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**THE UNITED STATES DISTRICT COURT**
**FOR THE NORTHERN DISTRICT OF CALIFORNIA**



Center for Food Safety, Beyond Pesticides, Cornucopia Institute, California Farmers Union, Dakota Resources Council, Geertson Seed Farms, National Family Farm Coalition, Northeast Organic Dairy Producers Alliance, Sierra Club, Trask Family Seeds, and Western Organization of Resource Councils

Plaintiffs,

v.

THOMAS J. VILSACK, *et al.*

Defendants.

CV11 1310
Case No.

**COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF**

## INTRODUCTION

1. This is a civil action for injunctive and declaratory relief. Plaintiffs Center for Food Safety, Beyond Pesticides, Cornucopia Institute, California Farmers Union, Dakota Resource Council, Geertson Seed Farms, National Family Farm Coalition, Northeast Organic Dairy Producers Alliance, Sierra Club, Trask Family Seeds and Western Organization of Resource Councils (collectively "Plaintiffs") challenge the decision by Defendant Animal and Plant Health Inspection Service ("APHIS"), an agency within the United States Department of Agriculture ("USDA"), to deregulate Roundup Ready Alfalfa ("RRA"), a genetically engineered ("GE") alfalfa that is designed to withstand direct application of glyphosate, the active ingredient in herbicide formulations manufactured and sold by the commercial name Roundup by Monsanto Company ("Monsanto").

2. This is the second case regarding APHIS's approval of RRA. The first suit, *Geertson Seed Farms, et al. v. Johanns, et al.*, No. 3:06-cv-01095 CRB ("*Alfalfa I*"), challenged APHIS's previous decision to deregulate RRA after the agency completed an Environmental Assessment ("EA"), and issued a Finding of No Significant Impact ("FONSI"). 70 Fed. Reg. 36917-19 (June 27, 2005).

3. In *Alfalfa I*, a coalition of conventional and organic farmers and non-profits (all of which are also plaintiffs in this action) alleged that APHIS's deregulation of RRA violated the National Environmental Policy Act ("NEPA"), the Plant Protection Act ("PPA"), the Endangered Species Act ("ESA"), and the Administrative Procedure Act ("APA").

4. The *Alfalfa I* court granted summary judgment in plaintiffs' favor, finding potential significant environmental impacts associated with the deregulation of RRA that required the preparation of an Environmental Impact Statement ("EIS"). *Alfalfa I*, 2007 WL 518624, at *11-12 (N.D. Cal. Feb. 13, 2007). Among the impacts the court ordered the agency to analyze were: the harm to the human environment from transgenic contamination (*i.e.*, the movement—via insect cross-pollination, seed mixing, human error, or other means—of engineered DNA to natural plants, including conventional, organic and feral alfalfa, permanently altering their genetic make-up); the cumulative impact of increased herbicide load on the

environment from the adoption of the herbicide-dependent cropping system; and the creation of Roundup Ready ("RR") "super weeds" that become immune to the herbicide Roundup because of overuse. The court dismissed plaintiffs' ESA and PPA claims without prejudice. *Id.*

5. The *Alfalfa I* court then vacated APHIS's decision to deregulate RRA and issued an injunction preserving the *status quo* pending APHIS's NEPA compliance. *Alfalfa I,* 2007 WL 776146, at *3 (N.D. Cal. Mar. 12, 2007) (Preliminary Injunction Order); *id.,* 2007 WL 1302981, at *8-9 (N.D. Cal. May 3, 2007) (Permanent Injunction Order).

6. The remedial portion of the *Alfalfa I* decision was appealed. After the Ninth Circuit twice affirmed, *see Alfalfa I,* 541 F.3d 938 (9th Cir. 2008) *amending opinion and denying petition for rehearing and rehearing en banc,* 570 F.3d 1130 (9th Cir. 2009), the Supreme Court granted *certiorari.* The Supreme Court set aside the injunction but left the vacatur of RRA's deregulation in place, with the result that RRA remained unlawful to sell or plant commercially pending further regulatory action. *Monsanto Co. v. Geertson Seed Farms,* 130 S.Ct. 2743, 2747, 2761-62 (2010).

7. Pursuant to the court's order in *Alfalfa I,* APHIS issued a draft EIS ("DEIS") for public comment in December 2009. Plaintiff Center for Food Safety submitted extensive comments, noting that, *inter alia,* APHIS completely failed to consider, or failed to adequately analyze, (1) the likelihood of transgenic contamination, (2) the impacts of deregulating RRA on threatened and endangered species, (3) the impacts of increased herbicide use and the resulting development of glyphosate resistant weeds, and numerous other intertwined socioeconomic and agricultural impacts of deregulating RRA. The DEIS also failed to analyze alternatives other than unrestricted deregulation, because APHIS concluded that it could not limit production of RRA based on any environmental or agronomic impacts beyond a small subset of "plant pest harms," which the agency concluded were nonexistent.

8. APHIS published a final EIS ("FEIS") in December 2010. This court-ordered EIS is the first (and only) EIS APHIS has ever completed for any GE crop, in over fifteen years of approving GE crops for commercial use. In the FEIS, APHIS changed its position and determined that one of its two "preferred alternatives" was a *partial* deregulation, with required

isolation distances and geographic restrictions. These restrictions were designed to limit the likelihood of transgenic contamination. The agency concluded that this alternative would fulfill APHIS's "purpose and need" to promote "coexistence" in agriculture between production of GE, organic, and conventional crops. FEIS at 11.

9. On January 27, 2011, APHIS announced that it had reached a Determination of Nonregulated Status for RRA ("Deregulation Determination") and issued its Record of Decision ("ROD"). APHIS again reversed its position, reverting to the view it had espoused in the DEIS: that it could not implement any restrictions on RRA because its oversight was limited to approving complete, unrestricted deregulation, based on its separate PPA determination that RRA is not a plant pest.

10. APHIS's FEIS violates NEPA. It is arbitrary and capricious because the agency's analysis of the myriad environmental, socio-economic, agricultural, and cumulative impacts of deregulating RRA is erroneous, unsupported, and/or inadequate to comply with NEPA. APHIS failed to consider numerous significant potential impacts, and its discussion of those it analyzed is superficial, lacking in detail or quantification, and conclusory. The agency's analysis is also based on unreliable data and erroneous assumptions contrary to the record. The agency's conclusions that deregulation of RRA will not negatively affect the environment, and the agency's attempts to minimize those significant impacts, are contrary to the record evidence. The agency's NEPA analysis and its outcome were improperly predetermined, and its scope was erroneously confined, by the agency's misapplication of its underlying statutory authority under the PPA.

11. The agency's Deregulation Determination violates the PPA. The decision is not based on sound science and fails to account for the harms to the environment and U.S. agriculture, such as transgenic contamination, increased use of glyphosate, and the proliferation of glyphosate-resistant ("GR") weeds that deregulating RRA will cause. In exercising its authority to deregulate, the PPA mandates that APHIS prevent such agronomic harms when taking actions, including deregulation. APHIS failed to comply with, or even acknowledge, that mandate. APHIS's rejection of a partial deregulation alternative, which would have potentially

reduced these harms, and its refusal to consider any partial deregulation alternative, arbitrarily and capriciously violated its statutory mandates.

12. This action, *Alfalfa II,* seeks vacatur of the Deregulation Determination and the completion of proper environmental review. Plaintiffs ask this Court to declare the Deregulation Determination to be arbitrary and capricious, in violation of NEPA, the PPA and the APA. Plaintiffs further ask this Court to vacate APHIS's decision to once again deregulate RRA without taking a "hard look" at the environmental consequences of its decision. *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 374 (1989). Plaintiffs request injunctive, declaratory, and other relief this Court deems appropriate.

## JURISDICTION AND VENUE

13. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal question), 28 U.S.C. § 1346 (United States as defendant), 28 U.S.C. § 2201-02 (declaratory relief), 42 U.S.C. §§ 4321-4370a (NEPA), 5 U.S.C. § 702 (APA), 7 U.S.C. §§ 7701, and 7711-12 (PPA).

14. An actual controversy exists between the parties within the meaning of 28 U.S.C. § 2201 (declaratory judgments).

15. Venue properly lies in this Court pursuant to 28 U.S.C. § 1391(e)(3) because one or more plaintiffs reside in this district, and pursuant to 28 U.S.C. § 1391(e)(2) because a substantial part of the events or omissions giving rise to the claim occurred, or a substantial part of property that is the subject of the action is situated, in this district.

## INTRADISTRICT ASSIGNMENT

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

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## PARTIES

**Plaintiffs Public Interest Groups:**
***Center for Food Safety, Sierra Club, Beyond Pesticides, the Cornucopia Institute, Western Organization of Resource Councils, and Dakota Resource Council***

17. Plaintiff Center for Food Safety ("CFS") brings this action on behalf of itself and its members. CFS and its members are being, and will be, adversely affected by APHIS's actions. CFS is a Washington, D.C. public interest non-profit membership organization that has offices in San Francisco, CA and Washington, D.C.

18. Since the organization's founding in 1997, CFS has sought to ameliorate the adverse impacts of industrial farming and food production systems on human health, animal welfare, and the environment. CFS also supports and promotes sustainable forms of agriculture, including organic systems. CFS has over 200,000 members, in almost every state across the country, including members in many states and locations where alfalfa is grown.

19. CFS seeks to protect human health and the environment by advocating thorough, science-based safety testing of GE products prior to any marketing; cultivation of GE crops in a manner that minimizes any risk of contaminating conventional food supplies or the environment, and that minimizes negative impacts such as increased use of pesticides and evolution of resistant weeds; and appropriate labeling of foods that are or contain GE products. CFS also seeks to provide consumers with a means of identifying GE foods on the market and to encourage full public participation in defining the issues presented by GE crops.

