. If a pesticide is used on more than one food crop, a separate tolerance must be
5 established for each crop.

6 31. The Food Quality Protection Act (FQPA) of 1996, Pub. L. No. 104-170, 110 Stat.
7 1489 (1996), substantially amended FIFRA and the FFDCA in 1996 by mandating that health-
8 based and child-protective standards drive decisions about acceptable levels of pesticide residues
9 in the food supply and the environment. EPA must re-register pesticides and re-assess tolerances
10 according to a statutory schedule that gives priority to certain pesticide uses, including food uses
11 and crops where worker exposure is most likely to occur. 7 U.S.C. § 136a-1. EPA included
12 organophosphate pesticides in the first group of pesticides slated for re-assessment because
13 organophosphates are among the pesticides that “pose the greatest risk to public health.” 65 Fed.
14 Reg. 42,021 (Aug. 4, 1997). After EPA missed deadlines for re-assessing tolerances for
15 organophosphates and other priority pesticides, the Natural Resources Defense Council sued the
16 agency. In 2001, NRDC and EPA settled the case in a partial consent decree and settlement
17 agreement that established a schedule for further pesticide safety reviews. NRDC v. Whitman,
18 No. 99-3701 WHA, 2001 WL 1221774 (N.D. Cal. Sept. 24, 2001) (order approving consent
19 decree).

20 III. EPA’S RE-REGISTRATION DECISIONS FOR AZINPHOS-METHYL AND
21 PHOSMET

22 32. In late 2001, EPA issued interim re-registration eligibility decisions (“interim
23 REDs” or “IREDs”) for azinphos-methyl and phosmet. The interim REDs conclude EPA’s
24 assessment of the worker and ecological risks associated with use of these pesticides. Phosmet

1 IRED Cover Letter at 2. As the phosmet IRED states: “Based on its current evaluation of
2 phosmet alone, the Agency has determined that phosmet products, unless labeled and used as
3 specified in this document, would present risks inconsistent with FIFRA.” Phosmet IRED at 41.
4 The interim REDs are final in this regard and “present[] the Agency’s reregistration decision
5 except for the decision on tolerance reassessment.” AZM IRED Cover Letter at 2; Phosmet
6 IRED at vii. EPA may take further actions if warranted once it has completed a cumulative risk
7 assessment for all organophosphates. Phosmet IRED at 41; AZM IRED Cover Letter at 2.

8 A. EPA’s Unacceptable Risk Determinations

9 33. EPA conducted human health risk assessments for azinphos-methyl and phosmet,
10 which it made available in preliminary form for public comment and then finalized along with a
11 written response to the public comments. In its human health risk assessments, EPA first
12 determined the dose in scientific studies that caused no observed adverse effects, known as the
13 No Observed Adverse Effect Level (“NOAEL”). It then assessed how close occupational
14 exposures will come to the NOAEL, which it calls the Margin of Exposure (“MOE”). EPA takes
15 the position that “[g]enerally, MOEs greater than 100 do not exceed the Agency’s risk concern.
16 This MOE is based on a 10x uncertainty factor for interspecies variability, and a 10x uncertainty
17 factor for intraspecies variability.” Azinphos-Methyl IRED at 22. The tenfold interspecies
18 safety factor accounts for the uncertainties inherent in extrapolating from animal studies to
19 humans. The tenfold intraspecies safety factor accounts for the varying sensitivities to pesticide
20 exposures among individual human beings. The lower the MOE, the greater the risk to
21 farmworkers.

22 34. When occupational exposures reach EPA’s level of concern of an MOE of less
23 than 100, the agency requires the adoption of mitigation measures, beginning with increased
24 personal protective clothing and escalating to engineering controls, such as “closed” pesticide

1 mixing and loading and application systems in which farmworkers who mix and load pesticides
2 have little or no contact with the chemicals. If these protective measures fail to produce an
3 acceptable MOE, EPA finds that the pesticide use poses unacceptable worker risks.

4 *1. Azinphos-Methyl Worker Risks*

5 35. Farmworkers are exposed to azinphos-methyl through mixing, loading, and/or
6 applying the pesticide as well as through re-entering treated sites. Azinphos-Methyl IRED at 22.
7 Azinphos-methyl is acutely toxic at relatively low oral and dermal doses. It inhibits production
8 of cholinesterase, an enzyme that is essential for normal neurological functions. EPA, AZM
9 Human Health Risk Assessment, 1 & 13 (May 19, 1999). The National Institute for
10 Occupational Safety and Health has published a guideline for industrial worker exposure to
11 azinphos-methyl, which recommends that workers be tested to establish baseline cholinesterase
12 levels and that they be removed from exposure when their red blood cell cholinesterase levels
13 drop to or below 40% of the baseline level. AZM IRED at 26. The California Environmental
14 Protection Agency has established guidelines for workers exposed to cholinesterase-inhibiting
15 pesticides that call for testing when a worker's blood level drops to 80% of the baseline and
16 removal from exposure when levels drop to 70% of the baseline. AZM IRED at 26-27.

