

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF FLORIDA  
FORT PIERCE DIVISION

Case No. 2:10-cv-14175-KMM

CENTER FOR BIOLOGICAL DIVERSITY;  
DOGWOOD ALLIANCE; SIERRA CLUB;  
GLOBAL JUSTICE ECOLOGY PROJECT;  
INTERNATIONAL CENTER FOR  
TECHNOLOGY ASSESSMENT; and  
CENTER FOR FOOD SAFETY,

Plaintiffs,

vs.

ANIMAL AND PLANT HEALTH  
INSPECTION SERVICE; and  
UNITED STATES DEPARTMENT OF  
AGRICULTURE,

Defendants.

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**PLAINTIFFS' AMENDED COMPLAINT  
FOR DECLARATORY AND INJUNCTIVE RELIEF**

## INTRODUCTION

1. Plaintiffs Center for Biological Diversity, Dogwood Alliance, Sierra Club, Global Justice Ecology Project, International Center for Technology Assessment, and Center for Food Safety challenge the decisions and approvals by Defendants Animal and Plant Health Inspection Service and U.S. Department of Agriculture (hereinafter “APHIS”) of numerous permits that authorize the planting and flowering of a genetically engineered hybrid of *Eucalyptus* tree in seven states in the southeastern United States. The company ArborGen LLC is conducting open field tests on this genetically engineered “cold-tolerant” *Eucalyptus* hybrid at multiple undisclosed sites across the southeastern United States, in hopes that it will become widely planted in commercial plantations across the region for pulp and biofuel production. *See* [http://www.arborgen.us/uploads/presentations/southern-forest-tree-improvement\\_6-09.pdf](http://www.arborgen.us/uploads/presentations/southern-forest-tree-improvement_6-09.pdf).

2. APHIS has authorized ArborGen to import this experimental *Eucalyptus* hybrid into the United States, has granted at least seven permit requests from ArborGen which authorize the planting and flowering of the *Eucalyptus* hybrid on hundreds of acres at over 28 undisclosed locations, and is currently considering ArborGen’s pending request to “deregulate” this new *Eucalyptus* hybrid which would allow the genetically engineered hybrid to be planted in commercial plantations throughout the region. APHIS, however, has not prepared an “environmental impact statement” (“EIS”), pursuant to the National Environmental Policy Act (“NEPA”), in order to assess the combined environmental impacts of these numerous experiments along with the pending deregulation petition. APHIS has instead prepared two separate “environmental assessments” (“EAs”) that address only three of the seven permits. In addition, APHIS has not consulted with the United States Fish and Wildlife Service concerning the adverse affects of these multiple permits on threatened and endangered species in the region.

Nor has APHIS complied with Congressional mandates enacted in the 2008 Farm Bill requiring more rigorous oversight for the field testing of genetically engineered organisms (“GEOs”).

#### JURISDICTION

3. Jurisdiction is proper under 28 U.S.C. § 1331 and 28 U.S.C. § 1346, because this action involves the United States as a defendant and arises under the laws of the United States, including the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 551 *et seq.*; NEPA, 42 U.S.C. §§ 4321 *et seq.*; and the Endangered Species Act (“ESA”), 16 U.S.C. §§ 1531, *et seq.* An actual justiciable controversy exists between Plaintiffs and Defendants. The requested relief is proper under 28 U.S.C. §§ 2201-02, 5 U.S.C. § 706, and 16 U.S.C. § 1540(g). The challenged actions are subject to this Court's review under 5 U.S.C. §§ 702, 704, and 706, and 16 U.S.C. § 1540(g).

#### VENUE

4. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(e) because a substantial part of the property that is the subject of the action is within the district.

#### PARTIES

5. Plaintiff Center for Biological Diversity (“the Center”) is a non-profit corporation with over 250,000 members and online activists, including thousands of members in the southeastern United States. The Center works to insure the long-term health and viability of animal and plant species across the United States and elsewhere, and to protect the habitat these species need to survive. The Center works through science, law, and creative media to secure a future for all species, great or small, hovering on the brink of extinction.

6. Plaintiff Dogwood Alliance is a southern United States forest protection organization with numerous members in the counties affected by the approved permits. The Dogwood Alliance mobilizes diverse voices to defend the unique forests and communities of the

southern United States from destruction by industrial forestry.

7. Plaintiff Sierra Club brings this action on behalf of itself and its more than 750,000 members. The Sierra Club is a nonprofit corporation headquartered in San Francisco, California. The Sierra Club is 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. The Sierra Club's concerns encompass endangered species, habitat protection, forest ecosystems, pollution, genetic engineering, and industrial agriculture. The Club's particular interest in this case and the issues which the case concerns stem from Defendants' approval of the genetically engineered *Eucalyptus* hybrid forest tree for use in extensive field trials in seven southern states near where members reside. 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 GEOs, including genetically engineered crops such as the *Eucalyptus* hybrid forest trees that are the subject of Defendants' approval determination at issue herein. The Sierra Club's members are, and will be, injured by the escape and proliferation of *Eucalyptus* hybrid forest trees. Sierra Club has members in every state. The Sierra Club's members include timber growers, farmers, ranchers, and rural residents who live in rural locations where *Eucalyptus* hybrid forest trees will be grown and who will be affected by the *Eucalyptus* field trials. Members who grow native timber crops may lose their economic incentive to grow their native tree crop of choice and suffer from a reduced market if their lands are polluted with the *Eucalyptus* hybrid. Sierra Club members also regularly participate in extensive outings and field trips to native habitats and ecosystems that are free of genetically

engineered materials, and may lose their ability to enjoy wild places. Defendants' approval of the widespread planting of *Eucalyptus* hybrid forest trees adversely affects Sierra Club and its members, because this approval will allow genetically engineered *Eucalyptus* trees to be placed in the environment without adequate environmental review, or any other limitations.

