### APHIS

### **Factsheet**

Biotechnology Regulatory Services

July 2012

## Questions and Answers: Dow AgroSciences 2,4 -D-Tolerant Soybean (Event DAS-68416-4)

APHIS received a petition from Dow AgroSciences (DAS) in August 2010, seeking a determination of nonregulated status for soybean DAS-68416-4 which provides tolerance to the herbicides 2,4-dichlorophenoxyacetic acid (2,4-D) and glufosinate.

APHIS is making available for public comment the Dow AgroSciences petition for nonregulated status, the Agency's draft plant pest risk assessment, and draft environmental assessment for the proposed determination of nonregulated status.

#### 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 and glufosinate?

**A.** No. But, should APHIS ultimately grant nonregulated status to DAS-68416-4 soybean, it will be the first commercially available soybean variety with improved tolerance to 2,4-D and glufosinate.

### Q: How is soybean DAS-68416-4 different from traditional soybeans?

**A:** This soybean tolerates the herbicides 2,4-D and glufosinate.

### Q: Has soybean DAS-68416-4 been field tested in the U.S.?

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

### 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 as the Agency finalizes its environmental assessment and plant pest risk assessment and makes its regulatory determination in response to the petition for nonregulated status.

### 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 herbicide tolerant 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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