APHIS

Factsheet

Biotechnology Regulatory Services

July 2012

Questions and Answers: Dow AgroSciences's 2,4-D Tolerant Soybean (Event DAS-44406-6)

APHIS received a petition from Dow AgroSciences (DAS), in August 2011, seeking a determination of nonregulated status for soybean DAS-44406-6 developed for tolerance to the herbicides 2,4-dichlorophenoxyacetic acid (2,4-D), glyphosate and glufosinate.

Q: What is Glyphosate?

A: Glyphosate is a commonly used herbicide used to kill weeds. When applied to glyphosate resistant crops, its helps control weeds without damaging the crop.

Q: What is Glufosinate?

A: Glufosinate is an herbicide that controls perennial grasses and weeds. It has been used by farmers in the United States since 1993.

Q: What is 2,4-D?

A: 2,4-D is approved for use as a pre-plant or postemergent herbicide to control broadleaf weeds on a variety of crop and non-crop sites.

Q. Is 2,4-D safe?

A. Yes, 2,4-D herbicide is approved by the Environmental Protection Agency (EPA) to control broadleaf weeds on a variety of food/feed sites including field, fruit, and vegetable crops. It is also registered for use on turf, lawns, rights-of-way, aquatic sites, forestry applications, and is used as a plant growth regulator in citrus. Residents and professional applicators may use 2,4-D on home lawns.

Q. How long has 2,4-D been used in agriculture?

A. 2,4-D is the most widely used herbicide in the world and third most-used in the United States (after atrazine and glyphosate). The herbicide has been

used by farmers in the United States for more than 60 years. EPA has approved the use of 2,4-D to control weeds on a variety of food and feed sites, including field, fruit, and vegetable crops.

Q: Is 2,4-D Agent Orange?

A: No. Agent Orange was the code name for an herbicide mixture of 2,4-D and a related herbicide 2,4,5-T, used by the U.S. military during the Vietnam War as an herbicide and defoliant. After its use in the war, it was discovered that the synthesis of 2,4,5-T created a highly toxic dioxin contaminant. As a result, 2,4,5-T use was phased out of most agricultural applications by 1970, and EPA ultimately cancelled all remaining uses in 1985. Dioxin levels in currently marketed formulations of 2,4-D, on the other hand, are either undetectable or well below levels considered safe by EPA.

Q. Has APHIS ever granted nonregulated status for soybean variety with tolerance to 2,4-D?

A. No. But, should APHIS ultimately grant nonregulated status to DAS-44406-6 soybean, it will be the first commercially available soybean variety with improved tolerance to 2,4-D.

Q: Has soybean DAS-44406-6 been field tested in the U.S.?

A: Yes, it has been field tested in the major soybean growing regions of the continental United States as well as Puerto Rico. All field tests were conducted under field permits, including strict movement controls, granted by USDA APHIS.

Q: Why is APHIS making this petition available to the public?

A: This first comment period provides the public an opportunity to review the petition for nonregulated status and provide input that will be considered by APHIS as it develops its ensuing environmental assessment and plant pest risk assessment. APHIS will accept written comments regarding the petition for a determination of nonregulated status from interested or affected persons for a period of 60 days from the date of the Agency's notice in the *Federal Register*.

Q: What is the next step following the comment period?

A: After the comment period closes, APHIS will carefully consider all written comments received during the

comment period and any other relevant information; any substantive issues identified by APHIS based on our review of the petition and our evaluation and analysis of comments will be considered in the development of the Agency's environmental assessment and plant pest risk assessment.

Q: Under APHIS' process, what does the Agency do after it prepares its draft assessments?

A: After the Agency prepares these documents, it makes them publicly available, providing a second 30-day opportunity for public input. The Agency then carefully reviews comments before any determination becomes final.

For more details on the petition process, go to:

http://www.aphis.usda.gov/biotechnology/pet_proc_ imp_info.shtml

Q. How is EPA involved with this environmental review process?

A: The EPA has authority over the use of pesticidal substances and plant-incorporated protectants under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) as amended and the Federal Food, Drug, and Cosmetic Act (FFDCA). EPA is currently reviewing the information submitted by the applicant to evaluate the potential human health and environmental risks associated with the proposed use of this product on soybeans. EPA will base its decision on the best available information, and will thoroughly and carefully consider the potential impacts to human health and the environment. EPA will ensure there are meaningful opportunities for public engagement during the evaluation process.

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