8. Plaintiff Global Justice Ecology Project ("GJEP") explores and exposes the intertwined root causes of social injustice, ecological destruction and economic domination with the aim of building bridges between social justice, environmental justice and ecological justice groups to strengthen their collective efforts. Within this framework, GJEP programs focus on Indigenous Peoples' rights, protection of native forests and climate justice. GJEP uses the issue of climate change to demonstrate these interconnections. GJEP is the North American Focal Point of the Global Forest Coalition.

9. Plaintiff International Center for Technology Assessment ("ICTA") is a tax-exempt, non-profit organization incorporated in the District of Columbia that is committed to providing the public with full assessments and analyses of technological impacts on society. ICTA is devoted to fully exploring the economic, ethical, social, environmental and political impacts that can result from the applications of technology or technological systems. Over the last ten years, ICTA's program areas include *inter alia* addressing the environmental, economic and ethical concerns raised by the development and commercialization of agricultural and forestry technologies such as the GEOs at issue in this case.

10. Plaintiff Center for Food Safety ("CFS") is a national non-profit membership organization with over a hundred thousand members nationwide, including thousands in the southeastern United States. CFS works to counter the harmful impact of industrial agriculture and promotes more sustainable alternatives. In furtherance of this mission, CFS utilizes policy,

scientific, legal, educational, media and outreach mechanisms. Since its inception CFS has sustained an active program on the impacts of GEOs and is the leading United States public interest legal organization working to provide oversight, transparency and analyses of GEOs before their introduction into the natural environment. CFS has offices in Washington, DC and San Francisco, California and is incorporated in Washington, DC.

11. Plaintiffs' members and staff regularly use and enjoy lands within the counties where the challenged permits authorize the planting and flowering of the genetically engineered *Eucalyptus* hybrid tree. Plaintiffs' members and staff use and enjoy these lands for a variety of purposes including hiking, fishing, hunting, camping, photographing scenery and wildlife, and engaging in other vocational, scientific, and recreational activities. Plaintiffs' members and staff derive recreational, inspirational, religious, scientific, educational, and aesthetic benefit from their activities on these lands. Plaintiffs' members obtain aesthetic and recreational enjoyment from unimpaired natural habitats and native species. Plaintiffs' members and staff interest, use and enjoyment of these lands includes the numerous threatened and endangered species that reside in this region, the opportunity to observe and photograph these imperiled species in the wild, and the knowledge that this region is still able to support and recover these threatened and endangered species. Plaintiffs' members and staff intend to continue to use and enjoy these lands frequently and on an ongoing basis in the future, including this summer and fall.

12. Plaintiffs have members who own land in or near the counties where the challenged permits authorize the planting and flowering of the genetically engineered *Eucalyptus* hybrid tree. These members are concerned about the potential spread of this experimental *Eucalyptus* hybrid onto or near their property, as well as the risk that this *Eucalyptus* hybrid will become an invasive species within the counties where it is being planted and allowed to flower.

These members are also concerned that this hybrid may interbreed with the already-naturalized *Eucalyptus grandis*, making the *Eucalyptus grandis* more likely to spread over a wider area due to the introduced cold-tolerant gene.

13. Plaintiffs submitted numerous and extensive comments on the ArborGen permits for the *Eucalyptus* hybrid for which Defendants provided public notice and allowed public comment. Plaintiffs' comments express and explain their concerns and opposition to Defendants' approval of the ArborGen permits. Plaintiffs provided Defendants with 60 days written notice of the ESA claims and violations. 16 U.S.C. § 1540(g). Plaintiffs exhausted all available administrative remedies.

14. The interests of Plaintiffs and their members and staff have been and will continue to be adversely affected by Defendants' authorized planting and flowering of this experimental, genetically engineered *Eucalyptus* hybrid at multiple, undisclosed sites across the southeastern United States. Plaintiffs' injuries include the risk that this *Eucalyptus* hybrid will escape outside of the experimental plots and become an invasive species in this region, or contribute to invasiveness of other *Eucalyptus* species. Plaintiffs injuries also include the adverse affects of this *Eucalyptus* hybrid on wildlife, including threatened and endangered species; the extensive water used by this *Eucalyptus* hybrid as compared to native forests in the region and the related impacts to aquatic and riparian species; the increased fire risk associated with this *Eucalyptus* hybrid; and the unknown risks associated with allowing the widespread planting and flowering of a genetically engineered tree on numerous sites scattered across seven states in the southeastern United States.

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

16. Defendant Animal and Plant Health Inspection Service is an agency within the United States Department of Agriculture. The Animal and Plant Health Inspection Service signed and approved the decisions and permits that are challenged herein. The United States Department of Agriculture is responsible for overseeing the decisions and actions of the Animal and Plant Health Inspection Service.

#### FACTUAL BACKGROUND

17. The genus *Eucalyptus* includes over 700 species. *Eucalyptus* is native to Australia, with the exception of a few species that are native to the Timor Islands and Indonesia. There are no wild relatives of *Eucalyptus* that are native in the United States.

18. Certain species of *Eucalyptus* have been planted as ornamental species in the extreme southern United States, where mild winters will allow some *Eucalyptus* species to grow.