20. To achieve its goals, CFS disseminates to government agencies, members of Congress, and the general public a wide array of educational and informational materials addressing the introduction of GE crops into the environment and food supply. These materials include, but are not limited to, reprints of news articles, policy reports, legal briefs, press releases, action alerts, and fact sheets. CFS also sends out action alerts to its True Food Network; these action alerts generate public involvement, education and engagement with governmental officials on issues related to genetic engineering and other issues affecting a sustainable food system. Collectively, the dissemination of this material has made CFS an information clearinghouse for public involvement and governmental oversight of the use of

genetic engineering in our nation's food supply. Where necessary, CFS engages in public interest litigation to address the impacts of GE crops on the environment, its members and the public interest.

21. Plaintiff Sierra Club brings this action on behalf of itself and its members. Sierra Club and its members are being, and will be, adversely affected by defendants' actions complained of herein. The Sierra Club is a national non-profit organization of approximately 750,000 members dedicated to exploring, enjoying, and protecting the wild places of the earth, to practicing and promoting the responsible use of the earth's ecosystems and resources, to educating and enlisting humanity to protect and restore the quality of the natural and human environment, and to using all lawful means to carry out these objectives. Sierra Club is a California non-profit corporation that is headquartered in San Francisco, CA.

22. The Sierra Club's concerns encompass endangered species, habitat protection, pollution, genetic engineering, and industrial agriculture. The Sierra Club's particular interest in this case and the issues which the case concerns stem from the deregulation of RRA. The Sierra Club's Genetic Engineering Committee educates the public and advocates for regulatory reform to protect the natural environment and human health from the threats posed by the release of novel GE organisms. RRA falls within the scope of diverse concerns that the Sierra Club's Genetic Engineering Committee has been raising about GE crops.

23. Plaintiff Beyond Pesticides brings this action on behalf of itself and its members. Based in Washington, D.C., Beyond Pesticides is a national non-profit corporation that promotes safe air, water, land, and food, and works to protect public health and the environment by encouraging a transition away from the use of toxic pesticides, including herbicides such as glyphosate.

24. With Beyond Pesticides' resources made available to the public on a national scale, Beyond Pesticides contributes to a significant reduction in unnecessary pesticide use, thus improving protection of public health and the environment. The risks to public health and the environment from pesticides are large.

25. Beyond Pesticides and its members aim to reduce the proliferation of GE crops designed to be herbicide-resistant, because herbicide-resistant crops exacerbate the herbicide and pesticide treadmill that threatens the health of Beyond Pesticides' members. About 85 percent of all GE crops are altered to be herbicide-resistant. Thus, it is the goal of Beyond Pesticides to push for labeling as a means to identify products that contain GE ingredients, educate on the public health and environmental consequences of this technology, and generate support for sound ecological-based regulatory and management systems.

26. Plaintiff the Cornucopia Institute brings this action on behalf of itself and its members. Based in Cornucopia, Wisconsin, the Cornucopia Institute is a Wisconsin non-profit corporation whose goal is to empower farmers through research, advocacy and economic development. Among the interests of the Cornucopia Institute is protecting the credibility of organic farming methods. The Cornucopia Institute members include alfalfa farmers who grow and use non-GE alfalfa. The Cornucopia Institute's members include farmers who own certified organic farms and who desire to maintain their organic farms free of GE crops.

27. Plaintiff Western Organization of Resources Councils ("WORC") brings this action on behalf of itself and its members. WORC is a regional network of seven grassroots community organizations that include 10,000 members and 45 local chapters. WORC's member organizations are: Dakota Rural Action, Dakota Resource Council, Idaho Rural Council, Northern Plains Resource Council, Oregon Rural Action, Powder River Basin Resource Council, and Western Colorado Congress. WORC is a Montana and North Dakota nonprofit corporation that is based in Billings, Montana, with field offices in offices in Montrose, Colorado, Lemmon, South Dakota, and Washington, DC.

28. WORC's mission is to advance the vision of a democratic, sustainable, and just society through community action. WORC is committed to building sustainable environmental and economic communities that balance economic growth with the health of people and stewardship of their land, water, and air resources. WORC's interests include ensuring consumers' right to know by requiring the clear and accurate labeling at the retail level of all foods that contain, *inter alia*, GE ingredients. WORC and its members include alfalfa farmers

who grow and use alfalfa free of genetic engineering and who desire to maintain their farms free of GE crops. WORC's members also regularly eat organic foods and desire foods that are free of GE materials. The proliferation of GE alfalfa will reduce the supply of feed and food that is not contaminated with GE material.

29. Plaintiff Dakota Resource Council ("DRC") brings this action on behalf of itself and its members. DRC is a North Dakota non-profit corporation that is headquartered in Dickinson, North Dakota, with offices in Bismarck and Fargo, North Dakota. Formed in 1978, it is the mission of DRC to protect North Dakota's land, air, water, rural communities, and agricultural economy. DRC works for the preservation of family farms, enforcement of corporate farming laws, soil and water conservation, regulation of coal mining and oil and gas development, protection of groundwater and clean air, renewable energy, and sound management of solid and toxic wastes. It is a grassroots organization whose mission is to form enduring, democratic local groups that empower people to influence decision-making processes that affect their lives.

30. Among the interests of DRC are consumers' right to know whether their food is genetically engineered, placing liability on biotech corporations for damages caused by their products, and disclosure of sponsorship of research on GE products. DRC's members include alfalfa farmers who grow and use non-GE alfalfa. DRC's members also include farmers who desire to maintain their farms free of GE crops. DRC's members regularly eat organic foods and desire foods that are free of GE materials. The proliferation of GE alfalfa will reduce the supply of feed and food that is not contaminated with GE material.

31. The interests of CFS, Sierra Club, Beyond Pesticides, the Cornucopia Institute, WORC, and DRC (collectively "Plaintiffs Public Interest Groups") and their members are being, and will be, adversely affected by APHIS's actions complained of herein. Defendants' actions ensure that Plaintiffs Public Interest Groups' members are, and will be, aesthetically, economically, and physically injured by the spread of RRA. Plaintiffs Public Interest Groups have members in every state across the country, including members in states and locations where alfalfa is being grown. Plaintiffs Public Interest Groups' members include farmers, ranchers, and

rural residents who live in agricultural locations where RRA will be grown and who will be affected by the alfalfa crop. Similarly, members who grow alfalfa, keep honey bees, or feed their animals alfalfa may suffer from a reduced market if contaminated with RRA. Plaintiffs Public Interest Groups' members also regularly eat organic foods and desire foods that are free of GE products or derive from animals not fed such GE products. The proliferation of RRA will reduce the supply of feed and food that is not contaminated with GE material. Defendants' actions in allowing the introduction of RRA into the environment will imminently make it more difficult for CFS's members to produce, sell, and eat meat, dairy, and honey that are not contaminated by GE materials.

32. Plaintiffs Public Interest Groups and their members are also concerned about the proliferation of GE crops absent adequate environmental analysis and labeling. Members of Plaintiffs Public Interest Groups believe that the public has the fundamental right to know what they eat and feed their families. The Deregulation Determination adversely affects Plaintiffs Public Interest Groups and their members because the action will allow RRA to be placed in the stream of commerce without labeling, adequate environmental review, or any other limitations.

33. Furthermore, members of Plaintiffs Public Interest Groups regularly visit parks, natural areas, and other habitats near where RRA will be planted. Plaintiffs Public Interest Groups and their members have an interest in the protection of endangered species and their habitat. Plaintiffs Public interest Groups have members who hike and camp in wild, natural areas who are concerned about GE crops such as RRA. The release, introduction, and spread of RRA injures the members by interfering, *inter alia*, with their aesthetic enjoyment of native and endangered species and their use and enjoyment of parks, natural areas, and other habitats near alfalfa farms and feral alfalfa. Similarly, Plaintiffs Public Interest Groups' members' recreational and physical enjoyment of natural and recreational areas is injured as the introduction of glyphosate-resistant RRA makes it more difficult for stewards of such natural and recreational areas to remove weeds that develop resistance to glyphosate. Such removal activities will require more environmentally damaging techniques such as tillage, and excessive use and misuse of glyphosate and other herbicides. As a result, the members are at greater risk

of suffering health effects from increased herbicide use. Such imminent impacts also cause aesthetic injury to their property.

34. The conservation, environmental, and economic interests, as well as the health, well-being and enjoyment of Plaintiffs Public Interest Groups members have been, and continue to be, threatened by Defendants' actions. Defendants' actions will affect Plaintiffs Public Interests Groups and their members' conservation, environmental, and aesthetic interests because they may affect threatened or endangered species and/or their critical habitat.

**Plaintiffs Family Farmers and Ranchers Groups:**
***California Farmers Union, National Family Farm Coalition, and Northeast Organic Dairy Producers Alliance***

35. Plaintiff California Farmers Union ("CFU") brings this action on behalf of itself and its members. Founded in 1997, CFU is a non-profit organization based in Turlock, CA. It is the mission of CFU to protect and enhance the economic well-being and quality of life for family farmers, ranchers, and their communities.

36. Comprised of more than 1,400 farmer and rancher members, CFU advocates policies to lawmakers at the state and national levels on behalf of its membership throughout California. CFU is the state chapter of the National Farmers Union ("NFU"), which represents more than 250,000 family farmers and ranchers across the U.S. CFU membership includes members of the California Dairy Campaign ("CDC"). CDC's members include conventional and organic dairy family farmers whose interest will be adversely affected by the USDA's actions alleged herein.

37. Plaintiff National Family Farm Coalition ("NFFC") brings this action on behalf of itself and its member organizations. Founded in 1986, NFFC is a coalition representing family farm and rural groups working to secure a sustainable, economically just, healthy, safe, and secure food and farm system. NFFC is a Michigan non-profit corporation that is headquartered in Washington, DC.

38. NFFC was among the first farm groups in the nation to call into question the agronomic, economic, and environmental impacts of GE crops, and, together with member

groups, conducted a Summit on GE Crops in 1999 that brought together farmers, environmental groups, consumer groups, and scientists to discuss the impacts of agricultural biotechnology on farmers and rural economies.

