



National Organic Coalition

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The Honorable Tom Vilsack
Secretary, US Department of Agriculture
1400 Independence Ave. SW
Washington, DC 20585
agsec@usda.gov

RE: Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status, Final Environmental Impact Statement— December 2010

Dear Secretary Vilsack:

The National Organic Coalition (NOC) appreciates this additional opportunity to outline our comments and concerns with the Glyphosate-Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status Final Environmental Impact Statement— December 2010. For a variety of reasons outlined in our previous communications (both personal, through Michael Sligh, and written) we find the FEIS to be inadequate in outlining the impacts of de-regulation of GE Alfalfa, or in detailing acceptable alternatives which would mitigate the full range of impacts related to farmer and consumer choice, health, and environment.

Prior to any de-regulation of new genetically-engineered crops, or discussions of “Co-Existence” or Contamination Prevention, the following 7 points must be addressed transparently and fairly (for all stakeholders involved). See NOC’s Contamination Prevention Plan, previously submitted to you for the details: [<http://www.nationalorganiccoalition.org/GMO/GMOContaminationPrevention.pdf>]

1. Establish a USDA Public Breeds Institute to ensure that the public has access to high quality non-GMO breeds and germplasm.
2. Create a *Contamination Compensation Fund* [see NOC’s Draft proposal at: <http://www.nationalorganiccoalition.org/GEAlfalfa/ProposedCompensationPlan.pdf>, and attached] funded by GMO patent holders, to provide immediate assistance to persons contaminated by GMOs, from seed to table.

3. Complete elimination of deregulated GM crop status, including prior deregulations, with ongoing oversight and public evaluation of compliance and enforcement.
4. Conduct comprehensive, independent, longitudinal studies on the health, environmental, and socio-economic impacts of GMOs, prior to GM crop approvals.
5. Prohibit the growing of promiscuous GM crops that are likely to cause GMO contamination.
6. Prevent food security risks associated with the concentration of our food system in the hands of a few companies.
7. Institute an immediate labeling protocol for all GM crops, products, and ingredients.

Because none of these requirements were outlined as part of any alternative to de-regulate GT Alfalfa, we believe that the Department should table the de-regulation of GT alfalfa at this time in order to develop a comprehensive framework with lasting solutions for the ongoing oversight of all GE-crops. This should be done within the existing APHIS framework and include, but not be limited to, the empaneling a “co-existence/Contamination Prevention advisory group.”

NOC believes that the best alternative outlined in the FEIS is continued regulation of the GT Alfalfa, “Option 1”. In fact, in the FEIS, the Department fully admits that keeping the regulation is the best way to prevent gene flow (pg. 111): that existing regulation would “reduce cross pollination between GT alfalfa and conventional alfalfa below the other two alternatives,” and that keeping regulation would create the least likely scenario for secondary seedling gene flow. (pg. 113).

In response to “Option 3,” NOC offers the following comments:

- A. Non-GT alfalfa Hay/forage must be given the same protections as seed, as outlined in Option 3, and further delineated through the development of a comprehensive framework process. The FEIS fails to address real-world uses, including the fact that many farmers do let their last cutting of a forage area go to seed, and it is a common practice for farmers to save their own seed as a cost-cutting measure.
- B. Protections for non-GT seed outlined in Option 3, and further protections developed through ongoing discussions in a comprehensive framework noted above, should include all public and private breeding programs that currently exist throughout the US – not just the areas identified as Option 3 in the FEIS.
 - a. Option 3 presents no plan to address foundation seed plots outside of the areas of the western big three seed companies. For instance, public Alfalfa Breeding work (as well as other species) is being done at New Mexico, California, South Dakota, Georgia, New York, maybe WY and MT also; at USDA-ARS in Minnesota and Utah. Other specific alfalfa breeding is also being done, and needs to be included as well.