17 36. EPA assessed both short-term (seven day) and intermediate-term (one week to
18 several months) risks for mixing, loading, and applying azinphos-methyl for 17 major crop
19 groups and ten major agricultural exposure scenarios. AZM IRED at 28-36; EPA, Revised
20 Occupational Handler Exposure Assessment & Recommendations for the RED for Azinphos
21 Methyl, at 7 & 10 (July 10, 2001). EPA found that all but three exposure scenarios are of
22 concern because they would result in Margins of Exposure less than 100. AZM IRED at 36.
23 These estimates do not account for cumulative exposures when the same individual is engaged in
24 multiple tasks, such as mixing and application of the pesticide, that expose him or her to the

1 pesticide. EPA concluded that:

2 Even after factoring in exposure reductions provided by closed mixing and
3 loading systems, closed cab application equipment, and all feasible personal
4 protective equipment, safety margins (margins of exposure or MOEs) still fall
well below the target of 100 for the majority of pesticide handler exposure
scenarios considered.

5 AZM IRED at vii (risks to workers who mix, load, and apply azinphos-methyl).

6 37. EPA also assessed post-application risks to workers who re-enter treated sites to
7 perform tasks such as irrigating, hand-thinning, and harvesting. EPA, Azinphos Methyl: Third
8 Version of Revised Occupational Post-Application Exposure & Risk Calculations [Chemical
9 Code 058001] (Oct. 10, 2001). EPA determined the Margins of Exposure for various re-entry
10 activities based on current label restricted re-entry intervals. A re-entry interval (“REI”) is the
11 amount of time a worker must wait after the application of a pesticide before entering the treated
12 field to conduct non-harvest activities, such as pruning or thinning. EPA also calculated the
13 restricted re-entry intervals required for the Margin of Exposures to reach 100. EPA found that
14 “the risks to re-entry workers are above the level of concern for all assessed activities in all the
15 crops where azinphos-methyl is used. For example, the MOE for hand harvesting in apples (21
16 day PHI, 1.5 lbs ai/A [active ingredient per acre]) is 2. The MOE for hand harvesting apples
17 does not reach 100 until 102 days after application.” AZM IRED at 42. A PHI or pre-harvest
18 interval is the length of time a worker must wait to harvest a crop after the pesticide application.

19 Risk to field workers who reenter azinphos-methyl treated sites to harvest, thin,
20 prune and perform other post-application activities is of particular concern.
21 MOEs for many of these workers are less than 10 for critical activities. Even
22 taking into account the additional margins of safety afforded by using a very
protective endpoint, MOEs for many reentry workers are less than 30, where the
target MOE is 100.

23 AZM IRED at vii-viii.

1 2. *Phosmet Worker Risks*

2 38. For phosmet, EPA similarly concluded that farmworkers face unacceptable health
3 risks for many phosmet uses. Phosmet IRED at 51-52. The Margins of Exposures for workers
4 who mix and load phosmet for aerial applications are between 27 and 94 for intermediate
5 exposures. These risks exceed EPA’s cutoff for unacceptable risks of a Margin of Exposure less
6 than 100. Farmworkers face even greater post-application risks from harvesting, thinning, and
7 irrigating activities, which result in MOEs that are lower than 10, an order of magnitude greater
8 risk than EPA’s level of concern. Phosmet IRED at 32-43. Even with additional mitigation
9 measures, such as protective clothing, engineering controls, and reducing the number and rates of
10 applications, “residual risks are still of concern.” Phosmet IRED at 42-43. Specifically, Margins
11 of Exposure would be less than 20 for some worker activities for use of phosmet on apples,
12 crabapples, apricots, nectarines, peaches, pears, plums/prunes, highbush blueberries, and grapes.
13 Id. at 43, 52.

14 B. EPA Used Agricultural Re-entry Data That Deviate From its Past Data and
15 Methods Without Making The Data Available for Public Comment.

16 39. The Agricultural Re-entry Task Force (“ARTF”) is a limited liability company
17 comprised of major pesticide manufacturers or registrants. It is organized pursuant to FIFRA, 7
18 U.S.C. § 136a(c)(2)(B)(ii), which authorizes two or more registrants to “develop jointly or to
19 share in the cost of developing” data required to support a registration.