19. In the United States, *Eucalyptus* is only grown in commercial plantations in central and southern Florida, and in Hawaii. There are plantations of the species *Eucalyptus grandis* currently grown in south central Florida as short rotation crops for biomass production and for mulch production. These trees are planted in areas where severe freezing events are rare.

20. The genetically engineered *Eucalyptus* species at issue in this case is a hybrid of *Eucalyptus grandis* and *Eucalyptus urophylla* (hereinafter “*Eucalyptus* hybrid”). The *Eucalyptus* hybrid was genetically engineered in an attempt to increase tolerance to cold temperatures, decrease fertility, and decrease lignin biosynthesis.

21. In 2005, APHIS granted permit 05-072-03m, which authorized ArborGen to import the *Eucalyptus* hybrid from New Zealand to the United States. APHIS did not prepare an EIS or EA prior to granting the permit. APHIS did not provide public notice or an opportunity for public comment prior to granting the permit. APHIS did not consult with the United States

Fish and Wildlife Service (“FWS”) pursuant to the ESA prior to granting the permit.

22. In 2005, APHIS granted permit 05-256-03n, authorizing ArborGen to plant the *Eucalyptus* hybrid on 1.1 acre at an undisclosed site in Baldwin County, Alabama. This permit did not allow the flowering of the *Eucalyptus* hybrid. APHIS did not prepare an EIS or EA prior to granting the permit. APHIS did not provide public notice or an opportunity for public comment prior to granting the permit. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may be affected by the proposed action, and did not consult with FWS prior to granting the permit.

23. In June, 2007, APHIS granted permit 06-325-111r, which authorized ArborGen to allow the flowering of the *Eucalyptus* hybrid at the 1.1 acre site in Baldwin County, Alabama. APHIS prepared an EA prior to granting permit 06-325-111r, which considered the no action alternative along with two action alternatives. APHIS received 270 comments during a 30-day public comment period on the EA, including a petition opposed to granting the permit that included 5,495 signatures. APHIS concluded the permit would not result in significant environmental impacts and thus did not prepare an EIS prior to granting the permit. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may be affected by the proposed action, and did not consult with FWS prior to granting the permit.

24. APHIS subsequently granted an amendment to permit 06-325-111r, which authorized the flowering of the *Eucalyptus* hybrid on an additional 5.1 acres at the same location. APHIS did not prepare an EIS or supplemental EA prior to granting the amendment to the

permit, and did not provide public notice or an opportunity for public comment prior to granting the amendment. Prior to granting the amendment, APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may be affected, and did not consult with FWS.

25. In April, 2008, APHIS granted permit 08-039-102rm, which authorized ArborGen to plant the *Eucalyptus* hybrid at 15 undisclosed sites in seven states (Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas). This permit did not authorize ArborGen to allow the flowering of the *Eucalyptus* hybrid at these sites. APHIS did not prepare an EIS or EA prior to granting the permit. APHIS did not provide public notice or an opportunity for public comment prior to granting the permit. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may be affected by the proposed action, and did not consult with FWS prior to granting the permit. This permit was later amended or otherwise expanded to allow the planting of the *Eucalyptus* hybrid at 28 sites.

26. In June, 2008, APHIS granted permit 08-151-101r, which authorized ArborGen to plant the *Eucalyptus* hybrid on 1.4 acres in Highlands County, Florida. This permit authorized ArborGen to allow the flowering of the *Eucalyptus* hybrid at this site. APHIS did not prepare an EIS or EA prior to granting the permit. APHIS did not provide public notice or an opportunity for public comment prior to granting the permit. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may

be affected by the proposed action, and did not consult with FWS prior to granting the permit.

27. In 2008, ArborGen petitioned APHIS to request that the *Eucalyptus* hybrid be granted deregulated status. ArborGen's deregulation petition is currently pending before APHIS. As stated by ArborGen, this petition is "a step towards future commercial sales."

[http://www.arborgen.us/uploads/presentations/southern-forest-tree-improvement\\_6-09.pdf](http://www.arborgen.us/uploads/presentations/southern-forest-tree-improvement_6-09.pdf)

28. In April, 2009, APHIS granted permit 09-070-101rm, which authorized ArborGen to plant the *Eucalyptus* hybrid on 0.3 acres in Highlands County, Florida and 0.3 acres in Marion County, Florida. APHIS did not prepare an EIS or EA prior to granting the permit. APHIS did not provide public notice or an opportunity for public comment prior to granting the permit. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine whether any threatened or endangered species may be affected by the proposed action, and did not consult with FWS prior to granting the permit.

29. In May, 2010, APHIS granted permits 08-014-101rm and 08-011-106rm, which authorized the planting of the *Eucalyptus* hybrid on 28 sites in seven states (Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas), totaling 330 acres. These permits allow the flowering of the *Eucalyptus* hybrid on 27 of these 28 sites. Many of these sites are the same sites for which planting was authorized by permit 08-039-102rm. The sites range from 0.5 to 20 acres in size, with a proposed planting density of 300-600 trees per acre (or up to approximately 200,000 trees). If the permits are renewed, which ArborGen has indicated it will do, the trees will stay in the ground until maturity or when normally harvested, between 7-9 years. APHIS did not request from FWS whether any threatened or endangered species may be present in the area of the proposed action, did not prepare a biological assessment to determine

whether any threatened or endangered species may be affected by the proposed action, and did not consult with FWS prior to granting the permits.

30. APHIS prepared an EA prior to granting permits 08-014-101rm and 08-011-106rm. The EA considered only two alternatives: the “no action” alternative, and the “preferred alternative,” which would grant both of the requested permits. APHIS received approximately 12,500 comments on the EA, with 45 respondents in favor of issuing the permits and 12,462 respondents opposed. APHIS chose the preferred alternative, signed the “finding of no significant impact” and “decision notice” on May 12, 2010, and granted the permits.