- C. Enforcement and compliance of all provisions must be through government oversight and verified through independent third-party certifications which are also independently accredited.
- a. The failure of industry self-policing is well documented in contamination events with previously de-regulated ge crops.
 - b. The industry seed proposal is untested and has no performance history to conclude it is a viable plan.
 - i. Current industry proposals for the protection of non-ge seed are untested, have a poor track record in other crops such as GE corn and soy, and are therefore not viable.
 - c. Provisions in Option 3 must be reasonable enough to be adequately implemented: For instance, enforcement and compliance of the 10% bloom issue will be nearly impossible to implement (Pg 14).
 - i. This presents questions of subjectivity, enforcement capacity and the EIS notes, “a GT hay field at ten percent bloom can still serve as a source for pollen. As a result, gene flow can occur.” (Pg 120).
- D. Option 3 presents no plan for enforcement, and subsequent remediation and compensation should protection plans fail. A compensation plan and fund should be put in place prior to any release.
- E. USDA must also take responsibility for oversight of the GMO licensing agreement to ensure that they are fair and equitable.
- F. Option 3 presents no plan for on-going testing and contamination prevention for the world’s alfalfa germplasm collections. USDA should oversee such a plan in consultation with the National Plant Germplasm System, and NGRAC (below).
- G. The National Genetic Resources Advisory Council (NGRAC) should be re-empaneled to develop a Strategic Food Security plan for re-invigoration of our public cultivar, germplasm and utilization system to ensure long-term reinvigoration of our public cultivar and breeds development.
- H. Isolation distances are inadequate.
- a. There should be isolation distances between seed and forage fields. As currently written, there is no isolation distance requirement- only that if fields are within 165 feet that they must be harvested at 10% bloom.
 - b. Tier 2 and 3 states should have the same standard. The policy requires that a forage field must be harvested at or before 10% bloom if it is planted within 165 ft. of a seed field in a Tier 2 state. Yet, in a Tier 3 state, no GT alfalfa can be grown in a county where GT seed is grown. While Tier 2 states will have less overall seed acreage, the mechanisms for gene flow are still the same if seed and hay fields are located near each other. Regardless of whether a state makes up more or less than 1% of US total alfalfa seed production, the genetic and ecological aspects that allow for gene flow are the same. Therefore, the same threshold should be required for both Tier 2 and

Tier 3 states. While in theory, Tier 2 states represent less than 1% of total acreage and would “dilute” the seed supply if there was contamination, it could also create localized pockets of contamination.

- c. Bees can travel farther than the 5 mile isolation distances. New research (Brunet and Stewart 2010, a paper cited by USDA) found that honeybees were likely to have a higher relative transfer of transgenic pollen relative to other pollinators. Further, unlike other pollinators who have shown reduced gene flow potential in high plant densities, honeybee gene flow potential through pollination was unaffected by plant density. This is important because the USDA acknowledges that honeybees can travel up to 6.21 miles (per Beekman and Ratnieks 2000). Isolation distances are set at 5 miles for seed fields, potentially indicating inadequate protections.

- d. Gene flow at 165 ft. isolation barriers is still notable. Table V-13 in the EIS clearly shows that gene flow is not zero at the 165 feet amount or lower.

Table V-13. Hay to Seed Gene Flow (Teuber and Fitzpatrick 2007)

Distance between hay and seed field (feet)	Percentage gene flow
165	0.29
215	0.18
265	0.14
315	0.15
365	0.00
415	0.00
465	0.05
515	0.02
565	0.05
615	0.00

Field isolation distances as currently presented are inadequate to prevent gene flow between forage and seed. Furthermore, this chart used by the USDA fails to acknowledge what the percentage of gene flow is if fields are closer than 165 feet. In Tier 2 states, fields within 165 ft. would be required to be harvested at 10% bloom, but there is no requirement if fields are more than 165 ft. away. In essence, this means farmers can allow their fields to fully bloom (often done to change nutritional content) and would thus be greatly susceptible to gene flow as indicated by Teuber and Fitzpatrick.

- I. Feral alfalfa populations can and will act as vectors of the Roundup Resistance gene.
 - a. Feral alfalfa can serve as bridges for long distance gene flow and be a barrier to coexistence of transgenic and non transgenic alfalfa fields (Bagavathiannan and Acker 2009).
 - b. The USDA fully acknowledges this (Pg 119 and Appendix V) but it remains unclear how they intend to deal with feral alfalfa at the field edges.
 - c. Seed to feral gene flow can remain above 1% at distances of 1 mile. This brings into serious question how farmers will be controlling for feral alfalfa at these distances.

We strongly believe the above seven-point *GMO Contamination Prevention Plan* (and attached details) would create very meaningful steps toward restoring a rational marketplace and meeting USDA obligations to ensure fairness and choice for all farmers. We are fully prepared to aid in this development. We ask that you exercise USDA’s clear authority to protect all segments of U.S. Agriculture.

Sincerely yours,



Liana Hoodes,
Director

Cc: Kathleen Merrigan, Deputy Secretary

Literature Cited

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