20 40. ARTF has developed a generic agricultural re-entry exposure database. The
21 ARTF’s methodology assumes that occupational exposure to a pesticide is based on the degree
22 of contact that a worker has with the foliage of a particular groups of crops. Rather than testing
23 each type of crop, the ARTF establishes transfer coefficients to reflect worker pesticide exposure
24 from categories of activities with representative crops. The ARTF “transfer coefficients”

1 measure the amount of pesticide residue readily transferred from the foliage of the representative
2 crop to the worker's skin during the course of certain activities, such as thinning or pruning. The
3 ARTF transfer coefficients are not based on actual data pertaining to the use of particular
4 pesticides, such as azinphos-methyl or phosmet.

5 41. Registrants who are ARTF members provide ARTF proprietary data to EPA for
6 use in making pesticide re-registration decisions. EPA used ARTF's transfer coefficients to
7 estimate worker exposure in its re-registration decisions for azinphos-methyl and phosmet.
8 EPA's human health risk assessment for azinphos-methyl relied on ARTF transfer coefficients to
9 calculate re-entry intervals and Margins of Exposure. EPA, Health Effects Division Chapter of
10 the Reregistration Eligibility Decision Document (RED) for Azinphos Methyl, at 69 (May 7,
11 1998); EPA, Human Health Risk Assessment at 75 and 81 (May 19, 1999). For phosmet, EPA
12 used ARTF data to recalculate worker restricted entry intervals and make "major revisions" to its
13 phosmet human health risk assessment. *Id.* In its phosmet IRED, EPA noted that the Margins of
14 Exposure it calculated for phosmet uses may not accurately reflect farmworker risks because the
15 agency relied on ARTF data that grouped tree harvesters with tree thinners. Phosmet IRED at
16 31. While EPA disagreed with the task force methodology in this regard, it nonetheless relied on
17 and integrated the ARTF data into its analysis and re-registration decision.

18 42. EPA did not make the ARTF data used in its azinphos-methyl and phosmet
19 human health risk assessments available to the public during the 60-day comment period on
20 those assessments or on its IREDs for these pesticides. The public has, therefore, not had an
21 opportunity to scrutinize and comment upon the accuracy and adequacy of the ARTF data,
22 methodologies, or the conclusions drawn by EPA from that data in the IREDs.

23 C. EPA's Benefits Assessments for Azinphos-Methyl and Phosmet

24 43. When EPA found unacceptable risks to human health from use of azinphos-

1 methyl and phosmet, it prepared benefits assessments for various uses. The benefits assessments
2 are intended to form the basis for EPA's determination whether the benefits from continued use
3 of the pesticide outweigh the risks the pesticide poses to workers, consumers, and the
4 environment.

5 44. EPA prepared a single benefits assessment covering use of both azinphos-methyl
6 and phosmet on apples and pears, dominant uses of these pesticides. This benefits assessment
7 focused exclusively on the possible crop production repercussions of various strategies for
8 mitigating post-application worker risks. It did not address mitigation directed at workers
9 mixing, loading, and applying the pesticides.

10 45. Even as to the worker risks that it addressed, the apple-pear benefits assessment
11 looked solely at the effects of the mitigation scenarios on crop production, omitting entirely any
12 assessment of the individual and societal costs of allowing workers to be exposed to what EPA
13 has deemed to be unacceptable risks. The benefits assessment is one-sided, quantifying the
14 economic consequences to farmers who would be unable to use the pesticides at current levels
15 but failing to account for the costs of the harm to workers, their children, water quality, or
16 endangered species.

17 *1. The assumptions underlying the apple-pear benefits assessment*

18 46. EPA developed four hypothetical scenarios based on longer restricted re-entry
19 intervals than are currently required. While these longer re-entry intervals would reduce worker
20 risk, they would not bring the risks below EPA's unacceptable worker risk level. EPA assumed
21 that farmers would stop using azinphos-methyl and phosmet if worker re-entry intervals were
22 longer than 14 and 3 days respectively, yet some re-entry periods would need to be as long as a
23 month or more to reduce worker risks below EPA's unacceptable risk level.

24 47. EPA compared the net revenues to growers from using azinphos-methyl and

1 phosmet and alternative pest control strategies. EPA made several critical assumptions that
2 dictated the outcome of its assessment of alternative pest control strategies. EPA based its
3 assumptions on “discussions and information collected from knowledgeable experts who work in
4 apple pest management, publicly available information, and our best professional judgment.”
5 Benefits Assessment at 9, 20.