39. NFFC and its member organizations coordinated and sponsored the Farmer to Farmer Campaign on Genetic Engineering ("Farmer to Farmer") formed in 1999 to provide a national voice for farmers on agricultural biotechnology issues. As a result of the Farmer to Farmer campaign, 31 farms and rural groups have endorsed the *Farmer Declaration on Genetic Engineering* which demands that no new GE crops be deregulated and commercialized until a thorough, objective, independent and publicly transparent assessment of the impacts is conducted on said GE crop and determined to pose no risk of harm to farmers, farm and rural economies, the environmental or the health and safety of our food system.

40. Since 1999, NFFC has jointly engaged in numerous national and international campaigns to educate farmers on the risks of GE crops, to train farmer leaders as spokespersons on issues involving genetic engineering and its impact on farmers and rural communities, to assist and support farm organizations in grassroots efforts to educate the public on said risks, and to raise the visibility and awareness of these problems among the media and policy-makers.

41. NFFC, Farmer to Farmer, and member organizations regularly provide comment to the USDA on Petitions for Deregulated Status on new GE crops and did so in the current docket which led to the deregulation of GE alfalfa, which is the basis for this action.

42. Among the farmer members of NFFC and its member organizations are conventional and organic dairy and beef producers, grass-fed beef and dairy producers, beekeepers and horse breeders, all of whom will be adversely affected by the USDA's actions.

43. The Northeast Organic Dairy Producers Alliance ("NODPA") brings this action on behalf of itself and its members. NODPA is a ten-year-old 501(c)(5) non-profit organization based in Deerfield, MA. Open to any organic dairy producers in the eastern United States, NODPA is currently made up of 782 member organic farmers, organic dairies, and organic businesses. Members are based in eastern states including New York, Pennsylvania, West Virginia, Virginian, North Carolina, South Carolina, Massachusetts, Ohio and Michigan.

44. It is the mission of NODPA to enable organic dairy family farmers, situated across an extensive area, to have informed discussion about matters critical to the well being of the organic dairy industry as a whole. NODPA is one of three regional organizations of organic dairy producers that collaborate nationally under the Federation of Organic Dairy Farmers ("FOOD Farmers") coalition. NODPA is dedicated to protection of the integrity of the organic standard. To that end, NODPA is a member of the National Organic Coalition and regularly participates in the USDA's National Organic Program, by providing agronomic expertise and public comments on administrative actions concerning the USDA organic standards. NODPA disseminates information on organic issues to its members and the public through annual meetings with its members, field day events at different locations in the Northeast, its bi-monthly newsletters and other online resources.

45. NODPA's members include farmers and dairies who own certified organic farms and dairies, and who desire to maintain their organic farms and dairies free of GE crops. Organic agriculture like that practiced by NOPDA's members results in decreased off-farm inputs; reduced use of pesticides; and increased biodiversity through a holistic production management system. These ecological benefits lie at the core of the organics industry and drive consumer choices.

46. Plaintiffs CFU, NCCF, and NODPA (collectively "Plaintiffs Farmers and Ranchers Groups") and their members are being, and will be, adversely affected by APHIS's actions complained of herein. The Deregulation Determination adversely affects farmers and ranchers who are members of Plaintiffs Farmers and Ranchers Groups because the action will allow GE alfalfa to be placed in the stream of commerce without labeling, adequate environmental review, or any other limitations.

47. The risk of contamination is particularly high for CFU member farmers because alfalfa is almost exclusively pollinated by honey bees in California. Honey bees are known to travel six or more miles for forage.

48. Since alfalfa is used as a primary feed for all dairy animals, APHIS's actions allowing the introduction of glyphosate-resistant RRA into the environment will likely result in

the contamination of organic and conventional dairies and meats with GE feeds. Members of Plaintiffs Farmers and Ranchers Groups risk market rejection and loss of their business and reputation from transgenic contamination as a result of APHIS's decision to deregulate RRA. In particular, a producer of certified organic seed or crop may not use excluded methods, and USDA's National Organic Program standards require organic dairies and other livestock facilities to use 100 percent organic feed. Moreover, consumers in the U.S. organic market have identified the ability to avoid GE organisms as a leading reason for purchasing certified organic products. Thus, members of Plaintiffs Farmers and Ranchers Groups who are organic farmers will be directly harmed financially by the introduction of RRA due to lost domestic and international markets.

49. The interests of members of Plaintiffs Farmers and Ranchers Groups are adversely affected because GE crops promote large scale agribusiness at the expense of family scale farming. Farmers and dairies who want to sell non-GE crops will be required to prove the purity of their products through testing and/or to plant buffers or take other measures to prevent GE contamination. However, these measures may not prevent the genetic contamination. Farm management costs would dramatically increase in any event.

50. The unrestricted approval of RRA also adversely affects Plaintiffs Farmers and Ranchers Groups and their members because it will dramatically increase the amount of herbicides uses in alfalfa growing, threatening harm to the agricultural and ecological environments where Plaintiffs Farmers and Ranchers Groups' members live, farm and frequently visit. More fundamentally, the loss of organic alfalfa will cost members of Plaintiffs Farmers and Ranchers Groups their right to choose to produce and provide a non-GE product.

**Plaintiffs Family Farmers:**
***Trask Family Seeds and Geertson Seed Farms***

51. Plaintiff Trask Family Seeds brings this action on behalf of itself. A family business for four generations, Trask Family Seeds has been ranching on the edge of the Black Hills of South Dakota since the Gold Rush. Trask Family Seeds harvests alfalfa seed and hay from old, public varieties, commonly known as South Dakota Commons seed. Trask Family

Seeds harvests about 15,000 acres of its own property and has agreements to custom harvest alfalfa seed from other ranches in the area. Trask Family Seeds also sells whole, raw pure alfalfa seed nationwide. It is the goal of Trask Family Seeds to provide high quality alfalfa seed at a reasonable cost.

52. Plaintiff Geertson Seed Farms brings this action on behalf of itself. Geertson Seed Farms started as a family-owned seed farm located near Adrian, Oregon. Phillip Geertson does business as Geertson Seed Farms; an Oregon business. Phillip Geertson's family still farms the original 80 acres that was homesteaded by his family in 1939. Geertson Seed Farms has been selling alfalfa seed since 1942.

53. Geertson Seed Farms thrives to provide pure, high quality alfalfa seeds at a reasonable cost. Geertson Seed Farms contracts with farmers to grow its seed. In 2005, in order to ensure the purity of alfalfa seed varieties sold by Geertson Seed Farms after APHIS's first round of deregulation of RRA in 2004, Geertson Seed Farms entered into contract with farms in Canada to grow alfalfa seed. To this date, Geertson Seed Farms is still selling the seeds produced under its contract with farms in Canada. The alfalfa seed varieties currently sold by Geertson Seed Farms are university tested and have proven yield records.

54. Plaintiffs Trask Family Seed and Geertson Seed Farms (collectively "Plaintiff Family Farmers") are being, and will be, adversely affected by APHIS's actions complained of herein.

55. The cross contamination of the alfalfa seed that will inevitably occur from the introduction of GE alfalfa will have a detrimental effect on Plaintiffs Family Farmers' ability to market and sell their alfalfa seed. APHIS's Deregulation Determination will result in environmental, economic, and aesthetic injury to Plaintiffs Family Farmers because of the inadvertent contamination of conventional and organic alfalfa seed varieties, such as those sold by Plaintiffs Family Farmers, with RRA seed. Contamination of the seeds will impair or destroy Plaintiffs Family Farmers' ability to market their product as whole, raw, pure alfalfa seed. Conventional farmers and organic farmers who want to exclude GE organisms from their production systems demand testing to certify the purity of the seed, which will raise the costs of

farm management. Other onerous measures carried out in an attempt to prevent contamination will similarly burden Plaintiffs Family Farmers. For example, Plaintiff Family Farmers may have to contract to produce and import seed from farms abroad, which increases the transportation costs of producing and selling alfalfa seeds. More fundamentally, the Deregulation Determination will cost Plaintiffs Family Farmers the fundamental right to sow the crop of their choice.

56. Plaintiffs Family Farmers are also harmed by APHIS's Deregulation Determination because the inevitable development of weed resistance to glyphosate will damage farmers' ability to control weeds and feral alfalfa through the use of glyphosate, raising the cost of producing alfalfa seeds sold by Plaintiffs Family Farmers. Therefore, APHIS's Deregulation Determination will fundamentally change the nature of the alfalfa seed industry and cause economic, environmental aesthetic injury to Plaintiff Family Farms.

57. Plaintiffs and their members' injuries would be redressed by the relief sought.

***Defendants***

58. Defendant Thomas J. Vilsack is the Secretary of the United States Department of Agriculture and is being sued in his official capacity.

59. Defendant Cindy Smith is the Administrator for the U.S. Department of Agriculture's Animal and Plant Health Inspection Service and is being sued in her official capacity.

60. Defendants Vilsack and Smith are collectively referred to herein as USDA and/or APHIS.

## STATUTORY BACKGROUND

***The National Environmental Policy Act***

61. NEPA is "our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). NEPA emphasizes the importance of comprehensive environmental analysis to ensure that federal agencies make informed decisions. It also ensures that the public is made aware of the environmental effects of agencies' decisions, and is allowed to participate in the

process of preparing environmental reviews. NEPA requires federal agencies to assess the environmental consequences of their actions before those actions are undertaken.

62. One of the goals of NEPA is to preserve and maintain "an environment which supports diversity and variety of individual choice." 42 U.S.C. § 4331(a)(4).

63. An EIS is required under NEPA for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C).

64. "The primary purpose of an environmental impact statement is to serve as an action-forcing device to insure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal Government." 40 C.F.R. § 1502.1. An EIS must "provide full and fair discussion of significant environmental impacts and [must] inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." *Id.* It analyzes: "(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C).

65. In preparing an EIS, an agency must take a "hard look" at the impacts of the proposed agency action so that the agency may "make decisions that are based on understanding of environmental consequences." *Marsh*, 490 U.S. at 374; *see* 40 C.F.R. § 1500.1(c). The EIS ensures that the agency will take actions that "protect, restore and enhance the environment." 40 C.F.R. § 1500.1(c).