31. The EA does not disclose the location of the 28 sites. ArborGen continues to maintain that these sites are confidential business information.

32. Plaintiffs submitted detailed comments on the EA, explaining their concerns and opposition to the granting of these permits.

33. On February 18, 2010, the Georgia Department of Natural Resources, Wildlife Resources Division provided comments on the EA. The Department recommended that that ArborGen’s permit request be denied, and that a full EIS be prepared for the proposed action. This is because the Department has “serious concerns about potential impacts on hydrology, soil chemistry, native biodiversity, and ecosystem functions, regardless of whether this nonnative hybrid turns out to be invasive in a plantation setting.” As stated by the Department, *Eucalyptus* plantations “will be extremely inhospitable environments for native flora and fauna.” Moreover, noting the high water use for *Eucalyptus* plantations, the Department expressed concern regarding the increased potential for significant impacts on water resources and aquatic communities.

34. The Florida Exotic Pest Plant Council is an organization of professional land managers, researchers, and consultants, including agency and university scientists. <http://www.fleppc.org/> The Council submitted comments that expressed “serious concerns” about ArborGen’s proposal and the EA. The Council commented that its primary concern is whether the *Eucalyptus* hybrid will become invasive across some or all of the intended planting range. Noting that smaller-scale plantings of this *Eucalyptus* hybrid have only been in place for a few years, the Council commented that this timeframe is insufficient to understand the species’ potential invasiveness. As noted by the Council, however, *Eucalyptus grandis*, which is one of the parent species of this hybrid, is known to be invasive in other habitats. The Council commented that an EIS should be prepared before such large field trials are approved. The Council further recommended that any approved alternative exclude Florida from the experimental trial in order to reduce the risk of increasing cold tolerance in the *Eucalyptus* species that have already escaped.

35. According to the University of Florida’s Center for Aquatic and Invasive Plants, *Eucalyptus grandis*, which is one of the parent species of the *Eucalyptus* hybrid and presently found within central and southern Florida, is predicted to be invasive and thus not recommended. [http://plants.ifas.ufl.edu/assessment/spreadsheets/invasive\\_not\\_recommended\\_central.xls](http://plants.ifas.ufl.edu/assessment/spreadsheets/invasive_not_recommended_central.xls)

36. The United States Forest Service reviewed the materials provided by ArborGen and the relevant science on water use by *Eucalyptus*, and prepared an assessment of impacts on hydrology. According to the Forest Service, *Eucalyptus* hybrid plantations planted in the southeastern United States are likely to use water at a rate of at least twice that of stands of native forests in the region; the conversion to *Eucalyptus* hybrid plantations would likely reduce stream flows 20% relative to traditional pine plantations; the *Eucalyptus* hybrid has the potential

to impact both surface water and groundwater hydrology; and if the *Eucalyptus* hybrid invades native forests, water use in these stands will likely increase.

37. Dr. Donald Winslow, Ph.D., Director of Conservation Biology at St. George University, submitted comments on the ArborGen permits and EA. Dr. Winslow noted that *Eucalyptus grandis* has already become established in several counties in Florida, and that the experimental cold-tolerance gene in the *Eucalyptus* hybrid may facilitate the spread of this species in other southeastern states. Dr. Winslow also commented that *Eucalyptus* trees produce natural toxins that may cause decline in desirable insects and insectivorous bird species. Moreover, direct mortality of songbirds has been documented in California *Eucalyptus* stands as a result of the sticky gum exuded by these trees. Additionally, the large-scale planting of the *Eucalyptus* hybrid may have significant hydrological impacts, including negative impacts on endangered aquatic species such as fish and mussels.

38. The Union of Concerned Scientists submitted comments on the earlier EA that APHIS prepared for permit 06-325-111r. As stated by the Union of Concerned Scientists, the permit would allow flowering and possible seed development in a genetically engineered forest tree species, which would set precedent for risk assessment. As noted by the Scientists, forest tree species pose a risk of gene flow beyond the test site by outcrossing or seed escape, and may have far-ranging impacts if they escape and spread. The *Eucalyptus* hybrid may also become invasive, which would seriously disrupt native ecosystems, as has been the case with several *Eucalyptus* species introduced into California.

39. Additional comments were submitted by numerous conservation organizations, including Plaintiffs, as well as thousands of individuals who were opposed to ArborGen's permit requests.

40. The permits issued by APHIS to ArborGen are three year permits, but can be renewed for an additional three years if ArborGen wishes to continue the experiments.

41. Concurrent with the planting of genetically engineered *Eucalyptus*, in 2005, the United States Department of Agriculture's Office of the Inspector General (OIG) conducted an audit covering GMO field trials conducted in 2002 and 2003, finding numerous basic deficiencies in APHIS oversight. OIG (2005). "Audit report: Animal and Plant Health Inspection Service controls over issuance of genetically engineered organism release permits," Audit 50601-8-Te, USDA, Office of Inspector General, Southwest Region, December 2005. <http://www.usda.gov/oig/webdocs/50601-08-TE.pdf>

42. A 2008 Government Accountability Office study analyzed the numerous contamination incidences from field trials of GMOs in the past decade, concluded that "the ease with which genetic material from crops can be spread makes future releases likely," and recommended that APHIS address the unintended release of GMOs and coordinate strategies for post commercialization monitoring. <http://www.gao.gov/new.items/d0960.pdf>

43. With the adoption of the 2008 Farm Bill, Congress mandated that APHIS "improve the management and oversight" of GMO field trials (§ 10204), implement measures outlined in the agency's "Lessons Learned" 2006 document prepared in the wake of the 2006 'Liberty Link' GE rice contamination incident, and adopt a series of other new measures to safeguard against transgenic contamination. Pub. L. No. 110-246, Tit. X § 10204, 122 Stat. 1651, 2105 (2008).

