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10
11 **THE UNITED STATES DISTRICT COURT**
12 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**

13 CENTER FOR FOOD SAFETY and) Case No. 21-9640
14 PESTICIDE ACTION NETWORK NORTH)
15 AMERICA,)
16) **COMPLAINT FOR DECLARATORY**
17 *Plaintiffs,*) **AND EQUITABLE RELIEF**
18)
19 v.) Administrative Procedure Act Case
20)
21 UNITED STATES ENVIRONMENTAL)
22 PROTECTION AGENCY and MICHAEL)
23 REGAN, ADMINISTRATOR, UNITED)
24 STATES ENVIRONMENTAL)
25 PROTECTION AGENCY,)
26)
27)
28 *Defendants.*)
_____)

1 Plaintiffs Center for Food Safety and Pesticide Action Network North America
2 (Plaintiffs) on behalf of themselves and their members, allege as follows:

3 INTRODUCTION

4 1. This is an action for declaratory and equitable relief challenging the failure of the
5 United States Environmental Protection Agency (EPA or the agency) to answer Plaintiffs' 2017
6 legal rulemaking petition, which the agency is required to do by law. The 2017 petition called on
7 EPA to close a regulatory loophole that allows seeds coated with systemic pesticides (coated seeds)
8 to evade the registration and labeling requirements of the Federal Insecticide, Fungicide, and
9 Rodenticide Act (FIFRA). EPA's failure to respond to the petition and close the loophole means
10 these pesticides are continuing to cause environmental harm unabated.

11 2. Coated seeds are crop seeds that have been coated with systemic pesticides,
12 primarily neonicotinoid insecticides. Insecticides are a subcategory of pesticides. Neonicotinoids
13 and other systemic pesticides are absorbed into the plant's circulatory system as the plant grows
14 and are predominately intended to have an external pesticidal effect on pests and predators of the
15 growing plant. Crops grown from coated seeds—including corn, soybean, and sunflower—cover
16 almost 180 million acres of U.S. farmland each year. This is the equivalent acreage of over one-
17 and one-half Californias.

18 3. Coated seeds have devastating environmental impacts. First, the pesticidal coating
19 does not remain on the seed. The prophylactic pesticide coatings abrade off the seed as dust
20 during planting, or slough off the seed into the surrounding soil. Overall, only 5% of the
21 prophylactic coating is taken up by the plant,¹ leaving 95% to contaminate the air, soil, vegetation,
22 and waterways. Second, beyond coating the seed itself, these systemic pesticides spread through all
23 living tissues of the growing plant, protecting the plant from pests but also spreading the
24 poisonous effects to non-target species. As a result of both these pathways, beneficial insects,
25 valuable pollinators, and birds—including threatened and endangered insects and birds protected
26 under the Endangered Species Act (ESA)—are killed or injured. The most dramatic impacts of

27
28 ¹ R. Sur & A. Stork, *Uptake, Translocation and Metabolism of Imidacloprid in Plants*, 56 *Bulletin of Insectology* 35-40 (2003).

1 coated seeds have come in the mass die-offs of honey bees and wild native bees they have caused.
2 Excessive honey bee mortality and related wild pollinator declines are a major crisis for American
3 agriculture.

4 4. Currently EPA entirely exempts coated seeds from FIFRA's pesticide's premarket
5 licensing, registration, assessment, and labeling regime. Instead the agency has a de facto practice
6 of applying the "Treated Article" Exemption in its regulations, 40 C.F.R. §152.25(a), despite the
7 plain language of the Treated Article Exemption foreclosing the possibility that coated seeds are
8 treated articles. Because the coated seeds are not treated primarily to protect the seed itself, but
9 rather to protect the *growing plant*, they cannot be properly exempted as "treated articles" under the
10 regulation. As a result, EPA has completely failed to assess the risks of these unregulated pesticides.
11 It has also never provided the public with any justification for its exemption or codified that
12 practice in its regulations.

13 5. On January 6, 2016, CFS filed a case challenging EPA's position that coated seeds
14 are exempt from the requirements of FIFRA, as stated in the agency's 2013 Guidance for
15 Inspecting Alleged Cases of Pesticide-Related Bee Incidents. EPA moved to dismiss the case on
16 grounds that its 2013 guidance was not final agency action and thus not justiciable. The court
17 denied EPA's motion.² However at the summary judgment stage after review of the full
18 administrative record the court held the 2013 guidance was not final agency action and therefore
19 unreviewable.³

20 6. In summary, the Court granted summary judgment to EPA because the agency had
21 never actually publicly and formally admitted its Treated Seeds policy for exempting coated seeds.
22 Instead the agency has for decades intentionally evaded any judicial review by failing to issue any
23 final agency action on the topic.

26 ² *Anderson v. McCarthy*, No. C 16-00068 WHA, 2016 WL 2770544, at *3 (N.D. Cal. May 13,
27 2016).

28 ³ *Anderson v. McCarthy*, No. C 16-00068 WHA, 2016 WL 6834215, at *4 (N.D. Cal. Nov. 21,
2016).

1 7. Accordingly, on April 26, 2017, CFS filed a formal rulemaking petition. The
2 petition was a comprehensive 43-page scientific and legal document detailing the numerous
3 environmental impacts that the broad use of coated seeds causes, outlining EPA’s authority under
4 FIFRA, and explaining why EPA’s position is incorrect. The petition was supported by 81 citations
5 and supporting documents filed concurrently. Thus the petition provided both a legal blueprint
6 and legal impetus for EPA to either (1) amend the Treated Article exemption to clarify that it does
7 not apply to seeds coated with systemic pesticides, or (2) in the alternative publish a final, formal,
8 agency interpretation in the Federal Register stating that EPA interprets the Treated Article
9 Exemption not to apply to coated seeds. CFS further requested that EPA enforce FIFRA’s
10 numerous pesticide registration and labeling requirements for each separate crop seed product that
11 is coated with a neonicotinoid or other systemic pesticidal chemical. CFS urged the agency to grant
12 the requests within 180 days of filing. Eleven organizations and beekeepers endorsed the petition,
13 including American Beekeeping Federation, American Bird Conservancy, American Honey
14 Producer’s Association, Pollinator Stewardship Council, Bret Adee, Jeff Anderson, Lucas Criswell,
15 Gail Fuller, and David Hackenberg. The petition is attached as Exhibit A.

