

1 GEORGE A. KIMBRELL (*Pro Hac Vice* application pending)
2 PETER T. JENKINS (*Pro Hac Vice* application pending)
3 PAIGE M. TOMASELLI (State Bar No. 237737)
4 SYLVIA SHIH-YAU WU (State Bar No. 273549)
5 Center for Food Safety
6 303 Sacramento Street, 2nd Floor
7 San Francisco, CA 94111
8 T: (415) 826-2770 / F: (415) 826-0507
9 Emails: gkimbrell@centerforfoodsafety.org
10 pjenkins@centerforfoodsafety.org
11 ptomaselli@centerforfoodsafety.org
12 swu@centerforfoodsafety.org

13 *Counsel for Plaintiffs*

14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
**THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

12 STEVE ELLIS, TOM THEOBALD, JIM)
13 DOAN, BILL RHODES, CENTER FOR)
14 FOOD SAFETY, BEYOND PESTICIDES,)
15 SIERRA CLUB, PESTICIDE ACTION)
16 NETWORK NORTH AMERICA, and)
17 CENTER FOR ENVIRONMENTAL)
18 HEALTH,)

19 Plaintiffs,)

20 v.)

21 STEVEN P. BRADBURY, DIRECTOR OF)
22 OFFICE OF PESTICIDE PROGRAMS,)
23 UNITED STATES ENVIRONMENTAL)
24 PROTECTION AGENCY; and BOB)
25 PERCIASEPE, ACTING)
26 ADMINISTRATOR AND DEPUTY)
27 ADMINISTRATOR, UNITED STATES)
28 ENVIRONMENTAL PROTECTION)
AGENCY,)

Defendants.)

C 13 1266

Case No.

**COMPLAINT FOR DECLARATORY
AND INJUNCTIVE RELIEF**

Administrative Procedure Act Case

**ORIGINAL
FILED
MAR 27 2013
RICHARD W. WIEKING
CLERK, U.S. DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA**

LB

INTRODUCTION

1. This is a civil action for injunctive and declaratory relief. Plaintiffs Steve Ellis, Tom Theobald, Jim Doan, Bill Rhodes, Center for Food Safety (CFS), Beyond Pesticides, Sierra Club, Pesticide Action Network North America (PANNA), and Center for Environmental Health (CEH), (collectively Plaintiffs), challenge the actions of Defendants Steven P. Bradbury, Director of Office of Pesticide Programs of the United States Environmental Protection Agency (EPA), and Bob Perciasepe, Acting Administrator and Deputy Administrator of EPA (collectively EPA or Defendants) to allow the ongoing use of pesticide products containing the active ingredients clothianidin and thiamethoxam, in violation of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. § 136 *et seq.*; § 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2); and the Administrative Procedure Act (APA), 5 U.S.C. § 701 *et seq.*

2. Clothianidin and its parent compound, thiamethoxam, are two widely-used pesticides in a class of pesticides known as neonicotinoids, which have been shown to adversely impact the survival, growth, and health of honey bees and other pollinators vital to U.S. agriculture, and which have harmful effects on other animals, including threatened and endangered species. In a vast and extremely risky experiment, EPA has allowed over two million pounds of clothianidin and thiamethoxam to be used annually on more than 100 million acres and on dozens of different plant crops without adhering to existing procedural frameworks and with no adequate risk assessments in place.

3. In most instances, EPA has approved clothianidin and thiamethoxam product registrations, new uses, and use amendments without affording notice in the Federal Register and the opportunity for public comment, in violation of the FIFRA and the APA. Substantively, EPA has failed to modify its regulation of these pesticides in response to the many scientifically-sound studies and adverse effect reports illustrating the risks these neonicotinoid pesticides pose. EPA's regulatory actions and inactions have been a major factor in excessive honey bee mortality and the decline of pollinator populations in the same time period. EPA's regulatory

1 actions and inactions, resulting in the continued use of clothianidin and thiamethoxam, have also
2 continued to place threatened and endangered species in jeopardy.

3 4. In addition to chronic effects described as Colony Collapse Disorder, hundreds of
4 the nation's beekeepers and honey producers each spring suffer from acute effects when
5 neonicotinoid-treated corn, in particular, is planted in virtually every state. Thousands of bee
6 colonies have been exposed to lethal levels of neonicotinoid-contaminated dust during corn
7 planting season. Plaintiff beekeepers and honey producers have suffered, and will continue to
8 suffer, devastating economic hardships unless Defendants take action, which they have refused
9 to do despite repeated formal requests.

10 5. EPA is well aware of recent studies and reports illustrating the risks to honey
11 bees, pollinators, and other sensitive species, but has refused to take any regulatory action. In
12 December 2010, Plaintiffs Beyond Pesticides and PANNA, along with other environmental
13 groups, beekeepers, and honey producers, submitted a formal letter requesting EPA to issue a
14 stop sale order of clothianidin products.¹ EPA denied the request in February 2011.² In March
15 2012, Plaintiffs CFS, Beyond Pesticides, and PANNA, along with numerous other environmental
16 groups, beekeepers, and honey producers, filed a legal petition (hereafter the Clothianidin Legal
17 Petition or the Petition) asking EPA to initiate immediate suspension and cancellation of
18 clothianidin products.³ EPA denied the suspension request in July 2012.⁴ Plaintiff CFS further
19 submitted a comment letter regarding similar risks of thiamethoxam products and requesting
20

21
22 ¹ Letter from Beyond Pesticides *et al.*, to EPA (Dec. 8, 2010), *available at*
<http://www.epa.gov/opp00001/about/intheworks/clothianidin-petition2.pdf>.

23 ² Letter from Steven Bradbury, Director, Office of Pesticide Programs, EPA, to Steve Ellis *et al.*
24 (Feb. 18, 2011), *available at* [http://www.epa.gov/opp00001/about/intheworks/clothianidin-](http://www.epa.gov/opp00001/about/intheworks/clothianidin-response-letter.pdf)
[response-letter.pdf](http://www.epa.gov/opp00001/about/intheworks/clothianidin-response-letter.pdf).

25 ³ CFS *et al.*, Clothianidin Legal Petition (Mar. 21, 2012), *available at*
26 [http://www.centerforfoodsafety.org/wp-content/uploads/2012/10/CFS-Clothianidin-Petition-3-](http://www.centerforfoodsafety.org/wp-content/uploads/2012/10/CFS-Clothianidin-Petition-3-20-12.pdf)
[20-12.pdf](http://www.centerforfoodsafety.org/wp-content/uploads/2012/10/CFS-Clothianidin-Petition-3-20-12.pdf).

27 ⁴ Letter from Steven Bradbury, Director, Office of Pesticide Programs, EPA, to Peter T. Jenkins
28 (July 17, 2012), *available at* [http://www.epa.gov/opp00001/about/intheworks/epa-respsns-to-](http://www.epa.gov/opp00001/about/intheworks/epa-respsns-to-clothianidin-petition-17july12.pdf)
[clothianidin-petition-17july12.pdf](http://www.epa.gov/opp00001/about/intheworks/epa-respsns-to-clothianidin-petition-17july12.pdf).

1 suspension of the pesticide in October 2012.⁵ EPA has also refused that suspension request.⁶

2 6. In addition to the Plaintiffs, hundreds of thousands of Americans endorsed an
3 informal citizen petition in 2011 to 2012 urging Defendants to suspend clothianidin's
4 registration. There is intense public interest in EPA's actions, due to the loss of honey bees and
5 other beneficial insects; the resulting economic, food supply, and ecosystem damages; and the
6 unnecessary persistent toxic pollution of America's private and public landscapes.

7 7. Yet, despite repeated formal requests, Defendants have failed to take any
8 regulatory action. In allowing this scenario to unfold over the last twelve years, EPA has
9 violated the FIFRA, the ESA and the APA. EPA has denied Plaintiffs and the public mandatory
10 notice and public comment opportunities, severely damaged the interests of Plaintiffs, injured
11 vital pollinators and threatened and endangered species, and caused unreasonable adverse
12 environmental and economic impacts.

13 JURISDICTION AND VENUE

14 8. This Court has jurisdiction pursuant to 28 U.S.C. § 1331 (federal question), 28
15 U.S.C. § 1346 (United States as defendant), 28 U.S.C. §§ 2201-02 (declaratory relief), 5 U.S.C.
16 § 702 (APA), 7 U.S.C. § 136n(a) (FIFRA), and 16 U.S.C. § 1540(e), (g) (ESA).

17 9. Jurisdiction is in the District Court under the ESA citizen suit provision, which
18 allows "any person" to sue an agency "alleged to be in violation of any provision of [the ESA]"
19 and provides that the "district courts shall have jurisdiction . . . to enforce any such provision or
20 regulation" 16 U.S.C. § 1540(g)(1). Pursuant to the ESA, 16 U.S.C. § 1540(g)(2)(A),
21 Plaintiffs CFS, Beyond Pesticides, Sierra Club, Steve Ellis, and Tom Theobald have provided
22 Defendants with at least sixty days written notice of the their violations under the ESA and of
23 Plaintiffs' intent to sue should Defendants fail to remedy such violations (hereafter the Sixty-Day
24 Notice Letter).⁷ To date, Defendants have not remedied any of the violations of law set forth in

25 _____
26 ⁵ Letter from Plaintiffs to EPA (Oct. 16, 2012) (on file with Plaintiffs).

27 ⁶ Letter from EPA to Plaintiffs (Feb. 27, 2013) (on file with Plaintiffs).

28 ⁷ Sixty-Day Notice Letter from Plaintiffs Center for Food Safety *et al.* to Defendants and Ken Salazar, former Secretary of the Interior (Sept. 5, 2012) (on file with Plaintiffs).

1 Plaintiffs' Sixty-Day Notice Letter.

2 10. Jurisdiction also lies in this Court under the FIFRA's judicial review provision, 7
3 U.S.C. § 136n(a), which provides:

4 District court review.

5 Except as otherwise provided in this Act, the refusal of the Administrator to
6 cancel or suspend a registration or to change a classification not following a
7 hearing and other final actions of the Administrator not committed to the
8 discretion of the Administrator by law are judicially reviewable by the district
9 courts of the United States.

9 11. Each of the eight claims in this Complaint involve the refusal of the Defendants to
10 cancel or suspend a registration or to change a classification not following a hearing, failure to
11 conduct required ESA analysis and consultation, and other final actions of the Administrator not
12 committed to his or her discretion; thus, jurisdiction lies properly in the District Court. 7 U.S.C.
13 § 136n(a); 16 U.S.C. § 1540(g)(1). In particular, Defendants have: a) refused to cancel or
14 suspend the conditionally registered uses of clothianidin and thiamethoxam despite clear
15 evidence that the registrants for those uses have failed to comply with the conditions imposed by
16 EPA; b) changed the classifications of numerous conditional registrations of thiamethoxam and
17 clothianidin to unconditional registrations, as well as approved thiamethoxam and clothianidin
18 products as unconditional registrations, despite the registrants' failures to comply with the
19 conditions EPA imposed on them; c) taken final action, without a hearing, on Plaintiffs'
20 Clothianidin Legal Petition in denying the request to declare an "imminent hazard" exists; d)
21 failed to comply with the ESA, in approving all of the registered uses of these compounds, in
22 converting registrations to the unconditional classification and in denying an "imminent hazard"
23 exists; e) violated the FIFRA requirement to provide notices of clothianidin and thiamethoxam
24 registrations and changed use applications in the Federal Register and allow public comment, as
25 well as other notice requirements; and f) taken other actions as alleged herein that caused
26 unreasonable adverse environmental and economic impacts that are reviewable in the District
27 Court.

1 12. An actual controversy exists between the parties within the meaning of 28 U.S.C.
2 § 2201 (declaratory judgment).

3 13. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e)(1)(c) because
4 one or more Plaintiffs reside in this district, and pursuant to 28 U.S.C. § 1391(e)(1)(b), because a
5 substantial part of the events or omissions giving rise to the claim occurred, or a substantial part
6 of property that is the subject of the action is situated, in this district.

7 **INTRADISTRICT ASSIGNMENT**

8 14. Pursuant to Local Rule 3-2(c) and (d), assignment of this action is appropriate in
9 the San Francisco or Oakland Divisions because one or more Plaintiffs reside in San Francisco.

10 **PARTIES**

11 ***Beekeeper and Honey Producer Plaintiffs***

12 15. The interests of Plaintiffs Mr. Steve Ellis, Mr. Tom Theobald, Mr. Jim Doan, and
13 Mr. Bill Rhodes (collectively Beekeeper and Honey Producer Plaintiffs) are being, and will be,
14 adversely affected by EPA's actions and inactions complained of herein. Beekeeper and Honey
15 Producer Plaintiffs have suffered confirmed or unconfirmed clothianidin- and
16 thiamethoxam-related kills to their honey bees, both acute and chronic, as well as poor colony
17 health and failure to thrive. Beekeeper and Honey Producer Plaintiffs are geographically and
18 operationally representative of this essential agricultural sector, in which there are thousands of
19 similarly-affected businesses and individuals.