44. The states affected by the *Eucalyptus* hybrid permits approved by APHIS are home to hundreds of threatened and endangered species. After California and Hawaii, the two states with the highest number of threatened and endangered species are Florida (114 species)

and Alabama (116 species). In addition, there are 93 threatened and endangered species in Texas, 71 listed species in Georgia, 42 listed species in both Mississippi and South Carolina, and 29 listed species in Louisiana.

#### STATUTORY AND REGULATORY BACKGROUND

45. NEPA is our national charter for protection of the environment. 40 C.F.R. § 1500.1(a). The purpose of NEPA is to ensure “that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger [public] audience that may also play a role in both the decisionmaking process and implementation of that decision.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

46. “NEPA imposes a procedural requirement that an agency must contemplate the environmental impacts of its actions.” *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998); *see* 42 U.S.C. § 4332. “NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken.” 40 C.F.R. § 1500.1(b). The information in an NEPA analysis must be of high quality, as accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. *Id.*

47. NEPA establishes three “categories” of agency action. First, proposals that normally require an EIS should immediately trigger preparation of an EIS. 40 C.F.R. § 1501.4(a)(1). Second, the agency may designate types of actions that normally do not require the preparation of an EIS and can be “categorically excluded.” 40 C.F.R. §§ 1508.4, 1501.4(a)(2). If a proposed action fits within a categorical exclusion, agencies must still consider whether there

are extraordinary circumstances that would require preparation of an EA or EIS. 40 C.F.R. § 1508.4. Third, any action that does not fall into the first or second category should be evaluated in an EA, which must analyze whether impacts from the proposed action may be significant and, therefore, require an EIS. 40 C.F.R. §§ 1501.4(b), 1508.9.

48. Agencies must make diligent efforts to involve the public in preparing and implementing their NEPA procedures. 40 C.F.R. § 1506.6(a).

49. Agencies must integrate NEPA into the planning process at the earliest possible time to insure that planning and decisions reflect environmental values. 40 C.F.R. § 1501.2; *see also* 40 C.F.R. § 1502.5. Until an agency issues its final decision on a proposal, no action concerning the proposal may be taken that would have an adverse environmental impact or limit the choice of reasonable alternatives. 40 C.F.R. § 1506.1(a).

50. Agencies must study, develop and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternatives uses of available resources. 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1501.2(c); *see also* 40 C.F.R. § 1502.14 (describing the alternatives section as the “heart” of an EIS).

51. Agencies have a continuing duty to supplement NEPA documents. *See* 40 C.F.R. § 1502.9(c).

52. NEPA established the Council on Environmental Quality and charged CEQ with the duty of overseeing the implementation of NEPA. *See* 42 U.S.C. §§ 4321, 4344. The regulations promulgated by CEQ, 40 C.F.R. §§ 1500-08, implement the directives and purpose of NEPA, and “[t]he provisions of [NEPA] and [CEQ] regulations must be read together as a whole in order to comply with the spirit and letter of the law.” 40 C.F.R. § 1500.3. CEQ’s regulations are applicable to and binding on all federal agencies. 40 C.F.R. §§ 1500.3, 1507.1;

*see, e.g., Hodges v. Abraham*, 300 F.3d 432, 438 (4th Cir. 2002). Among other requirements, CEQ's regulations mandate that federal agencies address all "reasonably foreseeable" environmental impacts of their proposed programs, projects, and regulations. *See* 40 C.F.R. §§ 1502.4, 1508.8, 1508.18, & 1508.25.

53. The United States Department of Agriculture has promulgated additional NEPA regulations to assure early and adequate consideration of environmental factors in APHIS planning and decisionmaking. 7 C.F.R. § 372.1. According to the APHIS NEPA regulations, the goal of timely, relevant environmental analysis will be secured principally by adhering to the CEQ NEPA regulations, especially the provisions pertaining to timing, integration and scope of analysis. *Id.*

54. The APHIS NEPA regulations explain that actions normally requiring an EIS typically involve an entire program or a substantial program component, and are characterized by their broad scope and potential effect. 7 C.F.R. § 372.5(a). Actions requiring an EA, by contrast, generally concern a more discrete program component and are characterized by their limited scope and potential effect. 7 C.F.R. § 372.5(b). For actions requiring an EA, methodologies, strategies, and techniques employed to deal with the issues at hand are seldom new or untested, and alternatives means of dealing with those issues are well established. *Id.*

55. The APHIS NEPA regulations include a list of "categorically excluded" actions, but recognize there are a number of exceptions, including where the categorically excluded action "may have the potential to affect 'significantly' the quality of the 'human environment,'" such as when the action is added to other past, present and reasonably foreseeable actions that have the potential for significant environmental impacts, or when a confined field release of genetically engineered organisms involve new species or organisms or novel modifications that

raise new issues. 7 C.F.R. § 372.5(c-d).

56. Under the Plant Protection Act and its implementing regulations, GMOs are classified as “regulated articles” which cannot be “introduced” into the environment except upon specific notification or permit. *See* 7 C.F.R. §§ 340.0-340.4. Introduction is defined as “to move into or through the United States, to release into the environment, to move interstate, or any attempt thereat.” 7 C.F.R. § 340.1.