16 8. In December 2018, EPA opened a public notice and comment period in response
17 to the petition.⁴ Many commenters were concerned that EPA’s hands-off approach to coated seed
18 regulation has a devastating impact on bees and other pollinators.⁵ Commenters agreed that the
19 Treated Article Exemption should not apply to coated seeds because that interpretation is contrary
20 to the purposes and intent of FIFRA,⁶ and that EPA is “improperly using the treated article
21 exemption as a way to abdicate itself of its duties under FIFRA.”⁷

22
23
24 ⁴ EPA, *Petition Seeking Revised Testing Requirements of Pesticides Prior to Registration; Request for
Comment*, 83 Fed. Reg. 66260 (Dec. 26, 2018).

25 ⁵ EPA, *Petition Seeking Revised Testing Requirements of Pesticides Prior to Registration*, Docket No. EPA-
26 HQ-OPP-2018-0805-0009, 0013, 0015, 0024, 0040, 0083 (Dec. 2018).

27 ⁶ *Id.* at EPA-HQ-OPP-2018-0805-0083.

28 ⁷ *Id.* at EPA-HQ-OPP-2018-0805-0069.

1 9. EPA's failure violates the mandates of the Administrative Procedure Act (APA),
2 because EPA cannot unlawfully withhold or unreasonably delay a petition response. 5 U.S.C.
3 § 706(1). Nearly five years after Plaintiffs first lodged the 2017 Petition, EPA has still failed to
4 respond. Irreparable environmental harm has continued unanalyzed and unabated in the interim.
5 Plaintiffs' interests are continuing to be harmed by EPA's inaction and lack of oversight regarding
6 coated seeds.

7 10. Accordingly, this Court should hold that EPA's failure to act in response to the
8 petition violates the APA and order EPA to respond to Plaintiffs' 2017 Petition by a Court-ordered
9 date certain and without further unlawful delay.

10 JURISDICTION

11 11. This Court has jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 (federal
12 question) and 1346 (United States as Defendant).

13 12. Plaintiffs have a right to bring this action pursuant to the APA. 5 U.S.C.
14 §§ 551-559, 702-706.

15 13. The relief requested is specifically authorized pursuant to 28 U.S.C. § 1651 (writs)
16 and §§ 2201 to 2202 (declaratory relief), as well as under the APA, 5 U.S.C. §§ 701-706. An actual
17 controversy exists between the parties within the meaning of 28 U.S.C. § 2201 (declaratory
18 judgments).

19 VENUE

20 14. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e) because one or
21 more Plaintiffs reside in this District.

22 PARTIES

23 *Plaintiffs*

24 15. Plaintiffs Center for Food Safety (CFS) is a nationwide nonprofit organization with
25 offices in San Francisco, California, Portland, Oregon, and Washington, DC. Founded in 1997,
26 CFS's mission is to empower people, support farmers, and protect the earth from the harmful
27 impacts of industrial agriculture. CFS has over a million members, including members in every
28 state across the country, including many thousands of conservationists, gardeners, farmers, and

1 beekeepers. CFS and its members are being, and will be, adversely affected by EPA's continued
2 failure to answer CFS's legal petition and address the risks from coated seeds.

3 16. CFS combines myriad tools and strategies in pursuing its goals, including public
4 education, grassroots organizing and campaigns, media, outreach, and when necessary public
5 interest litigation and/or legal rulemaking petitions. CFS's membership action alerts also generate
6 public education and engagement with governmental officials on issues related to addressing the
7 health and environmental impacts of industrial agriculture, and promoting a healthier, more
8 sustainable food system. Collectively, the dissemination of this material makes CFS an information
9 clearinghouse for public involvement and governmental oversight of all aspects of industrial
10 agriculture, including pesticides.

11 17. Since its inception twenty-five years ago CFS has had a flagship program on
12 pesticides and pollinators, with multiple staff—science, policy, campaign, and legal. CFS's pesticide
13 program has long advocated for rigorous, science-based safety testing and proper regulation of new
14 pesticide product uses prior to any use, in a manner that minimizes negative impacts such as the
15 increased use of pesticides and mortality to non-target species and addresses loopholes like the one
16 at issue here. This specifically has included the issue of neonicotinoids and coated seeds. CFS has
17 commented on numerous agency actions for pesticides, submitted petitions to agencies, and
18 litigated various cases to prevent environmental harm.

19 18. Plaintiff Pesticide Action Network of North America (PANNA) is a Berkeley,
20 California-based, nonprofit corporation that serves as an independent regional center of Pesticide
21 Action Network International, a coalition of public interest organizations in more than ninety
22 countries. It brings this action on behalf of itself and its members, particularly small-scale farmers,
23 beekeepers, farmworkers, and indigenous members. For nearly thirty years, PANNA has worked to
24 replace the use of hazardous pesticides with healthier, ecologically sound pest management across
25 the United States and around the world. PANNA provides scientific expertise, public education
26 and access to pesticide data and analysis, and policy development and coalition support to more
27 than 100 affiliated organizations in North America. PANNA has more than 50,000 members
28 across the United States. PANNA's members live, work, farm, and recreate in areas of the country

1 where pesticides such as the neonicotinoid insecticides are applied, and in which the pesticides
2 and contaminated dust drift and transport occurs, and thus have a strong interest in ensuring that
3 EPA protect public health and the environment from this contamination. PANNA's members are
4 highly concerned by the effects of the unregulated neonicotinoid-coated seeds on honey bees,
5 bumble bees, butterflies, beneficial invertebrates, wild pollinators, water, aquatic invertebrates,
6 food chains, ecosystem sustainability generally, and ultimately on humans via food and water
7 consumption. The lack of enforceable labeling on these pesticidal seeds, and their prophylactic
8 overuse, violate bedrock principles PANNA seeks to protect as far as only using pesticides as a last
9 resort, and then only when they have strong and clear warnings and enforceable use directions.
10 PANNA has repeatedly called on EPA to eliminate the coated seeds' exemption from registration
11 as pesticides, including by joining the 2017 petition.

