

COURT OF APPEALS OF VIRGINIA

Present: Judges O'Brien, AtLee and Senior Judge Frank
Argued at Norfolk, Virginia

HAMPTON ROADS SANITATION DISTRICT

v. Record No. 0979-16-1

VIRGINIA DEPARTMENT OF
ENVIRONMENTAL QUALITY

MEMORANDUM OPINION* BY
JUDGE RICHARD Y. ATLEE, JR.
JUNE 6, 2017

FROM THE CIRCUIT COURT OF THE CITY OF VIRGINIA BEACH
Glenn R. Croshaw, Judge

Richard H. Sedgley (Lisa M. Ochsenhirt; William A. Cox, III;
AquaLaw PLC; Kellam, Pickrell, Cox & Anderson, PC, on
briefs), for appellant.

Kelci A. Block, Assistant Attorney General (Mark R. Herring,
Attorney General; John W. Daniel, II, Deputy Attorney General;
Donald D. Anderson, Senior Assistant Attorney General and
Section Chief; David C. Grandis, Assistant Attorney General, on
brief), for appellee.

The Hampton Roads Sanitation District (“HRSD”) appeals a decision of the Circuit Court of the City of Virginia Beach (“the circuit court”) upholding the Department of Environmental Quality’s (“DEQ’s”) denial of HRSD’s proposal to use biosolids ash on a farm in Virginia Beach. HRSD assigns the following errors:

1. The circuit court erred in failing to hold that DEQ’s case decision denying HRSD the right to use the exemption at 9 VAC [§] 20-81-95(C)(5)(a) of the Solid Waste Management Regulations constituted error of law.
2. The circuit court erred in failing to hold that DEQ’s purported use of the “Beneficial Use Determination” procedure of 9 VAC [§] 20-81-97 constituted an error of law.

* Pursuant to Code § 17.1-413, this opinion is not designated for publication.

3. Notwithstanding the above, the circuit court erred in failing to hold that no substantial evidence supports the substantive concerns expressed by DEQ as its basis for its case decision.
4. Further notwithstanding the above, the circuit court erred in failing to hold that DEQ's use of its guidance document "Management and Use of Contaminated Media" to impose binding requirements violated the agency rulemaking requirements of the Virginia Administrative Process Act.

For the following reasons, we affirm.

I. BACKGROUND

A. *HRSD's Proposed Use*

HRSD, in managing regional wastewater treatment facilities, produces "biosolids ash" as a byproduct of incinerating solid waste (otherwise known as sewage) derived from wastewater. The ash is a "porous, lightweight material, with a grit-like texture similar to sand." Rather than sending all of the biosolids ash byproduct to a landfill, HRSD uses it in a number of ways, such as mixing it into cement and using it as a replacement for building material. In 2008, HRSD began using the ash to raise the ground level of flood-prone agricultural fields on Freeman Farm in Virginia Beach. This process entailed:

1. Removing approximately eighteen inches of topsoil from the field.
2. Collecting soil samples and testing for pH.
3. Applying agricultural lime to raise pH.
4. Filling the field with approximately 3 feet of 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.
7. Returning the field to agricultural productions.

This use of the ash helped prevent the field from flooding. In so doing, it substantially improved crop yields, which included corn, wheat, and soybeans. This use was also favorable because it allowed HRSD to sell the ash, rather than having to put it into a landfill.

B. DEQ's Involvement and Evaluation

DEQ learned of HRSD's use of the ash on Freeman Farm in 2012 after receiving a neighbor's complaint about dust. DEQ investigated and found that approximately 14,000 pounds of the biosolids ash had been applied to one-and-a-half acres on the farm. HRSD planned to apply the ash to a total of eleven acres. HRSD had not notified DEQ of this use or sought approval for it, believing it was using the ash as an "effective substitute for a natural resource" and thus was exempt from solid waste regulation under 9 VAC § 20-81-95(C)(5)(a).¹ HRSD maintains this position on appeal. HRSD's belief was in part founded on a 1993 decision from DEQ, finding that this exception applied to HRSD's use of the ash as "flowable fill" and to manufacture erosion control structures. Notably, both uses involved mixing the ash with cement.