66. NEPA requires that an EIS contain a thorough discussion of the "alternatives to the proposed action." 42 U.S.C. §§ 4332(C)(iii); 4332(E). The discussion of alternatives is "the heart" of the NEPA process, and is intended to provide a "clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. The agency must "[r]igorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14(a).

67. The effects that must be discussed in an EIS include, *inter alia*, the direct environmental impacts of the proposed action, the indirect effects of the proposed action, and the cumulative impacts of the proposed action. Direct effects are those "which are caused by the action and occur at the same time and place." 40 C.F.R. 1508.8(a). Indirect effects are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. 1508.8(b). A cumulative impact constitutes the "impact on the environment which results from the incremental impact of the action when added to past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R . § 1508.7.

68. An EIS must analyze the ecological effects, including "the effects on natural resources and on the components, structures, and functioning of affected ecosystems," of the proposed agency action. 40 C.F.R. § 1508.8. An EIS must analyze potential adverse economic effects that are interrelated with natural or physical environmental effects. 40 C.F.R. § 1508.14.

69. Moreover, an adequate EIS must analyze the proposed agency action in different contexts. *See* 40 C.F.R. § 1508.27. Specifically, "context" means that "the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality ... Both short- and long-term effects are relevant." 40 C.F.R. § 1508.27(a).

70. An EIS must also analyze the intensity, or the "severity of the impacts" of the proposed agency action. 40 C.F.R. § 1508.27(b). This requires an agency to consider "the degree to which the effects on the quality of the human environment are likely to be highly controversial." 40 C.F.R. § 1508.27(b)(4). An agency must also discuss "the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks." 40 C.F.R. § 1508.27(b)(5) and "the degree to which the proposed agency action is related to other actions of "individually insignificant but cumulatively significant impacts." 40 C.F.R. § 1508.27(b)(7). Analysis of the intensity of the proposed action must also discuss the extent to which the proposed agency action "may cause loss or destruction of significant scientific,

cultural or historical resources," 40 C.F.R. § 1508.27(b)(8), and "the degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973." 40 C.F.R. § 1508.27(b)(9). Finally, and EIS must disclose and analyze "whether the action threatens a violation of Federal, State or local law or requirements imposed for the protection of the environment." 40 C.F.R. § 1508.27(b)(10).

71. After preparation of an EIS and at the time of its final decision, an agency prepares a concise, public record of decision ("ROD"). Among other things, the ROD describes and explains the basis for the agency's ultimate decision, discusses all alternatives considered, and states whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why. 40 C.F.R. § 1505.2.

72. The EIS must "state whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation." 40 C.F.R. § 1505.2(c). "Mitigation must 'be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated.'" *Carmel-By-the-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142, 1154 (9th Cir. 1997) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 353 (1989)). "A mere listing of mitigation measures," or "broad generalizations and vague references to mitigation measures" is legally inadequate. *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1381 (9th Cir. 1998).

73. An EIS must be prepared by the agency in two stages: a draft statement and a final statement, either of which "may be supplemented." 40 C.F.R. § 1502.9. An agency must remain alert to "new information that may alter the results of its original environmental analysis." *Marsh*, 490 U.S. at 374. An agency must supplement an EIS when "the agency makes substantial changes in the proposed action that are relevant to environmental concerns,"40 C.F.R. § 1502.9(c)(i), or when "there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(ii). An agency is also required to supplement an EIS when "the agency determines

that the purposes of the Act will be furthered by" preparing a supplemental EIS. 40 C.F.R. § 1502.9(c)(2).

***The Plant Protection Act***

74. In 2000, Congress enacted the PPA, which combined three previous statutes: the former Plant Quarantine Act, the Federal Plant Pest Act, and the Federal Noxious Weed Act. The purpose of the PPA is summarized in its first finding: "the detection, control, eradication, suppression, prevention, or retardation of the spread of plant pests or noxious weeds is necessary for the protection of the agriculture, environment, and economy of the United States." 7 U.S.C. § 7701(1).

75. Under the PPA, APHIS' decisions "shall be based on sound science." 7 U.S.C. § 7701(4).

76. A "plant pest" is defined as: "any living stage of any of the following that can directly or indirectly injure, cause damage to . . . any plant or plant product." 7 U.S.C. § 7702(14). APHIS's regulations defined a "plant pest" as "[a]ny living stage (including active or dormant forms) of . . . bacteria [among other organisms] . . . or any organisms similar to or allied with any of the foregoing . . . which can directly or indirectly injure cause disease or damage in or to any plants or parts thereof, or any processed, manufactured, or other products of plants." 7 C.F.R. § 340.1. The regulations further reference with regard to plant pest analyses: "indirect plant pest effects on other agricultural products." 7 C.F.R. § 340.6(c)(4).

77. The PPA also gives APHIS broad statutory power to prohibit or regulate not only plant pests, but "noxious weeds:" "The Secretary may prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, article, or means of conveyance, if the Secretary determines that the prohibition or restriction is necessary to prevent the introduction into the United States or the dissemination of a plant pest or noxious weed within the United States." 7 U.S.C. § 7712(a). The statutory definition of "noxious weed" is very broad: "The term 'noxious weed' means any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation,

navigation, the natural resources of the United States, the public health, or the environment." 7 U.S.C. § 7702(10).

78. The PPA creates an affirmative obligation for APHIS to prevent the spread of noxious weeds, and to "facilitate ... interstate commerce in agricultural products and other commodities that pose a risk of harboring ... noxious weeds in ways that will reduce, to the extent practicable, the risk of dissemination of ... noxious weeds." *See* 7 U.S.C. § 7701(3).

79. A central part of APHIS's mission is to protect the health and value of American agricultural and natural resources. *See, e.g.*, 75 Fed. Reg. 79467, 79468 (Dec. 20, 2010). For example, APHIS's Biotechnology Regulatory Service (BRS)'s "mission is to protect U.S. agriculture and the environment using a dynamic and science based regulatory framework that allows for the safe development and use of GE organisms." FEIS at i. APHIS has broad authority to take regulatory and administrative action to meet these goals. *See* 7 U.S.C. § 7754; *id.* § 7424.

80. Pursuant to its GE crop regulations, 7 C.F.R. Part 340, APHIS regulates "organisms and products altered or produced through genetic engineering that are plant pests or are believed to be plant pests." *See* 7 C.F.R. § 340.0(a)(2). A GE organism is presumed to be a "regulated article" if the donor organism, recipient organism, vector, or vector agent used in engineering the organism belongs to one of the taxa listed in the regulations, 7 C.F.R. § 340.2, and is also presumed to be a plant pest.

81. APHIS retains strict control over these "regulated article[s]," prescribing how they may be "introduce[d]" into the environment, and forbidding their "release" or "move[ment in] interstate [commerce]" absent explicit approval. 7 C.F.R. § 340.1. Under the agency's regulations, the introduction of any regulated article is considered to be a "release into the environment." 7 C.F.R. § 340.3(b)(1). APHIS defines "release into the environment" as "the use of a regulated outside the constraints of physical confinement that are found in a laboratory, contained greenhouse, or a fermenter or other contained structure." 7 C.F.R. § 340.1. An applicant can receive permission to conduct experimental field trials of a regulated article

pursuant to a notification and/or a permit, after submitting sufficient data, and in compliance with APHIS's limitations on use and planting. 7 C.F.R.§§ 340.3(e), 340.3(e)(5), 340.4.

82. In order to commercialize a GE crop, a person must further petition APHIS for a "deregulation" determination. 7 U.S.C. § 7711(c)(2); 7 C.F.R. § 340.6. Before deciding whether to approve a deregulation petition, APHIS must publish notice and solicit public comments. 7 C.F.R. § 340.6(d)(2)-(3). APHIS can approve a deregulation in whole or in part. 7 C.F.R. § 340.6(d)(3).

***Administrative Procedure Act***

83. The APA provides for judicial review of "final agency action" such as the preparation and issuance of an EIS and ROD under NEPA.

84. The APA provides that "[a] person suffering legal wrong because of agency action, or adversely affected or aggrieved within the meaning of a relevant statute, is entitled to judicial review thereof." 5 U.S.C. § 702.

85. Under the APA, a reviewing court shall "hold unlawful and set aside agency action, findings, and conclusions" that it finds to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A).

86. "Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co,.* 463 U.S. 29, 43 (1983).

87. Under the APA, a reviewing court must also "hold unlawful and set aside agency action, findings, and conclusions" found to be made "without observance of procedure required by law." 5 U.S.C. § 706(2)(D).

88. Under the APA, a reviewing court has the authority to "compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1).

## FACTUAL BACKGROUND

***Background on Alfalfa***

89. Alfalfa (*Medicago sativa L.*) is the fourth most widely grown crop in the United States behind corn, soybeans, and wheat; it is grown in every U.S. state. It ranks third in agricultural crops in terms of value. Both food (sprouts, dietary supplements, and herbal or homeopathic medicine) and animal feed (hay, haylage, or silage) are derived from alfalfa. It is dubbed the "Queen of Forages" due to its high nutritional content for cattle, sheep and horses.

90. Because of the dense nature of the plant growth, alfalfa can be, and is often, grown without the application of herbicides. According to the latest available figures from the USDA, only 7 percent of alfalfa planted in the U.S. was treated with herbicides in 1998.

91. Farmers planted approximately 21 million acres of alfalfa in 2008. The overall crop value was $10.7 billion in the 2008-2009 crop year. In 2004, the USDA estimated that 77.4 million tons was produced on 22.2 million acres, with an additional 88.5 million tons of alfalfa mixed hay produced on another 39.4 million acres.

92. In 2004, 1,050,000 acres of alfalfa and alfalfa mixtures for hay were harvested in California, and another 7,350,000 tons of hay were produced in California. In California, hay and seed are often produced on the same acreage.

93. According to the 2007 Census of Agriculture, approximately 115 million pounds of alfalfa seed were produced in the U.S. California was the largest producer of alfalfa seed, with 19 million pounds produced, followed by Washington, Idaho, Wyoming, Nevada, Montana, Oregon, Utah, Arizona, and South Dakota.