12 *Defendants*

13 19. Under FIFRA, Defendant EPA is charged with the pre-market assessment and
14 registration of pesticides, including the systemic pesticides used on coated seeds.

15 20. Defendant Michael Regan is sued in his official capacity as Administrator of the
16 EPA. As Administrator, Mr. Regan has ultimate responsibility for EPA's activities and policies.

17 21. Mr. Regan and EPA are collectively referred to herein as EPA or the agency.

18 **LEGAL AUTHORITY**

19 **I. ADMINISTRATIVE PROCEDURE ACT**

20 22. Pursuant to the APA, agencies must "give an interested person the right to petition
21 for the issuance, amendment, or repeal of a rule." 5 U.S.C. § 553(e). A "rule" is "the whole or a
22 part of an agency statement of general or particular applicability and future effect designed to
23 implement, interpret, or prescribe law or policy." *Id.* § 551(4).

24 23. The APA requires an agency to conclude a matter presented to it, such as a legal
25 petition like the one at issue here, "within a reasonable time." *Id.* § 555(b). If an agency denies a
26 petition in whole or in part, it must provide "[p]rompt notice" to the petitioner. *Id.* § 555(e).

27 24. The APA grants a right of judicial review to "[a] person suffering legal wrong
28 because of agency action, or adversely affected or aggrieved by agency action." *Id.* § 702. "Agency

1 action” is defined to include not just affirmative agency action but also the “failure to act,” *id.*
2 § 551(13), such as the failure to respond to a legal petition.

3 25. Under the APA, courts “shall compel agency action unlawfully withheld or
4 unreasonably delayed,” *id.* § 706(1), and “hold unlawful and set aside agency action, findings, and
5 conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in
6 accordance with law,” *id.* § 706(2)(A).

7 II. FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

8 26. FIFRA controls the manufacture, sale, and use of a broad range of chemicals and
9 biological pest controls. 7 U.S.C. §§ 136–136y. As Congress explained, FIFRA’s primary purpose
10 is to protect human health and the environment. Pub. L. No. 92-516, 86 Stat. 973 (1972).

11 27. Pursuant to FIFRA, every pesticide must undergo registration with EPA before
12 distribution or sale. 7 U.S.C. § 136a(a). A “pesticide” is defined very broadly, to mean “any
13 substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any
14 pest,” *id.* § 136(u)(1); the term “pest” includes insects, bacteria, and other microorganisms, *id.*
15 § 136(t).

16 28. EPA may not register a pesticide unless it first determines and supports with
17 substantial evidence that the pesticide “will perform its intended function without unreasonable
18 adverse effects on the environment; and when used in accordance with widespread and commonly
19 recognized practice it will not generally cause unreasonable adverse effects on the environment.” 7
20 U.S.C. § 36a(c)(5)(C), (D).

21 29. A pesticide is considered unregistered under FIFRA if its claims differ substantially
22 from the claims made for the registered pesticide, or if its composition differs from the
23 composition of the registered pesticide. 7 U.S.C. § 136j(a)(1)(B), (C). A new registration is
24 required for a pesticide containing an active ingredient that has not been previously registered. 40
25 C.F.R. § 152.403. A new registration is also required prior to a new use of an existing registered
26 pesticide. *Id.*

27 30. With regard to exemptions from FIFRA, the “Administrator may exempt from the
28 requirements of this subchapter by regulation any pesticide which the Administrator determines

1 either (1) to be adequately regulated by another Federal agency, or (2) to be of a character which is
 2 unnecessary to be subject to this subchapter in order to carry out the purposes of this subchapter.”
 3 7 U.S.C. § 136w(b).

4 31. EPA’s implementing regulation for such exemptions provides that treated articles
 5 or substances are not regulated. 40 C.F.R. § 152.25. A treated article or substance is one which is
 6 “treated with, or containing, a pesticide to protect the article or substance itself.” *Id.* § 152.25(a).
 7 EPA regulations exemplify this as “paint treated with a pesticide to protect the paint coating, or
 8 wood products treated to protect the wood against insect or fungus infestation.” *Id.*

9 STATEMENT OF FACTS

10 *Neonicotinoid Pesticides*

11 32. Neonicotinoids are a class of insecticide chemically similar to nicotine, which
 12 disrupt the central nervous system of insects resulting in paralysis and death. Lower-level exposure
 13 has sublethal effects on insects, which include reductions in growth and reproduction, weakened
 14 immunity to parasites and viral diseases, and impaired learning and foraging behavior. These
 15 pesticides are systemic: unlike contact pesticides, which remain on the surface of the treated plant
 16 or seed, systemic pesticides are taken up by the growing seedling and transported to all its tissues
 17 (leaves, flowers, roots and stems, and pollen and nectar).

18 33. Neonicotinoids are highly soluble in water and quite persistent in the environment.
 19 Thus, it is not surprising to find neonicotinoids transported away from the initial application area
 20 to pollute surface water and groundwater. For instance, a survey conducted by the U.S. Geological
 21 Survey from 2012 to 2014 found one or more neonicotinoids present in 63% of the streams that
 22 were tested in 24 states and Puerto Rico.⁸

23 34. Neonicotinoids are the most widely used class of insecticides in the world. Studies
 24 show they are extremely harmful to pollinators, and strongly implicated in bee declines worldwide.

