

No. 09-475

IN THE
Supreme Court of the United States

MONSANTO CO., ET AL.,

Petitioners,

v.

GEERTSON SEED FARMS, ET AL.,

Respondents.

**On Writ of Certiorari
to the United States Court of Appeals
for the Ninth Circuit**

**BRIEF OF AMICUS CURIAE ARKANSAS RICE
GROWERS ASSOCIATION, RICE PRODUCERS OF
CALIFORNIA, NEW ENGLAND FARMERS UNION,
COMMUNITY ALLIANCE WITH FAMILY FARMERS,
FEDCO SEEDS, INC., NATIONAL FARMERS UNION
OF CANADA, GENETICS INTERNATIONAL,
ECKENBERG FARMS, INTERNATIONAL
FEDERATION OF ORGANIC AGRICULTURE
MOVEMENTS, INTERNATIONAL COMMISSION ON
THE FUTURE OF FOOD AND AGRICULTURE IN
SUPPORT OF RESPONDENTS**

RICHARD DRURY
Counsel of Record
Lozeau | Drury LLP
1516 Oak Street, Suite 216
Alameda, CA 94501
510-749-9102
richard@lozeaudrury.com

Counsel for Amici Curiae

TABLE OF CONTENTS

	Page(s)
INTERESTS OF AMICI CURIAE	1
SUMMARY OF ARGUMENT	6
ARGUMENT	10
I. LEGAL STANDARD	10
A. The Trial Court Complied with NEPA by applying the Four – Part Injunction Standard and Enjoining the Proposed Federal Action Pending Completion of NEPA Review	10
B. NEPA Contains a Strong Statutory Pre- ference that Environmental Review Should Generally Precede Federal Action ...	12
II. The District Court made all Necessary Find- ing to Support its Injunction Protecting Farmers From Irreparable Harm from Transgenic Contamination Pending Comple- tion of NEPA Review	14
A. Success on the Merits	14
B. Without the Injunction, Farmers Will Be Irreparably Harmed.....	15

TABLE OF CONTENTS

(Continued)

	Page(s)
1. The District Court Properly Held that the Injunction was Necessary to Prevent Irreparable Harm of Transgenic Contamination.....	15
2. Transgenic Contamination Has Plagued Rice and Corn Farmers Under Similar Circumstances	16
a. Contamination Occurred Despite the Imposition of Safeguards.....	18
b. Rice Farmers Suffer Ongoing Harm Resulting from Transgenic Contamination.....	21
c. Without the Injunction on New Planting of RRA, Alfalfa Farmers are Likely to Suffer the same type of Irreparable Harms Endured by Rice Farmers.....	22
3. Without the Injunction Farmers Will be Irreparably Harmed by their Loss of Choice to Grow Conventional Alfalfa	28

TABLE OF CONTENTS

(Continued)

	Page(s)
4. The District Court Injunction is Necessary to Prevent Irreparable Harm Caused by Roundup Resistant Weeds	29
C. The Balance of Equities Tips in Favor of the Injunction	35
D. The Injunction is in the Public Interest	37
III. CONCLUSION	39

TABLE OF AUTHORITIES

	Page(s)
<u>Cases</u>	
<i>American Trucking Ass'n v. City of Los Angeles</i> , 559 F.3d 1046 (2009)	22, 28
<i>Amoco Production Co. v. Village of Gambell</i> , 480 U.S. 531 (1987)	37
<i>Andrus v. Sierra Club</i> , 442 U.S. 347 (1979).....	7, 8, 13, 37
<i>Califano v. Yamasaki</i> , 442 U.S. 682 (1979).....	12
<i>Citizens to Preserve Overton Park v. Volpe</i> , 401 U.S. 402 (1971)	38
<i>Hecht Co. v. Bowles</i> , 321 U.S. 321 (1944).....	12
<i>Lamb-Weston, Inc. v. McCain Foods, Ltd.</i> , 941 F.2d 970 (1991)	12
<i>Marsh v. Oregon Natural Resources Council</i> , 490 U.S. 360 (1989).....	8, 13, 38
<i>Robertson v. Methow Valley Citizens Council</i> , 490 U.S. 332 (1989).....	12, 13
<i>Sligh v. Kirkwood</i> , 237 U.S. 52 (1915).....	38

Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519 (1978). 13

Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982) 12

Winter v. Natural Resources Defense Council, 129 S. Ct. 365 (2008) 11, 14

Young v. Community Nutrition Institute, 476 U.S. 974 (1986) 38

TVA v. Hill, 437 U.S. 153 (1978) 13

Statutes

Code Federal Regulations

40 CFR § 1502.5.....8, 12, 13

40 CFR § 1502.14(f) 13

40 CFR § 1502.16(h) 13

40 CFR § 1505.2(c)..... 13

40 CFR § 1508.25(b) 13

United States Code

42 U.S.C. § 4331(b)(4)..... 28

INTERESTS OF AMICI CURIAE¹

Amici Curiae (“*Amici*”) are farmers and growers who grow conventional (not genetically engineered) rice, alfalfa, hay and other products for domestic sale and export. *Amici* are deeply concerned that if genetically engineered (“transgenic”) alfalfa (also known as Roundup Ready Alfalfa (“RRA”)) is unleashed upon the environment without adequate safeguards, and prior to the completion of environmental review, it is highly likely that genetically engineered alfalfa will contaminate conventional alfalfa crops through open pollination (e.g., bees) and other routes, causing irreparable harm to the environment.

Genetically engineered (“GE”) crops have already contaminated conventional crops, resulting in damages of over a billion dollars to the rice trade, and ruinous results to many of *Amici*’s export operations. Many major trade partners, including Japan, Korea, the European Union and many Middle Eastern countries refuse to accept genetically engineered crops. While some farmers may debate the benefits and detriments of genetically engineered crops, all farmers agree that they must respond to the demands of their markets. When genetically engineered material un

¹ Letters of consent have been filed with the Clerk allowing the filing of this amicus brief. Pursuant to Rule 37.6, *amici* state that no counsel for a party authored this brief in whole or in part, and no person or entity other than *amici*, their members, or their counsel made a monetary contribution to the preparation or submission of this brief. Counsel for *Amici* are members of the bar of this Court.

expectedly contaminates the food supply, market consequences for farmers are severe.

Amici include the Arkansas Rice Growers Association (ARGA), the Rice Producers of California, the New England Farmers Union, the Community Alliance with Family Farmers, Fedco Seeds, Inc., Eckenberg Farms, the National Farmers Union of Canada, Genetics International, the International Federation of Organic Agriculture Movements (“IFOAM”), and the International Commission on the Future of Food and Agriculture.