6 48. First, EPA assumed that no other chemical pesticide can provide effective control
7 of pests and that each alternative would result in reduced yields, declines in quality, increased
8 costs due to the need to apply an alternative pesticide more frequently, and some secondary pest
9 outbreaks that damage fruit. Second, EPA assumed that chemical pesticides must be the central
10 component of any pest control strategy even though it acknowledged the growing acceptance and
11 use of nonchemical alternatives. Third, EPA limited its assessment to a two-year time frame,
12 which foreclosed consideration of adjustments and returns that occur over a longer time horizon.

13 49. EPA’s faulty assumptions translated directly into inaccurate predictions of
14 substantial losses in net revenues for growers from restrictions on the use of azinphos-methyl
15 and/or phosmet. EPA made separate findings for the East and West regions (defined based on
16 use patterns, target pests, climate conditions, agricultural practices, and markets), but concluded
17 that growers would face a significant reduction in net revenues in both regions.

18 2. *The nonchemical alternatives EPA refused to give adequate consideration*

19 a. Pheromone mating disruption

20 50. The codling moth is a key pest on apples in the United States. *Id.* at 4.

21 51. Pheromone mating disruption is a nonchemical pest control method used to
22 control the codling moth. *Id.* at 6. In this pest control strategy, growers release high
23 concentrations of pheromones into the orchard air. The pheromones confuse the males, making
24 it difficult for them to find and mate with females. The apple-pear benefits assessment states:

1 The greatest success to date has been with the codling moth. Approximately 50%
2 of the acreage in the Pacific Northwest (90,000) used codling moth mating
disruption in 2000.

3 52. EPA assumed that use of pheromone mating disruption would continue to
4 increase in the West. For all alternative scenarios in the West, EPA assumed that an additional
5 25% of acres would adopt a full program and acres already in the program (assumed to be 50%)
6 would move from a half to a full program. EPA never considered an alternative in which all
7 acreage in the West would use pheromone mating disruption.

8 53. The apple-pear benefits assessment noted “[s]ome populations of codling moth in
9 CA have developed resistance to AZM and phosmet. Some other areas in the West (OR) have
10 recently experienced reduced efficacy from AZM and phosmet applications against codling moth
11 and they suspect that resistance may be the culprit.” *Id.* at 19. EPA also observed that growers
12 could be severely impacted by the “development of pest resistance to alternative pest control
13 methods.” *Id.* at iii. However, the agency failed to consider whether continued use of azinphos-
14 methyl and phosmet would increase pest resistance to these chemicals or whether increased use
15 of pheromone mating disruption would slow the development of chemical pesticide resistance.

16 b. Kaolin Clay

17 54. The use of kaolin clay is based on Particle Film Technology, which creates a
18 protective film on the plant fruit or foliage. The film creates a barrier that makes the plant
19 unsuitable for feeding or egg-laying. The particles attach to the insect, agitating and repelling
20 them, and the reflective coating makes the plant unrecognizable as a host.

21 55. The apple-pear benefits assessment described kaolin clay as a potential pest
22 control alternative, *id.* at 8, but assumed no use of kaolin clay in any of the alternative scenarios.

1 D. EPA's Interim Reregistration Eligibility Decision and its Deviation from EPA's
2 Acceptable Risk Threshold

3 56. In its interim RED for AZM, EPA made the following determination:

4 Taking into account both the risks and benefits of azinphos-methyl use, the
5 Agency has determined that all uses of azinphos-methyl are ineligible for
6 reregistration based on their currently approved labeling.

7 AZM IRED Cover Letter at 3. For phosmet, EPA "determined that phosmet products, unless
8 labeled and used as specified in this document, would present risks inconsistent with FIFRA."
9 Phosmet IRED at 41.

10 57. Based on EPA's assessments of benefits for various uses, EPA divided azinphos-
11 methyl uses into three categories. First, EPA would propose immediate cancellation of 28 uses
12 that have little use and/or low benefits. Second, EPA determined that the benefits did not
13 outweigh the risks posed by seven uses that it found have moderately high benefits. However,
14 based on the benefits, EPA decided to allow a four-year phase-out of these uses to facilitate an
15 orderly transition to alternative pest control products, provided certain mitigation measures are
16 implemented. For these first two categories combined, EPA found: "Of the currently registered
17 uses of azinphos-methyl, the Agency has determined that 35 are not eligible for reregistration
18 based on risk concerns for workers and the environment." AZM IRED at 71. Third, EPA
19 decided that eight uses that it found have significant benefits are eligible for a time-limited four-
20 year reregistration, provided certain mitigation measures are implemented. These reregistrations
21 would expire at the end of October 2005, unless the registrant requests and EPA grants an
22 extension.

23 58. For the phased-out and time-limited uses, interim mitigation to address ecological
24 and worker risks includes eliminating or restricting aerial applications on many sites, reducing
25 the rate and number of applications per season, extending re-entry and pre-harvest intervals,

1 requiring closed systems for mixing and loading activities, and requiring the maximum personal
2 protective clothing. AZM IRED at 67.