20 16. Plaintiff Mr. Steve Ellis owns and operates Old Mill Honey Company, a
21 migratory beekeeping operation with 2,300 hives of bees during the summer honey-producing
22 season, and with several employees. The managed hives in his business produce honey for
23 market over the summer months in Minnesota, and paid pollination services in the winter and
24 spring in California. Mr. Ellis has over thirty-five years of experience and has served as an
25 officer in beekeeper organizations for many years. He is the Secretary of the National Honey
26 Bee Advisory Board. Over the course of the last six to seven years, he has observed a new type
27 of bee kill caused by pesticide poisoning in the early spring, at corn seeding time, and early
28 dandelion bloom. He has suffered major bee kills that were attributable to thiamethoxam and/or

1 clothianidin. His fall and winter mortality have remained between 30 to 40 percent over this
2 period. This level of losses is unsustainable. Mr. Ellis keeps bees in west central Minnesota
3 where corn and soybeans are increasingly the dominant crops. It is not practically feasible to
4 locate his bees away from these crops during the summer growing season.

5 17. Plaintiff Mr. Tom Theobald is a commercial beekeeper and owner of the Niwot
6 Honey Farm in Niwot, Colorado. He has conducted his beekeeping business for thirty-eight
7 years. He was the President of the Boulder County Beekeepers Association for thirty years. Mr.
8 Theobald served two terms as Vice-President of the Colorado Beekeepers' Association and was
9 the last County Bee Inspector in Colorado. He is losing 40 to 60 percent of his colonies each
10 year and in 2011 and again in 2012 had his smallest honey crops in thirty-seven years. Mr.
11 Theobald has observed, based on his long personal and government experience with the impacts
12 of various pesticides on bees as well as through his own research, that a primary cause of his
13 recent and continuing losses is the uncontrolled use of neonicotinoid pesticides (including
14 clothianidin and thiamethoxam) over vast acres of agricultural land near his business, as well as
15 on untold acres of nearby urban and suburban land in Boulder County.

16 18. Plaintiff Mr. Jim Doan runs Doan Family Farms based in Hamlin, New York,
17 with his wife, son and several hired men. He has kept honey bees for forty-five years. In 2006
18 Mr. Doan ran as many as 5,300 hives in New York and in Florida; his bees pollinate a vast
19 portion of New York's apple crop each year. Since 2006, he has been unable to keep from losing
20 more than 50 percent of his hives each year to symptoms that, based on his experience, are
21 caused by both acute and chronic exposure to the new neonicotinoid pesticides. In the spring
22 and summer of 2012, Mr. Doan suffered a devastating bee kill caused by clothianidin, which
23 very clearly came from contaminated dust and other exposure routes related to the several
24 cornfields around his bee colonies. If he continues suffer such losses to his business, without
25 monetary support, he fears it is doomed to disappear. His bees cannot be replaced as fast as they
26 are dying.

27 19. Plaintiff Mr. Bill Rhodes owns Bill Rhodes Honey Company, the largest
28 commercial honey producer in Florida, based in Umatilla. A beekeeper for forty-one years, his

1 company employs about fifteen people. Mr. Rhodes produces several premium honey varieties,
2 both in Florida and South Dakota, and his company also ships bees to Georgia and other states.
3 He seeks to maintain about 9,000 hives, but the impacts of pesticides, including thiamethoxam
4 and clothianidin, make keeping that level very difficult. Mr. Rhodes started seeing symptoms of
5 Colony Collapse Disorder around 2004 and 2005, and again in 2007 and 2008. In the latter year
6 he lost 7,200 of 9,000 hives. Major losses have continued, far exceeding normal loss rates
7 during the three earlier decades of his operations. Mr. Rhodes has seen other beekeepers driven
8 out of the business from major losses, and has a high level of concern that his own livelihood
9 based on premium honey production is threatened.

10 20. Each of the Beekeeper and Honey Producer Plaintiffs is injured by EPA's actions
11 and inactions complained of herein. EPA's failure to provide Beekeeper and Honey Producer
12 Plaintiffs with the FIFRA-mandated notices of application for clothianidin and thiamethoxam
13 registration and changed uses in the Federal Register, and its failure to provide mandatory public
14 comment periods, denied Plaintiffs the ability to submit information to the EPA that may have
15 convinced the agency not to issue those registrations or use amendments. For Beekeeper and
16 Honey Producer Plaintiffs, the monetary damages to their businesses are significant, including
17 the costs of replacing killed and weakened bees; contaminated beeswax, comb, and hives;
18 reduced honey production and lost profits; increased labor, equipment, and supply expenditures;
19 and costs and lost profits from the inability to perform contracted pollination services. Their
20 losses are not insured or insurable. On a personal level, they have suffered from increased
21 workload to address bee kills and poor bee health, and personal stress and anxiety from seeing
22 the valuable animals in their care die, as well as being compelled to pursue enforcement actions
23 with government agencies about their farmer neighbors, and other damages. The relief sought in
24 this case will provide redress for their ongoing harms and aid in preventing additional future
25 damages from clothianidin and thiamethoxam, which are expected to worsen in the future absent
26 change.

27 //

28 //

1 ***Public Interest Group Plaintiffs***

2 21. The interests of CFS, Beyond Pesticides, PANNA, and CEH (collectively Public
3 Interest Group Plaintiffs) and their members are being, and will be, adversely affected by EPA's
4 actions and inactions complained of herein. EPA's continued registrations of clothianidin and
5 thiamethoxam products and failure to take regulatory actions to suspend or cancel such product
6 registrations harm the interests of Public Interest Group Plaintiffs and Public Interest Group
7 Plaintiffs' members. EPA's actions and inactions have, and will continue to have, an adverse
8 effect on Public Interest Group Plaintiffs' missions and their members' conservation,
9 environmental, recreational, aesthetic, and economic interests.

10 22. Plaintiff CFS brings this action on behalf of itself and its members. CFS and its
11 members are being, and will be, adversely affected by EPA's actions and inactions complained
12 of herein. CFS is a Washington, D.C.-based, public interest, nonprofit membership organization
13 that has offices in San Francisco, CA; Portland, OR; and Washington, D.C.

14 23. Since CFS's founding in 1997, it has sought to ameliorate the adverse impacts of
15 industrial farming and food production systems on human health, animal welfare, and the
16 environment. CFS has over 280,000 members nationwide. CFS seeks to protect human health
17 and the environment by advocating for thorough, science-based safety testing of new agricultural
18 products prior to any marketing and cultivation of crops in a manner that minimizes negative
19 impacts such as increased use of pesticides and evolution of resistant pests and weeds. A
20 foundational part of CFS's mission is to further the public's fundamental right to know what is in
21 their food and food production methods.

22 24. Plaintiff Beyond Pesticides brings this action on behalf of itself and its members.
23 Beyond Pesticides and its members are being, and will be, adversely affected by EPA's actions
24 and inactions complained of herein. Based in Washington, D.C., Beyond Pesticides is a national
25 nonprofit corporation that promotes safe air, water, land, and food, and works to protect public
26 health and the environment by encouraging a transition away from the use of toxic pesticides.
27
28

1 25. With Beyond Pesticides's resources made available to the public on a national
2 scale, Beyond Pesticides contributes to a significant reduction in unnecessary pesticide use, thus
3 improving protection of public health and the environment.

4 26. Plaintiff Sierra Club brings this action on behalf of itself and its members. Sierra
5 Club and its members are being, and will be, adversely affected by EPA's actions and inactions
6 complained of herein. The Sierra Club is a national nonprofit organization of approximately
7 600,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth; to
8 practicing and promoting the responsible use of the earth's ecosystems and resources; to
9 educating and enlisting humanity to protect and restore the quality of the natural and human
10 environment; and to using all lawful means to carry out these objectives. The Sierra Club is a
11 California nonprofit corporation headquartered in San Francisco, CA.

12 27. The Sierra Club's concerns encompass endangered species, habitat protection,
13 pollution, and industrial agriculture, all of which are involved in this case. The loss of bees and
14 other beneficial insects, and the threats to native ecosystems and wildlife posed by neonicotinoid
15 insecticides, harm the interests of the Sierra Club and its members.

16 28. Plaintiff PANNA is an Oakland, California-based, nonprofit corporation that
17 serves as an independent regional center of Pesticide Action Network International, a coalition of
18 public interest organizations in more than ninety countries. For over thirty years, PANNA has
19 worked to replace the use of hazardous pesticides with healthier, ecologically-sound pest
20 management. PANNA provides scientific expertise, public education and access to pesticide
21 data and analysis, policy development, and coalition support to more than 100 affiliated
22 organizations in North America. PANNA has more than 70,000 members across the United
23 States.

24 29. PANNA's members live, work, and recreate in areas of the country where
25 pesticides such as clothianidin and thiamethoxam are applied, and in which pesticide drift and
26 transport occurs. They have a strong interest in ensuring that EPA protects public welfare and
27 the environment from neonicotinoid contamination and a long history of advocacy to EPA on
28 this issue.

1 30. Plaintiff CEH is a tax-exempt, nonprofit corporation with offices in Oakland,
2 California; and New York, New York. Founded in 1996, CEH is a nonprofit organization
3 dedicated to protecting the public from environmental and public health hazards, including
4 harmful pesticides. CEH achieves its mission by working with communities, consumers,
5 workers, government, and the private sector to demand and support business and agricultural
6 practices that are safe for public health and the environment.

7 31. As part of its mission, CEH and its staff have long been involved in efforts to
8 combat the negative human health and environmental effects of pesticides and other harmful
9 contaminants in our food system. For example, CEH is a member of Californians for Pesticide
10 Reform, an organization whose mission is to protect public health, improve environmental
11 quality, and expand a sustainable and just agriculture system by seeking to change state and local
12 pesticide policies and practices. CEH's Research Director, Caroline Cox, serves on the
13 California Department of Pesticide Regulation's Pest Management Advisory Committee and is a
14 member of the Board of Beyond Pesticides. When necessary, CEH also engages in public
15 interest litigation to address the food safety concerns raised by the current regulatory framework
16 and the negative impacts of unsafe products. The interests of CEH and its members in reducing
17 the harmful impacts stemming from pesticide use are being, and will be, adversely affected by
18 EPA's ongoing registrations of clothianidin and thiamethoxam products.

19 32. Public Interest Group Plaintiffs and their members are injured by EPA's actions
20 and inactions complained of herein. Public Interest Group Plaintiffs and their members have a
21 vital interest in the survival and health of honey bees and other plant pollinators to ensure a
22 nutritious and safe food supply and healthy natural ecosystems and gardens. Each of the
23 Plaintiffs has a strong interest in the conservation of the vast numbers of native ESA-listed
24 species that are potentially impacted, directly and indirectly, by clothianidin and thiamethoxam.
25 Several of the Plaintiffs and their members have personally visited the ranges of directly
26 impacted ESA-listed invertebrates, including, but not limited to, listed plant pollinators, as well
27 as other indirectly impacted ESA-listed species, including, but not limited to, rangeland birds.
28

1 They enjoy utilizing these species for recreational, aesthetic, and other uses, and intend to
2 continue to visit those habitats and enjoy those species and the ecosystem services they provide.

3 33. EPA's failure to provide Plaintiffs with the FIFRA-mandated notices of
4 applications for the clothianidin and thiamethoxam registration and changed uses in the Federal
5 Register, and its failure to provide public comment periods, denied the Plaintiffs the ability to
6 submit information to EPA that may have convinced the agency not to issue those registrations
7 or change amendments. Defendants' failure to adequately regulate clothianidin and
8 thiamethoxam under FIFRA and the ESA, and failure to provide adequate label warnings on
9 these pesticides, resulting in the ongoing collapse of populations of honey bees and other
10 beneficial insects and the continued harm to threatened and endangered species, further injure
11 Public Interest Group Plaintiffs' organizational interests as well as their members' aesthetic,
12 recreational, and economic interests. The relief sought in this case will provide redress for the
13 ongoing harm to Plaintiffs.

14 ***Defendants***

15 34. Defendant Steven P. Bradbury is the Director of the Office of Pesticide Programs
16 of EPA, and is being sued in his official capacity.

17 35. Defendant Bob Perciasepe is the Acting Administrator and Deputy Administrator
18 of EPA, and is being sued in his official capacity.

19 36. Defendants Bradbury and Perciasepe are collectively referred to as EPA or
20 Defendants.

21 **STATUTORY BACKGROUND**

22 ***Federal Insecticide, Fungicide, and Rodenticide Act***

23 37. Under the FIFRA, EPA licenses the sale, distribution, and use of pesticides
24 through the process of registration. 7 U.S.C. § 136a. The Administrator is required to provide
25 public notice and comment opportunities under 7 U.S.C. § 136a(c)(4):

26 Notice of application.

27 The Administrator shall publish in the Federal Register, promptly after
28 receipt of the statement and other data required pursuant to paragraphs (1)

and (2), a notice of each application for registration of any pesticide if it contains any new active ingredient or if it would entail a changed use pattern. The notice shall provide for a period of 30 days in which any Federal agency or any other interested person may comment.