Arkansas Rice Growers Association: ARGA is an association of rice growers. ARGA promotes Arkansas rice to domestic and international trade partners. Arkansas produces almost half of all U.S. rice, more than sixty percent of all long grain rice and an even larger percentage of long grain rice seed. Approximately half of all U.S. grown rice is sold for export. The international rice market has thus far rejected genetically engineered (GE) rice.

ARGA’s members experienced severe financial losses after the long grain rice supply was unintentionally genetically contaminated. The genetic contamination of long grain rice cost the U.S. rice industry over one billion dollars in 2006. These losses are clearly significant and far from harmless.

ARGA members did not intend to grow genetically engineered rice, thus their situation is similar to that of the conventional and organic alfalfa growers represented by Respondents who do not intend to

grow GE alfalfa. Despite repeated official assurances that genetic contamination of rice from field trials was highly improbable, ARGA's members have experienced and been harmed by the consequences of transgenic contamination, and have been forced to abandon entirely certain strains of rice that are permanently contaminated – once the genetic contamination is in the DNA of the rice, it cannot be taken out. ARGA believes that it is inequitable for conventional and organic farmers to be forced to bear the economic burdens imposed by those who chose to grow transgenic alfalfa. The story of how genetic contamination has hurt ARGAs' members and the entire U.S. rice industry provides insight into the effects of genetic contamination.

ARGA's hope is that alfalfa farmers are protected from similar contamination so they do not have to suffer the devastating market losses experienced by ARGA members. ARGA intends to assist this Court by showing that the district court's injunction is necessary to prevent the kinds of harm to farmers that not only can, but indeed have already occurred.

Rice Producers of California: RPC is an organization of California rice farmers. California is the second largest rice growing state in the US, and almost 50% of the California rice crop is exported. RPC's mission is to advocate for the economic viability of rice farming in California. RPC has a long history of involvement on marketing issues surrounding the genetic engineering of crop plants, specifically rice. In 2006, RPC commissioned a survey of international buyers of California rice and found that com

mercial production of GE rice, or a contamination event involving GE rice, would have a severe, negative impact on farmers ability to market their crop internationally. Our findings were later shown to be correct by the genetic contamination of Southern US long grain rice.

The New England Farmers Union is a regional chapter of the National Farmers Union working in six New England states. New England Farmers Union represents the interests of small family farmers and promotes the benefits of agriculture for the region. New England farmers, especially dairy and grass fed beef producers, rely on forage plants like hay and alfalfa. The latter is known as "the queen of forages." Because it is perennial, GE alfalfa would certainly cross-pollinate, and would thereby make alfalfa unavailable to organic dairy farmers, and to farmers who rely on conventional alfalfa, having a devastating impact on this fast growing market sector.

Community Alliance with Family Farmers: CAFF is a 30-year-old non-profit membership organization with some 2,000 members nationally, about half of them farmers in California, which works to develop sustainable agriculture and local food systems. CAFF has for more than ten years supported a cautious approach to genetically modified crops, asking that extensive research and testing be conducted to ensure that farmers will not have their conventional crops unintentionally contaminated. Many CAFF members grow conventional alfalfa and CAFF supports a thorough analysis of the potential impacts

of Roundup-read alfalfa prior to its release into the environment.

Fedco Seeds, Inc.: Fedco sells vegetable, flower and herb seeds, seed potatoes and onion sets, fruit trees, ornamentals, berry bushes, perennials, bulbs, soil amendments, cover crops, tools supplies and books for farmers and gardeners. A sizable portion of Fedco's market will not tolerate GE contamination. Fedco has therefore adopted the policy that it will not knowingly sell any transgenic varieties or those contaminated with genetically modified organisms (GMOs). Fedco has suffered losses because of its inability to sell certain sweet corn lots due to the presence of GMOs. Overturning the district court ruling in the alfalfa case poses a potential threat to the purity of other crops by setting a bad precedent in failing to uphold a strict interpretation of NEPA.

Genetics International is a California-based company formed in 1984 to offer distributors diverse germplasm from a range of breeding programs under one single brand. Successfully introduced throughout the Middle East, this innovative, fully integrated model is now being expanded to other world markets. Genetics International exports conventional alfalfa seed to the Middle East, including Saudi Arabia.

Eckenberg Farms is one of world's largest producers of hay cubes. Based in Washington State, Eckenberg Farms supplies premium quality hay cubes, compressed hay bales and a wide range of other premium forage products to customers around the

world. Eckenberg Farms exports alfalfa hay internationally, including to Japan.

International Federation of Organic Agriculture Movements: IFOAM, based in Bonn, Germany, is a grassroots and democratic organization that currently unites 750 member organizations in 116 countries. IFOAM believes in the freedom of choice for both farmers and consumers to choose non-GE varieties, and the protection of farmers' fundamental property rights and economic independence.

International Commission on the Future of Food and Agriculture, based in Italy, aims to ensure that food and agriculture become more socially and ecologically sustainable. The Commission works with regional governments in Europe to develop "GMO [genetically modified organism] free" regions and to instead promote agro-ecological farming methods. GMO alfalfa and herbicide tolerant ("HT") crops are antithetical to the goals of the Commission and as such we wish to avoid the exporting of GMO varieties that could contaminate European crops and food.

SUMMARY OF ARGUMENT

Petitioner Monsanto and Federal Respondent Animal and Plant Health Inspection Service (APHIS) put the alfalfa cart before the horse. They want the court to allow the planting of genetically engineered alfalfa *before* NEPA review is completed. Monsanto and APHIS have it exactly backward. NEPA review must be completed *before* the federal action at issue is taken, not after. NEPA review must precede federal

action so that the agency can determine based on a full administrative record whether to approve the action at all, and whether and what type of mitigation measures are required to prevent unwanted environmental consequences from the *proposed* federal action. Otherwise, agencies could proceed with projects ranging from construction of dams, to forest clear cuts, to nuclear power plants and then conduct NEPA review after the project is already built. This would render NEPA dead letter. The statutory language and Supreme Court case law prevents such an absurd outcome.

This Court has pointed out that NEPA review must occur *before* project approval, not after. In *Andrus v. Sierra Club*, 442 U.S. 347, 351 (1979), this Court emphasized that the NEPA regulations promulgated by the Council for Environmental Quality (CEQ) state:

An agency shall commence preparation of an environmental impact statement *as close as possible to the time the agency is developing or is presented with a proposal . . .* so that preparation can be completed in time for *the final statement to be included in any recommendation or report on the proposal*. The statement shall be prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and *will not be used to rationalize or justify decisions already made. . . .* For instance:

(a) For projects directly undertaken by Federal agencies *the environmental impact statement shall be prepared at the feasibility analysis (go-no go) stage* and may be supplemented at a later stage if necessary. . . ."