3 59. EPA allowed continuation of the second and third categories even though it found
4 that: “Even with the most stringent feasible mitigation measures, most of the 15 remaining uses
5 of azinphos-methyl (7 phased-out, 8 time-limited) have estimated exposures resulting in very
6 low MOEs for post-application agricultural workers.” IRED at 73. The Margins of Exposures
7 would still be less than ten for certain irrigating, scouting, pruning, and thinning activities,
8 posing a far greater risk to workers than EPA deems acceptable. AZM IRED at 33-42. The
9 benefits found in EPA’s benefits assessment constituted the sole reason EPA allowed such
10 excessive worker risks to continue. AZM IRED at 71.

11 60. EPA also approved unacceptable risks for workers who mix and load phosmet and
12 who reenter fields recently sprayed with phosmet. Workers who mix and load phosmet for use
13 on cotton, alfalfa, and forestry face Margins of Exposure between 27 and 94. Phosmet RED at
14 21-26. Workers who re-enter sprayed fields to perform various tasks also face unacceptable
15 risks. Id. at 32- 34. The Margins of Exposure are less than 20 for workers harvesting or thinning
16 apples and stone fruits. Id. at 33. The Margins of Exposure are less than 10 for workers who
17 enter blueberry, grape, kiwi, sweet pea, walnut, and cashew fields for harvesting, pruning,
18 girding, and turning activities. Id. at 34.

19 E. Public Comments Identified Scientific Studies and Data That Undercut Key
20 Assumptions Underlying EPA’s Benefits Assessment.

21 61. In the fall of 2001, EPA released to the public IREDs for azinphos-methyl and
22 phosmet along with its benefits assessments, and solicited public comment. 66 Fed. Reg. 47,657
23 (Sept. 13, 2001); 66 Fed. Reg. 59,419 (Nov. 28, 2001). Because EPA had not previously
24 released the benefits assessments to the public, this marked the first opportunity for public

1 comment.

2 62. Plaintiff Beyond Pesticides and others submitted comments and scientific studies
3 addressing the benefits assessments. These comments and studies called into question omissions
4 and assumptions in the benefits assessments.

5 63. First, the comments pointed out that the benefits assessments fail to estimate the
6 economic costs to workers, their families, their employers, and society of illnesses caused by use
7 of azinphos-methyl and phosmet. Even though the benefits assessments were prepared and used
8 by EPA to justify exposing workers to risks that exceed EPA's threshold for unacceptable risks
9 (MOEs > 100), EPA did not factor in the costs of providing health care to poisoned workers, lost
10 work time, workers' compensation, temporary and permanent disabilities, and adverse effects to
11 farmworker children exposed to these pesticides.

12 64. Second and related, the comments provided evidence of adverse environmental
13 effects from use of azinphos-methyl and phosmet that EPA did not consider in its benefits
14 assessments. For example, azinphos-methyl, which is acutely toxic to aquatic organisms, has
15 been detected frequently in streams and water bodies, often at levels exceeding regulatory
16 standards. Azinphos-methyl and phosmet both pose threats to the continued survival of
17 threatened and endangered species. Azinphos-methyl also poses significant hazards to bees, but
18 the benefits assessments did not consider costs of continued azinphos-methyl use to the bee-
19 keeping industry or farmers who depend on bees to pollinate their crops.

20 65. Third, the commenters provided published scientific studies and results of field
21 tests substantiating the existence of effective alternative pest control strategies to replace
22 azinphos-methyl and phosmet. Several published, peer-reviewed studies and field studies refute
23 EPA's assumptions that: (1) only azinphos-methyl and phosmet provide effective control of
24

1 target pests; (2) available alternatives would be less effective in controlling pests; and (3) all the
2 alternatives would result in reduced yields and declines in quality. Several studies substantiate
3 the effectiveness of pheromone mating disruption on both large and small farms in the West
4 region. Some studies document an increase in natural enemies of orchard pests with use of
5 pheromone mating disruption, which is particularly important in light of the documented
6 resistance of some pests to azinphos-methyl and phosmet. Another study documents the
7 effectiveness of kaolin clay on target pests in the East region. The commenters also submitted
8 evidence of pheromone dispensing technologies, such as the “puffer,” which produce sustained
9 pheromone levels, thereby eliminating the need for multiple applications and reducing product
10 and labor costs.