57. In relevant part, the 2008 Farm Bill created new statutory directives for APHIS regarding the oversight of GMO field trials. Food, Conservation, and Energy Act of 2008, Pub. L. No. 110-246, Tit. X § 10204, 122 Stat. 1651, 2105 (2008). Congress mandated that APHIS take action to implement these new directives “[n]ot later than 18 months after the date of enactment of this Act.” *Id.*

58. The Endangered Species Act (“ESA”) is the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.

59. Section 7(a)(1) of the ESA requires all federal agencies to utilize their authorities in furtherance of the purposes of the ESA by carrying out programs for the conservation of endangered species.

60. Section 7(a)(2) of the ESA requires federal agencies, in consultation with FWS, to insure that any action authorized, funded, or carried out by agency is not likely to jeopardize the continued existence of any threatened or endangered species, or result in the destruction or adverse modification of the critical habitat of such species. 16 U.S.C. § 1536(a)(2).

61. Section 7(a)(2) contains both procedural and substantive requirements. The procedural requirements require all federal agencies to assess the effects of their actions on endangered and threatened species in such areas where such species may be present.

62. “Action” is broadly defined by the ESA to include all activities or programs of any kind authorized, funded, or carried out by federal agencies, including the granting of permits and actions directly or indirectly causing modifications to the land, water, or air. 50 C.F.R. § 402.02.

63. For each federal action, the agency must request from FWS whether any listed or proposed species may be present in the area of the agency action. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12. If listed or proposed species may be present, the agency must prepare a “biological assessment” to determine whether the listed species is likely to be adversely affected by the proposed action. *Id.*

64. If an agency determines that a proposed action may affect any listed species or critical habitat, the agency must engage in formal consultation with FWS. 50 C.F.R. § 402.14. The only exception is when the agency and FWS agree in writing that the agency action is not likely to affect any listed species or critical habitat. *Id.*

65. Both direct and indirect agency actions are subject to consultation. The agency must assess the direct and indirect effects of an action together with the effects of other activities that are interrelated or interdependent with the proposed action. 50 C.F.R. § 402.02. ESA consultation must consider all phases and the entire scope of the proposed agency action.

66. The threshold for formal consultation under the ESA is very low. Any possible effect, whether beneficial, benign, adverse, or of an undetermined character, triggers the formal consultation requirement. Once an agency discovers that a proposed action crosses the low threshold of “possible effect,” it must formally consult with FWS.

67. To complete formal consultation, FWS must provide the action agency with a “biological opinion” explaining how the proposed action will affect the listed species or habitat. 16 U.S.C. § 1536(b); 50 C.F.R. § 402.14. If FWS concludes that the proposed action “will jeopardize the continued existence” of a listed species, the biological opinion must outline “reasonable and prudent alternatives.” 16 U.S.C. § 1536(b)(3)(A). If the biological opinion concludes that the action is not likely to jeopardize the continued existence of a listed species, and will not result in the destruction or adverse modification of critical habitat, FWS must provide an “incidental take statement,” specifying the amount or extent of such incidental taking on the listed species, any “reasonable and prudent measures” that FWS considers necessary or appropriate to minimize such impact, and setting forth the “terms and conditions” that must be complied with by APHIS to implement those measures. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(i).

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

69. Section 9 of the ESA and its implementing regulations prohibit the unauthorized “take” of listed species. 16 U.S.C. § 1538(a)(1); 16 U.S.C. § 1533(d); 50 C.F.R. § 17.31. “Take” is defined broadly to include harming, harassing, trapping, capturing, wounding or killing a protected species either directly or by degrading its habitat. *See* 16 U.S.C. § 1532(19). Taking that is in compliance with the terms and conditions specified in a biological opinion is not considered a prohibited taking under Section 9 of the ESA. 16 U.S.C. § 1536(o)(2).

FIRST CLAIM FOR RELIEF

Defendants Violated NEPA in Approving Permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, and in Significantly Amending Permit 06-325-111r

70. Plaintiffs hereby incorporate by reference all preceding paragraphs.

71. Defendants failed to prepare either an EA or EIS prior to approving permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, in violation of NEPA.

72. Defendants failed to prepare a supplemental EA or EIS prior to significantly amending permit 06-325-111r, in violation of NEPA.

73. Defendants failed to involve the public and allow public comment prior to approving permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, in violation of NEPA.

74. Defendants failed to consider the presence of extraordinary circumstances, the potential significant environmental impacts, and other relevant factors prior to approving permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, in violation of NEPA.

75. Defendants' approval of permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, and Defendants' approval of the significant amendment to permit 06-325-111r, is arbitrary, capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law. 5 U.S.C. § 706(2). Permits 05-072-03m, 08-039-102rm, 08-151-101r, 09-070-101rm, and the amendment of permit 06-325-111r, should therefore be held unlawful and set aside. *Id.*

SECOND CLAIM FOR RELIEF

Defendants Violated NEPA in Approving Permits 08-011-106rm and 08-014-101rm

76. Plaintiffs hereby incorporate by reference all preceding paragraphs.

77. Defendants' EA prepared for permits 08-011-106rm and 08-014-101rm violates

NEPA for at least the following reasons:

- a) The EA fails to consider a reasonable range of alternatives;
- b) The EA fails to consider the cumulative impacts of the proposed action along with all past, present and reasonably foreseeable actions, including the other related permits and ArborGen's deregulation petition;
- c) The EA fails to adequately address the potential invasiveness and spread of the *Eucalyptus* hybrid over time;
- d) The EA fails to adequately address the potential impacts to wildlife, water quantity and quality, hydrology, and fire risk;
- e) The EA fails to support its conclusions with hard data and objective analysis; and
- f) The EA fails to disclose critical information necessary to allow for meaningful public comment.