25 35. An authoritative 2014 global review of over 800 published studies conducted under
 26

27 ⁸ Michelle Hladik & Dana Kolpin, *First National-scale Reconnaissance of Neonicotinoid Insecticides in*
 28 *Streams Across the USA*, 13 *Env’t Chemistry* 12-20 (2016),
<https://pubs.er.usgs.gov/publication/70156299>.

1 the auspices of the International Union for the Conservation of Nature (IUCN) determined that
2 neonicotinoids are dangerously overused and should be restricted. A 2021 update to this review
3 finds still more evidence of harms, linking neonicotinoid exposure to declines in wild bee and
4 butterfly populations, warning that neonicotinoids' extreme toxicity to aquatic invertebrates
5 "eliminates entire populations from the affected areas," and thereby threatens entire ecosystems.⁹

6 36. In 2018, the European Union (EU) banned the primary neonicotinoids from all
7 outdoor use. The United Nations states that neonicotinoids are so hazardous that their use should
8 be severely restricted. Several states in the United States have also restricted neonicotinoid usage to
9 protect bees and other pollinators. At the federal level, EPA has acknowledged the dangers of
10 neonicotinoids and regulates them under FIFRA.

11 *Neonicotinoid-Coated Seeds*

12 37. While neonicotinoids themselves are regulated by EPA under FIFRA, EPA does
13 not currently regulate neonicotinoid-coated *seeds*. However systemic neonicotinoid-coated seeds
14 plainly fit within FIFRA's broad definition of "pesticide": they are a "mixture of substances that
15 are intended to prevent, destroy, repel or mitigate a pest," and thus they should require pesticide
16 registration approval prior to any sale or use. 7 U.S.C. § 136(u)(1). Instead, EPA has a de facto
17 policy of treating them as exempt from the requirements of FIFRA and not requiring any
18 registration.

19 38. Coated seeds are coated with liquid formulations of neonicotinoid chemicals,
20 essentially turning the seeds into pesticide delivery devices. After the seeds germinate, the chemical
21 coating delivers the active ingredient of the pesticide into the tissues of plants, via the growing
22 plants' circulatory system. The tissues are typically hundreds or even thousands of times larger in
23 dimension and mass than the seed itself, and are fundamentally different from a biological
24 standpoint. The pesticide coating protects the plant from some insects; the coatings do not, in the
25 vast majority of their uses, protect the seed itself against any disease or other risk to the seed.

27
28 ⁹ Dave Goulson et al., *An Update of the Worldwide Integrated Assessment (WIA) on System Insecticides
Part 2: Impacts on Organisms and Ecosystems*, 28 *Env't Sci. Pollution & Rsch.* 11749-97 (2021).

1 39. Reviewing the many pesticide product labels that EPA has registered since 2010
2 reveals that in the vast majority of those labels the neonicotinoid ingredients are intended to
3 protect the growing crop plants. Few of those labels explicitly claim protection of the planted seed
4 itself by the neonicotinoid ingredient.

5 40. Crop seeds coated with neonicotinoid throughout the United States, include but
6 are not limited to:

- 7 • Canola
- 8 • Field and sweet corn
- 9 • Cotton
- 10 • Cucurbits
- 11 • Legume vegetables
- 12 • Potatoes
- 13 • Soybean
- 14 • Sunflowers
- 15 • Wheat

16 41. These seeds are used on nearly 180 million acres across the United States,
17 representing the vast majority of systemic insecticide use and covering close to one-fifteenth of the
18 entire land surface of the lower forty-eight states.

19 42. Despite being used over such a large land area, neonicotinoid seed treatments
20 provide little or no benefit. They are largely ineffective on corn's worst pest, corn rootworm,¹⁰ and
21 an EPA study showed that any benefits of neonicotinoid seed treatments to soybean farmers were
22 "negligible."¹¹ Despite this, seed companies often give farmers little or no choice of uncoated
23 seeds, particularly uncoated corn seed.

24 43. Planting coated seeds results in exposure of non-target organisms even in those
25 frequent instances when pests are not present at damaging levels. Such prophylactic or "insurance-

26 ¹⁰ Marlin Rice, *Seed-Treatment Insecticides: What Can We Expect in Terms of Broad-Spectrum Control of*
27 *Soil Insects?* Proc. of Ind. Crop Advisory Conf. (2004).

28 ¹¹ U.S. Environmental Protection Agency, *Benefits of Neonicotinoid Seed Treatments to Soybean*
Production (Oct. 15, 2014).

1 based” use of pesticides is contrary to Integrated Pest Management (IPM), which strives to
2 eliminate senseless pesticide applications.¹²

3 *Environmental Effects*

4 44. Neonicotinoids associated with coated seeds are found widely throughout the
5 environment, and the agricultural landscape is up to 48 times more toxic to insects than it was 25
6 years ago.¹³

7 45. Since neonicotinoids are systemic, they are found in the crops grown from treated
8 seeds including the leaves, pollen, and nectar. Neonicotinoids disrupt the central nervous system
9 of insects, and do not discriminate between target and non-target insects, so affect insects and
10 pollinators such as bees that consume the nectar or pollen of the treated crop.

11 46. On average only 5% of the neonicotinoid coating is absorbed by the crop, leaving
12 roughly 95% of the active ingredient to diffuse into the surrounding soil and soil water, and
13 eventually into waterways. In addition, neonicotinoid coatings are abraded off into the talc or
14 other lubricant added to seed boxes to prevent coated seeds from sticking together, and the
15 neonicotinoid-rich lubricant dust lost during planting travels long distances on the wind during
16 planting. In short, the bulk of the coating does not remain in or on the treated articles: the seeds.
17 The result is widespread contamination of the air, soil, marginal vegetation, waters, neighboring
18 farms, and beehives. Pesticide contamination thus results on vast areas extending far beyond the
19 planted fields, affecting non-target organisms.