11 66. Fourth, the commenters submitted published studies and field tests on the costs of
12 alternative pest control strategies. These studies refute EPA’s assumption that alternatives, such
13 as pheromone mating disruption, cost more than azinphos-methyl and phosmet. In two studies,
14 pheromone mating disruption cost less and resulted in higher profits than pest management using
15 chemical pesticides. Another study found higher costs for pheromone mating disruption but
16 higher net profits because the apples could be sold in the premium organic market. Even where
17 chemical pesticides continue to be used in a pest management strategy, use of pheromone mating
18 disruption has been shown to reduce the number of applications of azinphos-methyl substantially
19 (generally down to 1 from 3 to 4 applications per season). Some studies quantified the reduced
20 use of organophosphates to range from 59% in the first year to 70-83% in later years. The
21 comments pointed out that EPA’s apple-pear benefits assessment had a built-in bias because it
22 looked at only two years into the future, while studies show that farmer acceptance and financial
23 benefits of pheromone mating disruption increased significantly in the third year of use.

1 67. EPA has not responded to the public comments on its benefits assessments. Nor
2 has EPA modified its benefits assessments to incorporate the published articles and field tests
3 submitted by the commenters. EPA has never provided an explanation that reconciles the
4 assumptions made and analysis embodied in its benefits assessments with the public comments
5 and scientific evidence in the record.

6 F. EPA Has Entered into Memoranda of Agreement with Registrants Embodying its
7 Re-Registration Determinations for Azinphos-Methyl and Phosmet

8 1. *The Azinphos-Methyl Memorandum of Agreement*

9 68. In May 2002, EPA entered into a Memorandum of Agreement with registrants of
10 products containing azinphos-methyl. The agreement provides for the immediate, voluntary
11 cancellation of uses of azinphos-methyl on 23 crops and for the amendment of labels for use of
12 azinphos-methyl on 17 other crops, subject to additional restrictions, such as re-entry intervals,
13 protective clothing, engineering controls, and pre-harvest intervals, drawn largely, but deviating
14 significantly for some uses, from the interim RED. Under the agreement, registration of
15 azinphos-methyl for seven of the continued crop uses will be phased-out as of March 31, 2005
16 for manufacturing use products and on August 31, 2005 for end use products. Under the
17 agreement, the time-limited registration of azinphos-methyl for ten of the continued crop uses,
18 representing approximately one million pounds or more in annual usage, will expire on October
19 31, 2005, unless further data is submitted and EPA has granted an application to extend the use
20 subject to additional directions and constraints. In the azinphos-methyl agreement, EPA reversed
21 its IRED decision to phase out uses on almonds, walnuts, and pistachios over four years, by
22 making these uses eligible for a four-year re-registration that can be renewed. The agreement
23 provides for the sale, distribution, and use of existing stocks beyond the cancellation dates for all
24 categories of uses.

1 Exposure. EPA has determined that workers are exposed to unacceptable risks when the Margin
2 of Exposure is less than a threshold value.

3 73. In its human health risk assessments for azinphos-methyl and phosmet, EPA
4 applied its Margin of Exposure level of protection. EPA concluded that uses of azinphos-methyl
5 and phosmet result in a Margin of Exposure of less than 100 and thereby create unacceptable
6 risks to workers. Many of the azinphos-methyl and phosmet uses result in risks that are far
7 lower, sometimes an order of magnitude lower, than a Margin of Exposure of 100.

8 74. After EPA determined that workers are exposed to unacceptable risks from uses
9 of azinphos-methyl and phosmet, EPA conducted benefits assessments to determine whether the
10 benefits from continued use of azinphos-methyl and phosmet outweigh the risks these pesticides
11 pose to workers and the environment.

12 75. EPA's benefits assessments failed to consider the costs of exposing workers to
13 risks from azinphos-methyl and phosmet, as well as the costs of exposing farmworker children to
14 adverse health effects from continued use of these pesticides. EPA failed to consider the
15 environmental costs of continued use of azinphos-methyl and phosmet, such as contamination of
16 water bodies, impacts on bees, and impacts on threatened and endangered species. None of the
17 pest control alternatives considered by EPA addressed the costs to workers from exposures
18 during mixing, loading, and applying the pesticides.

19 76. Public comments identified these critical factors that should have been, but were
20 not, addressed and incorporated into EPA's benefits assessments.

21 77. To determine whether a pesticide use presents "unreasonable adverse
22 environmental effects," FIFRA requires EPA to "tak[e] into account the economic, social, and
23 environmental costs and benefits of the use of any pesticide." 7 U.S.C. § 136(bb). EPA
24

1 accounted for the economic benefits of the pesticides to growers, but failed to take into account
2 the social and environmental costs. Its risk benefit analysis is one-sided, lacking a risk side of
3 the equation.