Andrus v. Sierra Club, 442 U.S. 347, 351 (1979), quoting, 43 Fed. Reg. 55995 (1978) (codified at 40 CFR § 1502.5) (emphasis added).

Similarly in *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 109 S. Ct. 1851, 104 L. Ed. 2d 377 (1989), this Court stated that NEPA “promotes its sweeping commitment” to environmental integrity “by focusing Government and public attention on the environmental effects of *proposed agency action*.” (Id. at 371) “By so focusing agency attention, *NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct*.” (Id.)

This Court’s jurisprudence is clear. NEPA review must occur at time of “proposed agency action,” at the “go-no-go” stage, and not after project approval when the agency may act on “incomplete information, only to regret its decision after it is too late to correct,” or when the NEPA document may do nothing more than “rationalize or justify decisions already made.”

Nevertheless, APHIS and Monsanto seek to proceed with their approval of genetically engineered alfalfa, before completing NEPA review, with only minimal safeguards. While Monsanto’s brief is re

plete with expert “evidence” suggesting that the safeguards proposed by APHIS will be adequate, this is precisely the type of analysis that must occur in the Environmental Impact Statement (EIS), subject to public review and comment, not in a legal brief prepared by lawyers and reviewed by judges with no expertise in the field. The trial court and Ninth Circuit plainly followed this Court’s directives in this respect.

The trial court pointed out that it is not an expert “super agency,” and that the court should let the agency do its job after the completion of the final EIS and review of all public and expert comments submitted. The trial court stated:

So I’m not an environmental agency... I could be like a super environmental agency engaged in balancing all these different factors and coming to particular conclusions, which I feel particularly ill suited to do, number one. And number two, it isn’t my job I should stop things in its place until the Government has discharged its duty given to it by the right of Congress of the United States.

Pet.App.417a.

The trial court did not ban genetically engineered alfalfa. Rather, it merely held that NEPA review should be conducted first, before this crop that exists nowhere in nature is unleashed upon the world, in order to analyze what environmental impacts may occur, and what measures are necessary to protect against those impacts. The whole point of

NEPA is to conduct the review *before* there is an impact on the environment.

Indeed, there is no dispute that genetically engineered alfalfa poses environmental risks. No party has challenged Judge Breyer's well-reasoned ruling that an environmental impact statement (EIS) is required under NEPA. Further, all parties agree that some form of injunctive relief is required. Monsanto and APHIS merely argue that the scope of injunctive relief ordered by the trial court was too broad and should have been more narrowly tailored. All of the parties agree that there is a risk of cross-pollination between genetically engineered alfalfa and conventional alfalfa. The only question is what steps are necessary to protect against that threat. This is precisely the type of situation where NEPA review is required *ante hoc*, not *post hoc*. Only after the EIS is complete will APHIS be able to determine, based on a full record, what mitigation measures are required to adequately safeguard the environment against the threat of genetic contamination that all parties agree exists.

ARGUMENT

I. LEGAL STANDARD

A. The Trial Court Complied with NEPA by Applying the Four-Part Injunction Standard and Enjoining the Proposed Federal Action Pending Completion of NEPA Review

All parties agree that a plaintiff seeking a preliminary injunction must establish: (1) a likelihood of success on the merits; (2) a likelihood of irreparable harm in the absence of injunctive relief; (3) that the balance of equities tips in favor of the party seeking injunctive relief; and (4) that an injunction is in the public interest. *Winter v. Natural Resources Defense Council*, 129 S. Ct. 365, 374 (2008). As discussed in Respondents' brief, the District Court and Ninth Circuit, (Pet.App.11a, 13a), applied all four factors in issuing the injunction in this action.

Indeed, Petitioners acknowledge that an injunction is appropriate in this action. They merely challenge the scope of the injunction issued by the District Court, contending that it is overly broad. Since Petitioners contend that an injunction may only be issued based on the four factors set forth in *Winter*, and Petitioners admit that injunctive relief is appropriate in this action, by necessary implication, Petitioners must admit that all four prongs of the injunction standard have been satisfied. Thus, this case is nothing like *Winter*, where the lower courts applied the wrong legal standard. Here, the district court and Ninth Circuit applied the proper legal standard, and there is no dispute that injunctive relief is appropriate.

The only dispute is as to the scope of the injunction. Here, Petitioners bear a much heavier burden. Flexibility is a hallmark of equity jurisdiction. "The essence of equity jurisdiction has been the power of the Chancellor to do equity and to mould each decree to the necessities of the particular case. Flexibility rather than rigidity has distinguished it."

Weinberger v. Romero-Barcelo, 456 U.S. 305, 312, (1982), quoting *Hecht Co. v. Bowles*, 321 U.S. 321 (1944). A district court has “considerable discretion in fashioning suitable relief and defining the terms of an injunction” and appellate review of those terms is “correspondingly narrow.” *Lamb-Weston, Inc. v. McCain Foods, Ltd.*, 941 F.2d 970, 974 (9th Cir. 1991). “Absent the clearest command to the contrary from Congress, federal courts retain their equitable power to issue injunctions in suits over which they have jurisdiction.” *Califano v. Yamasaki*, 442 U.S. 682, 705 (1979). As discussed above, the district court’s injunction and the findings on all four prongs of the injunction standard are supported by the record and are not clearly erroneous.

B. NEPA Contains a Strong Statutory Preference that Environmental Review Should Generally Precede Federal Action.

This Court has made clear that NEPA’s statutory language generally requires NEPA review to be completed *prior* to the commencement of the federal action at issue. In *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989), this Court stated, “NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the *die otherwise cast*.” (Emphasis added); see also, *Andrus*, 442 U.S. at 351-352, n. 3, 99, quoting 40 CFR § 1502.5 (1979). A statute may restrict the court’s equity jurisdiction. *Weinberger v. Romero-Barcelo*, 456

U.S. 305, 313 (1982); *TVA v. Hill*, 437 U.S. 153, 173 (1978).

This Court has explained that NEPA review must occur *prior* to project approval. In *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989), this Court stated, “[b]y so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, *only to regret its decision after it is too late to correct.*” (emphasis added); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); *Andrus v. Sierra Club*, 442 U.S. 347, 351 (1979). Placing NEPA review prior to agency action ensures that the agency considers the potential consequences of its proposed action as well as potential mitigation measures and alternatives to the proposed course of action. See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351-352, (citing 40 CFR §§ 1508.25(b), 1502.14(f), 1502.16(h), 1505.2(c) (1987)); *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978). An EIS must be prepared “early enough so that it can serve practically as an important contribution to the decisionmaking process and *will not be used to rationalize or justify decisions already made.*” *Andrus*, 442 U.S. at 351-352, n. 3, 99 (quoting 40 CFR § 1502.5 (1979) (emphasis added)).

