

Biosolids: Virginia Appellate Court Addresses Denial of Land Application



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

07/12/2017

Co-Author: Hayden Redd

The Court of Appeals of Virginia ("Court") in a June 6th opinion affirmed the ruling of the Circuit Court of the City of Virginia Beach ("Circuit Court") addressing issues associated with the management of biosolids ash. See *Hampton Roads Sanitation District v. Virginia Department of Environmental Quality* 2017 WL 2437184.

The Circuit Court had upheld the Virginia Department of Environmental Quality's ("DEQ") denial of Hampton Roads Sanitation District's ("HRSD") proposed use of biosolids ash on a farm in Virginia Beach.

HRSD produces biosolids ash as a byproduct of incinerating solid waste (sewage) derived from wastewater. Biosolids ash is described as a "porous lightweight material with a grit-like texture similar to sand."

HRSD began using ash in 2008 to raise the ground level of flood prone agricultural fields on farm in Virginia Beach, Virginia. The process entailed:

1. removing approximately eighteen inches of topsoil from the field;
2. collecting soil samples and testing for pH;
3. applying agricultural limes to raise pH;
4. filling the field with approximately 3 feet for biosolids ash;
5. compacting and grading the biosolids ash to provide proper drainage;
6. covering the biosolids ash with approximately twelve to eighteen inches of original topsoil; and
7. returning the field to agricultural productions.

HRSD argues that the biosolids ash prevented the field from flooding, substantially improved crop yields, and allowed it to sell the material instead of putting it into a landfill.

A neighbor notified DEQ of this activity in 2012 and complained about dust.

DEQ investigated and found HRSD applied approximately 14,000 pounds of biosolids ash to one-and-a-half acres on the farm. A total of 11 acres was projected to receive the material. HRSD never notified nor asked for approval for this use of biosolids ash.

DEQ did not dispute that the biosolids ash served as a substitute for soil. Further, soil was deemed a natural resource. HRSD argued that the biosolids ash constituted an "effective substitute for a natural resource." Therefore, it believed this activity was exempt from solid waste regulation under 9 VAC § 20-81-95(C)(5)(a). However, DEQ expressed concern that the biosolids ash may "leach hazardous materials into the groundwater or negatively affect crops or wildlife."

DEQ offered HRSD two suggestions for exempting the biosolids ash. The two options included:

1. Submit a Beneficial Use Determination (“BUD”) request as required by 9 VAC § 20-81-97.
2. Submit documentation from the Virginia Department of Agriculture and Consumer Services that classifies biosolids ash as “fertilizer, soil amendment, soil conditioner, or horticultural growing medium” or “intended purpose is to neutralize soil acidity.”

HRSD maintained that the biosolids ash was a soil substitute. However, it only pursued option one.

HRSD commissioned a study by Virginia Tech to address the DEQ concerns. The study determined that “initial leachate concentrations for several elements exceeded DEQ groundwater protection or United States Environmental Protection Agency drinking water criteria, but few remained near those standards beyond the first several leaching events.” The study also indicated that because of the observed leaching, “saturated soil conditions within the ash layer should be avoided.”

DEQ assessed the study and concluded certain elements were near or exceeded the levels set forth in the groundwater standards. While the study advised against exposing the ash to saturated soil conditions, DEQ noted that HRSD had applied the biosolids ash to a flood-prone area. The agency therefore concluded that biosolids ash was not an effective substitute for a natural resource under 9 VAC § 20-81-95(C)(5)(a). Consequently, the state agency determined it was not a “beneficial use” under 9 VAC § 20-81-97.

In addressing HRSD’s challenge to DEQ’s decision the Court refused to define effectiveness in the limited sense of “how well it improved conditions on the farm, emphasizing facts such as increased crop yields and reduced flooding.” Instead, the Court concurred with DEQ that “efficacy must include consideration of possible harmful effects on environmental and human health.” It therefore held that DEQ did not act in an arbitrary or capricious manner or abuse its delegated discretion.

[A copy of the opinion can be found here.](#)