38. EPA's FIFRA-implementing regulations also impose several procedural requirements, including, but not limited to, requiring publication of two classes of notices in the Federal Register. Under 40 C.F.R. § 152.102:

The Agency will issue in the Federal Register a notice of receipt of each application for registration of a product that contains a new active ingredient or that proposes a new use. After registration of the product, the Agency will issue in the Federal Register a notice of issuance. The notice of issuance will describe the new chemical or new use, summarize the Agency's regulatory conclusions, list missing data and the conditions for their submission, and respond to comments received on the notice of application.

Id. (emphases added).

39. The FIFRA authorizes Defendants to register a pesticide product without any conditions (unconditional registration) if Defendants determine that the product "will perform its intended function without unreasonable adverse effects on the environment," and that "when used in accordance with widespread and commonly recognized practice" the pesticide "will not generally cause unreasonable adverse effects on the environment." 7 U.S.C. § 136a(c)(5)(C)-(D).

40. The FIFRA authorizes Defendants to register a pesticide product with conditions (conditional registration) if Defendants determine that the pesticide or proposed new use is so new that insufficient data exists to support unconditional registration under 7 U.S.C. § 136a(c)(5), provided that the registrants meet Defendants' conditions, and conduct and supply studies to fill the missing data gaps within a set timeframe. 7 U.S.C. § 136a(c)(7)(C). A conditional registration is authorized under three circumstances: 1) EPA may conditionally register a pesticide if "the pesticide and proposed use are identical or substantially similar to any currently registered pesticide and use thereof, or differ only in ways that would not significantly increase the risk of unreasonable adverse effects on the environment, and [] approving the registration . . . would not significantly increase the risk of any unreasonable adverse effect on the environment," 7 U.S.C. § 136a(c)(7)(A); 2) EPA may conditionally amend a pesticide's

1 registration “to permit additional uses of such pesticide notwithstanding that data concerning the
2 pesticide may be insufficient to support an unconditional amendment,” 7 U.S.C. § 136a(c)(7)(B);
3 and 3) EPA may conditionally register a pesticide “containing an active ingredient not contained
4 in any currently registered pesticide for a period reasonably sufficient for the generation and
5 submission of required data” but “only if [EPA] determines that use of the pesticide during such
6 period will not cause any unreasonable adverse effect on the environment, and that use of the
7 pesticide is in the public interest,” 7 U.S.C. § 136a(7)(C) (emphasis added).

8 41. Under the FIFRA, a conditional registration may only last for a period
9 “reasonably sufficient” to generate the outstanding data necessary for unconditional registration.
10 7 U.S.C. § 136a(c)(7)(C).

11 42. EPA has the authority to cancel a pesticide registration whenever “a pesticide or
12 its labeling . . . does not comply with the provisions of [the FIFRA] or, when used in accordance
13 with widespread and commonly recognized practice, generally causes unreasonable adverse
14 effects on the environment.” 7 U.S.C. § 136d(b).

15 43. EPA may immediately suspend a pesticide registration to prevent an “imminent
16 hazard.” 7 U.S.C. § 136d(c). The phrase “imminent hazard,” as defined in the FIFRA, means a
17 situation “when the continued use of a pesticide during the time required for cancellation
18 proceeding would be likely to result in unreasonable adverse effects on the environment or will
19 involve unreasonable hazard to the survival of a species declared endangered” under the ESA.
20 7 U.S.C. § 136(l).

21 44. If a registrant has failed to fulfill any condition imposed on the registration, the
22 Administrator “shall” initiate cancellation proceedings. 7 U.S.C. § 136d(e)(1). While
23 cancellation is pending, EPA may suspend the registration of the pesticide or new use
24 immediately if an “imminent hazard” exists, that is, if “continued use of a pesticide during the
25 time required for cancellation proceeding would be likely to result in unreasonable adverse
26 effects on the environment or will involve unreasonable hazard to the survival of a species
27 declared endangered or threatened by the Secretary [of the Interior] pursuant to the Endangered
28 Species Act of 1973.” 7 U.S.C. §§ 136d(c), 136(l).

1 45. The culmination of the registration process is EPA's approval of a label for the
2 pesticide, including use directions and appropriate warnings on safety and environmental risks.
3 It is a violation of the FIFRA for any person to sell or distribute a "misbranded" pesticide.
4 7 U.S.C. § 136j(a)(1)(E). A pesticide is misbranded if the "labeling accompanying it does not
5 contain directions for use which . . . if complied with . . . are adequate to protect health and the
6 environment." 7 U.S.C. § 136(q)(1)(F).

7 46. The FIFRA registrations for clothianidin and thiamethoxam products amount to
8 licenses that establish the terms and conditions under which the products may be lawfully sold,
9 distributed, or used. EPA retains the ongoing authority to modify the terms and conditions of
10 these licenses as needed; thus, each pesticide registration constitutes an ongoing agency action.
11 *See* 7 U.S.C. §§ 136d(c), 136(l).

12 47. The legal burden of showing that any pesticide and any approved uses thereof
13 meet the FIFRA criteria to be eligible for continued registration rests with the products'
14 proponents. *See* 40 C.F.R. § 154.5. The proponents of clothianidin's and thiamethoxam's
15 numerous uses have not met that burden.

16 *Endangered Species Act*

17 48. The ESA requires EPA, in consultation with U.S. Fish and Wildlife Service
18 (FWS), to ensure that any action authorized by the agency is not likely to jeopardize the
19 continued existence of any threatened or endangered species, or result in the destruction or
20 adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2). For each
21 federal action, EPA must request information from FWS indicating whether any listed or
22 proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50
23 C.F.R. § 402.12. If listed or proposed species may be present, EPA must prepare a "biological
24 assessment" to determine whether the listed species may be affected by the proposed action. 16
25 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12.

26 49. If EPA determines that its proposed action may affect any listed species or critical
27 habitat, the agency must engage in formal consultation with FWS. Effects determinations are
28 based on the direct, indirect, and cumulative effects of the action when added to the

1 environmental baseline and other interrelated and interdependent actions. 50 C.F.R. § 402.02.
2 An agency is required to review its actions “at the earliest possible time” to determine whether
3 the action may affect listed species or critical habitat. 50 C.F.R. § 402.14(a). Because EPA
4 retains ongoing discretionary authority to modify the terms and conditions of its approvals, the
5 agency’s continuing authority over pesticide registrations constitutes ongoing agency action and
6 it has a continuing obligation to follow the requirements of the ESA.

7 50. To complete formal consultation, FWS must provide EPA with a “biological
8 opinion” explaining how the proposed action will affect the listed species or habitat. 16 U.S.C.
9 § 1536(b). If FWS concludes the proposed action will jeopardize the continued existence of a
10 listed species, the biological opinion must outline “reasonable and prudent alternatives.”
11 16 U.S.C. § 1536(b)(3)(A). If the biological opinion concludes the action is not likely to
12 jeopardize the continued existence of a listed species, and will not result in the destruction or
13 adverse modification of critical habitat, FWS must provide an incidental “take” statement
14 specifying the impact of such incidental taking on the listed species and any “reasonable and
15 prudent measures” that FWS considers necessary or appropriate to minimize such impact, and
16 also setting forth the “terms and conditions” that must be complied with by EPA to implement
17 those measures. 16 U.S.C. § 1536(b)(4).

18 51. “Take” is defined broadly to include actions that “harass, harm, pursue, hunt,
19 shoot, wound, [or] kill” a protected species, either through direct action or by degrading its
20 habitat. 16 U.S.C. § 1532(19); 50 C.F.R. § 17.3. In furtherance of Congress’s goal to conserve
21 species, the ESA generally prohibits the “take” of any species listed as endangered, a prohibition
22 FWS has extended by regulation to threatened species. 16 U.S.C. § 1538(a)(1)(B); *see also* 16
23 U.S.C. § 1533(d); 50 C.F.R. § 17.31. However, take that complies with the terms and conditions
24 specified in a biological opinion is not prohibited. 16 U.S.C. § 1536(o)(2).

25 52. During consultation with FWS, EPA is prohibited from making any irreversible or
26 irretrievable commitment of resources with respect to the agency action which may foreclose the
27 formulation or implementation of any reasonable and prudent alternative measures. 16 U.S.C.
28 § 1536(d).

1 53. Section 7 of the ESA also requires EPA, in consultation with and with the
2 assistance of FWS, to utilize its authority in furtherance of the purposes of the ESA by carrying
3 out programs for the conservation of endangered and threatened species. 16 U.S.C. § 1536(a)(1).

4 *Administrative Procedure Act*

5 54. The APA provides for judicial review of final agency actions. “Agency action” is
6 defined to include “the whole or a part of an agency rule, order, license, sanction, relief, or the
7 equivalent or denial thereof, or failure to act.” 5 U.S.C. § 551(13). The APA provides that “[a]
8 person suffering legal wrong because of agency action, or adversely affected or aggrieved by
9 agency action within the meaning of a relevant statute, is entitled to judicial review thereof.” 5
10 U.S.C. § 702.

11 55. Under the APA, a reviewing court shall “hold unlawful and set aside agency
12 action, findings, and conclusions” that it finds to be “arbitrary, capricious, an abuse of discretion,
13 or otherwise not in accordance with the law” or “without observance of procedure required by
14 law.” 5 U.S.C. § 706(2)(A), (D).

15 56. Further, under the APA, a reviewing court has the authority to “compel agency
16 action unlawfully withheld or unreasonably delayed.” 5 U.S.C. § 706(1).

17 **STATEMENT OF FACTS**

18 *Honey Bee Impact Facts*

19 57. Clothianidin and thiamethoxam are systemic insecticides that are taken up by a
20 plant’s vascular system as it grows and are expressed through its tissues, including flowers,
21 pollen, and nectar. They share a common mode of action that damages the central nervous
22 system of honey bees. When bees forage on pollen or nectar from treated crops, or are otherwise
23 exposed to even extremely small levels of these compounds, paralysis and death can result. Over
24 the past decade, the proliferating use of the neonicotinoid class of pesticides has coincided with
25 mass die-offs of honey bee populations in the phenomenon known as Colony Collapse Disorder,
26 documented as early as 2003–2004 in the United States, with first reported case findings in 2006.

27 58. Clothianidin and thiamethoxam affect bee behavior and cognition in ways that
28 compromise the overall health of colonies, often causing them to collapse. Honey bees are social

1 insects that rely heavily on memory, cognition, and communication to coordinate activities
2 essential for their survival. Chronic ingestion of neonicotinoids damages foraging behavior,
3 overall mobility, and the communication by which they coordinate their activities.
4 Neonicotinoid pesticides can also have several other indirect effects on honey bees, such as
5 causing premature shifts in hive roles. They can impair honey bees' medium-term olfactory
6 memory and associative learning abilities, which foraging honey bees rely on, *inter alia*, to find
7 their way back to the hive.

8 59. Neonicotinoid pesticides such as clothianidin and thiamethoxam persist in a toxic
9 state in the environment for several years, increasing the risk of cumulative toxic loading effects,
10 especially after repeat applications at the same location. No label warnings or use directions are
11 capable of mitigating these impacts and those warnings and directions that do exist are almost
12 never enforced. Farmers and other users are known to ignore them in many cases, yet
13 enforcement cases by EPA and its cooperating state agencies are exceedingly rare.

14 60. Due to EPA's actions and inactions alleged herein, clothianidin and
15 thiamethoxam are spread widely throughout hundreds of millions of acres of both agricultural
16 and neighboring lands. The neighboring lands are where these toxic compounds are not intended
17 to be and often are lands not owned by the farmers applying the compounds. These lands
18 adjacent to agricultural fields in many cases are prime remaining bee and native insect habitats.
19 Due to the long persistence of these compounds and the uncontrollable drifting and blowing of
20 contaminated dust and soil, bees and other insects are victims of multiple exposure pathways that
21 EPA failed to assess when the agency approved the pesticides—and still has failed to assess.
22 Key among these exposure pathways are residues in pollen and nectar, dust from treated seeds
23 and soils, planter exhaust, untreated but contaminated non-crop plants adjacent to treated fields,
24 contaminated puddles in fields and adjacent surface water, guttation droplets on both treated and
25 untreated but contaminated plants, and residues from foliar uses.

26 61. EPA's own scientists have regularly described severe impacts of these
27 insecticides in their internal risk assessments. Recent studies, including those by the U.S.
28 Department of Agriculture (USDA)'s lead bee scientists, also confirm that neonicotinoids

1 interact with common bee pathogens and parasites, making them more vulnerable to the deadly
2 effects of both, leading to further colony collapse. Numerous recent peer-reviewed studies and
3 other evidence of both acute and sub-lethal harm to bees from a variety of exposure pathways
4 across diverse agricultural landscapes support the need to suspend the uses of clothianidin and
5 thiamethoxam.

6 62. Other nations, including Austria, Italy, France, Germany, and Slovenia, have
7 recognized the imminent harm of seed treatment uses of clothianidin and thiamethoxam and
8 suspended or restricted those uses, which then generally allowed honey bee colonies to thrive
9 after those suspensions. EPA has failed to take this new science into account in deciding
10 whether an “imminent hazard” exists and with respect to labeling and to impacts on federally-
11 listed threatened and endangered species under the ESA.