4 78. EPA acted arbitrarily, capriciously, and contrary to FIFRA, in violation of the
5 Administrative Procedure Act (“APA”), 5 U.S.C. § 706(2)(A), by failing to consider and
6 incorporate into its assessments: (1) the costs to workers, their employers, their children, and
7 society of adverse health effects from continued use of azinphos-methyl and phosmet; (2) the full
8 environmental costs of continued use of azinphos-methyl and phosmet; and (3) any comparison
9 of the benefits and costs of particular pesticide uses.

10 79. EPA acted arbitrarily and capriciously in violation of the APA by making
11 azinphos-methyl and phosmet re-registration decisions based on its one-sided benefits
12 assessments without modifying the assessments or providing an adequate explanation for
13 refusing to modify the assessments based on comments and data, provided by the public, on
14 human, societal, and environmental risks.

15 CLAIM TWO: EPA ACTED ARBITRARILY, CAPRICIOUSLY,
16 AND IN VIOLATION OF FIFRA IN ITS BENEFITS ASSESSMENTS
17 AND INTERIM REDS FOR AZINPHOS-METHYL AND PHOSMET
18 BECAUSE IT RELIED ON ASSUMPTIONS THAT RUN COUNTER
19 TO PUBLISHED SCIENTIFIC ARTICLES AND OTHER DATA
20 MADE AVAILABLE TO EPA

21 80. Under FIFRA, the Administrator “shall register a pesticide if the Administrator
22 determines that, . . .

- 23 (A) its composition is such as to warrant the proposed claims for it;
24 (B) its labeling and other material required to be submitted comply with the
25 requirements of this Act;
26 (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.”

1
2 7 U.S.C. § 136a(c)(5).

3 81. FIFRA defines “unreasonable adverse effects on the environment” to mean “any
4 unreasonable risk to man or the environment, taking into account the economic, social, and
5 environmental costs and benefits of the use of any pesticide” 7 U.S.C. § 136(bb).

6 82. After EPA determined that workers are exposed to unacceptable risks from uses
7 of azinphos-methyl and phosmet, EPA conducted benefits assessments to determine whether the
8 benefits from continued use of azinphos-methyl and phosmet outweigh the risks they pose to
9 workers and the environment.

10 83. EPA made assumptions about the effectiveness, costs, and impacts of alternative
11 pest control strategies. These assumptions predetermined the outcome of the benefits
12 assessments.

13 84. EPA did not solicit public input or peer review before completing its benefits
14 assessments for azinphos-methyl and phosmet. EPA solicited public comment on its benefits
15 assessments only after it had incorporated the assessments into its re-registration decisions
16 embodied in its IREDs for azinphos-methyl and phosmet. EPA received public comments,
17 published scientific articles, and field test results that called into question the assumptions made
18 by EPA in its benefits assessments. EPA has never responded to these comments, explained the
19 basis for its assumptions in light of the comments and submitted data, or revised its benefits
20 assessments to modify its assumptions based on the submitted comments and data.

21 85. EPA’s apple-pear benefits assessment made the following assumptions that
22 conflict with the submitted published articles, field test results, and comments: (1) EPA assumed
23 that there are no effective pest control alternatives to continued use of azinphos-methyl and
24 phosmet, but the submitted articles and field tests attest to the effectiveness of alternatives, such

1 as pheromone mating disruption and kaolin clay, in suppressing the key target pests; (2) EPA
2 assumed that crop yields and quality would decline with use of pheromone mating disruption,
3 but the published articles and field tests refute this assumption; (3) EPA assumed that significant
4 secondary pest outbreaks would occur with alternative pest control methods, but published
5 articles and field tests referenced in the public comments do not support this assumption; and (4)
6 EPA assumed that higher costs are associated with the use of pheromone mating disruption than
7 are supported by the published articles and field tests.

8 86. EPA acted arbitrarily, capriciously, and contrary to FIFRA and the APA by
9 basing its benefits assessments on assumptions that are contradicted in published scientific
10 articles and field tests. EPA acted arbitrarily, capriciously, contrary to FIFRA and the APA by
11 making azinphos-methyl and phosmet re-registration decisions based on its benefits assessments
12 without modifying that assessment or providing an adequate explanation for refusing to modify
13 the assessments based on the published scientific articles, field tests, and other data provided in
14 public comments.

