AGRICULTURAL
RETAILERS
ASSOCIATION

October 11, 2019

The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

RE: Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles; Docket # EPA-HQ-OLEM-2018-9524-0001

Dear Administrator Wheeler:

On behalf of the Agricultural Retailers Association (ARA), I am writing regarding the U.S. Environmental Protection Agency (EPA)'s proposed changes to the Coal Combustion Residual regulations related to the beneficial use criteria and piles. We are concerned the proposed changes could cause an unfair financial hardship on agricultural retailers and others within the agricultural industry and impact the availability of this important fertilizer product. We request gypsum be excluded / exempt from the Resource Conservation and Recovery Act (RCRA)[1] and these proposed regulations when being used and applied as a soil additive, similar to existing RCRC exemptions for other agricultural input products such as Zinc fertilizer and solid wastes generated by the growing and harvesting of agricultural crops that are returned to the soils as fertilizer and not regulated as RCRA hazardous waste.

As you may know, currently a large amount of flue gas desulfurization (FGD) gypsum is produced by the removal of sulfur dioxide (SO2) from flue gas streams when energy sources like coal, containing high concentrations of sulfur (S) are burned. The FGD gypsum is produced at coal burning electric utility plants. There is an extensive process at these utility plants that includes a complex scrubbing and filtration process that results in high quality gypsum as a byproduct. FGD gypsum, like mined gypsum, has very beneficial agricultural uses that has shown to enhance crop production, improve soil health, and improve water quality by reducing phosphorous run-off[2]. Gypsum, one of the earliest forms of fertilizer used in the United States, has been applied to farmland

[1] 40 CFR Parts 239 through 282; https://www.epa.gov/rcra
[2] USDA-NRCS Press Release "USDA Announces Changes for Largest Conservation Program", September 1, 2016, https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/releases/?cid=NRCSEPRD1288622

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for more than 250 years as an essential source of plant nutrients, calcium and sulfur. It can improve the physical and chemical properties of soils and nutrient concentrations to the benefit of overall plant growth.

EPA has stated it supports the environmentally sound recycling of coal ash and byproducts developed for its beneficial uses. In the agricultural industry, gypsum is temporarily stored at agricultural retail facilities typically for a 3 to 4-month period during a key time of the growing season with a typical pile around 10,000 tons. The primary crops that benefit from the application of gypsum include peanuts, cotton, corn, wheat and alfalfa due to improved soil workability and receptivity to moisture.

Calcium needs are especially high for peanuts. Since peanuts are grown in sandy soils, which are drought prone, there is a limited ability of these soils to replenish in Calcium. Peanuts need calcium for pod and seed development which usually leads to good yields and quality. Calcium is much more important for non-irrigated peanuts than for irrigated peanuts. Gypsum is often applied to peanuts at pegging time so they will have an adequate Calcium supply.

Gypsum solubilizes rather slowly and can provide continual release of sulfur to the soil for more than just the year it is applied. Use of gypsum as a sulfur fertilizer to enhance crop production in sulfur deficient soils has been proved beneficial for many crops such as corn, soybeans, canola, and alfalfa.[3] According to The Ohio University Extension, FGD gypsum improves soil physical and chemical properties. In September 2016, the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) announced new enhancement practices that farmers may be eligible for financial assistance under NRCS conservation programs.[4] According to USDA-NRCS, farmers can utilize gypsum as a soil amendment, shown to improve water quality by reducing dissolved phosphorous and reducing the potential for pathogens to reach ground and surface water from manure. In a USDA-NRSC update issued in August 2015 called "NRCS Investments in the Western Lake Erie Basin", NRCS highlighted gypsum as an important tool for farmers to reduce phosphorous runoff from their fields, potentially serving as part of the solution to harmful algae blooms plaguing water bodies like Lake Erie.[5]

USDA-NRCS adopted all or parts of a new national Conservation Practice Standard called "AMENDING SOIL PROPERTIES WITH GYPSUM PRODUCTS CODE 333"[6] in June of 2015. States with gypsum programs include Ohio, Indiana, Alabama and Michigan. The four purposes of the standards include:

- Improve soil health by improving physical/chemical properties and increasing infiltration of the soil;

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[3] Gypsum as an Agricultural Amendment – General Use Guidelines; The Ohio State University Extension – Bulletin 945, 2011, page 8. Guide funded in part by EPA under a Resource Conservation Challenge grant.
[4] USDA NRCS Press Release "USDA Announces Changes for Largest Conservation Program", Sept. 1, 2016
[5] USDA-NRCS "NRCS Investments in the Western Lake Erie Basin," August 2015
[6] https://www.nrcs.usda.gov/wps/PA_NRCSConsumption/download?cid=nrcseprd370440&ext=pdf

- Improve surface water quality by reducing dissolved phosphorus concentrations in surface runoff and subsurface drainage;
- Improve soil health by ameliorating subsoil aluminum toxicity; and
- Improve water quality by reducing the potential for pathogens and other contaminants transport from areas of manure and biosolids application.

As a food additive, gypsum (also referred to as calcium sulfate) is recognized as acceptable for human consumption by the U.S. Food and Drug Administration (FDA)[7] for use as a dietary source of calcium, to condition water used in brewing beer, to control the tartness and clarity of wine, as an ingredient in canned vegetables, flour, white bread, ice cream, blue cheese, and other foods.[8]

We request gypsum be excluded / exempt from the RCRA regulations when being used as a soil additive. If EPA is unable to exempt FGD gypsum fully from these regulations, ARA requests the agency maintain the 12,400-ton threshold and exempt agricultural retail facilities from these regulations. As previously mentioned, agricultural retailers temporarily store gypsum at their locations for no more than a 3 to 4-month period during the key part of the growing season. The product is non-toxic and ecologically safe. All the gypsum products sold, distributed, stored, and applied by the agricultural industry have a Safety Data Sheet (SDS) that are required to be followed by the purchaser.

Thank you for your review and consideration of our comments! We look forward to working with EPA and USDA-NRCS on this important industry issue.

Sincerely,

Richard D. Gupton
Senior Vice President, Public Policy & Counsel

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[7] 21CFR184.1230; Food and Drug Administration, Department of Health and Human Services, Direct Food Substances Affirmed as Generally Recognized as Safe for Human Consumption
[8] https://gypsum.org/other-uses-of-gypsum/