



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

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Ms. Cindy Eck
USDA, APHIS
Biotechnology Regulatory Services
4700 River Road
Riverdale, MD 20737

Subject: Draft Environmental Impact Statement (DEIS) for the Determination of Nonregulated Status for ASR368 Glyphosate-Resistant Creeping Bentgrass CEQ #20160220

Dear Ms. Eck:

In accordance with our responsibilities under Section 309 of the Clean Air Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) has completed its review of the DEIS for the *Determination of Nonregulated Status for ASR368 Glyphosate-Resistant Creeping Bentgrass*.

APHIS received a request (Petition 15-300-01p) from the Scotts Company LLC and Monsanto Company seeking a determination of nonregulated status for ASR368 Creeping Bentgrass that has been engineered to be resistant to the herbicide glyphosate. The petition states that APHIS should not regulate ASR368 Creeping Bentgrass because it does not present a plant pest risk. APHIS has prepared this DEIS in response to the Scotts and Monsanto Petition for nonregulated status to consider the potential environmental impacts of an agency determination of nonregulated status. APHIS emphasizes that its decision to prepare an EIS in this case was discretionary and was based on a perceived need for the level of thoroughness afforded by the EIS process because of the complexity of issues that needed to be addressed. Specifically, the DEIS evaluates the impacts on the quality of the human environment that may result from a determination of nonregulated status of ASR368 Creeping Bentgrass. The DEIS considered two alternatives: 1) **No Action Alternative** (continue to regulate ASR368 Creeping Bentgrass) and 2) **Preferred Alternative** (approve the Petition for nonregulated status of ASR368 Creeping Bentgrass).

APHIS determined that the direct impacts on the environment from the potential cultivation of ASR368 Creeping Bentgrass would not differ from those caused by the cultivation of conventional creeping bentgrass varieties, because ASR368 Creeping Bentgrass is not

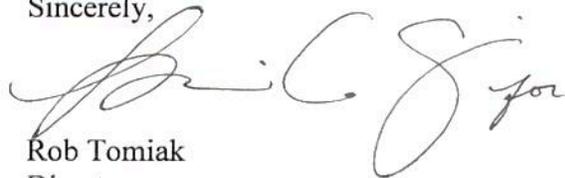
agronomically different from conventional creeping bentgrass. Potential impacts would be the same under the **No Action** and **Preferred Alternatives** with respect to agricultural production, the physical environment (*e.g.*, soil, water, air), biological resources (*e.g.*, animal, plant, biodiversity), human health, animal feed, and socioeconomics. APHIS previously assessed the weed risk potentials of herbicide resistant and non-herbicide resistant types of creeping bentgrass, using PPQ's weed risk assessment guidelines and found the two types to be the same in terms of weed risk potential (USDA-APHIS-PPQ, 2014). As a result, APHIS did not add glyphosate-resistant creeping bentgrass to the federal list of noxious weeds.

Based on our review, EPA rates the Preferred Alternative an EC-2, Environmental Concerns, (the draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment.) These concerns which are elaborated in the attached Detailed Comments, include Climate Change, Tribal Consultation and Environmental Justice.

The EPA Rating System Criteria is located at
<http://www.epa.gov/compliance/nepa/comments/ratings.html>.

We appreciate the opportunity to offer scoping comments for your consideration. Questions concerning our Scoping comments should be directed to Arthur Totten of my staff at (202) 564-7164.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob Tomiak', with a stylized flourish at the end.

Rob Tomiak
Director
Office of Federal Activities

Enclosure: Detailed Comments

DETAILED COMMENTS

APHIS DEIS for the Determination of Nonregulated Status of Glyphosate-Resistant Creeping Bentgrass

General Comments

Currently there are no active or pending registrations for use of glyphosate on glyphosate-resistant creeping bentgrass. Should EPA receive an application proposing to use glyphosate on glyphosate-resistant creeping bentgrass, EPA will consider the potential exposure and any associated risks the proposed use may pose to the environment, including any impacts associated with a deregulated status (*e.g.*, increase in potential use footprint). EPA will also, as part of meeting its obligations to protect endangered species, as required under the Endangered Species Act for new registrations involving the use of pesticides on herbicide tolerant crops, complete an Overview Document-compliant endangered species assessments for new herbicide tolerant crop uses. For more information, please see the “Interim Report to Congress on Endangered Species Act Implementation in Pesticide Evaluation Programs,” developed jointly by EPA, USDA, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. The Overview Document can be found at the following link: <https://www.epa.gov/sites/production/files/2014-11/documents/ecorisk-overview.pdf>.

Clarification Comments

The DEIS was unclear about what will happen when the patent expires if the product becomes deregulated. At that point, it is likely some entity may develop a glyphosate resistant creeping bentgrass, and consequently not be held to the agreements that Monsanto and Scotts have made. This raises the following questions:

(Page 31) states that Scotts and Monsanto do not intend to “commercialize” the product. What is the scope of this agreement? Does it mean that anywhere the product is grown, Scotts and Monsanto will handle *all* planting and maintenance? This makes it easy to spread involuntarily, through contaminated equipment for example. EPA questions whether this agreement would permit non-commercial distribution of the product.