20 47. Neonicotinoids persist in the environment, creating the potential for increasing
21 concentrations in the soil over time with repeated use, exacerbating risks to non-target organisms.

22 48. The effects on wildlife range from direct harm to both managed and wild bees and
23 other beneficial terrestrial insects, to contaminated runoff decimating aquatic invertebrates, to
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25

26 ¹² Jacob Pecenka et al., *IPM Reduces Insecticide Applications By 95% While Maintaining Or Enhancing*
27 *Crop Yields Through Wild Pollinator Conservation*. 118 Proc. Nat’l Acad. Sci. USA (2021).

28 ¹³ Kendra Klein & Anna Lappé, *America's agriculture is 48 times more toxic than 25 years ago. Blame neonics*, The Guardian (Aug. 2019).

1 both acute and chronic effects on birds that ingest the coated seeds. Traces of residual
2 neonicotinoids can have a mixture of lethal and sublethal effects on a wide range of taxa.

3 49. Many beekeepers have observed toxic dust clouds billowing from seed planting
4 machines, spreading neonicotinoids into integral bee habitat. Honey bee kill incidents caused by
5 coated seeds have numbered in the hundreds and the true number is likely far higher. These
6 incidents have killed hundreds of millions of individual bees due to acute dust-off kills and
7 chronic damage to bee hives. Sublethal doses can result in honey bee colony damage through
8 chronic effects, which compromise the behavior and immunity of bees, and the health of entire
9 colonies, contributing to substantial losses under the additional stress of pathogens and parasites.

10 50. Harm to noncommercial bees and other pollinators is equally deadly. Species such
11 as bumblebees, ground-nesting mining bees, alkali bees, squash bees, and long-horned sunflower
12 bees are devastated by repeated, persistent use of coated seeds. Adverse impacts to other species of
13 native bees that are not ground nesters has also been identified through exposure routes such as
14 contamination of nesting materials. The harm to pollinators harms U.S. agriculture, which relies
15 on wild pollinators to pollinate food crops.

16 51. Because neonicotinoids are water soluble, increasing contamination of ditches,
17 streams, groundwater, lakes, rivers, and marine areas is being documented, with coatings applied
18 to crop seeds a primary source of the contamination. The three major neonicotinoids were found
19 to be prevalent throughout the year in sampled tributaries to the Great Lakes, the largest
20 freshwater ecosystem in the world. EPA has found ongoing chronic effects for many aquatic
21 invertebrates and some groups likely to suffer acute effects. Aquatic invertebrates are core
22 contributors to nutrient cycling, water quality, and aquatic food webs that support fish and
23 wildlife, so lethal and sublethal effects to these organisms can have far-reaching consequences.

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1 52. Slugs that consume neonicotinoid-coated soybean seeds and seedlings take the
2 insecticide into their tissues; while they are unaffected, beneficial predatory ground beetles that
3 prey upon them are killed, resulting in higher slug populations that lower soybean yield.¹⁴

4 53. Bird species are being exposed to and harmed by coated seeds. Small to medium-
5 sized birds are at risk of death from consuming just one to four small seeds of crops like sorghum
6 or wheat, a credible risk given shallow planting and many birds' predilection for energy-rich seeds.
7 Birds could also be harmed by eating neonicotinoid-intoxicated organisms like slugs or
8 earthworms. In addition to direct mortality to birds from ingesting neonicotinoid-coated seeds,
9 research has demonstrated sublethal effects, such as reduced body fat and disorientation.

10 54. Coated seeds have been documented as seriously harming humans and pet dogs
11 despite neonicotinoids supposedly not affecting large mammals. In Nebraska, a bioethanol
12 company fed surplus neonicotinoid coated corn seeds into its bioethanol plant, resulting in
13 polluted water and soil to levels posing serious health threats to people and animals. Tests on the
14 corn waste emanating from the plant revealed neonicotinoid levels as high as 427,000 parts per
15 billion, emphasizing the need for proper regulation of coated seeds and strict enforcement. People
16 reported eye and throat irritation and nosebleeds. Pet dogs grew ill, staggering about with dilated
17 pupils, while colonies of bees died, and birds and butterflies were afflicted with neurological
18 damage as well. Residents who reported the debacle to EPA said the agency's response was that it
19 did not think it could do anything about the problem.¹⁵

20 55. Humans are increasingly getting exposed to neonicotinoids through the food
21 supply and water contamination. Neonicotinoids have been found in fruits such as apples,

22 ¹⁴ Margaret Douglas et al., *Neonicotinoid Insecticides Travels Through A Soil Food Chain, Disrupting*
23 *Biological Control Of Non-Target Pests And Decreasing Soya Bean Yield*, 52 J. of Applied Ecology
24 250-260 (2014).

25 ¹⁵ Carey Gillam, 'There's a red flag here': how an ethanol plant is dangerously polluting a US village, *The*
26 *Guardian* (Jan. 10, 2021), [https://www.theguardian.com/us-news/2021/jan/10/mead-](https://www.theguardian.com/us-news/2021/jan/10/mead-nebraska-ethanol-plant-pollution-danger)
27 [nebraska-ethanol-plant-pollution-danger](https://www.theguardian.com/us-news/2021/jan/10/mead-nebraska-ethanol-plant-pollution-danger); Chris Dunker, *Public records reveal frustration as state*
28 *sought to deal with pesticide dangers from ethanol plant*, *Lincoln Journal Star* (Nov. 21, 2021),
[https://journalstar.com/news/state-and-regional/nebraska/public-records-reveal-frustration-as-](https://journalstar.com/news/state-and-regional/nebraska/public-records-reveal-frustration-as-state-sought-to-deal-with-pesticide-dangers-from-ethanol-plant/article_60cc64ea-0e7b-5081-8148-d453be8cce90.html)
[state-sought-to-deal-with-pesticide-dangers-from-ethanol-plant/article_60cc64ea-0e7b-5081-8148-](https://journalstar.com/news/state-and-regional/nebraska/public-records-reveal-frustration-as-state-sought-to-deal-with-pesticide-dangers-from-ethanol-plant/article_60cc64ea-0e7b-5081-8148-d453be8cce90.html)
[d453be8cce90.html](https://journalstar.com/news/state-and-regional/nebraska/public-records-reveal-frustration-as-state-sought-to-deal-with-pesticide-dangers-from-ethanol-plant/article_60cc64ea-0e7b-5081-8148-d453be8cce90.html).