The Court in *Winter* recognized that application of NEPA’s general preference for environmental review prior to federal action was not possible in that case because the action at issue was not a “new type of activity,” but instead had been ongoing for 40

years, and extensive environmental review had already occurred. (*Winter v. NRDC*, 129 S. Ct. at 376).

By contrast, in this case, APHIS does propose a “new type of activity” -- namely the first ever unregulated, open-pollinated, perennial, genetically engineered crop proposed to be unleashed upon the environment. Under the standards articulated in *Winter*, until NEPA review is completed, APHIS cannot determine whether to approve the project at all, or whether and what type of mitigation measures to impose to safeguard the environment.

Thus, the district court’s order in this case, enjoining federal action pending completion of NEPA review is completely consistent with the language and purpose of NEPA, and this Court’s NEPA jurisprudence. The district court properly applied all four prongs of the injunction standard and complied with NEPA’s directive requiring environmental review prior to federal action.

II. THE DISTRICT COURT MADE ALL NECESSARY FINDINGS TO SUPPORT ITS INJUNCTION PROTECTING FARMERS FROM IRREPARABLE HARM FROM TRANSGENIC CONTAMINATION PENDING COMPLETION OF NEPA REVIEW.

A. Success on the Merits.

Respondents demonstrated actual success on the merits – much more than a likelihood of success.

An EIS is required for the proposed APHIS action. Petitioners do not even challenge the district court's ruling on the merits.

B. Without the Injunction, Farmers Will Be Irreparably Harmed.

1. The District Court Properly Held that the Injunction was Necessary to Prevent the Irreparable Harm of Transgenic Contamination

The district court cited evidence that despite the imposition of safeguards almost identical to those proposed by APHIS, extensive transgenic contamination had already occurred in alfalfa crops in at least four separate states, causing irreparable harm. Contractual conditions required separation distances between transgenic and conventional alfalfa ranging from 900 feet to three miles (depending on the type of bees used for pollination), JA 263, 280-81, 615, required growers of transgenic alfalfa hay to harvest their crop at or before 10 percent bloom, JA 260-61, 334, 624, and required growers of both seeds and hay to thoroughly clean tractors, combines, and other equipment used to harvest and process transgenic alfalfa. JA 329; see also JA 271, 283-84, 287-88, 325, 349.

Despite these safeguards, conventional alfalfa seed producers experienced contamination by transgenic alfalfa in at least four different states – Montana, Wyoming, California and Idaho. JA 1008-10,

1013-14, 1017-19, 1022-24, 670-75; see also JA 630, 663-64, 666. Transgenic contamination was detected at up to 1.5 miles from the RRA source, despite predictions that the bees involved would carry the engineered gene no more than 900 feet. JA 1018.

Based on this and other evidence, the district court properly held that the proposed APHIS conditions were not adequate to prevent transgenic contamination, and the more comprehensive injunction was required pending the completion of NEPA review.

2. Transgenic Contamination Has Plagued Rice Farmers Under Similar Circumstances.

A recent report of the United States Government Accountability Office (“GAO”) concluded that “Unauthorized releases of GE crops into food, animal feed, or the environment beyond farm fields have occurred, and *it is likely that such incidents will occur again*” (emphasis added).² The report points to at least six incidents of GE crops contaminating conventional crops, with the most prominent involving GE varieties of corn and rice. This brief focuses primarily on the experiences of *Amici* Arkansas Rice Growers.

² GAO, *Genetically Engineered Crops: Agencies Are Proposing Changes to Improve Oversight, but Could Take Additional Steps to Enhance Coordination and Monitoring* (November 2008) GAO-09-60, p. 1.

On August 18, 2006, the United States Secretary of Agriculture, Mike Johanns, announced that transgenic material had contaminated the U.S. long grain rice supply.³ That very day the price of long grain rice futures contracts traded on the Chicago Board of Trade began to decline.⁴ Two days later, Japan banned all U.S. long grain rice imports.⁵ Five days later, the European Union, which previously imported 5-6% of all U.S. long grain rice, announced it would no longer accept long grain rice from the U.S. unless it was tested and certified free of GE grains.⁶ Just eleven days after the contamination was announced, the value of the U.S. long grain rice crop had fallen by \$135 million.⁷ Analysts realized that, despite a promising forecast and the hard work already invested, farmers would not even come close

³ Press Release, United States Department of Agriculture, Release No. 0306.06: Investigation of Regulated Rice in Commercial Rice Samples (Aug. 18, 2006), <http://www.usda.gov/wps/portal/usdahome?contentidonly=true&contentid=2006/08/0306.xml>.

⁴ U.S. Rice Producers Association, Analysis of GM Impact of Rice on Rice Industry (Feb. 19, 2008) (unpublished spreadsheet, on file with U.S. Rice Producers Association).

⁵ *Japan Bans 'Contaminated' US Rice*, BBC News, Aug. 21, 2006, available at <http://news.bbc.co.uk/2/hi/science/nature/5271384.stm>.

⁶ Press Release, Europa, *Commission requires certification of US rice exports to stop unauthorised GMO entering the EU*, Aug. 23, 2006, <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/06/1120>.

⁷ Press Release, Arkansas Rice Growers Association, Rice Producer Update (Aug 29, 2006), <http://www.arkansasricegrowers.com/gm.asp>.

to breaking even in 2006.⁸ The producers of an international food staple suddenly had to worry about feeding their own families.

In the months after this initial contamination was discovered, testing revealed two more contamination events involving transgenic rice strains.⁹ APHIS, fully aware of the dramatic consequences of growing genetically contaminated rice, issued emergency action notifications to stop the planting of the popular, and now contaminated, Clearfield 131 rice variety.¹⁰ The financial burden imposed by these actions was borne by individual farmers.

a. Contamination Occurred Despite the Imposition of Safeguards

Following the contamination incidents, the United States Department of Agriculture launched a major investigation. On October 5, 2007 USDA an

⁸ Christina Verderosa, *County Farmers Irritated About Genetic Rice Flap*, DeWitt Era-Enterprise, Aug. 30, 2006, <http://www.dewittee.com/articles/2006/08/30/news/news01.txt>

⁹ Marc Gunther, *Attack of the Mutant Rice*, Fortune Magazine, July 2, 2007, http://money.cnn.com/magazines/fortune/fortune_archive/2007/07/09/100122123/index.htm.