94. Alfalfa is an important feed for all classes of agricultural animals. It is considered the best available animal feed for ruminants and critical to the dairy industry. Other livestock sectors that rely upon alfalfa include beef cattle, sheep, chickens, turkeys, and horses. Pelletized alfalfa is a common component of many pet foods. Alfalfa also produces a large amount of nectar, up to 1900 pounds per acre, making it popular with beekeepers. Honey bee hives commonly use alfalfa and clover as nectar sources; managed and wild bee hives are often associated with alfalfa fields.

95. About 2.5 percent of alfalfa seed in the U.S. is also eaten directly by humans in the form of sprouts. Alfalfa sprouts account for about 75 to 80 percent of the green sprouts market, or about $60 to $65 million in annual sales. Dehydrated alfalfa leaf is also consumed by humans as a dietary supplement, herbal, or homeopathic medicine.

96. Alfalfa is a deep-rooted perennial crop often grown for three to six years in succession, or longer in some areas.

97. Honey bees, alkali bees, and leaf cutter bees are important pollinators for alfalfa producers. Leafcutter bees are the main pollinating species in the Pacific Northwest and honey bees are the main species in the U.S. Southwest. Some growers also use alkali bees. Feral honey bees and native bees including *Bombus spp., Osmia spp., Agapostomen spp. and Megachile spp.* can also be found visiting alfalfa flowers in varying numbers. Bees can forage and cross-pollinate at distances of many miles. For example, honey bees are known to travel six miles or more. Unlike most alfalfa seed production states, California depends almost exclusively on honey bees for alfalfa pollination.

98. Because it is widespread and grown as a perennial crop, alfalfa provides important habitat for wildlife. More than 130 species of birds visit alfalfa fields each year, including endangered species. In California alone, a survey of 675 flora in the state revealed that 27 percent use alfalfa fields for feeding, cover and/or reproduction.

99. In addition to being a key source of digestible fiber and protein for dairy cows, alfalfa is a key contributor to sustainable agriculture, providing reduced soil erosion compared with row crops, deep extensive root systems that improve soil tilth and sequester carbon, and nitrogen fixation/crop rotation benefits.

100. Feral, or wild, alfalfa populations are ubiquitous in the U.S. west. Alfalfa populations can escape agricultural fields and multiply by natural regeneration. Feral alfalfa can be found at air fields, canals, cemeteries, ditch banks, fence rows, highways, irrigation ditches, pipelines, railroads, rangeland, right-of-ways, roadsides, and wastelands.

101. At an average export price of $160 per ton, the alfalfa hay export market is valued at $192 million annually. Most of the alfalfa hay exported from the U.S. is grown in California

and Washington. Japan, Korea, Taiwan, Canada, and Mexico account for 98 percent of the total metric tons exported. Of the five countries, Japan, Korea and Taiwan, which make up 91.6 percent of the alfalfa export market, all contain restrictions and regulations on GE crops. In 2007 the alfalfa exports to Japan, Korea, and Taiwan were about $159 million.

102. Saudi Arabia is the largest customer for U.S. alfalfa seed followed by Mexico, Argentina, and Canada. In 2007, the total value of export alfalfa seed was $66 million. Saudi Arabia, which currently bans imports of GE seeds, is the largest U.S. export market for alfalfa seed ($38 million).

***The Organic Industry***

103. The organic sector is the fastest growing sector of the U.S. agricultural economy, a $26.6 billion-per-year industry that employs tens of thousands of individuals around the country, and helps keep at least 14,540 family farms operating in our countryside. Except for 2009, the organic industry has experienced double digit growth annually—often over 20 percent every year—for over a decade.

104. Organic dairy comprises 16 percent of the total organic market. Organic alfalfa forage is essential for organic dairies because it serves as their most important feed source. Much of the alfalfa hay grown in the U.S. is consumed on dairy farms, with approximately 200,000 total acres of organic alfalfa hay harvested annually.

105. Farmers, food processors, and retailers receive a price premium for certified organic products; alfalfa growers, for example can reap an average of 18 percent price premium for certified organic alfalfa.

106. Organic dairy farming is central to the national growth of the organic industry, as consumer demand has driven a steady increase in production. The organic dairy industry has surpassed $1 billion in annual sales for the past several years, and the sale of organic milk alone was $750 million in 2007. Organic milk receives an average 43 percent premium over the price of conventional milk. The sale of organic meat has also been growing and is forecasted to grow at an annual rate of 27 percent between 2007 to 2010. Nationwide, the number of certified organic cows grew by an annual average of 25 percent between 2000 and 2005.

107. The production of organic alfalfa is centered in six states -- Idaho, Wisconsin, Minnesota, North Dakota, South Dakota, and California. The price premium for organic alfalfa hay is on average 18-20 percent higher compared to conventional alfalfa.

108. Consumers choose organic products in large part due to the decreased environmental impact of organic production. Organic production is defined as a system that integrates "cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity." 7 C.F.R. § 205.2. These ecological benefits lie at the core of the organics industry and drive consumer choices.

***Background on GE Crops and History of RRA***

109. GE crops are the subject of great controversy both in the U.S. and abroad. Controversial issues include the growing control of seed supply by biotechnology/pesticide firms, their inability to live up to the promises made for them, transgenic contamination of non-GE crops, and the adverse environmental impacts associated with their use.

110. The biotechnology industry emerged through the rapid acquisition of seed firms by chemical and pesticide companies such as Monsanto, DuPont, Syngenta and Dow. Monsanto, the world's largest seed firm, has used genetic engineering primarily to create patented RR crops for use in tandem with its Roundup herbicide. American soybeans, corn, cotton, canola and sugar beets are now primarily Roundup Ready, making glyphosate the most heavily used chemical pesticide in history, with 180-185 million lbs. applied in U.S. agriculture in 2007.[1] Controversial issues include Monsanto's aggressive use of lawsuits to sue farmers for the millennia-old practice of seed-saving, anticompetitive practices resulting in sharply rising GE seed prices and a dwindling supply of non-GE seeds, and crop breeding programs that are increasingly driven by corporate profit rather than public interest and the needs of farmers.

111. Despite a quarter century of promises, agricultural biotechnology has failed to make any progress towards reducing world hunger, ameliorating global malnutrition, combating

[1] U.S. Environmental Protection Agency, *Pesticide Industry Sales and Usage: 2006 and 2007 Market Estimates*,Table 3-6. (Feb. 2011), *available at* http://www.epa.gov/opp00001/pestsales/07pestsales/market_estimates06-07.pdf.

global warming, or creating miracle drugs through GE plant and animal "biofactories." Biotechnology firms have instead delivered a handful of GE crops that produce pesticides and/or withstand direct application of herbicides. Herbicide-resistant crops predominate, and nearly all of these are Monsanto's RR varieties, like RRA.

112. Gene flow from GE crops to conventional and organic crops, or transgenic contamination, is one adverse environmental impact stemming from the cultivation of GE crops. Gene flow occurs in numerous ways, including when a crop disperses its seeds or pollen to propagate itself over time and space. Gene flow results in biological contamination of related conventional or organic cultivars or wild species with potentially hazardous, or simply unwanted, GE or transgenic content. It has been the focus of several legal challenges, including the precursor to this case, *Alfalfa I*.

113. The risk of transgenic contamination is especially high with alfalfa because it is a bee-pollinated, perennial crop. Pollen from RRA can easily spread to conventional hay and seed fields, as well as reach feral populations of alfalfa that are prevalent in alfalfa growing regions. Alfalfa persists and propagates readily without human intervention. Feral populations that acquire the RR gene can transmit it via gene flow back to conventional alfalfa stands years later.

114. Transgenic contamination can also result from seed mixing, flooding, improper seed cleaning of machinery, spillage during transport, and a variety of human errors that may occur at each stage of the crop production process. Volunteer RRA that sprouts from unharvested RRA seed can be a troublesome weed in follow-on crops that requires increased use of non-glyphosate herbicides to control.

115. Consumers and foreign markets demand conventional and organic foods free of transgenic content. Over 200 documented episodes of transgenic contamination have made it increasingly difficult to meet this demand and resulted in conventional and organic farmers suffering huge economic losses when contaminated shipments are rejected by foreign markets, grain traders or food companies. Farmers are denied the ability to plant non-GE crops, food companies are subject to huge liability, and consumers cannot access the foods of their choice. Among the most well-known contamination episodes are those of genetically engineered

StarLink corn, Liberty Link rice, and RR canola. Starlink was a GE corn approved for animal feed or industrial use, but not for human foods, due to the concerns of leading American food allergists that the insecticidal toxin produced in StarLink grain could trigger food allergies. In 1998, Starlink contaminated the U.S. corn supply chain, resulting in rejection by foreign markets, the recall of over 300 corn products, the destruction of numerous lines of contaminated corn seed, lawsuits by farmers who lost hundreds of millions of dollars due to depressed corn prices, and losses to the food industry as a whole estimated at $1 billion. GE LibertyLink rice (LL601) massively contaminated the rice supply in 2006 and 2007, leading to export market rejection of American rice, depressed rice prices, shortage of uncontaminated rice seed for farmers to plant, and overall losses on the order of $700 million to $1.3 billion. Farmers were forced to sue Bayer CropScience, the developer of LL601, for compensation for their losses. Finally, the nascent organic canola industry in Canada was destroyed a decade ago by rampant contamination of organic canola with transgenic varieties. This contamination was so pervasive that it was found regularly in certified and foundation seed stocks, making it virtually impossible for farmers to grow organic canola free of transgenic content. This example is particularly relevant to alfalfa, given that both canola and alfalfa are bee-pollinated crops that can persist in wild or feral form to acquire transgenic traits and pass them back to conventional cultivars.

116. Increases in herbicide usage are also associated with RR crops. Large-scale cultivation of RR crops has substantially increased overall use of herbicides in American agriculture, by 383 million pounds in the 13 years from 1996 to 2008.[2] Much of this increase is attributable to greater use of glyphosate. Because the vast majority of alfalfa is grown without the use of herbicides, substantial adoption of RRA would spur increased glyphosate use without significant displacement of other herbicides. RR crop systems have made glyphosate the most heavily used pesticide in the history of agriculture, with 180-185 million pounds applied by

[2] Charles Benbrook, The Organic Center, *Impacts of Genetically Engineered Crops on Pesticide Use: The First Thirteen Years,*(Nov. 2009), *available at* http://www.organic-center.org/science.pest.php?action=view&report_id=159.