1 cherries, and strawberries, as well as honey and baby food. Neonicotinoids are ubiquitous in
2 surface waters and may be contaminating aquifers. Human urine samples show that at least half
3 the U.S. population is exposed to neonicotinoids on a regular basis. Epidemiological studies have
4 found suggestive evidence that neonicotinoid exposure may be linked to developmental or
5 neurological effects including malformations of the developing heart and brain, autism spectrum
6 disorder, and a cluster of symptoms including memory loss and finger tremors, though further
7 research is called for. Coated seeds have facilitated the increased use and spread of neonicotinoids
8 through the environment, heightening the risks to the environment, wildlife, and humans.

9 ***Harm to Endangered and Threatened Species***

10 56. Pesticide escape into the environment associated with coated seeds affects a vast
11 number of non-target species, including those protected under the ESA.

12 57. The Fish and Wildlife Service (FWS) found that neonicotinoid-coated seeds were
13 strongly implicated as a factor endangering the Rusty Patched Bumble Bee. Pollinators such as the
14 Rusty Patched Bumble Bee foraging on treated plants are exposed to the chemicals directly.
15 Coated seed technology allowed neonicotinoids to become large-scale, preemptive pesticides, and
16 that increased use is correlated with a precipitous decline of the species.

17 58. Two butterflies, the Dakota skipper (*Hesperia dacotae*) and Poweshiek skipperling
18 (*Oarisma poweshiek*), listed under the ESA in 2014 also had neonicotinoid-coated seeds explicitly
19 singled out by the FWS as a significant factor that led to their listings.

20 59. On August 26, 2021, EPA released draft ESA Biological Evaluations (BE) for
21 neonicotinoids to evaluate their effects on species and their critical habitat. EPA's draft BEs
22 showed widespread harm was predicted. For example, the agency expects nearly 80% of all
23 endangered species—1,445 different kinds of plants and animals—are likely to be “adversely
24 affected” by the neonicotinoid imidacloprid, and the pesticide will adversely modify the designated
25 critical habitats of 658 species.

26 60. However, in the draft BEs EPA did not even conduct a quantitative risk assessment
27 of ecological harm from neonicotinoid seed treatments, and moreover failed to even provide any
28

1 estimate of the total amount applied to seeds, despite the fact that seed treatments are by far the
2 major use of these insecticides.

3 *The Treated Article Exemption*

4 61. EPA first issued the Treated Article Exemption, 40 C.F.R. § 152.25(a), in 1988.
5 Neonicotinoid-coated seeds were neither mentioned in the regulation text nor in the Federal
6 Register notice accompanying the exemption, and were not in use in agriculture at the time.

7 62. By the early 2000, coated seeds were coming into use in agriculture. And in 2003,
8 EPA and the Pest Management Regulatory Agency of Canada jointly issued a paper called
9 *Harmonization of Regulation of Pesticide Seed Treatment in Canada and the United States*
10 (Harmonization Paper). The Harmonization Paper concluded that coated seeds should be *excluded*
11 from the Treated Article Exemption: “The term ‘for the protection of the [seed] itself’ means that
12 the pesticidal protection imparted to the treated seed does not extend beyond the seed itself.”¹⁶
13 The Harmonization Paper otherwise provided no coverage or analysis of systemic pesticides or
14 neonicotinoid-coated seeds.

15 63. Despite this interpretation EPA has instead persisted in practice in its view that the
16 Treated Article Exemption *does* include systemic coated seeds, despite the intended and actual
17 pesticidal effects extending far beyond the articles (seeds) themselves. At the same time the agency
18 has studiously avoided making this interpretation formal or final in any final agency action.

19 64. In practice EPA neither requires registration of the seeds nor imposes enforceable
20 labeling on their bags or tags, labeling that would otherwise be required under FIFRA.

21 65. Not only does the extension of the Treated Article Exemption to these pesticidal
22 seeds violate the exemption’s plain language, it also violates the basic FIFRA safety standard. EPA
23 cannot exempt a pesticide that violates this safety standard, *i.e.*, that the pesticides *as commonly used*
24 will not cause unreasonable adverse effects to the environment.

25
26
27 ¹⁶ *Harmonization of Regulation of Pesticide Seed Treatment in Canada and the United States* April 11,
28 2003, pp. 1-2, (Joint Regulatory Directive of EPA and the Pest Management Regulatory Agency
of Canada), perma.cc/3MUH-B9VQ.

1 *Anderson et al. v. McCarthy*¹⁷

2 66. On January 6, 2016, CFS filed a case challenging EPA's position that coated seeds
3 are exempt from the requirements of FIFRA.

4 67. Specifically, Plaintiffs in that case sought review of a 2013 guidance document
5 issued by EPA stating that coated seeds may be exempted from the requirements of FIFRA under
6 the treated article exemption. Plaintiffs argued that the 2013 Guidance was a final agency action
7 establishing the coated seeds exemption and as such exceeded EPA's statutory authority, failed to
8 comply with the APA's rulemaking requirements, and was arbitrary and capricious. They also
9 argued that EPA's "non-enforcement policy" for coated seeds was an unlawful abdication of the
10 agency's duties under FIFRA.