¹⁰ Press Release, USDA Animal and Plant Health Inspection Service, Statement by Dr. Ron DeHaven Regarding APHIS Hold on Clearfield CL131 Long-Grain Rice Seed (Mar. 5, 2007) (on file with author).

nounced the conclusion of its investigation.¹¹ Despite extensive analysis, USDA concluded that the exact mechanism of the genetic contamination could not be determined.¹²

The transgenic rice responsible for the contamination incident probably entered the rice supply from field trials conducted by an experienced rice breeder at Louisiana State University, despite aggressive measures to prevent such contamination, including buffer zones four times larger than recommended by the manufacturer.¹³

In its report, USDA admits that even with proper procedures, it may be impossible to prevent the low-level presence (LLP) of transgenic plant material in conventional seeds and grains. It states, “[t]hese occurrences can result from natural processes such as the movement of seeds or pollen or human-

¹¹ Press Release, United States Department of Agriculture, USDA Concludes Genetically Engineered Rice Investigation (Oct. 5, 2007), <http://www.usda.gov/wps/portal/usdahome?contentidonly=true&contentid=2007/10/0284.xml>; USDA, Report of Liberty Link Rice Incidents 1 (2007), www.aphis.usda.gov/newsroom/content/2007/10/content/printable/RiceReport10-2007.pdf.

¹² USDA, Report of Liberty Link Rice Incidents 1 (2007), www.aphis.usda.gov/newsroom/content/2007/10/content/printable/RiceReport10-2007.pdf.

¹³ Marc Gunther, *Attack of the Mutant Rice*, Fortune Magazine, July 2, 2007, http://money.cnn.com/magazines/fortune/fortune_archive/2007/07/09/100122123/index.htm.

mediated processes associated with field testing, plant breeding, or seed production.”¹⁴ USDA’s Bio-technology Regulatory Services “continually examines confinement measures, including isolation distances, to insure that they are adequate; however, *these measures still might not prevent 100 percent of LLP occurrences.*”¹⁵ (emphasis added).

Agriculture consultant, Dr. E. Neil Blue, concludes that buffer zones proposed by APHIS will be inadequate to prevent transgenic contamination of conventional alfalfa. Dr. Blue points out that similar safeguards did not protect the canola crop. He states, “The extent of the penetration of contaminated seed into the canola seed supply is now so deep that segregating GE from non-GE seed will not help at this point (<http://www.grain.org/front/>).”¹⁶

In light of USDA’s conclusions following the transgenic rice contamination incident, it defies logic for APHIS to claim that its proposed measures for the planting of Roundup Ready alfalfa can prevent transgenic contamination of conventional alfalfa. ARGA’s experience demonstrates that even very low levels of

¹⁴ USDA, Report of Liberty Link Rice Incidents 2 (2007), www.aphis.usda.gov/newsroom/content/2007/10/content/printable/RiceReport10-2007.pdf.

¹⁵ *Id.*

¹⁶ Comments of Dr. E. Neil Blue, A Review of the Draft Environmental Impact Statement, Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status (March 2010), [APHIS-2007-0044-10172.1](http://www.aphis.usda.gov/oc/foia/2010/0044-10172.1).

transgenic material in a crop can cause devastating and extensive losses for farmers. Contamination of long grain rice led to severe market losses despite the fact that the genetic material was found at a rate of 0.06 percent or six out of 10,000 rice kernels.¹⁷

b. Rice Farmers Suffer Ongoing Harm Resulting from Transgenic Contamination

APHIS's December 4, 2006, deregulation of GE rice allowed long grain rice to be sold in the U.S., albeit at discounted prices.¹⁸ However, deregulation did not affect the stance of international trade partners. Many formerly enthusiastic trade partners, including the European Union, Japan, Russia, Iraq, Canada, and Mexico, continue to either impose stringent testing requirements on U.S. long grain rice or reject it outright.¹⁹ Farmers must bear the financial burdens imposed by these new testing requirements and market losses.

¹⁷ Christina Verderosa, *County Farmers Irritated About Genetic Rice Flap*, DeWitt Era-Enterprise, Aug. 30, 2006, <http://www.dewitt-ee.com/articles/2006/08/30/news/news01.txt>.

¹⁸ Bayer CropScience; Extension of Determination of Nonregulated Status to Rice Genetically Engineered for Glufosinate Herbicide Tolerance, 71 Fed. Reg. 70,360, 70362 (Dec. 4, 2006) (to be codified at 7 CFR pt. 340).

¹⁹ USARice.com, *U.S. Rice Export Markets Impacted by the Presence of LLRICE601*, <http://www.usarice.com/industry/communication/exportimpact.pdf> (last visited Feb. 24, 2008).

Lost markets and new testing requirements are not the only ongoing harms. To contain the contamination, farmers no longer plant the contaminated varieties, Cheniere and Clearfield 131. For many farmers, these were the varieties of choice. The abandonment of these varieties has led to seed shortages, as farmers seek out less popular, uncontaminated seed varieties. Farmers are therefore forced to grow less desirable rice varieties. In addition, farmers are still overcoming the cost of having had to decontaminate their fields, machinery, storage facilities, and transportation systems.²⁰ Some rice farmers have gone out of business or have gotten out of the business, deciding the business of growing rice is too risky.

While economic loss alone is generally not irreparable, when the loss is so severe that it amounts to the “loss of one's business,” the harm is irreparable. *American Trucking Ass'n v. City of Los Angeles*, 559 F.3d 1046, 1059 (9th Cir. 2009).

c. Without the Injunction on New Planting of RRA, Alfalfa Farmers are Likely to Suffer the same type of Irreparable Harms Endured by Rice Farmers.

²⁰ Press Release, Arkansas Rice Growers Association, Rice Farmer Liabilities Focus of ARGA on GMO Debate (Jan. 3, 2007), <http://www.arkansasricegrowers.com/gm.asp>.

While there are certainly differences between rice and alfalfa, one significant similarity is that APHIS has provided assurance to farmers of both crops that transgenic contamination of their crops from nearby GE plots is nearly impossible. Nonetheless, the U.S. long grain rice supply was contaminated, even though the transgenic rice was grown only by experts in tightly-controlled field trials.²¹ Another similarity lies in the type of GE trait; both RRA and the contaminated rice strains contain a trait for herbicide tolerance.²²

Petitioners contend that Roundup Ready alfalfa can be grown on a million acres with no real threat of contamination because farmers will promise to follow the measures proposed by APHIS. However, in view of the above-described actual experiences, these assurances that there will be no contamination of organic and conventional alfalfa are speculative and lack credibility. Long grain rice is a self-

²¹ GE rice was a regulated article when the contamination was announced, but was deregulated several months later. Bayer CropScience; Extension of Determination of Nonregulated Status to Rice Genetically Engineered for Glufosinate Herbicide Tolerance, 71 Fed. Reg. 70,360, 70362 (Dec. 4, 2006) (to be codified at 7 CFR pt. 340). In contrast, GE alfalfa was deregulated in 2005, but was reregulated as a result of inadequate environmental analysis. Return to Regulated Status of Alfalfa Genetically Engineered for Tolerance to the Herbicide Glyphosate, 72 Fed. Reg. 13,735, 13,736 (Mar. 23, 2007) (to be codified at 7 CFR pt. 340).