American farmers in 2007. While RR crops lead to glyphosate displacing certain other herbicides, the use of still other toxic herbicides has not diminished; for instance, atrazine use has remained relatively constant at 70-82 million lbs. per year over the past two decades despite widespread adoption of RR crops. Because the vast majority of alfalfa is grown without the use of herbicides at all, substantial adoption of RRA would spur increased herbicide use more than prior RR crops, like soybeans and corn, which have been herbicide-intensive for decades.

117. A growing body of scientific research demonstrates that glyphosate-based herbicides are more toxic than was once thought. Glyphosate formulations are lethal to many amphibians; they kill human cells, disrupt formation of sex hormones, and interfere with animal embryonic development in laboratory experiments; and are associated with increased rates of certain cancers in farmers who apply them. Glyphosate use with RR crops is also linked to higher incidence of plant disease, plant nutrient deficiencies, and adverse impacts on soil microbes.

118. RR crops have also fostered an ongoing epidemic of GR weeds, regarded by agronomists as one of the most serious challenges facing American agriculture.[3] GR weeds evolve most quickly when RR crops are grown year after year, without break, on the same fields; like bacteria exposed to antibiotics, some weeds naturally resistant to glyphosate will survive exposure, and will then reproduce and flourish. Farmers respond to resistant weeds by applying more glyphosate and other, even more hazardous herbicides, and by using soil-eroding tillage operations.[4]

119. Herbicide-resistant GE crops such as RRA withstand direct, "over the top" application of an herbicide that is toxic to conventional (non-GE) crops, facilitating season-long application of an herbicide that otherwise is used primarily prior to planting or sprouting of the non-GE crop seed in order to remove early season weeds. GE herbicide-resistant crops (chiefly

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[3]Powles, S.B, *Gene amplification delivers GR weed evolution*, PNAS 107, 955-56 (2010).

[4]National Research Council, National Academy of Sciences, *The Impact of Genetically Engineered Crops on Farm Sustainability in the United States* (2010).

soybeans, corn, cotton and canola) represent five of every six acres (84 percent) of GE crop acres worldwide.

120. Use of glyphosate with RR crops is much more prone to trigger evolution of GR weeds than its traditional use with conventional crops. GR weeds were unknown in the two decades from the introduction of glyphosate in 1974 to the introduction of RR crops in 1996. Since the year 2000, GR weeds have evolved in epidemic manner to infest over 10 million acres of cropland in 26 states. GR weed-infested acreage in the U.S. has quadrupled since just November of 2007, and is projected to nearly quadruple again to 38 million acres by 2013.[5] GR weeds lead to increased use of glyphosate and more toxic herbicides, greater use of soil-eroding tillage operations to physically remove weeds, and massive deployment of weeding crews to manually remove weeds, all of which increase farmers' weed control costs, often dramatically.

121. The most effective means to forestall development of GR weeds is to plant non-RR crops and use weed control methods other than glyphosate in at least some years. Alfalfa is commonly rotated with corn and soybeans, both of which are now primarily RR varieties in the U.S. The replacement of conventional alfalfa with RRA in rotations already dominated by RR corn and RR soybeans would foster still more rapid evolution of GR weeds, and expand their presence to new regions.

122. The rapid evolution of GR weeds accelerates adoption of the next generation of GE crops, which are engineered for resistance to more toxic herbicides like 2,4-D, dicamba and imidazolinones, often in combination.[6] These multiple herbicide-resistant crops—presented by the pesticide industry as the "solution" to glyphosate-resistant GR weeds—will in turn foster multiple herbicide-resistant weeds and a toxic spiral of increased herbicide use in response.

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[5] FEIS, App. G at G-35.

[6] Kilman, S., *Superweed outbreak triggers arms race*, The Wall Street Journal, June 4, 2010, *available at* http://www.gmwatch.org/latest-listing/1-news-items/12263-superweed-outbreak-triggers-arms-race.

*Procedural History of the RRA Litigation*

123. The RRA lines at issue in this case and in *Alfalfa I*, Events J101 and J163, "were engineered to be glyphosate-resistant by inserting a gene that codes for the enzyme 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) into the alfalfa genome. The gene is from the common soil bacterium *Agrobacterium* sp. strain CP4 and was introduced into alfalfa via an *Agrobacterium*- mediated transformation protocol." FEIS at 3.

124. Because regulations adopted by APHIS pursuant to the PPA list *Agrobacterium* as a plant pest, 7 C.F.R. § 340.2(a), Events J101 and J163 RRA qualified as "regulated article[s]" and could not be introduced into the environment without permits from APHIS. 7 C.F.R. §§ 340.0(a), 340.1. RRA was a regulated article because it contains non-coding deoxyribonucleic acid (DNA) segments derived from plant pathogens and the vector agent used to deliver the transforming DNA is a plant pathogen.

125. On April 16, 2004, APHIS received a petition from Monsanto and Forage Genetics International (FGI), its licensee, requesting a determination of non-regulated status for GE alfalfa designated as Events J101 and J163.

126. On December 8, 2004, the FDA issued a Biotechnology Consultation Note to the File BNF No. 000084 regarding glyphosate-resistant (Roundup Ready) Alfalfa Event J101 and Event J163. This consultation note was issued as part of FDA's voluntary consultation process which does not mandate any food safety testing. FDA only reviewed documents presented by Monsanto/FGI. The consultation note concluded that: "Monsanto and Forage Genetics have concluded that their glyphosate-resistant alfalfa event J101 and event J163, and the feeds and foods derived from them, are not materially different in safety, composition, or any other relevant parameter from alfalfa now grown, marketed and consumed. At this time, based on Monsanto's and Forage Genetics' description of its data and information, the Agency considers this consultation on alfalfa event J101 and event J163 to be complete." (Biotechnology Consultation Note to the File BNF No. 000084 at 5).

127. APHIS prepared an EA, issued a FONSI and on June 27, 2005, announced its decision to unconditionally deregulated RRA. 70 Fed. Reg. 36917-19.

*The Alfalfa I Litigation*

128. In 2006, Plaintiffs filed *Alfalfa I* in the United States District Court for the Northern District of California challenging APHIS's decision to grant deregulated status to RRA under NEPA, the PPA, the ESA and the APA.

129. On February 13, 2007, the court issued a summary judgment opinion, finding that the EA prepared by APHIS was inadequate and the FONSI arbitrary and capricious, and ordering APHIS to prepare an EIS. *Alfalfa I*, No. 3:06-cv-01095 CRB, 2007 WL 518624, at *10-12 (N.D. Cal. Feb. 13, 2007). The impacts to be analyzed included transgenic contamination, the creation of herbicide-resistant superweeds, and the cumulative impacts of the herbicides used on RRA. Regarding transgenic contamination, the court also held that the intertwined socioeconomic impacts to organic or other non-GE farmers, and consumers—the potential loss of their choice to sow and eat non-GE crops and food—was a cognizable injury that must also be analyzed. *Id.* at *8 ("A federal action that eliminates a farmer's choice to grow non-genetically engineered crops, or a consumer's choice to eat non-genetically engineered food, is an undesirable consequence: another NEPA goal is to 'maintain, wherever possible, an environment which supports diversity and variety of individual choice.'"). The court dismissed Plaintiffs' ESA and PPA claims without prejudice. *Id.* at *11-12.

130. APHIS and Monsanto and FGI, which intervened during the remedy phase, then proposed that, despite the NEPA violation, RRA production should continue—and even increase fivefold—to a million acres, proposing measures they claimed would keep RRA from causing any harm. After considering voluminous evidence submitted by the parties during the remedy phase, the court declined to adopt and install the APHIS-Monsanto remedy; instead, finding that plaintiffs had met their burden to warrant relief, the court vacated the deregulation and issued an injunction preserving the *status quo* pending NEPA compliance. *Alfalfa I*, 2007 WL 776146, *3 (N.D. Cal. March 12, 2007) (Preliminary Relief Order); *Alfalfa I*, 2007 WL 1302981, *8-9 (N.D. Cal. May 3, 2007) (Permanent Relief Order). In balancing the equities, the court permitted those few farmers who had already planted RRA (about 200,000 acres) to continue growing it, but under restrictions proposed by the government intended to mitigate contamination.

131. The defendants appealed, seeking to set aside the *Alfalfa I* district court's relief and replace it with their proposed remedy, a *de facto* partial deregulation which would have allowed planting of RRA to continue during the pendency of the EIS. Neither APHIS nor intervenors challenged the district court's merits decision. The Ninth Circuit twice affirmed. *See Geertson Seed Farms v. Johanns*, 541 F.3d 938 (9th Cir. 2008), *amending opinion and denying petition for rehearing and rehearing en banc*, 570 F.3d 1130 (9th Cir. 2009).

132. Intervenors then sought, and the Supreme Court granted, certiorari. *Monsanto*, 130 S.Ct. 2743 (2010).

133. The Supreme Court reversed the Ninth Circuit and set aside the injunction, holding that it improperly bound APHIS from proposing a limited deregulation. *Monsanto*, 130 S.Ct. at 2759 (2010) (holding that "the District Court barred the agency from pursuing *any* deregulation-no matter how limited the geographic area in which planting of RRA would be allowed, how great the isolation distances mandated between RRA fields and fields for growing non-genetically-engineered alfalfa.") (emphasis in original). In its analysis of actions APHIS could take, the Court posited partial deregulations for RRA with restrictions to prevent or mitigate transgenic contamination harm and weed resistance harm, such as geographic restrictions and isolation distances. *Id.* at 2760.

134. The Court also relied on the independent effect of the district court's vacatur, holding that it alone was sufficient to preclude planting, and thus the additional injunction was unnecessary. *Id.*at 2761. At the end of *Alfalfa I* litigation, RRA remained a "regulated article" under the PPA and as such, it remained unlawful to plant and sell RRA commercially.