11 68. The case was decided on procedural grounds. After first denying a motion to
12 dismiss and ordering production of the administrative record, on cross motions for summary
13 judgment the court concluded that while it was "most sympathetic to the plight of our bee
14 population and beekeepers," there was not any EPA final agency action on the issue that could be
15 challenged.¹⁸

16 *Plaintiffs' 2017 Petition*

17 69. EPA is tasked with regulating the use of pesticidal products in order to protect
18 public health and the environment. Pub. L. No. 92-516, 86 Stat. 973. As part of that
19 responsibility, EPA must ensure that pesticides are registered under FIFRA. Nevertheless, EPA
20 continues to insist that coated seeds fall under the Treated Articles Exemption.

21 70. In addition to failing to comply with FIFRA by declining to require registration of
22 coated seeds, EPA has so far also failed to comply with mandates in the ESA that require
23 consideration of the adverse impacts of coated seeds on threatened and endangered species, 16
24 U.S.C. § 1536.

25
26
27 ¹⁷ *Anderson v. McCarthy*, No. C 16-00068 WHA, 2016 WL 6834215 (N.D. Cal. Nov. 21, 2016).

28 ¹⁸ *Id.* at *13.

1 71. A few months after the court dismissed the first coated seeds case, on April 26,
2 2017, Plaintiffs submitted a legal petition for rulemaking to EPA urging the agency to remedy
3 those failures, on behalf of itself and 10 other entities. Specifically, the petition requested, *inter*
4 *alia*, that EPA take the following actions:

- 5 (1) Amend 40 C.F.R. § 152.25(a) to clarify that it does not apply to seeds for
6 planting coated with systemic pesticides, such as the neonicotinoids, that are
7 intended to kill pests of the plant instead of pests of the seed itself; or
- 8 (2) In the alternative publish a final, formal, agency interpretation in the Federal
9 Register stating that EPA interprets the exemption in 40 C.F.R. § 152.25(a) not
10 to apply to seeds for planting coated with systemic pesticides, such as the
11 neonicotinoids, that are intended to kill pests of the plant instead of pests of
12 the seed itself.
- 13 (3) Analyze the potential human health and environmental risks of coated seeds
14 under the ESA; and
- 15 (4) Enforce FIFRA's numerous pesticide registration and labeling requirements for
16 each separate crop seed product that is coated with a neonicotinoid or other
17 systemic insecticidal chemical.

18 72. On December 25, 2018, EPA opened a sixty-day public comment period in
19 response to Plaintiffs' petition. Petition Seeking Rulemaking or a Formal Agency Interpretation for
20 Planted Seeds Treated With Systemic Insecticides; Request for Comment, 83 Fed. Reg. 66,260
21 (Dec. 26, 2018). The comment period ran until March 26, 2019 and attracted 16,343 comments.

22 73. Public comments highlighted the agency's flawed basis for exempting coated seeds
23 as treated articles, as well as the harm EPA's insufficient regulation of coated seeds has caused and
24 is causing to pollinators, birds, aquatic organisms, and the environment.

25 74. In the approximately five years since Plaintiffs filed the petition, the agency still has
26 not issued a response or answer to the petition in whole or in part.

27 ***EPA's Ongoing Failure to Meaningfully Examine or Regulate Coated Seeds***

28 75. Despite refusing to codify the loophole for coated seeds, EPA is very aware that
neonicotinoids are used on coated seeds, and that they are creating lasting environmental damage.
As long ago as 2003, EPA assessments showed that exposure to treated seeds posed toxic risks to

1 birds and mammals. Since then, EPA has conducted risk assessments and studied the impacts of
2 neonicotinoids on pollinators but has routinely ignored the contribution of coated seeds.

3 76. EPA requires labels to be placed onto the bags or other containers, or onto the
4 affixed tags, of the unregistered pesticidal seeds, which include some sparse warnings superficially
5 aimed at protecting pollinators and other environmental values. While these amount to
6 admissions of the seeds' harmful pesticidal effects, the label language itself is unenforceable by
7 EPA's own statements and its inactions.

8 77. Even were they enforceable, the bag labels are inadequate to protect against the vast
9 spectrum of environmental and economic impacts, including, but not limited to, death of
10 pollinators, damage to soil and aquatic life, lethal and sublethal effects on birds, and harm to ESA-
11 protected species.

12 78. In its proposed interim registration review for the neonicotinoid imidacloprid,
13 published in January 2020, EPA decided that this pesticide was too hazardous to be applied via on-
14 farm seed treatment activities to canola, millet, and wheat, even when wearing the maximum
15 possible protective clothing. EPA therefore added the statement "Must be applied in commercial
16 seed treatment facilities only" to the label.¹⁹ Yet despite acknowledging that seed treatment was the
17 primary method for dispersing these hazardous chemicals, EPA did not fully analyze the
18 environmental impacts of this use.

19 79. Perhaps most problematically, EPA has never provided the public with any
20 justification for treating coated seeds as exempt from the registration and labeling requirements of
21 FIFRA.

22 ***EPA's Failure to Respond to the 2017 Petition***

23 80. Almost five years have passed since Plaintiffs filed its 2017 legal petition providing
24 the legal blueprint and impetus for EPA to amend its regulations to make clear that coated seeds
25 are not covered by the Treated Article Exemption and to enforce the requirements of FIFRA. Yet
26 EPA still has not responded to that petition.

27
28 ¹⁹ EPA, *Imidacloprid Proposed Interim Registration Review Decision*, Case Number 7605, at 41 (Jan. 2020).

1 81. The APA requires that agencies respond to petitions within a reasonable time and
2 without undue delay. While the reasonableness of the time taken by the agency to respond varies
3 depending on the circumstances, it does not usually extend to years like it has here and particularly
4 not in these circumstances. Subsequent to the 2018 comment period, EPA has gone silent and has
5 not indicated any timeline by which it will answer the 2017 Petition. Five years is an especially
6 egregious delay in cases like this where the delay involves danger to the environment and/or public
7 health. Pollinators, threatened and endangered species, American agriculture, human health, and
8 the environment have all suffered because of EPA's failure to regulate. EPA acknowledges the risks
9 of neonicotinoid pesticides and has cancelled the registration of several neonicotinoids in the past,
10 but continually refuses to address the most common form in which neonicotinoids are used – as
11 seed coatings. Because EPA has not yet acted on coated seeds, the environmental damage caused
12 by coated seeds has likely compounded, endangering human health and hastening the insect
13 apocalypse.