²² The contaminated rice strains contained the GE trait which confers tolerance to the herbicide LibertyLink, or glufosinate. RRA is genetically engineered for tolerance to Roundup, or glyphosate.

pollinated annual plant that was only grown in field trials, yet it contaminated large portions of the long grain rice crop. Alfalfa is an open-pollinated plant, which is even more susceptible to cross-pollination. Yet, Petitioners would like to see it grown on hundreds of thousands of acres, *before* NEPA review is completed. Thus, contamination of organic and conventional alfalfa by Roundup Ready alfalfa is even more likely.

Alfalfa farmers, like rice farmers, rely on the purity of their product to ensure its marketability. Importing businesses in several countries including Japan, which imports 75% of the alfalfa exported from the U.S., have stated that their markets do not want RRA and will reject alfalfa contaminated by RRA. Pet.App. 30a, 40a; JA 120, 154, 243, 354, 409-11, 420-23, 433, 451, 1070-71. Genetic contamination of conventional and organic alfalfa would likely lead to adverse consequences for alfalfa growers similar to those suffered by long grain rice farmers.

The proposed deregulation of genetically engineered alfalfa is likely to have a significant impact on export markets, especially Saudi Arabia, Japan, and South Korea. According to the draft environmental impact statement already prepared by APHIS, these three countries “all have approval processes for GE products and labeling requirements.” For alfalfa hay, Japan and the Republic of Korea are the main players. “Approximately three-fourths of U.S. alfalfa hay exports go to Japan each year” while approximately

13 to 16 percent goes to the Republic of Korea.²³ Exports to Japan and Korea exceed \$159 million dollars annually.²⁴

APHIS's own EIS describes Japan's attitude as "zero tolerance" when it comes to non-approved GE foods, and they have a rigorous inspection process, testing "up to 50% of all cargoes." "Labeling is mandatory for all GE foods as long as GE material can be detected, the GE ingredient is one of the first three ingredients of a product, and the GE material accounts for more than five percent of the total weight."²⁵

One American exporter expressed concern in the EIS that "Japan's reaction to Monsanto's sale of GE alfalfa seed in Washington State could be extreme, including chances of a boycott or other negative reaction" and that "the consequences of such a reaction will fall primarily on the shoulders of the Washington State hay industry and on the state's economy, not Monsanto, and Monsanto either does not appreciate, or is not concerned about, the heightened level of Japanese consumer awareness of, and

²³

http://www.aphis.usda.gov/biotechnology/downloads/alfalfa/gealfalfa_deis.pdf, p. 54

²⁴ *Id.* Table R-3, Appendix R, p.R-6; see also, Comments of Dr. E. Neil Blue, A Review of the Draft Environmental Impact Statement, Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status (March 2010), APHIS-2007-0044-10172.1.

²⁵ *Id.* p. 141

phobia for, GE products, particularly with regard to milk and dairy products and the perceived danger to their children's diets.”²⁶

“Korea has similar approval processes and labeling requirements as Japan” and does not require labeling of processed foods with “non-detectable levels of GE material such as dairy, meat, and vegetable oils.”²⁷ “As in the case of Japan, there is evidence of consumer negative views of GE products” which could result in a significant economic impact, especially as demand for labeling expansion increases.²⁸ Keeping these important markets for US alfalfa producers may prove difficult if the GE alfalfa becomes unregulated.

According to USDA’s December 2009 draft EIS on the deregulation of GE alfalfa, ²⁹ for alfalfa seed, the most important export market is Saudi Arabia.³⁰ Saudi Arabia is the largest customer for U.S. alfalfa seed, followed by Mexico, Argentina, and Canada.³¹

²⁶ *Id.* Appendix B-40

²⁷ *Id.* Appendix R-10

²⁸ *Id.* Appendix R-12

²⁹

http://www.aphis.usda.gov/biotechnology/downloads/alfalfa/gealfalfa_deis.pdf

³⁰ APHIS. (2009). Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Draft Environmental Impact Statement. 142.

³¹

http://www.aphis.usda.gov/biotechnology/downloads/alfalfa/gealfalfa_deis.pdf, Table R-1.

Saudi Arabia has said that it will not purchase GE alfalfa seeds, and whether they would “continue purchasing non-GE alfalfa seeds from the United States would likely depend on the extent to which non-GE alfalfa seed producers are able to avoid unintended presence of GE alfalfa traits.”³² For US alfalfa seed producers, this could spell losses of more than \$38 million annually.³³

APHIS admits in the EIS that “deregulation of GT [glyphosate-tolerant] alfalfa could imply losses in exports of alfalfa seed and hay to the main U.S. clients” and that “[a]ny losses are unlikely to be regained in the future, since the trust established by lasting commercial relationships is often valued in international trade.”³⁴ If GE alfalfa is deregulated, the burden of sustaining an export market for alfalfa seed to Saudi Arabia will fall on the shoulders of seed producers, who may find it increasingly difficult to maintain purity.

Lifting the district court’s injunction is likely to result in the same type of ruinous economic loss to alfalfa farmers as befell rice farmers. As with rice

³² APHIS. (2009). Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Draft Environmental Impact Statement. 142-143.

³³ APHIS. (2009). Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Draft Environmental Impact Statement. Appendix R-6.

⁴ APHIS. (2009). Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Draft Environmental Impact Statement. 178.

farmers, when the loss is so severe that it amounts to the “loss of one’s business,” the harm is irreparable. *American Trucking Ass’n v. City of Los Angeles*, 559 F.3d at 1059.

3. Without the Injunction Farmers Will Be Irreparably Harmed by their Loss of Choice to Grow Conventional Alfalfa.

Judge Breyer’s merits decision found that a farmer’s loss of his right to farm the crop of his choice because of unwanted transgenic contamination from GE crops was a cognizable harm that required an EIS:

“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.” 42 U.S.C. § 4331(b)(4) ... An action which potentially eliminates or least greatly reduces the availability of a particular plant--here, non-engineered alfalfa--has a significant effect on the human environment.”

This decision was *not* appealed and cannot be challenged here.

As discussed above, one of the most troubling aspects of the transgenic rice contamination incidents was that farmers who had no intention of growing transgenic rice were unwittingly forced to grow transgenic rice due to cross-pollination or other routes of contamination. These farmers lost their freedom to choose whether to grow transgenic rice, but suffered all of the adverse market consequences of growing the genetically engineered varieties.