12 63. EPA has maintained the active registrations of clothianidin and thiamethoxam
13 despite known risks and data gaps. The European Food Safety Authority has recently issued
14 authoritative reports that confirm that clothianidin and thiamethoxam products present acute
15 risks to honey bee survival, risks that the European Food Safety Authority characterized as
16 having been underestimated and inadequately researched by national pesticide regulators. A
17 high acute risk to honey bees was identified from exposure via dust drift for the authorized uses
18 in cereals and cotton (thiamethoxam), corn and canola (thiamethoxam and clothianidin), cereals
19 (clothianidin), and sunflowers (thiamethoxam—except for uses with the lowest application rate
20 authorised in the European Union). A high acute risk was also identified for exposure via
21 residues in nectar and/or pollen for the authorized uses in canola (clothianidin), and corn
22 (thiamethoxam). Other risks and major data gaps were identified. The same risks and data gaps
23 exist in the United States.

24 64. EPA has suggested non-mandatory best management practices (BMPs) that it
25 might promote to reduce the unreasonable adverse environmental effects of thiamethoxam and
26 clothianidin. However, EPA lacks authority to mandate adherence to all of the needed
27 technological fixes and BMPs. EPA officials have publicly stated they lack comprehensive
28 enforcement power under the FIFRA to prevent farmers from killing bees and other pollinators

1 via the contaminated dust pathway associated with planting treated seeds. Even if they had such
2 authority, the time lag for the hundreds of thousands of users of clothianidin and thiamethoxam
3 products to be able to comply is such that the unreasonable adverse environmental effects would
4 continue for many years unless use of these products is suspended in the interim. EPA's
5 suggested non-mandatory BMPs are inadequate for purpose of compliance with the FIFRA and
6 the ESA.

7 65. As a result, clothianidin- and thiamethoxam-treated seeds will continue to be
8 planted across hundreds of millions of acres in 2013 and beyond. To date, EPA has provided no
9 formal direction or label changes to farmers on how to minimize non-target effects, how and
10 where to clean out crop planters, or what steps to take to avoid effects to nearby honey bees or
11 insect-pollinated plants. In short, the imminent hazard the Defendants have allowed will
12 re-initiate in about April 2013, when corn and other crop planting season begins again.

13 *Non-Honey Bee Impact Facts*

14 66. Besides honey bees, there are thousands of other U.S. native bee and other insect
15 species that EPA has a duty to conserve, including, but not limited to, the rusty patched bumble
16 bee, Franklin's bumble bee, yellow-banded bumble bee, and Western bumble bee, as well as
17 non-bee insects such as butterflies, ladybugs and lacewings, dragonflies, and hoverflies. Several
18 of these species are facing severe declines comparable to, or worse than, those faced by honey
19 bees. Clothianidin and thiamethoxam are documented to be highly toxic to other bee species like
20 the common Eastern bumble bee, alfalfa leafcutter bee, and blue orchard bee, all of which are
21 valuable plant pollinators. There are numerous other beneficial insects and other invertebrates
22 that are severely impacted by use of clothianidin and thiamethoxam. Broad recognition exists,
23 including by EPA, that inadequate data exists to assess the impacts of clothianidin and
24 thiamethoxam use on the behavior, reproduction and survival of these vital pollinators and insect
25 species.

26 67. The agency's continuing authority over conditional pesticide registrations
27 constitutes ongoing action and it has violated its continuing obligation to follow the requirements
28 of the ESA. EPA has never done a thorough effects analysis of the numerous thiamethoxam or

clothianidin uses it has approved for any federally-listed threatened and endangered species under the ESA, and EPA similarly has failed to assess potential adverse modification of designated critical habitat. It also has failed to consult as required with FWS under the ESA. More than fifteen threatened or endangered insects, including, but not limited to, plant pollinators, ranging from beetles to butterflies to grasshoppers and other taxa, are potentially directly affected by the use of clothianidin and thiamethoxam products. These include, but are not limited to (followed by their listing dates; the vast majority were listed prior to the dates of EPA's actions at issue in this Complaint):

American burying beetle (<i>Nicrophorus americanus</i>)	07/13/1989
Behren's fritillary (<i>Speyeria zerene behrensii</i>)	12/05/1997
Callippe silverspot (<i>Speyeria callippe callippe</i>)	12/05/1997
Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)	09/23/1993
Fender's blue (<i>Icaricia icarioides fenderi</i>)	01/25/2000
Hine's emerald dragonfly (<i>Somatochlora hineana</i>)	01/26/1995
Karner blue (<i>Plebejus melissa samuelis</i>)	12/14/1992
Kern primrose sphinx moth (<i>Euproserpinus euterpe</i>)	04/08/1980
Lange's metalmark (<i>Apodemia mormo langei</i>)	06/01/1976
Mitchell's satyr butterfly (<i>Neonympha mitchellii mitchellii</i>)	05/20/1992
Myrtle's silverspot (<i>Speyeria zerene myrtleae</i>)	06/22/1992
Northeastern beach tiger beetle (<i>Cicindela dorsalis dorsalis</i>)	08/07/1990
Ohlone tiger beetle (<i>Cicindela ohlone</i>)	10/03/2001
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	01/16/1997
Salt Creek tiger beetle (<i>Cicindela nevadica lincolniiana</i>)	10/06/2005
San Bruno elfin (<i>Callophrys mossii bayensis</i>)	06/01/1976
Schaus swallowtail (<i>Papilio aristodemus ponceanus</i>)	listed as threatened 4/22/1975; as endangered 8/31/1984
Zayante band-winged grasshopper (<i>Trimerotropis infantilis</i>)	01/24/1997

68. More insect species are regularly listed and numerous "Candidate" species await further action, including native bees.

69. Harmful direct, indirect, and cumulative effects on many other non-insect ESA-listed species, including, but not limited to, birds, crustaceans, mollusks, fish, mammals,

1 reptiles, and amphibians, are also foreseeable due to the known effects of clothianidin and
2 thiamethoxam.⁷ Listed species may be affected by direct consumption of clothianidin- and
3 thiamethoxam-treated seeds and plant parts, as well as by food chain and ecosystem collapses
4 associated with the vast mortality caused by these pesticides to aquatic and terrestrial
5 invertebrates. EPA has not made the required “effects” determinations or consulted with FWS
6 for any listed species or their critical habitats.

7 70. In its initial conditional registration of clothianidin, EPA recognized that
8 compliance with the ESA is necessary:

9 Clothianidin is expected to present acute and/or chronic toxicity risk to
10 endangered/threatened birds and mammals via possible ingestion of treated corn
11 and canola seeds. Endangered/threatened non-target insects may be impacted via
12 residue laden pollen and nectar. The potential use sites cover the entire U.S.
13 because corn is grown in almost all U.S. states.⁸

14 EPA has made the same admissions in its thiamethoxam documentation.⁹

15 71. For at least one neonicotinoid insecticide, FWS scientists are on record stating
16 “EPA is ignoring their duties with respect to consulting with FWS.”¹⁰ This is in fact true for all
17 thiamethoxam and clothianidin product use approvals subject to this Action. According to EPA
18 documents, there are hundreds of federally-listed threatened and endangered species occurrences
19 in states where clothianidin and thiamethoxam are used in which direct or indirect effects are
20 foreseeable, but EPA has disregarded those effects determinations with respect to the ESA § 7
21 consultation requirements.

22 72. In March 2013, the American Bird Conservancy of Washington, D.C., released a
23 highly relevant scientific report, *The Impact of the Nation’s Most Widely Used Insecticides on*

24 ⁸ EPA, Pesticide Fact Sheet: Clothianidin, Conditional Registration 16 (May 30, 2003), *available*
25 *at* [http://www.epa.gov/opp00001/chem_search/reg_actions/registration/fs_PC-044309_30-May-](http://www.epa.gov/opp00001/chem_search/reg_actions/registration/fs_PC-044309_30-May-03.pdf)
26 [03.pdf](http://www.epa.gov/opp00001/chem_search/reg_actions/registration/fs_PC-044309_30-May-03.pdf).

27 ⁹ *See, e.g.*, EPA, Thiamethoxam Summary Document Registration Review: Initial Docket 5
28 (Dec. 2011), *available at* [http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2011-](http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2011-0581-0002)
[0581-0002](http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2011-0581-0002).

¹⁰ E-mail from Ken Dickerson, Environmental Contaminants Biologist, FWS, to Nancy Golden,
FWS, regarding initiating informal consultation on rodenticide new uses (Jan. 3, 2012) (on file
with Plaintiffs).

Birds.¹¹ It was researched and written by a recognized independent avian toxicologist, Pierre Mineau, Ph.D. In the report, Dr. Mineau examines the key EPA risk assessment documents and finds numerous critical errors and failures related to risks to birds in the agency's approvals of clothianidin and thiamethoxam products. The report shows high direct and indirect mortality risks to a broad suite of birds, as well as to aquatic invertebrates and to ecosystems generally. It finds that the observed acute threats to aquatic invertebrates from water contamination by EPA-approved neonicotinoids "may be totally unprecedented in the history of pesticide registration." *Id.* at 57. It also states: "Simply put, EPA has not been heeding the warnings of its own toxicologists." *Id.* at 65. In the report, Dr. Mineau also examines the EPA-approved product labels and finds them inadequate to address the risks to birds. It states: "regulators are clearly mistaken in believing that exposure to [neonicotinoid] treated seed can be minimized by label statements or adherence to good agricultural practices." *Id.* at 27. The report describes EPA's analysis of avian risks as "scientifically unsound," arbitrary, and capricious. It urges, *inter alia*, the agency to suspend use of these products until the risks are resolved and to ban seed treatments altogether.

73. Prominent scientists have repeatedly identified neonicotinoid insecticides as a major factor in Colony Collapse Disorder, and other forms of excessive bee mortality, and have urged that they be suspended due to their acute, chronic, and synergistic effects. Economic losses from the collapse of U.S. bee colonies used in agriculture would measure in the several tens of billions of dollars. The ecological, agricultural, landscaping, and horticultural impacts of lost wild and managed pollinators would be devastating and perhaps irreparable.

Procedural Background Facts

74. Since 2000 and 2003, respectively, EPA has registered approximately more than 100 total thiamethoxam and clothianidin insecticide uses and products under FIFRA. *See*

¹¹ Dr. Pierre Mineau and Cynthia Palmer, Am. Bird Conservancy, *The Impact of the Nation's Most Widely Used Insecticides on Birds* (Mar. 2013), available at http://www.abcbirds.org/abcprograms/policy/toxins/Neonic_FINAL.pdf.

1 Appendices A and B. On information and belief, these are as indicated in Appendix A –
2 Clothianidin (thirty-five products) and B – Thiamethoxam (sixty-eight products), which are
3 incorporated into this Complaint by this reference. Other registrations are believed to exist;
4 however, due to EPA's failure to publish required notices in the Federal Register, there is a lack
5 of accurate and clear public record. On information and belief, for the vast majority of
6 clothianidin and thiamethoxam registrations and changed use approvals, EPA did not, as required
7 under the FIFRA, 7 U.S.C. § 136a(c)(4) and 40 C.F.R. § 152.102, announce a "notice of receipt
8 of application" or a "notice of issuance" in the Federal Register or in any other public order or
9 hearing.

10 75. Additionally, on information and belief, for each of the thiamethoxam and
11 clothianidin insecticide uses and products, EPA failed this requirement under the FIFRA: "within
12 30 days after the Administrator registers a pesticide under this Act the Administrator shall make
13 available to the public the data called for in the registration statement." 7 C.F.R.
14 § 136a(c)(2)(A).

15 76. Together with a coalition of beekeepers and public interest groups, Plaintiffs
16 Beyond Pesticides and PANNA delivered a letter to Defendants dated December 8, 2010,
17 requesting suspension of clothianidin's registration due to inadequate data on impacts to
18 pollinators and excessive agency delay in ensuring compliance with that condition.¹² By letter of
19 February 18, 2011, Defendants refused that suspension request.¹³

20 77. Plaintiffs CFS, Beyond Pesticides, PANNA, Steve Ellis, and Tom Theobald,
21 along with a coalition of beekeepers and honey producers, and public interest groups, submitted
22 the Clothianidin Legal Petition to EPA to suspend the registration of clothianidin on March 20,
23 2012 (Docket No. EPA-HQ-OPP-2012-0334), rooted in the nine-year unreasonable delay in
24 ensuring full compliance with the "conditional registration" conditions for clothianidin.¹⁴ They
25

26 ¹² See Letter from Beyond Pesticide *et al.*, *supra* note 1.

27 ¹³ See Letter from Steven Bradbury, *supra* note 2.

28 ¹⁴ See Clothianidin Legal Petition, *supra* note 3.

1 followed that Petition with two supplemental filings, dated May 3, 2012, and June 18, 2012,
2 respectively.¹⁵ These consisted of information that came to light after the Petition was filed,
3 including critical new data on how certain uses of clothianidin constitute an “imminent hazard”
4 to honey bees and other beneficial insects that compelled a decision to promptly suspend
5 clothianidin’s registration.