DEQ was concerned about the use of the ash on Freeman Farm because the incineration process by which the ash is generated concentrates the levels of metals in it, and because this was the first use that did not involve first mixing the ash with another material before placing it in contact with soil. Together, this raised concerns that the ash may leach hazardous materials into the groundwater, or negatively affect crops or wildlife. Accordingly, DEQ offered two suggestions. First, HRSD could submit a Beneficial Use Determination ("BUD") request for this use as provided for in 9 VAC § 20-81-97.² If approved, this would exempt the ash's use on the farm from regulation as solid waste. See 9 VAC § 20-81-95(C)(6). Alternatively, HRSD could

¹ 9 VAC § 20-81-95, "Identification of Solid Waste," includes a list of materials that are exempt from solid waste regulation. As pertinent to this appeal, this includes materials that are "[u]sed or reused, or prepared for use or reuse, as an ingredient in an industrial process to make a product, or as effective substitutes for commercial products or natural resources"

² 9 VAC § 20-81-97 states that DEQ "may consider other waste materials and uses to be beneficial" and that "[t]he generator or proposed user of such materials may request that the department make a case-specific determination that the solid waste may be beneficially used in a manufacturing process to make a product or as an effective substitute for a commercial product." The section goes on to describe the BUD procedure.

submit documentation from the Virginia Department of Agriculture and Consumer Services that would exempt the ash from regulation as a solid waste if it were deemed a “fertilizer, soil amendment, soil conditioner, or horticultural growing medium” under Code § 3.2-3600, or if its “intended purpose is to neutralize soil acidity,” Code § 3.2-3700. Despite maintaining that the ash was being used as a substitute for soil, HRSD pursued only the first option.

As part of the BUD process, HRSD commissioned a study from Virginia Tech to determine whether the ash posed a risk of leaching hazardous materials into either groundwater or crops. That study determined that “initial leachate concentrations for several elements exceeded DEQ groundwater protection or [U.S. Environmental Protection Agency] drinking water criteria, but few remained near those standards beyond the first several leaching events.” The study also noted that “saturated soil conditions within the ash layer should be avoided” given the observed leaching.

In addition to determining whether the proposed use was “beneficial,” DEQ used the study’s data and conclusions to assess whether the use of the ash constituted an “effective substitute” for soil. DEQ examined the study results and determined that levels of certain elements, such as arsenic, cadmium, copper, iron, manganese, selenium, and zinc, were near or exceeded the levels set forth in the groundwater standards. DEQ also found the farm was a “sensitive environment,” in that it either serves a “critical ecological function” (the farm is next to a wildlife management area) or overlies groundwater currently, or potentially, used as a potable source. This designation governed the acceptable levels of elements that could be present in or leached from the ash. Based on the study, there were also concerns that certain crops with deeper roots could root down past the topsoil into the ash layer. Most importantly, DEQ noted that HRSD applied the ash in a flood-prone area (and, in fact, specifically used the ash because of this), although the study advised against exposing the ash to saturated soil

conditions. This was an important problem because existing and potential homes near the property, one as close as five-hundred feet from it, relied on groundwater as the sole source of potable water. As a result of these concerns, DEQ ultimately concluded that the ash was not an effective substitute for a natural resource under 9 VAC § 20-81-95(C)(5)(a) and that this use of the ash on the farm was not a “beneficial use” under 9 VAC § 20-81-97.

II. ANALYSIS

A. *DEQ’s Authority and Standards of Appellate Review*

The General Assembly has entrusted DEQ with broad authority to supervise, control, and promulgate regulations involving waste management activities. Code § 10.1-1402; see also 9 VAC § 20-81-50 (granting DEQ’s Waste Management Board the ability to enforce regulations governing solid waste management); Code § 10.1-1186 (establishing DEQ’s general powers). In this role, it must enforce those regulations “necessary to protect the public health, public safety, the environment, and natural resources.” 9 VAC § 20-81-30; see also Code § 10.1-1183 (defining DEQ’s policy and purposes to include “promot[ing] the health and well-being of the Commonwealth’s citizens” and “protecting its atmosphere, land and waters from pollution”).