Farmer also lost their freedom to choose entire varieties of rice that become contaminated with transgenics. To contain the contamination, farmers no longer plant the contaminated varieties, Cheniere and Clearfield 131, which were previously very popular rice varieties. These farmers have lost their ability to plant the rice varieties of their choosing due to unwanted and unintentional transgenic contamination.

Similar contamination of alfalfa has occurred in at least four states. The injunction is necessary to prevent irreparable harm caused by biological contamination and the resulting loss of farmers' right to choose to grow non-GE crops.

4. The District Court Injunction is Necessary to Prevent Irreparable Harm Caused by Roundup-Resistant Weeds.

The district court held that APHIS failed to assess the environmental significance of the anticipated proliferation of glyphosate-tolerant weeds (Roundup-

Resistant Weeds) – a side-effect of deregulation that APHIS did not dispute. Pet.App.45a-47a. Adoption of RRA would necessarily result in an increase in herbicide use, since that is the very purpose of Roundup Ready crops (including corn, rice, and soybeans). JA 114-43; see also JA 239-44. This, in turn, would result in a proliferation of glyphosate tolerant weeds, thereby driving farmers into a cycle of applying *even more* glyphosate or to employ other herbicides. JA 114-26, 131-43; see JA 239-44, 678-83, 707-19.

Alfalfa is a vigorous perennial crop that out-competes weeds and thus is grown mostly without herbicides.³⁵ Roundup Ready alfalfa would encourage many farmers who presently use little or no glyphosate (active ingredient of Roundup) to use it, up to four times per year. USDA estimated that the “potential amount of glyphosate due to adoption of GT [glyphosate-tolerant] alfalfa” was 142,761,960 lbs. per year.³⁶ This is a huge amount of glyphosate, roughly the quantity now used in all of American agriculture.³⁷

³⁵ USDA (1999). “Agricultural Chemical Usage: 1998 Field Crops Summary,” USDA’s National Agricultural Statistics Service, May 1999, p. 9. Just 7% of alfalfa hay acres were treated with herbicides.

³⁶ USDA (2009). “Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status. Draft Environmental Impact Statement,” Nov. 2009, Appendix N at N17-N18.

³⁷ See EPA (2009). “Glyphosate Summary Document Registration Review: Initial Docket,” Environmental Protection Agency, June 2009, p. 12, for figure of 135 million lbs. acid equivalents of glyphosate.

Roundup Ready crops are genetically engineered to be resistant to glyphosate and therefore, farmers can put as much glyphosate as they want on the crops. Genetically-modified (GM) soybeans, corn and cotton have increased overall herbicide use in the U.S. by 383 million lbs. over the first 13 years of their cultivation, from 1996 to 2008, versus what would have been applied in their absence. Roundup Ready crops are engineered to survive direct application of glyphosate (active ingredient of Roundup) to kill nearby weeds. The ability to spray Roundup Ready crops repeatedly with glyphosate throughout the growing season makes weed control easier and less labor intensive. After a few years, however, the exclusive use of glyphosate that is common with Roundup Ready crops drives the evolution of glyphosate-resistant weed populations – just as overused antibiotics foster resistant bacteria.

Farmers initially respond to resistant weeds by spraying more glyphosate, which in turn drives higher levels of resistance. This is the major factor responsible for the enormous increase in the intensity of glyphosate use in the Roundup Ready crop era, as revealed by USDA pesticide usage data. The annual amount of glyphosate applied per acre has doubled for soybeans (1996 to 2006) and tripled on cotton (1996 to 2007), clear signs that weeds are becoming resistant. In just one decade, glyphosate-resistant weeds have expanded from 1 species on a few thousand acres in California to 10 species on as much as

11.4 million acres in 22 states,³⁸ with the majority of resistant weed populations expanding.

Leading weed scientist Dr. Stephen Powles recently warned that glyphosate-resistant weeds pose “a looming threat to global cropping and food production.”³⁹ Dr. Alan York at North Carolina State University regards glyphosate-resistant weeds in cotton as “potentially the worst threat since the boll weevil.”⁴⁰ According to Dr. Micheal Owen of Iowa State University: “Right now, we are on the edge of a precipice that we could step off [of] in the next two years.”⁴¹

Weeds cost U.S. agriculture a substantial \$33 billion per year in lost productivity, despite \$7 billion

³⁸ Center for Food Safety’s compilation of data from glyphosate-resistant weed reports listed by the Weed Science Society of America at <http://www.weedscience.org/Summary/UspeciesMOA.asp?lstMOAID=12&FmHRACGroup=Go/>. Glyphosate is the only member of the “Glycines” herbicide class. Acres infested reported in ranges, 11.4 million is the aggregate, upper-bound estimate.

³⁹ Powles, S.B. (2010). “Gene amplification delivers glyphosate-resistant weed evolution,” Commentary, *Proceedings of the National Academy of Sciences* 107: 955-956.

⁴⁰ Minor, E. (2006). “Herbicide-resistant weed worries farmers,” Associated Press, 12/18/06.

⁴¹ Gullickson, G. (2010). “Reeling from resistance: Weed resistance to glyphosate and other modes of action increase,” *Successful Farming*, Jan. 26, 2010.

spent on weed-killers.⁴² Resistance to glyphosate is rapidly increasing these losses and costs. Soybeans grown by Mississippi farmer Kenneth Hood were so badly infested with Roundup-resistant pigweed that he had to plow them under, unharvested, while at least 10,000 acres of cotton fields in Georgia have been abandoned as uncultivable.⁴³ Crittenden County, Arkansas Extension agent Mike Hamilton estimates that an uncontrolled outbreak of glyphosate-resistant horseweed would reduce yields of cotton and soybeans by 50% and 25%, respectively, costing his state's farmers \$500 million.⁴⁴

Farmers also resort to increased use of other toxic herbicides. Use of carcinogenic 2,4-D in soybeans increased by 112% from 2005 to 2006;⁴⁵ 2,4-D was part of the Vietnam War's Agent Orange. The EPA recently exempted cotton from its ban on use of arsenic-based herbicides specifically to give cotton farmers a badly needed, but toxic, tool to battle resistant pigweed.⁴⁶

⁴² USDA (undated). U.S. Dept. of Agriculture, Agricultural Research Service, Invasive Weed Management Unit, <http://arsweeds.cropsci.illinois.edu/>.

⁴³ Robinson, E. (2010). "Old technology coming out the closet," *Delta Farm Press*, 1/12/10; Robinson, E. (2008). "Designing the perfect weed - Palmer amaranth," *Delta Farm Press*, 12/24/08.