78. Defendants were required to prepare an EIS for permits 08-011-106rm and 08-014-101rm for at least the following reasons:

- a) Permits 08-011-106rm and 08-014-101rm, along with the other related permits and ArborGen's deregulation petition, may cumulatively result in significant environmental impacts;
- b) The potential environmental effects of approving permits 08-011-106rm and 08-014-101rm are highly controversial;
- c) The possible environmental effects of approving permits 08-011-106rm and 08-014-101rm are highly uncertain and involve unknown risks;
- d) The approval of permits 08-011-106rm and 08-014-101rm may establish a precedent for future actions with significant effects; and
- e) The approval of permits 08-011-106rm and 08-014-101rm may adversely affect endangered or threatened species or their habitat.

79. Defendants' approval of permits 08-011-106rm and 08-014-101rm is arbitrary, capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law. 5 U.S.C. § 706(2). Permits 08-011-106rm and 08-014-101rm should

therefore be held unlawful and set aside. *Id.*

### THIRD CLAIM FOR RELIEF

#### Defendants Violated NEPA By Failing to Consider Connected, Cumulative, and Similar Actions in a Single EIS, and by Breaking ArborGen's Strategy Into Smaller Components Parts

80. Plaintiffs hereby incorporate by reference all preceding paragraphs.

81. NEPA requires connected, cumulative, and similar actions to be considered together in a single EIS. 40 C.F.R. § 1508.25. Connected actions are those that are closely related and should therefore be discussed in the same EIS. 40 C.F.R. § 1508.25(1). Cumulative actions are those when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same EIS. 40 C.F.R. § 1508.25(2). Similar actions are those having similarities that provide a basis for evaluating their environmental consequences together in a single EIS, such as common timing or geography. 40 C.F.R. § 1508.25(3). Similarly, an agency cannot avoid a significance determination and preparation of an EIS by breaking an action into small component parts. 40 C.F.R. § 1508.27(b)(7).

82. There is no question that ArborGen has an overall strategy for introducing its *Eucalyptus* hybrid throughout much of the southeastern United States. In just five years, ArborGen has requested a permit to import this hybrid into the United States, has requested seven separate permits to plant and allow to flower its experimental hybrid at over 30 sites across seven states, and has petitioned for this *Eucalyptus* hybrid to be deregulated. All permits, requests, and petitions are from the same company, to the same agency, for the same genetically engineered hybrid species, for future use in the same region of the county.

83. Defendants failure to consider the overall cumulative impacts of ArborGen's permits, petition, and strategy within a single EIS violates NEPA. *See* 40 C.F.R. § 1508.25.

84. Defendants consideration of each ArborGen permit and petition separately,

without consideration of the overall cumulative effects of the company's overall strategy, violates NEPA. *See* 40 C.F.R. § 1508.25; 40 C.F.R. § 1508.27(b)(7).

85. Defendants decision to consider ArborGen's permits and petition piecemeal, either in individual EAs or without NEPA review altogether, violates NEPA, and constitutes arbitrary, capricious, agency action. 5 U.S.C. § 706(2).

#### FOURTH CLAIM FOR RELIEF

Defendants Are Violating The Procedural and Substantive Mandates Of The Food, Conservation, And Energy Act Of 2008 By Failing To Implement And Apply Containment Measures In Approving The GMO Field Testing Permits In This Action

86. Plaintiffs hereby incorporate by reference all preceding paragraphs.

87. As applied here and in general, Defendants have failed to implement the directives of the 2008 Farm Bill by the statutory deadline of 18 months since its enactment. Pub. L. No. 110-246, Tit. X § 10204, 122 Stat. 1651, 2105 (2008).

88. As applied here and in general, Defendants have failed to apply any of the enhanced field testing safeguards mandated by the 2008 Farm Bill to its permit approval process.

89. Defendants failure to implement the directives of the 2008 Farm Bill and/or apply any of the enhanced field testing safeguards constitutes agency action unlawfully withheld and unreasonably delayed, 5 U.S.C. § 706(1) and is arbitrary, capricious, an abuse of discretion, and not in accordance with law, 5 U.S.C. § 706(2).

#### FIFTH CLAIM FOR RELIEF

Defendants Violated the ESA in Approving Permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm

90. Plaintiffs incorporate by reference all preceding paragraphs.

91. Prior to issuing permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, APHIS failed to insure, in consultation with FWS, that the

authorization and implementation of the ArborGen *Eucalyptus* hybrid permits is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of the critical habitat of such species, in violation of the ESA. 16 U.S.C. § 1536(a)(2).

92. Prior to issuing permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, APHIS failed to request from FWS whether any threatened or endangered species, or designated critical habitat, may be present within or near the areas of the proposed actions, in violation of the ESA. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12.

93. Prior to issuing permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, APHIS failed to prepare a “biological assessment” to determine whether any threatened and endangered species that may be present within or near the areas of the proposed actions may be affected, in violation of the ESA. 16 U.S.C. § 1536(c)(1); 50 C.F.R. § 402.12.

94. Prior to issuing permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, APHIS failed to consult with FWS regarding the potential adverse affects of the ArborGen *Eucalyptus* hybrid permits on threatened and endangered species, and critical habitat, in violation of the ESA. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.13-14.