With this in mind, we view factual determinations made by an agency in its regulatory role with great deference. We must sustain DEQ’s factual findings if the record contains substantial evidence to support those findings. Code § 2.2-4027. “The phrase ‘substantial evidence’ refers to ‘such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.’” Hedleston v. Va. Retirement Sys., 62 Va. App. 592, 599, 751 S.E.2d 1, 4 (2013) (quoting Va. Real Estate Comm’n v. Bias, 226 Va. 264, 269, 308 S.E.2d 123, 125 (1983)). To put it another way, we “may reject the agency’s findings of fact only if, considering the record as a whole, a reasonable mind would necessarily come to a different conclusion.” Johnston-Willis, Ltd. v. Kenley, 6 Va. App. 231, 242, 369 S.E.2d 1, 7 (1988).

When reviewing an agency’s legal conclusions, “[i]f the decision under review involves an interpretation within the specialized knowledge of the agency and if the General Assembly has vested the agency with broad discretion to interpret and apply the relevant regulations,” we reverse “only for arbitrary or capricious action that constitutes a clear abuse of the agency’s delegated discretion.” Frederick Cty. Bus. Park, LLC v. Va. Dep’t of Env’tl. Quality, 278 Va. 207, 211, 677 S.E.2d 42, 45 (2009).

B. *Exemption as an “Effective Substitute for a Natural Resource”*

HRSD first argues that the circuit court erred in upholding DEQ’s determination that the ash use on Freeman Farm was not an “effective substitute for a natural resource,” and thus exempt from regulation as a solid waste. Neither party disputes that the ash was serving as a substitute for soil, a natural resource; thus, the only question is whether it was “effective.” No binding case law exists construing the meaning of “effective” in this context. HRSD would have this Court define effectiveness in a limited sense — namely, how well it improved conditions on the farm, emphasizing facts such as increased crop yields and reduced flooding. DEQ argues that efficacy must include consideration of possible harmful effects on environmental and human health. We agree with DEQ. In light of the agency’s mandate, and the purpose of the solid waste management regulatory scheme, we cannot say that DEQ acted arbitrarily or capriciously, or abused its delegated discretion, by taking into account the risks of harm to the groundwater, neighbors of the farm, and nearby wildlife.

A key complaint present throughout HRSD’s argument is that DEQ used data collected during the BUD process, a separate exemption to the definition of solid waste with a distinct review procedure, to evaluate whether the ash was an effective soil substitute. The disagreement, in part, stems from the fact that the effective substitute exemption is “self-implementing,” in that use of a material as an effective substitute for a natural resource is

automatically exempt from solid waste regulation, requiring no prior approval from DEQ. Under HRSD's interpretation, DEQ has no administrative power to review a use to determine whether it, in fact, falls within the exemption, and suggests that it has no recourse but to file suit if it learns of the use and believes the exemption does not apply. This interpretation would lead to illogical results. First, the fact that the exemption is self-implementing does not make a waste management facility, such as HRSD, the final and only arbiter of whether the use falls within the exception — to say so would improperly usurp DEQ's authority to regulate and enforce waste management activities within the Commonwealth. DEQ, via authority conferred by the Virginia Waste Management Act, is charged with the duty to “[s]upervise and control waste management activities in the Commonwealth.” Code § 10.1-1402. Inherent in this authority is the requirement and ability of DEQ to determine which activities are permissible under the Waste Management Regulations. For these reasons, we cannot say DEQ acted arbitrarily or capriciously in concluding the biosolids ash was not being used as an effective substitute for soil, and thus was not exempt from regulation as a solid waste.

C. Exemption as a “Beneficial Use,” and Applicability of the BUD Process

Materials that DEQ deems “beneficial” are exempt from regulation as solid waste. 9 VAC § 20-81-97(C)(6); 9 VAC § 20-81-97. HRSD argues that DEQ ought not have suggested that HRSD submit a BUD request, as the ash was neither used in a manufacturing process nor as a substitute for a commercial product. While we may agree, agreement here is of little moment. Even though the Virginia Tech study was undertaken as part of the BUD process, and the study data were used in part to determine that the soil was not an “effective substitute” for soil, DEQ could have requested such information under other authority. Namely: “Every person [DEQ] has reason to believe is generating, storing, transporting, disposing of, or treating waste shall, on request of [DEQ], furnish such plans, specifications, and information as the Department may