(Page 46) mentions the commitment Scotts and Monsanto have made to continue their maintenance and control efforts. What is the maintenance plan for control in other areas of the country? The DEIS did not suggest that Scotts/Monsanto would not plant elsewhere. Also, there is only a 10-year time frame on the pledge. What happens at the end of those 10 years?

(Page 27) discusses how the product may be controlled using alternative pesticides. EPA is concerned that control of the product may require multiple applications of other pesticides, potentially in excess of the application limits on the label. Have the listed pesticides been tested against the product? Excessive pesticide application also raises concerns over soil toxicity and the potential for water contamination.

DETAILED COMMENTS

EPA understands that APHIS has been working with local parties to try to eradicate the species since its escape from the test sites. Part of this deregulation process includes a MOU and MOA that stipulates APHIS will continue eradication mitigation efforts to destroy the species over the next 10 years, will not sell the rights to the Creeping Bentgrass and will destroy any seed banks.

Recommendation:

EPA recommends that the final EIS include a copy of the MOU and MOA which elaborates on these stipulations.

Climate Change Comments

The draft EIS does not consider future climate scenarios, and how they may impact the proposal and its potential impacts. Consistent with the CEQ guidance,^[1] we recommend that the final EIS describe potential changes to the affected environment that may result from climate change. Including future climate scenarios, such as those provided by the USGCRP's National Climate Assessment,^[2] in the final EIS provides context for the proposal and its impacts and whether those could be affected by the changing climate.

Recommendation:

EPA recommends APHIS determine whether the environmental impacts of the alternatives would be exacerbated by climate change. This determination should be informed by the future climate scenarios outlined in the affected environment section.

If impacts may be exacerbated, additional mitigation measures may be warranted. Native species are often already stressed by climate change and the cumulative impacts from invasive species, such as Creeping Bentgrass could increase potential threats to native species

Tribal Review Comments

It appears Executive Order 13175 has not been fully adhered. APHIS mentioned that on January 8, 2016, it sent a letter of notification and request for comment and consultation on the proposed action to tribes in areas where ASR368 Creeping Bentgrass could be grown. The letter informed the tribes that "a determination of nonregulated status of ASR368 Creeping Bentgrass will not adversely impact cultural resources on tribal properties." The names of the Tribes consulted were not listed. See page 111, *EO 13175 (US-NARA, 2010)*, "*Consultation and Coordination with Indian Tribal Governments.*"

Recommendations:

EPA recommends the final EIS describe the process and outcome of government-to-government consultation between APHIS and each of the tribal governments within 5 miles of all field trial test sites, the issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.

^[1] CEQ Guidance, p. 20.

^[2] <http://nca2014.globalchange.gov/>

DETAILED COMMENTS

EPA recommends that APHIS consult with all Tribes within Region 6 (Oklahoma, Texas, New Mexico, Arkansas, Louisiana, Mississippi, Alabama, Florida and North Carolina, where applicable), since the ASR368 Creeping Bentgrass has been released into the environment and there is no guarantee that it will not spread to other areas throughout United States.

EPA also recommends that the final EIS document discussion with tribes where APHIS clearly states that even though the petition is for non-regulation of the status of ASR368 Creeping Bentgrass for plant pest risk, it has potential adverse impacts due to its invasiveness and the “eradication of escaped glyphosate-resistant creeping bentgrass has proven elusive.”

Environmental Justice Comments

It appears Executive Order 12898 has not been fully adhered. APHIS stated that it “analyzed the No Action and Preferred Alternatives with respect to EO 12898, EO 13045, and EO 13175 and that neither alternative is expected to have a disproportionate adverse impact on minorities, low-income populations, or children.” The DEIS provided no documentation to support this discussion.

The DEIS documents that Scotts Company LLC and Monsanto Company state they “will not commercialize or further propagate ASR368 creeping bentgrass and will not grant a license to or otherwise allow other entities to obtain, use, or propagate such plants. Also, the eradication of escaped glyphosate-resistant creeping bentgrass has proven elusive.” There appears to be no discussion or analysis of environmental justice populations. The DEIS lacked discussion on how APHIS will take steps to monitor, mitigate and/or control the escaped glyphosate-resistant creeping bentgrass through deregulation in the event it invades environmental justice populations.

The DEIS notes the regulatory responsibilities of other federal agencies that ensure human health and environmental protection from impacts of ASR368 Glyphosate-Resistant Creeping Bentgrass that may arise in the future (*i.e.*, page 64, “EPA’s Worker Protection Standard and the Food Safety Modernization Act, and Chapter 5, the Executive Summary). It appears that if APHIS decides to deregulate, it will exclude itself and the Monsanto and Scott companies of further responsibility and consequences of introducing the ASR368 Glyphosate-Resistant Creeping Bentgrass into the environment. There would be no assurance of protection for vulnerable communities.