⁴⁴ James, L. (2005). "Resistant weeds could be costly," *Delta Farm Press*, 7/21/05.

⁴⁵ *Ibid.* p. 59.

⁴⁶ EPA Arsenic (2009). "Amendment to Organic Arsenicals RED," Letter from EPA's Richard P. Keigwin, Director, Spe-

Losing an herbicide as valuable as glyphosate to resistance hurts all growers, especially non-Roundup Ready growers, many of whom make more appropriate, sparing use of this herbicide. For instance, wheat farmers who use glyphosate moderately because there is no Roundup Ready version available could easily be robbed of glyphosate if resistant weeds spread to their fields from Roundup Ready fields. This would constitute a tragedy of the commons, with weed susceptibility to glyphosate the common resource being squandered.

The latest resistant weed – kochia – illustrates the dilemma.⁴⁷ Resistant kochia evolved in corn, soybeans, and cotton,⁴⁸ but has the ability to spread to alfalfa, sugar beets and wheat, where it is one of the more problematic weeds,⁴⁹ and is already plagued by massive resistance to three other herbicide classes.⁵⁰

cial Review and Reregistration Division, to Registrant, April 22, 2009.

⁴⁷ Gillam, C. (2010). “More US weeds found resisting Monsanto Roundup,” *Reuters*, 2/26/10.

⁴⁸

<http://www.weedscience.org/Summary/USpeciesMOA.asp?lstMOAID=12&FmHRACGroup=Go>. See two entries for “kochia.” Though first discovered in 2007, resistance not confirmed until 2010.

⁴⁹ Menalled, F.D. & R.G. Smith (2007). “Competitiveness of herbicide-resistant and herbicide-susceptible kochia (*Kochia scoparia* [L.] Schrad.) under contrasting management practices,” *Weed Biology and Management* 7: 115-119.

⁵⁰

<http://www.weedscience.org/Summary/USpeciesCountry.asp?lstWeedID=101&FmCommonName=Go>.

Monsanto now blames farmers for resistant weeds. In fact, the company has greatly contributed to the problem by continually advising farmers that exclusive reliance on Roundup Ready crops and Roundup, year-in, year-out, would not lead to weed resistance.⁵¹ A respected Iowa State University agronomist singled out Monsanto's advertisements as precisely the wrong advice to give farmers. Continual use of glyphosate and no other weed control method is the perfect recipe for resistance. "Monsanto's self-serving advice has accelerated the emergence of glyphosate resistance in weeds." *Id.*

The district court's injunction is necessary to protect farmers from the irreparable harm that is likely to be caused by Roundup-Resistant weeds. A final EIS is necessary to analyze this impact and to propose mitigation measures to reduce or eliminate the impact.

C. The Balance of Equities Tips in Favor of the Injunction.

The district court found that "[t]he harm to these farmers and consumers who do not want to purchase genetically engineered alfalfa or animals fed with such alfalfa outweighs the economic harm to Monsanto, Forage Genetics and those farmers who desire to switch to Roundup Ready alfalfa." Pet.App.71a. It found that any lost revenue to peti

⁵¹ B. Hartzler, Two for the price of one, Iowa State University, (Dec. 17, 2004).
<http://www.weeds.iastate.edu/mgmt/2004/twoforone.shtml>.

tioners did “not outweigh the potential irreparable damage to the environment.” *Id.*

As discussed above, if the US alfalfa crop becomes transgenically contaminated, the loss of overseas markets will be permanent. USDA concludes that, “deregulation of GT alfalfa could imply losses in exports of alfalfa seed and hay to the main U.S. clients” and, “[a]ny losses are unlikely to be regained in the future, since the trust established by lasting commercial relationships is often valued in international trade.”⁵²

By contrast, the delay for Petitioners is only temporary, until the EIS is completed to determine safeguards necessary to protect the US food supply. Petitioners are seeking to plant an illegal and new product that could harm others. *Amici* simply want to plant as they always have and provide no danger to anyone. The balance of harms goes only one way in this case.

Judge Breyer was correct in finding that the environmental harm that would be caused by transgenic alfalfa far outweighed the purely economic harm that Monsanto and Forage Genetics may suffer. This holding was entirely consistent with this Court’s instruction that:

⁵⁰ APHIS. (2009). Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Draft Environmental Impact Statement. p. 178.

Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment.

Amoco Production Co. v. Village of Gambell, 480 U.S. 531, 545 (1987).

D. The Injunction is in the Public Interest.

The district court found that petitioners' proposed "expansion of the [RRA] market pending the preparation of the EIS" was "unprecedented" and was not in the public interest. Pet.App.72a-75a. Judge Breyer's ruling on this point was completely consistent with the public interest embodied by the legislature in NEPA and articulated by this Court on numerous occasions that NEPA review should generally precede the proposed federal action.

As discussed above, the EIS should be prepared "*as close as possible to the time the agency is developing or is presented with a proposal . . . so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made.*" *Andrus v. Sierra Club*, 442 U.S. 347, 351 (1979). "*NEPA ensures that the agency will not act on incomplete in*

formation, only to regret its decision after it is too late to correct.” *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, (1989).

Furthermore, this Court has long recognized that “ensur[ing] the purity of the Nation's food supply,” is one of the most important functions of government in protecting the public interest. *Young v. Community Nutrition Institute*, 476 U.S. 974, 976 (1986); *Sligh v. Kirkwood*, 237 U.S. 52 (1915).

The district court’s injunction is the only means to protect the core values set forth by the legislature in NEPA. The legislature’s intent, set forth in law, is the clearest articulation of the public interest. As this Court stated in another NEPA case, “[t]he very existence of the statutes indicates that protection of parkland was to be given paramount importance.” *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 413 (1971). The district court’s injunction vindicates the public interest enshrined by Congress in NEPA, and protects one of the Nation’s most critical assets – its food supply.

39
CONCLUSION

For the foregoing reasons, *Amici Curiae* respectfully request that this Honorable Court *affirm* the judgment of the Court of Appeals.

DATED: April 2, 2010

Respectfully submitted.

_____/s/_____

RICHARD DRURY
Counsel of Record
MICHAEL R. LOZEAU
Lozeau | Drury LLP
1516 Oak Street, Suite 216
Alameda, CA 94501
510-749-9102
richard@lozeaudrury.com
Counsel for Amici Curiae Arkansas Rice Growers Association (ARGA), Rice Producers of California, New England Farmers Union, Community Alliance with Family Farmers, Fedco Seeds, Inc., Eckenberg Farms, National Farmers Union of Canada, Genetics International, International Federation of Organic Agriculture Movements (“IFOAM”), and International Commission on the Future of Food and Agriculture