require in the discharge of its duties under this chapter.” Code § 10.1-1458. DEQ’s duties include “promot[ing] the health and well-being of the Commonwealth’s citizens” and “protecting its atmosphere, land and waters from pollution.” Code § 10.1-1183. Accordingly, DEQ had the power and responsibility to determine if the biosolids ash use on Freeman Farm posed any risks to human health or the environment. We cannot say that this constitutes an arbitrary or capricious action, or was a clear abuse of DEQ’s delegated discretion.

D. Was DEQ’s Determination Supported by Substantial Evidence?

Closely intertwined with HRSD’s other assignments of error, it argues that “no substantial evidence supports the substantive concerns expressed by DEQ as its basis for its case decision.” We disagree. DEQ issued numerous express findings of fact from which it drew conclusions about the safety and efficacy of HRSD’s proposed use of the biosolids ash. It considered the results and recommendations of the Virginia Tech study, as well as other guidance, to determine that this use of the ash on Freeman Farm posed potential risks to human health and the environment. The study specifically recommended that “initial leachate concentrations for several elements exceeded DEQ groundwater protection or [U.S. Environmental Protection Agency] drinking water criteria” and that “saturated soil conditions within the ash layer should be avoided” given the observed leaching. HRSD’s own witness noted the “wet, saturated, horrible conditions” on the property. Although the ash raised the ground level and helped prevent the surface of the fields from flooding, this effectively resulted in a saturated ash layer, rather than saturated surface soil. Based upon our review of DEQ’s decision, we do not find that “a reasonable mind would necessarily come to a different conclusion.” Johnston-Willis, Ltd., 6 Va. App. at 242, 369 S.E.2d at 7. Therefore the circuit court did not err in upholding DEQ’s decision.

E. *DEQ's Use of Guidance Document*

Finally, HRSD argues that the trial court erred in upholding DEQ's use of a guidance document, "Management and Use of Contaminated Media," in evaluating the acceptable levels of metals that would potentially leach into groundwater, and in designating the farm as a "sensitive environment." The guidance document contains tables of standard contaminant levels and provides "basic criteria for comparing the level of contamination in media to concentrations that have been determined to be acceptable for human health and the environment." There is a separate table for when an area is deemed a "sensitive environment," defined in part as "an area that serves a critical ecological function or that overlies groundwater that is currently used or is reasonably anticipated to be used as a potable source." Here, because of the nearby homes that rely on groundwater potentially affected by the ash's use at Freeman Farm, and because the farm is "adjacent" to a local wildlife management area, DEQ determined that the farm was a sensitive area and applied these more stringent standards for acceptable levels of elements present in soil. Comparing the Virginia Tech study results to the guidance document's standards, DEQ determined that the elements present within and which leached from the ash exceeded the acceptable ecological screening levels for a number of elements.

We see no error in DEQ's use of the guidance document. A guidance document is produced by an agency as part of its effort to "interpret or implement" statutes, rules, or regulations within its administrative responsibility. Code § 2.2-4001. Here, DEQ did not use the document as a source of regulatory authority, but as a resource in carrying out its regulatory duties. In other words, DEQ used it as intended — as guidance. Although it is possible to cherry-pick phrases from the guidance document to make it sound inapplicable to HRSD's use of the ash on the farm, on a fundamental level, the use of the sewage sludge ash is of the same nature that the guidance document addresses, which is use of a material in place of soil. Here,

DEQ used it to help determine whether the ash served as an “effective substitute” for soil and what, if any, risks this use of the ash might pose to human health or the environment. Given that determining safe levels of metals that may be leached into groundwater is plainly within the “specialized knowledge” of DEQ, we cannot say that its use of the guidance document, or the conclusions DEQ drew based upon such use, were arbitrary or capricious or an abuse of DEQ’s delegated discretion.

III. CONCLUSION

For the foregoing reasons, we find no error in the circuit court’s decision to uphold DEQ’s denial of HRSD’s proposed use of the biosolids ash, and we affirm.

Affirmed.