In Chapter 5, the DEIS notes that Monsanto and Scotts voluntarily consulted with FDA on the safety of glyphosate-resistant creeping bentgrass, due to interest in using it as a feed crop and fed upon by wildlife, which may be consumed by humans. There appear to be no indication of APHIS’ review and finding of facts. Also, on page 112, the DEIS states that ASR368 Creeping Bentgrass was determined not to be allergenic, toxic, or pathogenic in mammals, but did not state if it could be carcinogenic.

On Page 107, Section 6.2.2, Threatened and Endangered Animal Species, the DEIS states that “a history of *safe use* demonstrate that the EPSPS protein present in ASR368 Creeping Bentgrass presents no risk of harm to humans or livestock that consume creeping bentgrass products or to wildlife potentially exposed to ASR368 Creeping Bentgrass.” There was no mention of the impact of the EPSPS protein present in ASR368 creeping bentgrass, if it is not safely used. Due to the history of unsafe management and use of majority products, there has been moderate to significant adverse impact to minority and low-income populations.

DETAILED COMMENTS

The DEIS mentions that, “interstate movements and field trials of ASR368 Creeping Bentgrass have been conducted under authorizations by APHIS since 1999. These field trials were conducted in diverse growing regions throughout the United States.” Also that, “in the event of a determination of nonregulated status, the nonregulated status would include ASR368 Creeping Bentgrass and any progeny derived from crosses between ASR368 Creeping Bentgrass and conventional creeping bentgrass, including crosses of ASR368 Creeping Bentgrass with other biotechnology-derived creeping bentgrass varieties that are no longer subject to the regulatory requirements of 7 CFR part 340.” This appears to relieve APHIS, Scotts Company LLC and Monsanto Company of culpability of invasive species that will be left uncontrolled and possibly impact vulnerable communities.

It appears that Scotts Company LLC and Monsanto Company are segmenting federal regulations in order to deregulate the ASR368 glyphosate-resistant creeping bentgrass. It is crucial that APHIS consider all aspects and consequences to human health and the environment in its decision to regulate or deregulate.

Recommendations:

EPA recommends that the final EIS include an evaluation of environmental justice populations within the geographic scope of the ASR368 glyphosate-resistant creeping bentgrass field trial test sites. If such populations exist, EPA recommends the final EIS addresses the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Assessment of impacts on minority and low-income populations should reflect coordination with those affected populations.

EPA recommends that the final EIS identify the population demographic within 5 miles of the perimeter of each of the trial test fields and those within a 5 miles radius of escaped ASR368 glyphosate resistant creeping bentgrass areas and assess any impact on any minority and low-income populations.

EPA recommends in the final EIS, under Section 7-EO 12898, that APHIS explain, in layman terms, the studies conducted that substantiate that the EPSPS protein present in ASR368 creeping bentgrass present no risk of harm to humans or livestock that consume creeping bentgrass products or to wildlife potentially exposed to ASR368 creeping bentgrass when used safely and unsafely, as environmental justice populations are most vulnerable to unsafe use of products.

EPA recommends in the final EIS, under Section 7- EO 12898, that APHIS discuss if ASR368 glyphosate resistant creeping bentgrass has the potential to be carcinogenic.

EPA recommends in the final EIS, under Section 7– EO 12898, that APHIS discuss the adverse impact and consequences if the ASR368 creeping bentgrass is deregulated and it is later determined that the ASR368 creeping bentgrass has spread beyond the affected Counties and/or States test fields, since “the eradication of escaped glyphosate-resistant creeping bentgrass is elusive.”

EPA recommends in the final EIS, under Introduction, that APHIS discuss the impact the deregulation of the ASR368 creeping bentgrass would have on other regulatory agencies, such as FDA and EPA if in the near future the grass that has been released into the environment spreads by migration throughout the United States and gets into food supplies.

DETAILED COMMENTS

EPA recommends in the final EIS, under Section 7-EO 12898, that APHIS describe the outreach conducted to all communities that could be affected by APHIS' decision, since rural communities may be among the most vulnerable to health risks associated with the deregulation of the ASR368 Glyphosate-Resistant Creeping Bentgrass.

EPA recommends in the final EIS, under Section 7-EO 12898, that APHIS discuss assurances that the environmental justice populations understand that past experiences have proven that the bentgrass released in certain areas cannot be eradicated (Page 46 para 2, page 106 para 3, and page 103 para 1). It also raises concerns on the adverse effects to certain receptors such as wildlife and the environment that can result from pesticide and herbicides contamination.

EPA recommends that APHIS utilize the Promising Practice Report (https://www.epa.gov/sites/production/files/2016-/documents/iwg_promising_practices_final_5-16-2016.pdf) as it develops the final EIS to address the applicable requirements for considering and analyzing Environmental Justice populations.