

**State Lead Agencies Issues with Treated Seed Regulation**  
**SFIREG Environmental Quality Issues Working Committee**  
**SFIREG Meeting**  
**June 6 – 7, 2022**

Concerns have been raised by State Lead Agencies (SLA's) over the regulatory framework governing pesticide treated seeds. The topic has been discussed at numerous State FIFRA Issues Research and Evaluation Group (SFIREG) Joint and Independent Working Committees of Environmental Quality Issues (EQI) and Pesticide Operations Managers (POM) since at least 2020. Region 2 developed a white paper to characterize concerns discussed in this timeframe which is currently posted to the SFIREG working committees website (<https://aapco.org/wp-content/uploads/2022/04/SFIREG-State-Lead-Agency-Treated-Seed-Regulation-from-R2-Issue-for-December-6-7-2021.pdf>) The EQI Working Committee (WC) has taken on this topic and developed the white paper here to characterize the environmental concerns related to treated seeds and describe the regulatory challenges faced by the states. The goal of this document is to identify areas for further discussion with EPA.

Pesticides in seed coatings can provide a targeted application that protect seed and plant from below and above ground pests (2021). The mass of pesticides introduced through treated seeds can be far less than a soil or foliar application to the same plant. Industry cites the targeted pesticide use on seeds as a benefit that reduces overall pesticide use (2021). However, for many commodities the widespread use of treated seeds appears to be prophylactic, and it is not clear if seed treatment use always replaces an alternate pesticide application (Krupke and Tooker, 2020). The offsite transport of pesticides present in seed treatments has been well established and linked to water quality concerns (Hladik et al., 2014; Huseh and Groves, 2014; Main et al., 2015). Consumption of treated seeds by birds can lead to severe impacts including death (Lopez-Antia et al., 2013). Concerns over the drift of dust generated at the time of planting and impacts to pollinators have also been well documented (Nuyttens et al., 2013; Pistorius et al., 2009). There does appear to be some stewardship efforts in place in the industry; however, the regulatory structure prevents a comprehensive approach to the environmental protection from treated seeds at the state level.

Treated seeds fall under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) treated article exemption. Under federal law, "treated articles" are pesticides that are exempt from registration requirements pursuant to FIFRA section 25(b). An article or substance treated with pesticide qualifies for the exemption if: (1) the incorporated pesticide is registered for use in or on the article or substance, and (2) the sole purpose of the treatment is to protect the article or substance itself. (40 CFR s. 152.25.) The EPA exemption of treated seeds from registration under the "Treated Article exemption" leaves the states with a regulatory gap related to environmental protection, disposal, enforcement, complaints, questions, and potential lawsuits.

SLA's have the ability to register seed treatment products used to coat treated seeds when the coating process takes place in their state. However, once a seed is coated the resultant treated seed is considered exempt from registration and thus there is no clear mechanism to address interstate commerce of treated seed. In other words, if SLAs focused efforts on registration tools to address the potential impacts of seed treatment products to the environment once the resultant seed was planted, this would not provide comprehensive review of environmental impacts of seeds that could be legally planted in that state. If states were to instead develop a registration process for treated seeds, this would be in conflict with EPA inclusion of treated seeds in the treated article exemption. New York is currently considering legislative action that would prohibit the use of neonicotinoid treated seeds in the state.

Treated seeds ready for sale are sold in seed bags. The labeling requirements for seed bag tags fall under the Federal Seed Act (FSA) and United States Department of Agriculture (USDA). The FSA requires treated seed be labeled to include 1) either the pesticide active ingredient or the tradename of the seed treatment product, and 2) caution statements related to the most toxic chemical used (most seed treatment products include multiple active ingredients). In addition, seed treatment product labels often include seed bag labeling requirements. EQI has identified some FIFRA seed treatment product labels with a 'seed tag labeling' section where EPA identifies language to be included on seed bag tags. There are a few examples with numerous requirements such as state level limitations on use, disposal instructions, or details on how planting of seeds would translate to mass of active ingredient per planted area. However, it is unclear whether states have the authority to enforce on a seed bag label. Further, SLAs likely do not have pesticide regulatory agencies prepared to inspect and enforce on seed bag labels.

The EQI committee understands that in December of 2021, The Center for Food Safety sued US EPA for the agency's failure to regulate pesticide-treated seeds and lack of response to a 2017 formal petition. Should this lead to regulatory changes at the federal level, an open dialogue of how the specifics of those changes could impact SLAs would be welcome.

### **Key Questions**

- What data is available to track the active ingredients used in seed treatment products on specific commodities?
- How can tracking of treated seeds be improved or accomplished?
- Industry cites that wide scale use of treated seeds is vital for protecting seeds and emerging crops during the early growing season; however, does the prophylactic use represent a replacement of other types of applications?
- Can states use label information transferred onto seed bag tags to enforce under existing authorities? Would US EPA registration number printed on seed bag tags enhance this authority?
- What is the potential wide-scale impact to pollinators including native pollinators?

- What is the impact to non-target organisms and aquatic systems from use of treated seeds?
- What are mechanisms to obtain better information on the use of treated seeds?
- Could stronger oversight of seed treatment applicators be considered as a measure to address issues with treated seeds? For example, their role related to the information that is required to be included on the seed bag tag/label.

## References

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