6 78. By letter dated July 17, 2012, Defendants denied the portion of the Petition that
7 alleged an “imminent hazard” existed.¹⁶ That letter indicated EPA did not consider the May 3,
8 2012 and June 18, 2012 supplemental filings in making that decision. To date, the agency has
9 yet to issue a decision based on the supplemental evidence showing imminent hazard or on any
10 of the other new science and extensive mass honey bee kill data that emerged after the Petition
11 was filed.

12 79. Defendant Bradbury’s letter of July 17, 2012, stated his denial of the imminent
13 hazard claim in the Petition was EPA’s “final action pursuant to section 16 of FIFRA” with
14 respect to that claim. There was no Federal Register notice, no public hearing, and no
15 opportunity for notice and comment prior to this final action. The EPA has yet to resolve any of
16 the remaining claims in the Petition or to reconsider its denial of an “imminent hazard” based on
17 the full administrative record before it.

18 80. The evidence Plaintiffs provided in the Clothianidin Legal Petition and in their
19 supplemental filings described an “unreasonable adverse effect on the environment” in terms of
20 a vast number of bee kills impacting likely many hundreds of U.S. (and Canadian) colonies and
21 tens of millions of valuable honey bees. These acute bee kills that were ongoing during EPA’s
22 decision-making period on the Petition are in addition to the chronic impacts of clothianidin that
23 fall under the rubric of Colony Collapse Disorder. EPA’s July 17, 2012 letter admitted the
24 agency did not consider the ongoing bee kills associated with spring corn planting or any other
25

26 ¹⁵ On file with Plaintiff CFS; see Docket No. EPA-HQ-OPP-2012-0334, available at
27 <http://www.regulations.gov/#!docketDetail;D=EPA-HQ-OPP-2012-0334>.

28 ¹⁶ See Letter from Steven Bradbury, *supra* note 4.

1 information received after May 3, 2012, including the numerous clothianidin-related bee kills
2 during the ten weeks between May 3, 2012 and July 17, 2012.

3 81. Additionally, EPA's response letter and related documentation showed the agency
4 did not conduct any analysis of clothianidin's effects on endangered or threatened species and
5 failed to consult with FWS regarding its final agency action denying an imminent hazard.

6 82. Virtually all the information Plaintiffs have filed with respect to the various risks
7 of clothianidin also apply to its precursor compound, the very similar insecticide thiamethoxam.
8 The former is a transformation product of the latter. In honey bees, thiamethoxam is
9 metabolized into clothianidin. In short, the two are closely related with comparable applications,
10 toxicity, and effects.

11 83. On October 16, 2012, Plaintiffs CFS, Beyond Pesticides, and Steve Ellis delivered
12 a letter to Defendants on thiamethoxam, setting forth how that compound raises risks that are
13 essentially equivalent to the risks of clothianidin and seeking a suspension of its registration as
14 well.¹⁷ That letter cited to new evidence about the dangers of thiamethoxam, including direct
15 bee kills suffered by Plaintiff Steve Ellis that EPA itself attributed to thiamethoxam and/or
16 clothianidin in an official Incident Report. While EPA acknowledged receipt of the letter, by a
17 response letter to CFS dated February 27, 2013, EPA has refused that suspension request also.¹⁸

18 84. On September 6, 2012, Plaintiffs CFS, Beyond Pesticides, the Sierra Club, Steve
19 Ellis, and Tom Theobald filed a "Sixty-Day Notice of Intent to Sue Pursuant to the Endangered
20 Species Act regarding Registration and Use Approvals of Clothianidin and Thiamethoxam,
21 Neonicotinoid Insecticides," with Defendant Perciasepe's predecessor (Lisa Jackson) and Ken
22 Salazar, the former Secretary of the Interior, U.S. Department of the Interior.¹⁹ More than sixty
23 days have passed since the Sixty-Day Notice Letter, which sought suspension of the registrations
24 involved, and neither EPA nor the Department of the Interior has responded or resolved the
25

26 ¹⁷ See Letter from Plaintiffs, *supra* note 5.

27 ¹⁸ See Letter from EPA, *supra* note 6.

28 ¹⁹ See Sixty-Day Notice Letter, *supra* note 7.

ongoing ESA violation concerns raised in the Sixty-Day Notice Letter.

EPA Registration Process Facts

85. Ten years ago, in February 2003, EPA issued a Risk Assessment for clothianidin seed treatment for corn and canola.²⁰ EPA scientists raised serious concerns about the compound and called for a field test evaluating its environmental hazards prior to registration, specifically citing harm to pollinators:

The possibility of toxic exposure to nontarget pollinators through the translocation of clothianidin residues that result from seed treatment (corn and canola) has prompted EFED [the EPA Environmental Fate and Effects Division] to require field testing that can evaluate the possible chronic exposure to honey bee larvae and queen. In order to fully evaluate the possibility of this toxic effect, a complete worker bee life cycle study must be conducted, as well as an evaluation of exposure and effects to the queen.²¹

86. Less than two months later, in its Addendum to the Risk Assessment in April 2003, EPA reversed this position, recommending conditional registration while the registrant arranged for the required chronic exposure study. In contrast to its prior memorandum, EPA decided it would allow the nationwide sale and use of clothianidin while the registrant arranged for the study necessary to determine whether its decision would be a grave mistake. EPA provided no reason for its reversal; however, the second memorandum confirmed that EPA determined a study evaluating the long term toxicity to pollinators was necessary as a condition for registration. To date, for clothianidin, the requirement of a complete and adequate life cycle study, and evaluation of exposure and effects to the queen bee, remains unmet. This also applies in the case of thiamethoxam, as EPA's pollinator field test conditions for it incorporated and mirrored the conditions imposed for clothianidin.

87. On June 20, 2012, without a hearing, EPA issued a conditional registration to Syngenta Crop Protection for CruiserMaxx Vibrance Cereals, produced from thiamethoxam.

²⁰ Memorandum: Risk Assessment for the Seed Treatment of Clothianidin 600FS on Corn and Canola, PC Code 044309, EPA Environmental Fate and Effects Division 2 (Feb. 20, 2003), available at http://www.epa.gov/pesticides/chem_search/cleared_reviews/csr_PC-044309_20-Feb-03_a.pdf.

²¹ *Id.* at 2.

1 The approval document states:

2 Field Test for Pollinators (test guideline 850[.]3040)[:] An acceptable study must
3 be submitted or cited no later than the time this study is required to be submitted
4 or cited for current thiamethoxam registrations.²²

5 88. This is a vague condition in violation of the FIFRA's conditional registration
6 requirements because it neither sets nor refers to any limited time period for submitting the
7 pollinator field test study originally required nine years prior. It refers to an alleged "time this
8 study is required to be submitted or cited for current thiamethoxam registrations" when there is
9 no defined period to satisfy the pollinator study condition for the other thiamethoxam
10 registrations.²³ EPA's language violates the FIFRA requirement that periods for compliance
11 with conditions must be "limited" and is vague, unenforceable, and arbitrary and capricious. On
12 information and belief, numerous other thiamethoxam and clothianidin use approvals have the
13 same defects.

14 89. In the case of clothianidin's approval for use on corn and canola, since 2003, at
15 least the following additional conditions based on data gaps, beyond the field test for pollinators,
16 have remained unsatisfied, according to the most recent EPA records available to Plaintiffs: a)
17 Whole Sediment Acute Toxicity Invertebrates, Freshwater; b) Whole Sediment Acute Toxicity
18 Invertebrates, Estuarine and Marine; c) Aerobic Aquatic Metabolism; d) Seed Leaching Study;
19 and e) Small-Scale Prospective Groundwater Monitoring Study. Numerous other conditions and
20 data gaps also remain unsatisfied. The records are less clear for thiamethoxam, but the same
21 defects appear to exist as for clothianidin. Some of these conditions were to have been met
22 within three years after being first imposed in 2003 for clothianidin, and two years after being
23 first imposed in 2000 for thiamethoxam. Those clothianidin conditions thus are still not met—up
24 to seven years after their deadline, and the thiamethoxam conditions are still not met—up to
25 eleven years after their deadline.

26 ²² EPA, Notice of Pesticide Registration, June 20, 2012, *available at*
27 http://www.epa.gov/pesticides/chem_search/ppls/000100-01383-20120620.pdf

28 ²³ *Id.*

1 90. Ten years exceeds the amount of time reasonably sufficient to generate the data
2 needed to satisfy the conditions imposed on the variety of clothianidin and thiamethoxam
3 products in Appendices A and B, and for EPA to decide the registrations must be suspended until
4 the conditions are satisfied. *See* 7 U.S.C. § 136a(c)(7)(A). Delays of seven to eleven years in
5 meeting EPA-imposed deadlines are unreasonable and violate FIFRA's conditional registration
6 requirements.

7 91. EPA's Registration Review process for thiamethoxam recognizes that, twelve
8 years after it first approved uses of this compound, the agency still lacks vital information about
9 its environmental effects. The EPA Registration Review "Thiamethoxam Final Work Plan"
10 admits the environmental fate database is "only partially fulfilled and several ecological effects
11 data gaps were also identified."²⁴ It then lists at least twenty-five tests, studies, and other data
12 requirements that must be fulfilled, including, but not limited to, such basic information as:

13 850.2100 – Avian oral toxicity with a passerine
14 850.3030 – Honey bee toxicity of residues on foliage study
15 850.3040 – Field test for pollinators
16 850.1735 – Whole sediment acute toxicity invertebrates, freshwater
17 Special Study – Larval toxicity study (honey bee)
18 Special Study – Residues, pollen and nectar
19 Special Study – Laboratory (chronic) pollinator feeding study (honey bee)²⁵

20 92. The Registration Review documents for clothianidin show substantially identical
21 information gaps. The minimum level of knowledge required under the conditional registration
22 provisions of the FIFRA to protect honey bees, other beneficial insects, and ecosystems
23 generally, from unreasonable adverse effects caused by these two insecticides, does not exist.

24 93. EPA's Registration Review process aims for the year 2018, per the agency's
25 current schedule, before making a decision on the appropriateness of thiamethoxam's and
26 clothianidin's continuing registrations. Several Plaintiffs have formally commented on the
27

28

²⁴ EPA, Thiamethoxam Final Work Plan for Registration Review, June 2012, *available at*
<http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OPP-2011-0581-0024>.

²⁵ *Id.*

1 dockets for these reviews, stating the schedule is unreasonably slow and inadequate in light of
2 known risks, and urging EPA to commit to completing the reviews no later than 2013, but EPA
3 has refused. EPA has provided no indication that it will fully decide on the pending Clothianidin
4 Legal Petition to suspend clothianidin's registration prior to 2018.

5 94. Instead, EPA has continued to allow the sale and use of multiple clothianidin and
6 thiamethoxam products even though the registrants failed to satisfy essential registration
7 conditions imposed as early as 2003 that are necessary to support the required "no unreasonable
8 adverse effects on the environment" determination. These conditions are not limited to
9 pollinator field tests; however, the failure to obtain an adequate field test of the impacts of
10 clothianidin or thiamethoxam likely is the most serious source of EPA's injury to Plaintiffs.

11 95. Available EPA records as of November 2012, indicated approximately eleven
12 "pending" outdoor use approvals for clothianidin and thiamethoxam. On information and belief,
13 these include the following registration numbers and names, but others may exist:

14 Clothianidin

15 #73049-UIE – VBC3

16 #73049-UOR – Clothianidin 7.5 MC

17 #08NC01 – [unnamed]

18 Thiamethoxam

19 #100-RUER – A16901B CP

20 #100-RUEE – Mainspring Insecticide

21 #100-RUEU – A16901B Turf

22 #100-RUUU – CruiserMAXX Potato Extreme

23 #100-RULT – Avicta Complete Beans 500

24 #100-RULI – Endigo ZCX

25 #100-RULO – SYT0113

26 #100-RUAN – SYT0511

27 96. The agency is likely to approve all of these proposed future uses under its
28 conditional registration review process. 7 U.S.C. § 136a(c)(7). They present the same general
risks to Plaintiffs and the environment and the same FIFRA and ESA violations as the already-
approved uses.

29 //

30 //

31 //

1 **FIRST CLAIM**

2 ***EPA's Denial of Imminent Hazard Violated the APA***

3 97. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 96, as
4 though fully alleged herein.

5 98. EPA's final agency action, in denying an "imminent hazard" existed in response
6 to Plaintiff s' Clothianidin Legal Petition, failed to consider any of Plaintiffs' supplemental
7 filings, the bee kills associated with spring corn planting, or any other information it received
8 after May 3, 2012. Ignoring this information available to the agency, including the hundreds of
9 ongoing clothianidin-related bee kills during the ten week period between May 3 and July 17,
10 2012, when EPA issued its decision, was arbitrary and capricious. *See* 5 U.S.C. § 706(2).

