Message

From: Creger, Tim [tim.creger@nebraska.gov]
Sent: 10/5/2020 4:37:41 PM
To: Green, Jamie [Green.Jamie@epa.gov]
Subject: FW: Treated Seed Wetcake - Nebraska
Attachments: 4603 pesticides.pdf

Importance: High

Jamie,

I didn't get a formal letter per se from HQ, but did get the e-mail thread below from Mike Goodis, which references the attached wetcake analysis by our lab.

Tim Creger
Pesticide/Fertilizer Program Manager
Nebraska Department of Agriculture
OFFICE 402-471-6882

From: Goodis, Michael <Goodis.Michael@epa.gov>
Sent: Thursday, May 2, 2019 3:39 PM
To: Creger, Tim <tim.creger@nebraska.gov>
Cc: Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Davis, Donna <Davis.Donna@epa.gov>
Subject: Treated Seed Wetcake - Nebraska
Importance: High

Tim,

I am writing to follow up on your email dated 4/23/19, below and also our teleconference on 4/25/19.

I have attached the South Dakota Agricultural Laboratory analytical test results of the 3/29/19 wet cake sample to this email. I also note that you have indicated, below that this material is being land applied at a rate of 15 to 20 tons per acre.

EPA conducts risk assessments to assure the safe use of these pest control products. Environmental and human health risk is a product of both hazard/toxicity and exposure. While pesticides may inherently pose some hazard/toxicity due to their design to control pests, EPA considers both the hazard/toxicity and the potential for exposure when determining the conditions under which a pesticide may be safely used. To that end, the application rate of a pesticide is a critical parameter which informs both the environmental loading and also the likely exposure to humans and non-target species from a pesticide application. Our understanding here is that the wet cake is not being applied for pesticidal effect. Nevertheless, our previous assessments of the pesticidal ingredients that have been found in the wet cake may be useful to you.

Based on your estimated application rates and the concentrations present in the 3/29/19 wet cake sample, EPA concludes that it is likely that land application of the wet cake material as described above will result in application of these ingredients to farm lands at rates that far exceed the registered application rates for which EPA has conducted safety assessments for pesticide products.

We hope this information is helpful to you as the state pursues a solution to the issue that you have raised. If you have any questions, please feel free to contact us.

Sincerely,

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Creger, Tim <tim.creger@nebraska.gov>
Sent: Tuesday, April 23, 2019 4:23 PM
To: Laws, Meredith <Laws.Meredith@epa.gov>
Subject: Summary of treated seed wetcake issue in Nebraska

MEMORANDUM

TO: Meredith Laws, U.S. EPA
FROM: Tim Creger, Nebraska Dept. of Agriculture
RE: Wetcake Material Resulting from Ethanol Extraction Using Treated Seed

In order to provide an abbreviated summary of the larger case report forwarded to you today, I am providing the following information.

The central issue is that an ethanol plant located in Mead, NE is using discarded treated seed (mostly corn but also some grain sorghum) as a carbohydrate source. The resulting fermentation results in ethanol sold as a fuel additive and "wetcake" solids that are then distributed as a wetcake soil conditioner that is land applied to farm fields. The wetcake biosolids are heavily contaminated with pesticide residues.

The ethanol plant started generating ethanol using treated seed on January 9, 2015, and accumulated the wetcake solids for three years before deciding to land apply it as a soil conditioner. In Nebraska, any material applied to a farm field must either be classified as a fertilizer, unmanipulated animal manure, or a soil conditioner. Since the wetcake was unpredictable and variable in nutrient analysis it was unable to be classified and sold as a fertilizer, and so the company chose to register a label for the product as a soil conditioner which does not have to make plant nutrition claims.

Because the wetcake had been stockpiled for over three years without further conditioning, it developed an overwhelming odor that quickly resulted in citizen complaints whenever it was applied in a field near an occupied structure. Those odor complaints started in spring of 2018, shortly after the wetcake was being moved to the field and land applied. The odor complaints were received every time the company land applied more product with a significant number of complaints filed between the end of December 2018 and early March 2019. NDA became involved in the situation on January 28, 2019.

An unofficial sample of wetcake that had been moved to a field but not yet land applied was collected by the NDA on 1-29-19 and tested for neonicitinoid, pyrethroid and organophosphate insecticides, and strobilurin and triazole fungicides. Four fungicides, three insecticides and one herbicide were detected and reported by the lab on March 1, 2019. NDA then decided to collect an official sample on March 29, 2019 of fresh wetcake collected immediately after the fermentation process and before moving the material to stockpile storage. The lab analysis was reported on April 19, 2019 with significant concentrations of the following pesticides reported: azoxystrobin, clothianidin, fludioxonil, metalaxyl, prothioconazole, tebuconazole, thiamethoxam and trifloxystrobin, and a low concentration of imidacloprid and selenium (this is the only heavy metal reported as detected).

Ex. 7(A)

Ex. 7(A)

Ex. 7(A)

Ex. 7(A). It should be noted that the wetcake soil conditioner is being land applied at rate of 15 to 20 tons per acre, which is explained further I my full case report narrative.

Sincerely,

Tim Creger
Pesticide/Fertilizer Program Manager | ANIMAL & PLANT HEALTH PROTECTION

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