95. APHIS has failed to insure that ArborGen will not make any irreversible or irretrievable commitment of resources with respect to permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, prior to initiating and completing consultation with FWS, in violation of the ESA. 16 U.S.C. § 1536(d).

96. APHIS failed to comply with non-discretionary obligations under the ESA

prior to approving permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm, in violation of the ESA. 16 U.S.C. § 1540(g).

97. APHIS unilateral “no effect” determination for permits 06-325-111r, 08-011-106rm, and 08-014-101rm, violates the ESA, 16 U.S.C. § 1536(a)(2), and is arbitrary, capricious, an abuse of discretion, not in accordance with law, and without observance of procedure required by law, pursuant to the APA. 5 U.S.C. § 706(2).

#### SIXTH CLAIM FOR RELIEF

##### Defendants Violated the ESA By Failing to Consider and Consult with FWS on All Phases and the Entire Scope of ArborGen’s Strategy for the *Eucalyptus* Hybrid in the Southern United States

98. Plaintiffs hereby incorporate by reference all preceding paragraphs.

99. ArborGen has an overall strategy for introducing its *Eucalyptus* hybrid throughout the southeastern United States. In the past five years, ArborGen has requested a permit to import this hybrid into the United States, has requested at least seven separate permits to plant and allow to flower its experimental hybrid at over 30 undisclosed sites across seven states, and has petitioned for this *Eucalyptus* hybrid to be deregulated. All permits, requests, and petitions are from the same company, to the same agency, for the same genetically engineered hybrid species, for future use in the same region of the county.

100. Defendants failure to consider and consult with FWS regarding the potential direct and indirect effects of granting numerous permits allowing the import, planting, and flowering of the *Eucalyptus* hybrid, along with all interrelated and interdependent decisions and activities, including ArborGen’s deregulation petition, on threatened and endangered species and their critical habitat violates the ESA. *See* 16 U.S.C. § 1536(a)(2). Similarly, Defendants failure to comprehensively consider and consult with FWS on all phases, the entire scope, and the

overall cumulative impacts of ArborGen's permits, petition, and strategy on threatened and endangered species and their critical habitat violates the ESA. *Id.*

101. Defendants consideration of each ArborGen permit and petition separately, without consideration of the interrelated, interdependent, and cumulative effects of the company's overall strategy, violates the ESA. *See* 16 U.S.C. § 1536(a)(2).

#### RELIEF REQUESTED

WHEREFORE, Plaintiffs respectfully request that this Court:

A. Declare that Defendants have violated NEPA by approving permits 05-072-03m, 08-039-102rm, 08-151-101r, and 09-070-101rm, significantly amending permit 06-325-111r, and approving permits 08-011-106rm and 08-014-101rm;

B. Declare that the EA prepared for permits 08-011-106rm and 08-014-101rm violates NEPA;

C. Declare that Defendants failure to prepare an EIS to address ArborGen's overall strategy, permits, and petition concerning the *Eucalyptus* hybrid violates NEPA;

D. Compel Defendants to prepare an EIS to address the overall, cumulative environmental impacts of all ArborGen permits and petitions concerning the *Eucalyptus* hybrid and its introduction to the southeastern United States;

E. Declare that Defendants violated the ESA in approving permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm;

F. Set aside Defendants' approval of permits 05-072-03m, 08-039-102rm, 08-151-101r, 09-070-101rm, 08-011-106rm and 08-014-101rm, and Defendants' significant amendment of permit 06-325-111r;

G. Enjoin Defendants from allowing any *Eucalyptus* hybrid trees that are authorized

by permits 08-039-102rm, 08-151-101r, 09-070-101rm, 08-011-106rm, 08-014-101rm, and the significant amendment of permit 06-325-111r, to flower pending completion of a legally adequate EIS that addresses the cumulative impacts of all of these related permits in addition to ArborGen's pending deregulation petition;

H. Enjoin Defendants from allowing any Eucalyptus hybrid trees that are authorized by permits 06-325-111r, 08-151-101r, 08-039-102rm, 08-014-101rm, 08-011-106rm, and 09-070-101rm to flower pending completion of a legally valid consultation with FWS pursuant to the ESA regarding the potential impacts of these permits, and interrelated and interdependent activities, on threatened and endangered species;

I. Declare that Defendants have violated the Food, Conservation, and Energy Act of 2008 by failing to implement its directives by the statutory deadline;

J. Enjoin Defendants from allowing any *Eucalyptus* hybrid trees that are authorized by permits 08-039-102rm, 08-151-101r, 09-070-101rm, 08-011-106rm and 08-014-101rm to flower pending compliance with the Food, Conservation, and Energy Act of 2008;

K. Award to Plaintiffs their costs, expenses, expert witness fees, and reasonable attorney fees pursuant to applicable law including the Equal Access to Justice Act, 28 U.S.C. § 2412, and ESA, 16 U.S.C. § 1640(g)(4); and

L. Grant Plaintiffs such further relief as may be just, proper, and equitable.

Dated: August 10, 2010.      Respectfully submitted,

s/ Jeanne Marie Zokovitch Paben  
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Certificate of Service

I hereby certify that on Tuesday, August 10, 2010, I electronically filed the foregoing document with the Clerk of Court using CM/ECF. I also certify that the foregoing document is being served this day on all counsel of record or parties identified on the attached Service List in the manner specified.

s/ Jeanne Marie Zokovitch Paben  
Jeanne Marie Zokovitch Paben

SERVICE LIST

Center for Biological Diversity, et. al

vs.

Animal and Plant Health Inspection Service; and United States Department of Agriculture

Case No. 2:10-cv-14175-KMM

United States District Court, Southern District of Florida

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