11 99. The agency did not fully consider the likelihood of an imminent hazard recurring
12 during the time required for a cancellation or change in classification proceeding, under 7 U.S.C.
13 § 136d(c)(1). The time for such a proceeding is likely up to two years. It is foreseeable that
14 hundreds of additional bee kills will be suffered by Plaintiffs and others in the 2013 and 2014
15 spring planting seasons because of EPA's failure to respond based on the full 2012 spring bee
16 kill information. EPA's arbitrary and capricious actions violated the APA, and its failure to
17 reconsider its imminent hazard determination to date, approximately one year after the Petition
18 was filed, in view of the risks presented, constitutes unreasonable delay under the APA. *See* 5
19 U.S.C. § 706(1).

20 100. EPA's denial of "imminent hazard" has damaged Plaintiffs. EPA has allowed
21 clothianidin products that are harmful to Plaintiffs to be used that EPA should have suspended;
22 in particular, EPA has allowed the continued use of clothianidin seed treatment products that
23 foreseeably will damage the survival of the Beekeeper and Honey Producers' bees during 2013
24 and 2014.

25 **SECOND CLAIM**

26 ***EPA's Denial of Imminent Hazard Violated the ESA and the APA***

27 101. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 100, as
28 though fully alleged herein.

102. EPA was arbitrary and capricious in its determination that no imminent hazard existed to endangered or threatened species, in violation of the ESA and the APA. The FIFRA's definition of imminent hazard includes whether the pesticide "involves unreasonable hazard to the survival of a species declared endangered or threatened by the Secretary [of the Interior] pursuant to the [ESA]." 7 U.S.C. § 136(l). EPA failed to prepare the required effects analysis or to consult with FWS regarding impacts on endangered or threatened species in its final agency action denying an imminent hazard.

103. The agency's continuing authority over conditional and unconditional clothianidin product registrations constitutes ongoing action, and it has violated its continuing obligation to consider effects on endangered species in considering whether an imminent hazard exists. New scientific information, including the supplemental bee kill data and other scientific information submitted by Petitioner Plaintiffs that EPA failed to consider, shows effects of clothianidin on invertebrates and ecosystems and compels an ESA effects determination and consultation with FWS. EPA's failure to consider effects on endangered species or consult FWS was arbitrary and capricious.

104. EPA's actions and inactions violated § 7(a) of the ESA and were arbitrary and capricious actions under the APA. 5 U.S.C. § 706(2). EPA allowed clothianidin products that are harmful to endangered and threatened species to continue to be used, which EPA should have suspended, and damaged Plaintiffs' interest in avoiding jeopardy to the survival of ESA-listed species and preventing adverse modification of their designated critical habitats.

THIRD CLAIM

EPA's Failure to Publish Notices of Pesticide Applications Violated the FIFRA and the APA

105. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 104, as though fully alleged herein.

106. For the vast majority of clothianidin and thiamethoxam registrations and changed use approvals, EPA did not, as required, announce a “notice of receipt of application” or a “notice of issuance” in the Federal Register or in any other public order or hearing.

107. As indicated in Appendices A and B, on information and belief, only four clothianidin registrations and five thiamethoxam registrations had any Federal Register notice of application and none had a notice of issuance. Thus, the vast majority of approvals lacked the public notice and opportunity for public comment required under 7 U.S.C. § 136a(c)(4) and 40 C.F.R. § 152.102. On information and belief, for each of the thiamethoxam and clothianidin insecticide uses and products, EPA also failed to meet this requirement: “within 30 days after the Administrator registers a pesticide under this Act the Administrator shall make available to the public the data called for in the registration statement.” 7 U.S.C. § 136a(c)(2)(A).

108. EPA's failure to provide Plaintiffs with the FIFRA-mandated notices of application and issuance for the clothianidin and thiamethoxam registrations and changed uses in the Federal Register, its denial of public comment opportunities, and its failure to make its registration data available to the public within thirty days, denied Plaintiffs and the public the ability to submit information to EPA that may have convinced the agency not to issue those approvals in the first instance or to cancel them after they were issued. This has allowed the uses of products that cause unreasonable adverse effects and are harmful to Plaintiffs.

109. EPA's failure to publish the Federal Register notices as required under 7 U.S.C. § 136a(c)(4) and 40 C.F.R. § 152.102, or to provide data required under 7 C.F.R. § 136a(2)(A), establishes that these pesticide products were approved "without observance of procedure required by law," in violation of the APA. 5 U.S.C. § 706(2)(D).

FOURTH CLAIM

EPA Violated the FIFRA Conditional Registration Requirements and the APA for Conditionally-Registered Products

110. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 109, as though fully alleged herein.

111. On information and belief, of the more than one hundred registered uses of clothianidin and thiamethoxam, identified in Appendices A and B, approximately seventy-seven approvals are still registered as “conditional” (approximately fifty-four thiamethoxam products and twenty-three clothianidin products). A reasonable time for the conditions on these product

1 registrations to be met, including but not limited to the adequate pollinator field study condition,
2 has long passed. EPA has been arbitrary and capricious and violated the FIFRA's conditional
3 registration provisions, which require compliance with conditions imposed within a limited,
4 reasonable period. The FIFRA language is mandatory, providing EPA "shall issue a notice of
5 intent to cancel a [conditional] registration . . . if . . . at the end of the period provided for
6 satisfaction of any condition imposed, that condition has not been met." 7 U.S.C. § 136d(e)(1)
7 (emphasis added). EPA's own regulations are clear that the time for compliance is limited. *See*
8 40 C.F.R. § 152.114-115. The EPA-imposed deadlines for meeting the conditions of three years
9 for clothianidin's initial conditions and two years for thiamethoxam's initial conditions, on
10 information and belief, have been violated. On information and belief, EPA has unreasonably
11 delayed for up to eleven years in some cases and failed to issue any such notice for these
12 approximately seventy-seven conditional registrations. EPA has allowed impermissibly vague
13 conditions for conditional registrations that neither state nor refer to a limited time period for
14 achievement. In some cases EPA has, without a hearing, placed the conditions, such as the
15 pollinator field test study, "in reserve," with no time period for achieving them, which violates
16 the conditional registration requirements. Repeated formal requests from the Plaintiffs that the
17 Defendants ensure compliance with the conditions has been unlawfully withheld and
18 unreasonably delayed, in violation of the FIFRA, 7 U.S.C. § 136a(c)(7), and the APA, 5 U.S.C. §
19 706(1).

20 112. EPA's actions and inactions have damaged Plaintiffs. EPA's failure to timely
21 ensure compliance with the conditions it imposed has allowed clothianidin and thiamethoxam
22 products that cause unreasonable adverse effects and are harmful to Plaintiffs to continue to be
23 used, products that EPA should have suspended.

24 **FIFTH CLAIM**

25 ***EPA Violated the FIFRA Requirements and the APA for Unconditionally-Registered Products***

26 113. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 112, as
27 though fully alleged herein.
28

1 114. EPA has unconditionally registered numerous clothianidin and thiamethoxam
2 products despite missing data gaps on the two pesticides. EPA's classification of these pesticide
3 products as unconditional, despite outstanding data gaps and conditions, violates the FIFRA's
4 provisions for unconditional registration. *Compare* 7 U.S.C. § 136a(c)(5) *with* 7 U.S.C.
5 § 136a(c)(7).

6 115. For example, on April 22, 2010, without a hearing, EPA notified Valent U.S.A.
7 Corporation that its Clothianidin Technical product, which is the foundation for clothianidin
8 formulations and was previously conditionally registered, was reclassified to unconditional. On
9 information and belief, numerous other clothianidin and thiamethoxam product uses were
10 similarly reclassified. For Clothianidin Technical and all other products whose registrations are
11 no longer conditional, the removal or lifting of the conditions was arbitrary and capricious and in
12 violation of the FIFRA's conditional registration provisions because the conditions were not
13 fully met before they were removed.

14 116. On information and belief, the twenty-one products classified as unconditional
15 despite the failure of the registrations to meet supply data gaps and meet missing conditions on
16 clothianidin and thiamethoxam products include at least the following registration numbers and
17 names:

18 Clothianidin (14)

19 # 264-984 – Titan FL
20 # 264-1121 – Prosper Evergol
21 # 264-1125 – Ernesto Quantum
22 # 59639-153 – V-10170 16 WSG insecticide
23 # 59639-156 – Arena 0.5 G
24 # 59639-173 – V-10170 0.25 G insecticide
25 # 59639-176 – Inovate seed protectant
26 # 59639-183 – Nipsit suite cereals of seed protectant
27 # 59639-184 – Nipsit suite canola seed protectant
28 # 59639-187 – Inovate neutral seed protectant
72155-96 – Insecticide TD Granule
73049-467 – Darlex insecticide
FL 11001 – Arena 50 WDG Insecticide
ID 060015 – Poncho 600

Thiamethoxam (7)

100-1184 – Cruiser XL insecticide and fungicide prepack

100-1246 – Thiamethoxam 240 SC manufacturing product
100-1365 – Cruiser PD insecticide
100-1369 – Cruisemaxx rice
100-1405 – Avicta complete corn
100-1415 – Caravan G
34704-939 – Dyna-shield thiamethoxam fungicide

None of these products otherwise meet the criteria for unconditional registration.

117. EPA's decision to classify these products as unconditional registrations while maintaining the conditional registrations and outstanding data requirements on numerous other thiamethoxam and clothianidin products is inconsistent, arbitrary, capricious, and is in violation of the FIFRA's requirements for conditional registrations and the APA. EPA's actions and registration decisions alleged herein contradicted the earlier requests by Plaintiffs that the condition classifications be maintained and full compliance with the pollinator field test condition, in particular, be compelled. Further, EPA's decision to issue unconditional registrations despite a preponderance of evidence that these products, when used in accordance with widespread and commonly recognized practice, cause unreasonable adverse effects on the environment violated the FIFRA and the APA.

118. EPA's actions and inactions have damaged Plaintiffs. EPA's failure to fully enforce the conditions it imposed has allowed clothianidin and thiamethoxam products that cause unreasonable adverse effects and are harmful to Plaintiffs to continue to be used, products that EPA should have suspended.

SIXTH CLAIM

EPA Violated the FIFRA Suspension Requirements and the APA

119. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 118, as though fully alleged herein.

120. When used in accordance with widespread and commonly recognized practice, thiamethoxam and clothianidin cause unreasonable adverse effects on the environment.

121. Plaintiffs have repeatedly formally requested EPA to suspend the registrations for clothianidin and thiamethoxam products, listed in Appendices A and B, which the agency has refused to do. EPA's failure to suspend the registrations of these products in view of their

1 unreasonable adverse effects violates the FIFRA, 7 U.S.C. § 136d(b), and the APA, 5 U.S.C. §
2 706(1)-(2).

3 122. EPA's actions and inactions have damaged Plaintiffs. EPA's failure to suspend
4 clothianidin and thiamethoxam registrations has allowed these products, which cause
5 unreasonable adverse effects and are harmful to Plaintiffs, to continue to be used without
6 restrictions across the nation.

7 SEVENTH CLAIM

8 *EPA Violated the FIFRA's Labeling Requirements*

9 123. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 122, as
10 though fully alleged herein.

11 124. Clothianidin and thiamethoxam product labels have warnings about bee hazards
12 generally; however, they are inadequate and inconsistent across various registered products. The
13 label warnings, even if followed, violate labeling requirements as they do not advise the farmer,
14 applicator, or other user how to avoid the harms that the labels acknowledge and are not
15 "adequate to protect health and the environment," in violation of the FIFRA. 7 U.S.C. §
16 136(q)(1)(F).

17 125. One such harm is contaminated dust from planting of treated seeds, a source of
18 repeated major beekills for which EPA lacks authority to effectively enforce label warnings in
19 ways that actually can prevent the kills from reoccurring. EPA has admitted current labeling is
20 inadequate. It is arbitrary and capricious for EPA to continue to rely on inconsistent product
21 labels that are inadequate to fully warn of clothianidin's and thiamethoxam's risks and that the
22 agency lacks the ability to enforce.

23 126. EPA's actions and inactions have damaged Plaintiffs. EPA's failure to comply
24 with the FIFRA's labeling requirements has allowed uses of clothianidin and thiamethoxam
25 products according to their labels in ways that that are harmful to Plaintiffs. Such harms would
26 be avoided if the products included consistent, adequate warnings and directions.

27 //

28 //

EIGHTH CLAIM

EPA Violated the ESA

127. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 126, as though fully alleged herein.

128. Prior to registering clothianidin and thiamethoxam conditionally or changing or approving unconditional registrations of the two pesticides, and before issuing the approximately one hundred use approvals for them over a thirteen-year period, EPA violated the Section 7 of the ESA by failing to: a) ensure, in consultation with FWS, that the uses of clothianidin and thiamethoxam are not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of the critical habitat of such species; b) request from FWS information on whether any threatened or endangered species, or designated critical habitat, may be present within or near the areas of the proposed uses; c) prepare, at the earliest possible time, a biological assessment to determine whether any threatened and endangered species may be affected by the proposed uses or the agency's changes from the conditional classification for those uses; d) engage in consultation with FWS regarding the potential adverse effects of clothianidin and thiamethoxam on threatened and endangered species and critical habitat; and e) ensure that the agency, registrants and users of clothianidin and thiamethoxam products would not make any irreversible or irretrievable commitment of resources with respect to the sale and use of these compounds prior to EPA initiating and completing consultation with FWS. EPA's Section 7 failures occurred despite clear evidence in the agency's own risk assessment documents that EPA's actions would adversely affect particular listed species and posed a risk to broad suites of listed species. These actions and inactions constitute a violation of the ESA within the meaning of 16 U.S.C. § 1540(g).