14 ***Harm to Plaintiffs***

15 82. EPA's failure to respond to the petition injures Plaintiffs' informational and
16 organizational interests, and injures Plaintiffs members' interests.

17 83. Plaintiffs have a right under the APA to a timely response to their rulemaking
18 petition, and are injured by EPA's failure to provide it, in violation of the APA.

19 84. EPA's unlawful delay in responding to the 2017 Petition injures Plaintiffs by, *inter*
20 *alia*, denying them important and urgently needed information about EPA's oversight of pesticidal
21 coated seed products in the form of a petition response—a response to which the Plaintiffs is
22 statutorily entitled under the APA. By denying Plaintiffs the vital and urgent information in a
23 petition response, EPA's failure to respond to the 2017 Petition has violated Plaintiffs' procedural
24 and substantive rights under the APA.

25 85. Additionally, EPA's failure to act on the petition directly harms Plaintiffs' concrete
26 organizational interests by impeding their abilities as public interest nonprofit organizations to
27 facilitate public involvement in governmental decision-making, and by foreclosing the statutory
28 right that allows for public participation through petitions for rulemaking. As such, EPA's failure

1 to act has effectively negated Plaintiffs’ right to petition a federal agency for rulemaking under the
2 APA.

3 86. Further, EPA’s continued failure to respond to the 2017 Petition deprives Plaintiffs
4 of a decision on the Petition’s merits and, if necessary, the opportunity to seek judicial review of
5 EPA’s final decision.

6 87. Plaintiffs’ members’ concrete interests in their health and environmental
7 protection, are being and will be adversely affected by EPA’s continued failure to respond to the
8 2017 Petition. Specifically, Plaintiffs’ members are suffering or will suffer an ongoing threat to
9 their health, their children’s health, and, for farmers and beekeepers, their livelihoods, as well as
10 the health of the natural environment. Plaintiffs members’ myriad interests in the natural
11 environment and endangered species, honey and wild native bees, and other pollinators—
12 environmental, conservation, professional, recreational, and aesthetic interests—continue to be
13 injured by EPA’s failure to answer the petition and regulate coated seeds.

14 88. The requested relief will redress these harms by requiring EPA to respond to the
15 Petition, resulting either in a response that fulfills EPA’s statutory duties by protecting public
16 health and the environment from the risks of coated seeds, and/or a final agency action that
17 Plaintiffs may challenge in federal court if they disagree with the agency’s response, in whole or in
18 part. Both results would provide Plaintiffs organizations with APA-mandated information,
19 securing their procedural right to receive a timely response to a legal petition for rulemaking and
20 safeguarding their members’ interests.

21 CLAIM FOR RELIEF

22 VIOLATION OF THE APA

23 89. Plaintiffs incorporate by reference all allegations contained in paragraphs 1 through
24 88 *supra*.

25 90. EPA is an “agency” under the APA. *See* 5 U.S.C. §§ 551(1), 701(b)(1). The APA
26 requires agencies to “give an interested person the right to petition for the issuance, amendment,
27 or repeal of a rule.” *Id.* § 553(e); *see id.* § 551(4) (defining “rule” as “the whole or part of an agency
28 statement of general or particular applicability and future effect designed to implement, interpret,

1 or prescribe law or policy”). The APA right to petition encompasses the right to petition for a new,
 2 revised, or final rule concerning EPA oversight of pesticides and related substances such as coated
 3 seeds. *See id.* §§ 551, 553(e).

4 91. Upon receipt of an APA petition, EPA has a duty to provide a timely response to
 5 the petitioners. *Id.* § 555(e) (“Prompt notice shall be given of the denial in whole or in part of a
 6 written application, petition, or other request of an interested person . . .”). Such response must be
 7 substantive—*i.e.*, it must either grant or deny the petition, in whole or in part.

8 92. EPA cannot “unlawfully withhold or unduly delay” the Petition response, *id.*
 9 § 706(1), which it has here, for nearly five years, with environmental harm ongoing unabated.

10 93. The APA grants a right of judicial review to “[a] person suffering legal wrong
 11 because of agency action, or adversely affected or aggrieved by agency action.” *Id.* § 702. Agency
 12 action includes agencies’ failure to act, as here. Plaintiffs and its members are adversely affected by
 13 EPA’s past and continued failure to respond to the 2017 Petition.

14 94. The APA states that a reviewing court “shall” interpret statutes and “compel agency
 15 action unlawfully withheld or unreasonably delayed.” *Id.* § 706(1). EPA’s failure to respond to and
 16 act on the 2017 Petition constitutes unlawfully withheld and unreasonably delayed agency action.

17 RELIEF REQUESTED

18 WHEREFORE, Plaintiffs respectfully request that this Court enter an Order:

- 19 (1) Declaring that EPA has violated the APA by failing to provide a timely response to
- 20 the 2017 Petition;
- 21 (2) Declaring that EPA continues to be in violation of the APA by failing to respond to
- 22 the 2017 Petition;
- 23 (3) Ordering EPA to respond to the 2017 Petition by a Court-ordered date certain, by
- 24 no more than 90 days;
- 25 (4) Retaining jurisdiction of this action to ensure compliance with this Court’s
- 26 decree;
- 27 (5) Awarding Plaintiffs attorneys’ fees and all other reasonable expenses incurred in
- 28 pursuit of this action; and

1 (6) Granting other such relief as the Court deems just and proper.

2
3 Respectfully submitted this 14th day of December, 2021, in San Francisco, California.

4
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