***The 2010 Partial Deregulation Petition***

135. Following the Supreme Court's decision, on August 6, 2010, FGI filed a new petition seeking partial deregulation of RRA until APHIS completed the EIS and made a new decision on the original deregulation petition. *See* APHIS, *Supplemental Request for Partial Deregulation of Roundup Ready Alfalfa*, 75 Fed. Reg. 68321-22 (Nov. 5, 2010) (hereafter "supplemental petition"). APHIS did not propose a partial deregulation before completion of the court-ordered EIS in December 2010.

*APHIS's EIS on RRA*

136. On March 23, 2007, pursuant to the court's order in *Alfalfa I*, APHIS published a notice in the Federal Register, announcing the court's decision to vacate APHIS's decision to deregulate RRA and that events J101 and J163 were once again regulated articles under 7 C.F.R. part 430. 72 Fed. Reg. 13735-36. On January 7, 2008, APHIS published a notice of intent to prepare an EIS, soliciting comments on the scope and nature of the issues of the EIS. 73 Fed. Reg. 1198-1200, Docket No. APHIS-2007-0044.

137. APHIS released a DEIS for public comment in December 2009. *See* 74 Fed. Reg. 67206 (Dec. 18, 2009); 75 Fed. Reg. 1585-86 (January 12, 2010). In the DEIS, APHIS concluded that there were no significant environmental or intertwined socioeconomic impacts on the human environment due to the deregulation of RRA. DEIS at xv ("APHIS has preliminarily concluded that there is no significant impact on the human environment due to granting nonregulated status to [RRA]"), xviii ("In summary, the impacts analyses in this DEIS have not found any significant impacts of GT alfalfa on the biological properties of alfalfa, weediness, threatened and endangered species, wildlife, other plants, other agricultural production systems and markets, trade, human health and safety, land use or the physical environment.").

138. The DEIS offered two alternative outcomes: (1) deny the petition for deregulation or (2) approve full deregulation, without restriction. DEIS at 11-14. APHIS declined to include any partial deregulation alternatives with restrictive measures, such as isolation distances or geographic restrictions, or even seriously to consider a no action alternative, based on its view of its regulatory authority. APHIS concluded it could only approve a deregulation in part if there was a plant pest risk associated with the GE crop. DEIS at 12, 14-15.

139. APHIS concluded repeatedly that, because it had already concluded in its separate "Plant Pest Determination" (DEIS, App. W) that "GT alfalfa is unlikely to pose a plant pest risk," its authority, and NEPA analysis of RRA, was at an end. *See, e.g.*, DEIS at xv, 1, 11, 13-15, 161, 164 ("If APHIS determines that GT alfalfa does not pose a plant pest risk, then APHIS has no regulatory authority to deny the deregulation of GT alfalfa events J101 and J163").

140. The comment period on the DEIS closed March 3, 2010. APHIS received

approximately 244,000 public comments on the DEIS, *see* FEIS at ii, the overwhelming majority expressing concern regarding the impacts of deregulation and urging the agency to disallow deregulation and/or place restrictions on it. These were the most numerous public comments by far on any GE crop approval or GE issue, as well as was one of the largest public comment outpourings in the history of U.S. administrative notice and public comment procedure.

141. Plaintiffs filed extensive comments on the DEIS, raising issues such as the likelihood of transgenic contamination of conventional, organic and feral alfalfa, evolution of GR weeds, increased herbicide use, harm to endangered and threatened species, adverse impacts on organic production, and adverse economic impacts interrelated to the environmental impacts caused by the deregulation.

142. Approximately one year later, APHIS released the FEIS. 75 Fed. Reg. 80807-08 (December 23, 2010). It included three alternatives: (1) a "no action" alternative under which RRA would remain a regulated article ("No Action Alternative"); (2) a deregulation alternative that would grant RRA deregulated status and allow for the commercialization of RRA without limitations ("Full Deregulation Alternative"); and (3) an alternative whereby RRA would be deregulated but subject to isolation distances and geographic restrictions on hay and seed production ("Partial Deregulation Alternative").

143. APHIS determined that the Deregulation Alternative and Partial Deregulation Alternative were both "co-preferred" alternatives of the FEIS; that is, the FEIS found that both alternatives would fulfill the agency action's "purpose and need." *See* FEIS at iii-iv, 9, 11.

144. The FEIS determined that the Partial Deregulation Alternative was a "preferred alternative because it meets the USDA's purpose and need to promote programs that support coexistence of all types of agricultural practices" and because it "addressed concerns" regarding "the potential for cross pollination and other related impacts to non-GE alfalfa." FEIS at iv, 11.

***The 2011 RRA Deregulation Determination***

145. On January 27, 2011, APHIS announced its decision to select Alternative 2, the

Full Deregulation Alternative, granting unrestricted deregulated status for RRA and published the ROD.[7] On February 2, 2011, APHIS published a notice informing the public of its Deregulation Determination in the Federal Register. 76 Fed. Reg. 5780–81.

146. The ROD concluded that APHIS would deregulate RRA without restrictions or further analysis (Alternative 2) "because alfalfa events J101 and J163 do not present a greater plant pest risk than other conventional alfalfa varieties." ROD at 6. APHIS reached this conclusion despite acknowledging the risks and impacts of gene flow, increased glyphosate use, threats to certain endangered species, and various socioeconomic impacts. Further, the ROD concluded that the agency could not select Alternative 3, the partial deregulation alternative, because "APHIS has not identified any plant pest risks associated with J101 and J163. In light of these findings and after further consideration of Alternative 3, we have determined that the restrictions in Alternative 3 are not consistent with APHIS's regulatory authorities .... Therefore Alternative 3 does not meet the agency's purpose and need to act on the petition in accordance with its regulatory authorities." ROD at 14.

***Events Subsequent to the RRA Deregulation Decision that Require a SEIS***

147. Simultaneously with the deregulation determination, USDA announced some new "co-existence" initiatives intended to mitigate contamination impacts of RRA.[8] These initiatives include: creating a committee to provide guidance to USDA on coexistence between GE and non-GE crops; further research on restricting pollen flow and promoting coexistence in alfalfa seed and hay production; field trials to improve the alfalfa germplasm using non-GE alfalfa seeds; workshops and research regarding genetic mechanisms to prevent unwanted pollination; research aimed at improving detection of transgenes in alfalfa seeds and hay and improving seed handling; and making available a new voluntary audit-based program to promote the effective marketing of alfalfa.

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[7] *See* http://www.aphis.usda.gov/biotechnology/alfalfa_documents.shtml

[8] *See* USDA, USDA Actions to Support Continued Dialogue and Constructive Coexistence in U.S. Agriculture, *available at* http://www.usda.gov/documents/USDAContinuedDialogueConstructiveCoexistence.pdf

148. These new initiatives and their efficacy, if any, were not studied in the EIS.

***Effects of the Deregulation Determination***

149. APHIS's Deregulation Determination authorizes the unrestricted commercial release into the environment of the first perennial GE crop, to be used over vast acreage (potentially 20 million acres), in a myriad of climates and habitats throughout the United States. The decision is a significant increase in the commercial use of herbicide-resistant GE crops.

150. The unrestricted deregulation decision will cause the widespread, irreparable and permanent transgenic contamination of conventional, organic and feral alfalfa. The decision will cause the contamination of public and private lands with contaminated feral alfalfa and consequently cause a reduction in biodiversity. The decision will lead to extensive feral RRA populations that are impossible to control with glyphosate and that will pass the RR trait back to conventional alfalfa, as well as spread into native ecosystems.

151. The decision will impair the continued health and growth of the organic industry, the fastest growing sector of the U.S. agricultural economy. Organic dairies are particularly at risk, since alfalfa is their main source of forage and because the USDA organic standard requires feed for organic livestock producers to be 100 percent organic. Contamination by the increased unrestricted planting of RRA presents a grave threat to the organic industry's ability to meet growing consumer demand. The decision will threaten the loss of USDA organic certification for organic farmers, dairies and businesses. The decision will cause market rejection, loss of reputation and loss of public trust in organic farmers, dairies and businesses, as well as the public's trust in the USDA standard itself, due to widespread contamination. The direct financial impact on organic dairy farmers due to lost domestic and international markets will be in the hundreds of millions of dollars annually.

152. The decision will cause farm management costs to dramatically increase due to onerous measures intended to limit contamination, such as buffer zones, as well as the cost of contamination testing. Increased costs and forced isolation distances will favor large producers over small family farms, increasing the former at the expense of the latter.

153. The decision will cause severe harm to U.S. alfalfa export markets such as Saudi Arabia, Japan, and South Korea. It will cause market rejection and the permanent loss of some markets, which will instead import from countries that do not run the risk of contamination. The direct financial impact on U.S. alfalfa hay and seed farmers and exporters will be in the hundreds of millions of dollars annually.

154. The decision threatens the fundamental right of conventional and organic farmers to sow the crop of their choice, and consumers to by non-GE alfalfa sourced products. The decision will cause a decline in the availability of conventional and organic alfalfa seed varieties and potentially their extinction through contamination.

155. The decision will exacerbate the on-going glyphosate-resistant weeds epidemic. These weeds will spread to agricultural lands in the surrounding areas. During the harvest of alfalfa seeds, the seeds from these "superweeds" will intermix with alfalfa seeds. Alfalfa seeds are so small that it will be practically impossible to separate the alfalfa seeds from the seeds of the "superweeds." As a result, the seeds of "superweeds" will be disseminated throughout the country when alfalfa seed is dispersed through the stream of commerce. The increasing Roundup resistance in weeds and feral alfalfa will lead to use of herbicides with relatively greater environmental impacts and to increased costs for both adapting and non-adapting farmers. As "superweeds" emerge, chemical control will to shift to more toxic, persistent, and less desirable herbicides such as 2,4-D and Paraquat. The decision will also cause a prevalence of volunteer RRA alfalfa, leading to increased use of mechanical tillage to remove it, and hence to greater soil erosion.