15 CLAIM THREE: EPA ACTED ARBITRARILY, CAPRICIOUSLY,
16 AND CONTRARY TO 7 U.S.C. §§ 136A(C)(2)(A) AND 136H(D) IN USING NONPUBLIC
17 AGRICULTURAL RE-ENTRY DATA IN ITS AZINPHOS-METHYL
18 AND PHOSMET RE-REGISTRATION DECISIONS AND DENYING
19 THE PUBLIC A RIGHT TO COMMENT ON THE DATA USED
20 TO ESTIMATE WORKER EXPOSURE

21 87. In its human health risk assessments and interim REDs for azinphos-methyl and
22 phosmet, EPA concluded that worker risks from re-entering treated areas were unacceptable for
23 many uses of azinphos-methyl and phosmet. Even with the mitigation required in the interim
24 REDs and/or the Memoranda of Agreement with registrants, workers will be exposed to risks
25 from re-entering treated areas that EPA has deemed unacceptable.

26 88. EPA's assessment of occupational re-entry worker risks and re-registration

1 decisions for azinphos-methyl and phosmet used data produced by the Agricultural Re-entry
2 Task Force without making that data available to the general public. When members of the
3 public had opportunities to comment on EPA's risk assessments and the interim re-registration
4 eligibility decision, they lacked sufficient information to submit fully informed comments on the
5 worker exposure data and underlying methods.

6 89. FIFRA, 7 U.S.C. § 136a(c)(2)(A), provides, in part:

7 Except as provided in section 10, within 30 days after the Administrator registers
8 a pesticide under this Act the Administrator shall make available to the public the
9 data called for in the registration statement together with such other scientific
10 information as the Administrator deems relevant to the Administrator's decision.

11 90. FIFRA, 7 U.S.C. § 136h, provides, in part:

12 All information concerning the objectives, methodology, results, or significance
13 of any test or experiment performed on or with a registered or previously
14 registered pesticide or its separate ingredients, impurities, or degradation
15 products, and any information concerning the effects of such pesticide on any
16 organism or the behavior of such pesticide in the environment, including, but not
17 limited to, data on safety to fish and wildlife, humans and other mammals, plants,
18 animals, and soil, and studies on persistence, translocation and fate in the
19 environment, and metabolism, shall be available for disclosure to the public.

20 91. Data pertaining to the amount and likely transfer of pesticide residues to workers
21 engaged in various activities constitute data on safety to humans, on the effect of a pesticide on
22 any organism, and on the behavior of the pesticide in the environment. Under FIFRA, 7 U.S.C.
23 § 136h, such data must be available to the public. The ARTF worker exposure data and methods
24 constitute scientific information relevant to the azinphos-methyl and phosmet re-registration
25 decisions. Under FIFRA, 7 U.S.C. § 136a(c)(2)(A), such data must be made available to the
26 public.

92. EPA acted arbitrarily, capriciously, and contrary to 7 U.S.C. §§ 136a(c)(2)(A) and
136h(d) in using agricultural re-entry data in its re-registration decisions for azinphos-methyl and
phosmet without making the data available to the general public.

1 E. Order EPA to make new re-registration eligibility decisions for azinphos-methyl
2 and phosmet expeditiously: (1) that are based on the new benefits assessments; (2) that take into
3 account the magnitude and full costs of the unacceptable risks to workers from the various uses;
4 (3) that disclose to the public and take into account public comment on the Agricultural Re-entry
5 Task Force or other data and methods used by EPA to estimate worker exposure; and (4) that
6 respond fully to public comments on worker exposure data methods, the benefits assessments,
7 and EPA's risk-benefit balancing;

8 F. Award plaintiffs their costs and attorneys' fees in this action pursuant to the Equal
9 Access to Justice Act, 28 U.S.C. § 2412; and

10 G. Grant such other and further relief as the Court may deem just and proper.

11 Respectfully submitted this 7th day of April, 2004.

12
13 /s/ Patti Goldman

PATTI GOLDMAN (WSB #24426)

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1 CERTIFICATE OF SERVICE

2 I am a citizen of the United States and a resident of the State of Washington. I am over
3 18 years of age and not a party to this action. My business address is 705 Second Avenue, Suite
4 203, Seattle, Washington 98104.

5 On April 7, 2004, I served a true and correct copy of:

6 1. First Amended Complaint for Declaratory and Injunctive Relief

7 on the following parties:

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9 Christina B. Parascandola
10 U.S. Department of Justice
11 Environment and Natural Resources Division
12 Environmental Defense Section
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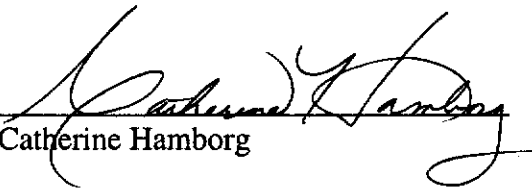
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1 I, Catherine Hamborg, declare under penalty of perjury that the foregoing is true and
2 correct. Executed on this 7th day of April, 2004, at Seattle, Washington.

3
4 
5 Catherine Hamborg

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