129. Scientific information on the impacts of clothianidin and thiamethoxam on invertebrates, birds, and ecosystems compels ESA § 7 effects determinations and consultation with FWS. Such information includes, but is by no means limited to, the March 2013 report by the American Bird Conservancy, which shows high direct and indirect mortality risks to a broad suite of birds from clothianidin and thiamethoxam products. EPA's continuing authority over

1 the conditional and unconditional registrations of these insecticidal products constitutes ongoing
2 action and it has violated its continuing obligation to follow the requirements of the ESA.

3 130. EPA's ongoing failure to comply with the ESA has allowed the clothianidin and
4 thiamethoxam products to directly and indirectly harm and otherwise "take" federally-listed
5 species, including, but not limited to, plant pollinators and birds, and has also adversely impacted
6 critical habitats, damaging Plaintiffs' ability to enjoy and utilize those species and habitats and
7 Plaintiffs' interests in their existence and well-being.

8 **PRAYER FOR RELIEF**

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

10 131. Directing EPA to fully consider the information Plaintiffs submitted and the
11 effects on ESA-listed species on the question of "imminent hazard" of clothianidin use. The
12 Court should order EPA to reconsider its final action of July 17, 2012, when Defendants denied
13 an imminent hazard pursuant to the Plaintiffs' Petition to suspend clothianidin without
14 considering the full information filed by Plaintiffs and without consulting with FWS under the
15 ESA on whether a hazard was posed to threatened and endangered species and their critical
16 habitats. The Court should direct EPA to consider all of the information filed with it related to
17 imminent hazard, to consult with FWS under § 7 of the ESA, and to issue a new decision on the
18 question of imminent hazard.

19 132. Declare that all of clothianidin's and thiamethoxam's registration and changed use
20 approvals, for which a "notice of receipt of application" and/or a "notice of issuance" were not
21 published in the Federal Register, are in violation of the FIFRA and its implementing
22 regulations, and vacate them. The Court should issue a declaratory judgment that those
23 approvals lacking public notices and an opportunity for public comments violated 7 U.S.C. §
24 136a(c)(4) and 40 C.F.R. § 152.102, and should be vacated until and unless EPA provides such
25 notices and opportunity.

26 133. Declare that clothianidin's and thiamethoxam's conditional and unconditional use
27 approvals violated the FIFRA and vacate them. The Court should issue a declaratory judgment
28 that compliance with the conditions EPA placed on the pesticide registrations at issue has been

1 unlawfully withheld and unreasonably delayed under the FIFRA and the APA, and should vacate
2 them. Further, the Court should issue a declaratory judgment that EPA's removal of conditions
3 and allowance of unconditional registrations for multiple thiamethoxam and clothianidin
4 products violated the FIFRA's conditional use provisions, was arbitrary and capricious, and
5 caused unreasonable adverse effects to the environment. The Court should vacate these unlawful
6 registrations.

7 134. Order EPA to immediately suspend the registration of clothianidin and
8 thiamethoxam. The Court should direct EPA to suspend all approved outdoor uses of
9 clothianidin and thiamethoxam, and issue a stop sale, use or removal order for all such approved
10 outdoor products, pending compliance with the many pending conditional registration
11 requirements to provide outstanding safety data including, but not limited to, the preparation,
12 publication, and agency review of a field study sufficient to support a finding that these
13 compounds do not pose unreasonable adverse effects to honey bees and other insect pollinators.

14 135. Direct EPA to cure clothianidin's and thiamethoxam's inadequate labels. The
15 Court should declare that clothianidin and thiamethoxam products are misbranded with labels
16 and use directions that are inadequate to prevent unreasonable adverse effects to the
17 environment, to beekeepers and honey producers, and to ESA-listed species. The Court should
18 order EPA to develop new product labels and directions fully adequate to advise users on how to
19 prevent these adverse effects.

20 136. Direct EPA to comply with the ESA. The Court should order EPA to comply
21 with the ESA by making the required "effects" determinations, and initiating and completing
22 consultation with FWS concerning clothianidin and thiamethoxam products' impacts on native
23 endangered and threatened species and their critical habitats. The Court should order EPA to
24 ensure that uses of these insecticides do not "take" threatened and endangered species or affect
25 their critical habitats without appropriate mitigation and should enjoin any further use of the
26 insecticides prior to completion of the ordered consultation.

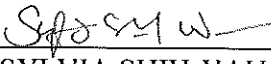
27 137. Enjoin proposed new clothianidin and thiamethoxam product uses. The Court
28 should enjoin EPA from approving any pending use approvals for clothianidin or thiamethoxam,

1 or any other future proposed uses of them, until the agency complies with all of the Requests for
2 Relief herein for the currently registered uses to avoid unreasonable adverse effects to Plaintiffs
3 and on the environment.

4 138. Award Plaintiffs the costs of this litigation, including reasonable attorneys' fees
5 and expert witness fees; and

6 139. Grant such other relief as the Court deems just and proper.

7
8 Respectfully submitted this 21st day of March, 2013.

9
10 
11 SYLVIA SHIH-YAU WU (State Bar No. 273549)
12 GEORGE A. KIMBRELL (*Pro Hac Vice application pending*)
13 PETER T. JENKINS (*Pro Hac Vice application pending*)
14 PAIGE M. TOMASELLI (State Bar No. 237737)
15 Center for Food Safety
16 303 Sacramento Street, 2nd Floor
17 San Francisco, CA 94111
18 T: (415) 826-2770 / F: (415) 826-0507
19 Emails: gkimbrell@centerforfoodsafety.org
20 pjenkins@centerforfoodsafety.org
21 ptomaselli@centerforfoodsafety.org
22 swu@centerforfoodsafety.org

23
24
25
26
27
28
Counsel for Plaintiffs

Appendix A

Arysta LifeScience North America

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
Aloft GC SC Insecticide	66330-365	10/18/2007 Conditional	None	24.70	n/a	turf and landscape ornamentals, trees and non-bearing fruit trees
Aloft LC SC Insecticide	66330-366	10/18/2007 Conditional	None	24.70	n/a	lawns, landscape ornamentals, trees and non-bearing fruit trees (not for use on sod farms or golf courses)
Aloft GC G Insecticide	66330-367	10/18/2007 Conditional	None	0.25	n/a	turf and landscape ornamentals
Aloft LC G Insecticide	66330-368	10/18/2007 Conditional	None	0.25	n/a	lawns, landscape ornamentals (not for use on sod farms or golf courses)
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1						

Bayer Advanced

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
Insecticide TD Concentrate	72155-82	01/28/2008 Conditional	None	0.37	n/a	outdoor ornamental trees, shrubs, and containerized plants (only for non-bearing fruit and nut trees)
Flower, Rose, and Shrub Care II	72155-94	08/24/2009 Conditional	None	0.05	Bayer Advanced All-in-1 Rose & Flower Care Ready-to-Use Granules	roses, flowers, iris, hibiscus, azaleas, camellias, rhododendrons, other shrubs
Flower, Rose, and Shrub Care III	72155-95	07/30/2009 Conditional	None	0.10	Bayer Advanced 2-in-1 Systemic Rose & Flower Care Ready-to-Use Granules III	roses, flowers, iris, hibiscus, azaleas, camellias, rhododendrons, other shrubs
Insecticide TD Granule	72155-96	12/28/2009 Unconditional	None	0.275	Bayer Advanced 12 Month Tree & Shrub Protect and Feed Granules II	outdoor ornamental trees, shrubs, and containerized plants (do not apply to plants grown for food)
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/?p=PPLS:1						

Bayer CropScience

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
Poncho 600	264-789	05/30/2003 Conditional; 04/22/2010 Unconditional	None	48.00	n/a	seed treatment for canola, rapeseed, corn, sorghum
AE 1283742	264-846	05/30/2007 Conditional	None	14.10	n/a	seed treatment for cotton
Titan FL	264-984	07/01/2003 Conditional; 04/22/2010 Unconditional	None	9.49	Prosper Flowable Insecticide and Fungicide Seed Treatment	canola and rapeseed
Prosper T400 Insecticide and Fungicide Seed Treatment	264-1034	11/14/2006 Conditional	None	21.75	n/a	canola and rapeseed
Prosper T200 Insecticide and Fungicide Seed Treatment	264-1035	12/14/2006 Conditional	None	11.05	n/a	canola and rapeseed
Poncho Beta	264-1056	03/07/2008 Conditional	None	34.30	n/a	sugarbeet
Three-Way VAP	264-1079	11/21/2008 Conditional	None	37.89	n/a	corn
Sepresto 75 WS	264-1081	04/28/2010 Conditional	None	56.25	n/a	barley, buckwheat, corn, millet, oats, popcorn, rye, sorghum, teosinte, triticales, wheat, potato seed pieces, carrot, onion bulbs, leek, bunching onion, broccoli
Proceed Plus	264-1082	01/29/2010 Conditional	None	1.48	n/a	wheat, barley, triticales
Poncho/Votivo	264-1109	03/16/2010 Unconditional	None	40.30	n/a	corn, cotton, sorghum, soybean, sugarbeet
Prosper Evergol	264-1121	05/11/2012 Unconditional	None	22.30	n/a	canola, rapeseed and mustard

Bayer CropScience

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
Emesio Quantum	264-1125	05/11/2012 Unconditional	None	18.60	n/a	cotton
Poncho/GB 126	264-1132	04/29/2011 Conditional	None	40.30	n/a	sugarbeet, barley, buckwheat, millet, oat, rye, teosinte, triticale, wheat
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/?p=PPLS:1						

Valent Biosciences

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
VBC3 Insecticide	73049-482	09/25/2012 Conditional	None	4	Crossfire	bed bugs in residential and commercial buildings; indoor use
Darlex Insecticide	73049-467	03/18/2010 Unconditional	None	23.60	NA811	commercial buildings and structures.
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1						

Valent USA

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
V-10170 2.13SC Insecticide	59639-150	01/04/2008 Conditional	77 FR 59186	23.60	Belay Insecticide; Clutch SC Insecticide	cotton, cranberry, fruiting vegetables, fig, grape, leafy vegetables, peach, pome fruit, pomegranate, soybean, tobacco, tree nuts, tuberous and corn vegetables, ornamental plants, non-bearing fruit and nuts grown in nurseries
V-10170 5 FS Insecticide	59639-151	02/28/2008 Conditional	76 FR 39396	47.80	NipsIt Inside Insecticide	barley, broccoli, buckwheat, canola/rapeseed, field corn, leek, pearl millet, popcorn, proso millet, oats, bulb onions, bunching onions, rye, sorghum, soybean, sugarbeet, sweet corn, teosinte, triticale, wheat
Arena 50 WDG Insecticide	59639-152 / 66330-40	11/30/2004 Conditional	77 FR 59186	50.00	Belay 50 WDG Insecticide; Clutch 50 WDG Insecticide	cotton, cranberry, fruiting vegetables, fig, grape, leafy vegetables, peach, pome fruit, pomegranate, soybean, tobacco, tree nuts, tuberous and corn vegetables, non-bearing fruit and nut trees, residential apple and pear trees, turfgrass

Valent USA

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
V-10170 16 WSG Insecticide	59639-153 / 66330-52	02/23/2005 Conditional	None	16.00	Belay 16 WSG Insecticide; Celero 16 WSG Insecticide	grapes, potato, tobacco, ornamental plants
Arena 0.5G	59639-156 / 66330-53	11/30/2004 Conditional	None	0.50	Celero 0.5G Insecticide	turfgrass, sod farms, landscape ornamentals, interior plantscapes, non-bearing fruits and nuts
V-10170 0.25G Insecticide	59639-157 / 66330-70	10/02/2006 Conditional	None	0.25	Arena 0.25G Insecticide	turfgrass, sod farms, landscape ornamentals, interior plantscapes, non-bearing fruits and nuts
V-10170 0.25G GL Insecticide	59639-164	01/27/2009 Conditional	None	0.25	Green Light Grub Control with Arena	residential lawns, landscaped areas, around non-bearing fruit and nut trees and shrubs
Clothianidin Technical Insecticide	59639-173 / 10308-32 / 74207-1	05/30/2003 Conditional; 04/22/2010 Unconditional	77 FR 59186; Amended Registration 74 FR 50198 09/30/2009	97.50	n/a	production of insecticides
Inovate Seed Protectant	59639-176	06/21/2011 Unconditional	None	14.34	n/a	soybean
Nipsit Suite Cereals of Seed Protectant	59639-183	12/21/2011 Unconditional	None	2.93	n/a	barley, oats, wheat
Nipsit Suite Canola Seed Protectant	59639-184	01/06/2012 Unconditional	None	22.15	n/a	