156. The decision will cause a massive increase in pesticide load on the environment. Currently only 7 percent of all alfalfa uses any herbicide. That agronomic system will be replaced with a pesticide-promoting cropping system. The RRA-applied glyphosate, now discharged in significant quantities over millions of acres where it was previously not used at all, will cause grave harm to neighboring crops, native plants, microorganisms and biodiversity in general. The surfactants used in glyphosate formulations will also cause environmental harm.

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**FIRST CLAIM**

[Violation of National Environmental Policy Act and Administrative Procedure Act – Against APHIS]
[By All Plaintiffs]

FAILURE TO ADEQUATELY CONSIDER ENVIRONMENTAL CONSEQUENCES

157. Plaintiffs reallege and incorporate by reference Paragraphs 1 through 156, as though fully alleged herein.

158. The FEIS is flawed because it failed to take a hard look at the environmental effects of its Deregulation Determination.

159. APHIS's NEPA analysis and deregulation decision are arbitrary and capricious. APHIS made numerous conclusions directly contracting the evidence before it. It relied on questionable, misleading, obsolete or incorrect data in its attempts to explain away or minimize the significant impacts of commercializing RRA. APHIS also either completely failed to analyze important impacts of its decision, or its treatment of them was inadequate and/or inaccurate. These inadequacies include, but are not limited to, those hereinafter alleged.

160. Transgenic Contamination: APHIS improperly discounted and failed to assess adequately or accurately the environmental impacts of transgenic contamination.

161. Socioeconomic Impacts of Contamination on Conventional and Organic Growers and Businesses: APHIS improperly discounted and failed to assess adequately the intertwined socioeconomic impacts of transgenic contamination on conventional and organic farmers, businesses, and the public.

162. Resistant Weeds and Weediness Impacts: APHIS failed to analyze adequately or accurately the impacts of RRA deregulation on the creation of GR weeds and exacerbation of the GR weeds epidemic in U.S. agriculture.

163. RRA Glyphosate Impacts: APHIS failed to assess adequately or accurately the environmental impacts of increased glyphosate use from the adoption of a Roundup-promoting cropping system in a crop that currently uses little or no herbicides.

164. Disease Resistance: APHIS failed to analyze accurately or adequately the potential for RRA to become more susceptible than organic or conventional alfalfa to plant diseases.

165. Seed Concentration: APHIS did not assess adequately the potential for deregulation of RRA to lead to a decline in the availability of conventional alfalfa seed varieties.

166. Tillage: APHIS's conclusion that RRA will increase use of conservation tillage is contrary to the record evidence.

167. Cumulative Impacts: APHIS did not adequately consider or take a hard look at the cumulative impacts of the Deregulation Determination. For example, APHIS did not analyze herbicide use with other RR crop systems to inform its analysis of herbicide use with RRA, since all RR crop systems share a characteristic glyphosate usage pattern. The FEIS included no analysis of RRA rotations with other RR crops, although displacement of conventional alfalfa by RRA in rotations comprised of RR corn and/or RR soybeans will greatly increase selection pressure for rapid evolution of GR weeds.

168. Mitigation: APHIS listed and relied on, but failed to take a hard look at, potential mitigations of the effects of the Deregulation Determination, including impacts of contamination, increased pesticide use and the creation of herbicide resistant weeds. APHIS relied on industry standards rather than analyzing their efficacy itself. APHIS also relied on new agency "co-existence" initiatives to minimize impacts of the deregulation, announced at the same time as the deregulation decision, but failed to analyze their efficacy, in the FEIS.

169. For the reasons alleged, among others, considered both individually and collectively, the Deregulation Determination and FEIS were inadequate and flawed, and did not constitute a hard look. Defendants' reliance on them was and is arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law, and without observance of procedures required by law, in violation of NEPA and the APA.

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**SECOND CLAIM**

[Violation of National Environmental Policy Act
and Administrative Procedure Act – Against APHIS]
[By All Plaintiffs]

APHIS' NEPA PROCESS PROCEDURALLY FLAWED AND PREDETERMINED

170. Plaintiffs re-allege and incorporate by reference Paragraphs 1 through 169, as though fully alleged herein.

171. APHIS improperly confined its NEPA analysis and as a consequence failed to consider, or adequately analyze, a broad array of potential environment impacts. Among other errors, APHIS limited its assessment to its regulatory authority rather than its statutory authority, and failed to acknowledge its mandate to minimize noxious weed impacts of deregulation where practicable.

172. APHIS improperly tainted and predetermined the outcome of its NEPA process by predicating its scope and conclusions on its separate, previously-decided PPA "plant pest risk" determination.

173. APHIS's alternatives analysis is inadequate in scope and pre-determined.

174. APHIS winnowed its "purpose and need" statement for its proposed action such that it eliminated any meaningful alternatives save the Full Deregulation Alternative.

175. The ROD rejected Alternative 3, the Partial Deregulation Alternative, based on its erroneous conclusion that APHIS does not have authority to implement isolation distances and geographic limitations on RRA, because it had previously and separately determined that there was no "plant pest risk" associated with RRA.

176. The ROD's decision that Alternative 3, the Partial Deregulation Alternative, must be rejected because it did not fulfill the agency's statutory mandates is arbitrary and capricious, and conflicts with the final EIS, in which the agency had concluded that the same alternative did fulfill its statutory mandate and, in fact, was necessary to do so.

177. The FEIS is arbitrarily and capriciously flawed because APHIS relied on EPA to fulfill its own NEPA duties to assess potential impacts of the deregulation, including the direct and indirect impacts of increased glyphosate use.

178. The ROD also improperly relied on separate, future agency actions to mitigate the impacts of transgenic contamination and support its conclusion that deregulation will have no significant impacts. These measures were not studied in the FEIS and were only first announced the day the ROD issued.

179. For the reasons alleged, considered both individually and collectively, the Deregulation Determination and FEIS is inadequate and flawed, and did not constitute a hard look. Defendants' reliance on it was and is arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law, and without observance of procedures required by law, in violation of NEPA and the APA.

**THIRD CLAIM**

[Violation of National Environmental Policy Act and Administrative Procedure Act – Against APHIS]

[By All Plaintiffs]

SUPPLEMENTAL EIS REQUIRED

180. Plaintiffs re-allege and incorporate by reference Paragraphs 1 through 179, as though fully alleged herein.

181. An agency must supplement an EIS when "the agency makes substantial changes in the proposed action that are relevant to environmental concerns,"40 C.F.R. § 1502.9(c)(i), or when "there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(ii).

182. APHIS's reliance on new agency policies on "coexistence," including new agency initiatives and committees, all of which were first announced simultaneously with the deregulation decision, to support a conclusion that deregulation will have no significant impacts and to obviate the need to assess and describe impacts that otherwise will occur is arbitrary and capricious and require a supplemental EIS to study the efficacy of any such measures.

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**FOURTH CLAIM**
[Violation of Plant Protection Act and Administrative Procedure Act – Against APHIS]
[By All Plaintiffs]

DEREGULATION DETERMINATION ARBITRARY AND CAPRICIOUS AND NOT BASED ON SOUND SCIENCE

183. Plaintiffs re-allege and incorporate by reference Paragraphs 1 through 182, as though fully alleged herein.

184. The deregulation decision was not based on sound science.

185. APHIS's decision that RRA is unlikely to cause plant pest risks is flawed in substance and improper in scope, and thus arbitrary and capricious.

186. APHIS's decision to not consider RRA and the associated, intended glyphosate use of that Roundup Ready cropping system together, as a system that will foster increased plant disease affecting both alfalfa and other important agricultural crops, violates the PPA because it is arbitrary and capricious and not based on sound science.

187. In approving the deregulation of RRA without any limitations, APHIS completely failed to comply with its statutory duty to minimize the risk of disseminating noxious weeds in carrying out their activities pursuant to the PPA. APHIS's failure to consider the noxious weed risks of deregulating RRA violates the PPA.

188. In approving deregulation for RRA without any limitations, APHIS violated the PPA by failing to adequately account for and minimize the resulting likely harms to U.S. agriculture and the environment from transgenic contamination, increased glyphosate use and the development of glyphosate resistant weeds.

189. APHIS's conclusion that RRA will not harm raw and processed U.S. agricultural commodities, such as organic alfalfa and dairy products, as well as conventional alfalfa seed and hay exports, is arbitrary and capricious.

190. APHIS's conclusion that RRA will not harm protected species that are beneficial to agriculture is arbitrary and capricious and not based on sound science.

191. APHIS's conclusion that RRA will not create noxious weed risks, given the agency's acknowledgment that RRA will exacerbate the GR weed epidemic, is arbitrary and capricious, not based on sound science, and violates the PPA.

192. The ROD's conclusion that Alternative 3, a partial deregulation with limitations on planting to protect against environmental harms such as transgenic contamination, was inconsistent with APHIS's authority and mission, is arbitrary and capricious and contrary to the PPA.

193. The Deregulation Determination is unsupported by the evidence in the record and was and is arbitrary and capricious, an abuse of discretion and otherwise not in accordance with law, and without observance of procedures required by law, in violation of the PPA and the APA.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs respectfully request that the Court:

194. Issue a declaratory judgment that APHIS violated and is violating NEPA and the APA by failing to take a hard look at the environmental impacts of its Deregulation Determination and prepare an adequate Environmental Impact Statement that takes a hard look at the impacts of RRA on agriculture and the environment;

195. Require that APHIS prepare an Environmental Impact Statement or Supplemental EIS that adequately analyzes both the direct and cumulative impacts of the Deregulation Determination;

196. Issue a declaratory judgment that APHIS violated and is violating the PPA and that the Deregulation Decision is arbitrary and capricious and not based on sound science;

197. Enter an order vacating the RRA Deregulation Determination;

198. Enter appropriate injunctive relief to ensure that defendants comply with PPA, NEPA, and APA, and to avoid irreparable harm to plaintiffs and the environment;

199. Award plaintiffs the costs of this litigation, including reasonable attorney's fees; and

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

Dated: March 18, 2011

By: _____

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