Valent USA

Registered Name	EPA Registration Number	Initial and Subsequent Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Clothianidin	Alternate Trade Names	Approved Uses/Crops
Inovate Neutral Seed Protectant	59639-187	01/25/2012 Unconditional	None	14.34	n/a	
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1						

Appendix B

Janssen PMP

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Xamox Technical	43813-29	10/21/2002 Conditional	None	98.00	n/a	manufacturing purposes -- for use in formulating industrial wood preservative products
Xamox 30L	43813-30	07/28/2006 Conditional	None	0.49	n/a	protects wood and wood products from termites, wood boring insects, and fungal decay
Xamox 10TK	43813-31	05/30/2006 Unconditional	None	9.90	n/a	manufacturing purposes -- for use in formulating industrial wood preservative products
Xamox 100 SL	43813-36	05/23/2006 Unconditional	None	9.90	n/a	protects wood and wood products from termites and wood boring insects (for industrial use)

Source: EPA Pesticide Product Labeling System database, available at <http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>

Loveland Products

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Dyna-Shield Thiamethoxam Fungicide	34704-939	07/10/2006 Conditional	None	47.60	n/a	barley, corn, cotton, legume vegetables (incl. soybean), oilseed crops, potatoes, sorghum, sunflower, wheat
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1						

Novartis Animal Health

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	% Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Agita 1 GB Fly Bait	70585-9	12/08/2010 Unconditional	None	1.00	n/a	reduces housefly populations in and around the outside perimeter of animal housing
Agita 10 WG	70585-10	12/08/2010 Unconditional	None	10.00	n/a	reduces housefly populations in and around the outside perimeter of animal housing
Source: EPA Pesticide Product Labeling System database, available at http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1						

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Helix Xtra Insecticide with Fungicides	100-935	12/04/2000 Conditional	None	20.70	n/a	canola
Thiamethoxam Technical	100-936	12/04/2000 Conditional	Notice of Receipt of Petition, 64 Fed. Reg. 14233 03/24/1999; New Uses, 75 Fed. Reg. 13282 03/19/2010; 75 Fed. Reg. 24695 05/05/2010; 76 Fed. Reg. 39396 07/06/2011	99.10	n/a	for manufacturing purposes only
Actara Insecticide	100-938	05/17/2001 Conditional	None	25.00	n/a	bushberries, caneberries, small fruit, <i>Brassica</i> vegetables, citrus, cucurbit vegetables, artichokes, leafy vegetables, mint, pome fruit, root vegetables, stone fruit, tobacco, tropical fruit, tuberous and corn vegetables
Platinum Insecticide	100-939	05/17/2001 Conditional	None	21.60	n/a	bushberries, low-growing berries, small fruit vine-climbing, <i>Brassica</i> vegetables, citrus, cucurbit vegetables, fruiting vegetables, hops, leafy vegetables, root vegetables, tobacco, tuberous and corn vegetables

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Cruiser Insecticide	100-941	12/04/2000 Conditional	None; New Uses 75 Fed. Reg. 13282 03/19/2010; 75 Fed. Reg. 24695 05/05/2010; 76 Fed. Reg. 39396 07/06/2011	47.60	Cruiser 5FS: Adage	alfalfa, barley, corn, cotton, cucurbit vegetables, legume vegetables, oilseed crops, peanuts, potatoes, rice, sorghum, soybeans, sugarbeets, sunflower, wheat
Meridian 25WG	100-943	02/15/2007 Conditional	None	25.00	n/a	turfgrass, sod farms, interiorscapes, landscapes
Flagship 25WG	100-955	07/30/2003 Conditional	None	25.00	Flagship 25WG Insecticide	ornamental plants, non-bearing fruit and nut trees, Christmas trees, forest seedlings, transplants of fruiting vegetables and cucurbit vegetables
Flagship 0.22G	100-960	02/23/2007 Conditional	None	0.22	n/a	ornamental plants (including non-bearing fruit and nut trees) grown in greenhouses, lath- and shade-houses, containers, field nurseries, and Christmas trees
Meridian 0.33G	100-961	02/23/2007 Conditional	None	0.33	n/a	turfgrass and ornamental plants on golf courses, residential lawns, commercial grounds, parks, playgrounds, athletic fields, sod farms, and interiorscapes

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Helix Insecticide with Fungicides	100-973	12/04/2000 Conditional	None	10.30	Helix Lite	canola
Platinum	100-974	05/17/2001 Conditional	None	4.50	n/a	potatoes
Ridomil Gold	100-1147	04/11/2002 Conditional	None	40.00	n/a	cotton, soybeans, tree nuts
Centric 40WG	100-1170	09/29/2004 Conditional	None; New Uses - 75 Fed. Reg. 51045 08/18/2010	21.60	n/a	control of drywood termites in structures
Cruiser XL Insecticide and Fungicide PrePack	100-1184	02/05/2004 Conditional	None	25.00	n/a	field corn, popcorn, sweet corn
Cruiser Extreme	100-1208	03/28/2005 Conditional	None	25.00	n/a	field corn, popcorn, seed corn, sweet corn
Thiamethoxam 240 SC Manufacturing Use Product	100-1246	09/6/2006 Conditional	None	21.60	n/a	repackaging or further formulation
CruiserMaxx	100-1247	05/24/2006 Conditional	None	22.61	CruiserMaxx Beans Insecticide with Fungicide	legume vegetables (including soybeans)
CruiserMaxx Potato Insecticide and Fungicide	100-1248	05/25/2006 Conditional	None	28.00	n/a	potato tubers
Adage - Maxim 4FS Twinpack	100-1249	04/14/2006 Conditional	None	47.60	n/a	potatoes

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Actara 240 SC Insecticide	100-1250	01/18/2007 Conditional	None	21.60	n/a	barley, bushberries, caneberries, <i>Brassica</i> vegetables, cotton, cranberries, cucurbit vegetables, fruiting vegetables, globe artichoke, grapes, leafy vegetables, mint, pecan, pome fruit, root vegetables, stone fruit, strawberry, tobacco, tuberous and corn vegetables
Optigard Ant Gel Bait	100-1260	04/4/2007 Conditional	None	0.01	Optigard Ant Gel 100	for indoor and outdoor control of structure-invading ants
Thiamethoxam Ant Killer Gel	100-1261	04/4/2007 Conditional	None	0.003	Optigard Ant Gel 30	kills ants indoors and outdoors
Endigo ZC	100-1276	08/21/2007 Conditional	None	12.60	n/a	barley, head and stem <i>Brassica</i> vegetables, cotton, cucurbit vegetables, fruiting vegetables, lettuce, pome fruits, soybean, stone fruit, tobacco, tree nuts, tuberous and corn vegetables

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
THX/MXM/FD L CZ	100-1283	09/20/2007 Conditional	None	21.50	Cruisermaxx Advanced; Warden CZ; Warden CS; Cruisermaxx Plus	soybeans
Thiamethoxam Lawn & Landscape 0.33G	100-1288	11/02/2007 Conditional	None	0.33	n/a	lawns and landscape plantings
Thiamethoxam Lawn & Landscape 0.22G	100-1289	11/02/2007 Conditional	None	0.22	n/a	lawns and landscape plantings
Platinum 75 SG Insecticide	100-1291	01/17/2008 Conditional	None	75.00	n/a	bushberries, low-growing berries, small-fruit vine climbing, <i>Brassica</i> leafy vegetables, citrus, cucurbit vegetables, fruiting vegetables, hops, leafy vegetables, root vegetables, tobacco, tuberous and corn vegetables
Cruiser 70 WS Insecticide	100-1294	11/20/2008 Conditional	None; New Uses - 74 Fed. Reg. 54999 10/26/2009	70.00	n/a	carrots, leafy vegetables, dry bulb onions, <i>Brassica</i> leafy vegetables
Thiamethoxam 0.02/Lambda-Cyhalothrin	100-1304	04/04/2008 Conditional	None	0.20	n/a	lawns and landscape plantings

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
CruiserMaxx Cereals	100-1305	04/16/2008 Conditional	None	2.80	n/a	barley, triticale, winter wheat, spring wheat
Optigard Flex Liquid	100-1306	03/28/2008 Conditional	None; New Uses - 75 Fed. Reg. 51045 08/18/2010	21.60	Optigard 2SC	for control of pests in structures
Durivo	100-1318	08/26/2008 Conditional	None	17.50	Durivo Insecticide	Brassica leafy vegetables, cucurbit vegetables, fruiting vegetables, leafy vegetables, tobacco
Voliann Flexi Insecticide	100-1319	08/25/2008 Conditional	None	20.00	n/a	Brassica leafy vegetables, citrus, cucurbit vegetables, fruiting vegetables, grapes, leafy vegetables, mint, pome fruit, strawberry, stone fruit, tobacco, tuberous and corn vegetables
Avicta Duo	100-1321	10/31/2008 Conditional	None	28.10	Avicta Duo Cotton; Avicta Duo Corn; Acceleron INT-210 Insecticide and Nematicide Seed Treatment	corn, cotton
Thiamethoxam 0.40/Lambda-cyhalothrin 0.16 ME Concentrate	100-1334	05/12/2009 Conditional	None	0.40	n/a	lawns and landscape plantings

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Thiamethoxam 0.010/Lambda-cyhalothrin 0.004 ME RTU	100-1336	05/12/2009 Conditional	None	0.01	n/a	landscape plantings
Meridian 0.20G	100-1341	06/22/2009 Conditional	None	0.20	n/a	turfgrasses and ornamental plants
Meridian 0.14G	100-1346	07/01/2009 Conditional	None	0.14	n/a	turfgrasses and ornamental plants
Agri-Flex Miticide/Insecticide	100-1350	04/06/2010 Conditional	None	13.90	n/a	apples, citrus, grapes, pears
Avicta Duo 250	100-1353	10/27/2009 Conditional	None	14.20	Avicta Duo 250 Corn	corn
Cruiser PD Insecticide	100-1365	08/05/2011 Conditional	None	70.00	n/a	peanuts
Difenoconazole 0.170/Thiamethoxam 0.010/Lambda-cyhalothrin 0.004 ME RTU	100-1366	08/05/2011 Conditional	None	0.01	n/a	roses and landscape plantings and ornamentals
Difenoconazole 0.66/Thiamethoxam 0.40/Lambda-cyhalothrin 0.16 ME Concentrate	100-1367	08/05/2011 Conditional	None	0.40	n/a	roses and landscape plantings and ornamentals

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
CruiserMaxx Rice	100-1369	07/20/2010 Conditional	None	26.40	n/a	dry-seeded rice
Optigard Liquid Ant Bait	100-1370	08/02/2010 Conditional	None	0.003	n/a	outdoor control of ants
Cruisermaxx Vibrance Cereals	100-1383	06/20/2012 Conditional	None		n/a	
Four-Way VAP	100-1384	10/29/2010 Conditional	None	22.60	n/a	soybeans
Avicta Complete Corn 500	100-1399	06/15/2011 Conditional	None	23.10	Avicta Complete Corn 500 Premix	corn
Avicta Complete Corn 250	100-1405	10/19/2011 Conditional	None	11.70	Avicta Complete Corn 250 Premix	corn
Caravan G	100-1415	01/11/2012 Unconditional	None	0.22	Synguard Multi G; Infinguard Multi G	turfgrasses on residential lawns, commercial grounds, parks, playgrounds, golf courses, and athletic fields
THX_MXM_F TBZ FS	100-1426	02/02/2012 Unconditional	None	22.60	n/a	soybeans
CruiserMaxx EZ	100-1427	02/02/2012 Unconditional	None	23.10	n/a	soybeans
Derby	100-1436	04/23/2012 Unconditional	None	11.60	n/a	lawns, ornamental trees, and shrubs around residential, institutional, public, commercial, and industrial buildings, and in parks, recreational areas, and athletic fields

Syngenta

Registered Name	EPA Registration Number	Initial Registration(s)	FR Notice(s) for Initial and/or Subsequent Registration	Percent Thiamethoxam	Alternate Trade Names	Approved Uses/Crops
Tandem	100-1437	04/23/2012 Unconditional	None	11.60	n/a	lawns, ornamental trees, and shrubs around residential, institutional, public, commercial, and industrial buildings, and in parks, recreational areas, and athletic fields
CruiserMaxx Peanuts	100-1438	04/30/2012 Unconditional	None	18.00	n/a	peanuts
Solvigo Miticide/Insecticide	100-1440	06/21/2012 Conditional	None	6.86	n/a	grapes, certain tubers
Adage Delux	100-1449	08/23/2012 Conditional	None	24.00	n/a	soybeans
Adage Premier	100-1450	08/23/2012 Conditional	None	24.00	n/a	soybeans
Avicta complete beans	100-1457	01/15/2013 Conditional	None	11.00	n/a	soybeans
Endigo ZCX	100-1458	01/23/2013 Conditional	None	19.20	n/a	barley, certain brassica crops, cotton, certain cucurbit vegetables, certain fruiting vegetables, certain pome fruits, soybean, certain stone fruits, tobacco, certaintree nuts, pecan, certain tubers
SYT0511	100-1460	01/30/2013 Conditional	None	24	n/a	soybeans

Source: EPA Pesticide Product Labeling System database. available at <http://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1>