REPORTED

IN THE COURT OF SPECIAL APPEALS

OF MARYLAND

No. 471

September Term, 2010

ASSATEAGUE COASTKEEPER *et al.*

v.

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Graeff,
Hotten,
Thieme, Raymond G., Jr.
(Retired, Specially Assigned),

JJ.

Opinion by Graeff, J.

Filed: September 6, 2011

This appeal involves the propriety of regulation by the Maryland Department of the Environment ("MDE"), appellee, of Animal Feeding Operations ("AFOs"), facilities that house animals.[1] AFOs produce large quantities of animal manure each year, which is applied to crops in place of chemical fertilizer. The manure contains nutrients that, if improperly managed, contribute to water quality problems for lakes, rivers, and groundwater.

As discussed in more detail, *infra*, both federal and state law prohibit discharges of pollutants to water, except as authorized by permit. The challenge here is to the decision by MDE to issue a General Discharge Permit for AFOs (the "GP"). The GP authorizes certain discharges, but it imposes requirements regarding the management of manure and its application as fertilizer. Both parties have represented that the GP primarily impacts poultry farms on the Eastern Shore.

Appellants, Assateague Coastkeepers, Waterkeeper Alliance, Lower Susquehanna Riverkeeper, and Charles and Betty Schelts, acknowledge some benefit from the GP, in that it imposes restrictions on entities that were not otherwise restricted, but they contend that the GP is not stringent enough.[2] They argue that the GP allows discharge of pollutants in

---

[1] An AFO is defined as a lot or facility where "(1) animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and (2) crops, forage, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility." General Discharge Permit for Animal Feeding Operations ("GP"), Part II.A. *See* COMAR 26.08.03.09 (2009).

[2] Assateague Coastkeepers, Waterkeeper Alliance, and Lower Susquehanna (continued...)

violation of federal law, and it fails to address adequately the problem of animal waste threatening "the quality of the waters of the nation" and of Maryland.

Appellants challenged the GP pursuant to the Administrative Procedure Act. *See* Md. Code (2004 Repl. Vol., 2009 Supp.) § 10-201 *et seq.* of the State Government Article ("S.G."). After a decision by an administrative law judge ("ALJ") in MDE's favor, to which appellants filed exceptions, the Final Decision Maker ("FDM") of MDE found that the promulgation of the GP was in accord with state and federal law and it was not arbitrary and capricious. Accordingly, the FDM granted MDE's motion for summary decision. The Circuit Court for Baltimore City affirmed the decision of the FDM.

Appellants presented seven questions for our review.[3] We have consolidated and

---

[2](...continued)
Riverkeeper are "non-profit, community-based organization[s] dedicated to protecting their respective waterbodies and watersheds." Charles and Betty Schelts identified themselves below as "citizens of Maryland that have been personally affected by a poultry animal feeding operation that is located adjacent to their property."

[3] Appellants presented the following seven questions:

I. Did the MDE Final Decision Maker improperly resolve disputed issues of material fact by conducting an independent review of the scientific literature?

II. Is the MDE Final Decision arbitrary or capricious because it failed to consider evidence and because it failed to further the goals of the Maryland Environmental Article?

III. Does the General Permit violate federal law by authorizing "new dischargers" to discharge to impaired waters without demonstrating compliance with the exception in 40 C.F.R. 122.4(i)?

(continued...)

rephrased these questions, to the extent properly before this Court,[4] as follows:

1. Did the FDM err: (a) in failing to find that the decision to promulgate the GP was arbitrary and capricious and unsupported by substantial evidence; and (b) in granting MDE's motion for summary decision when there was a dispute of material fact?

2. Does the GP violate federal regulations governing water quality standards?

3. Is the GP less stringent than federal law because it fails to regulate all AFOs that meet the federal definition of Concentrated Animal Feeding Operations?

---

[3](...continued)

IV. Did MDE violate federal law by failing to determine whether CAFOs will cause or contribute to a violation of water quality?

V. Is MDE's definition of CAFOs less stringent than federal law?

VI. By authorizing 90 days of uncovered manure storage, does the General Permit mislead Maryland Animal Feeding Operations into believing that precipitation-related discharges from the stockpiles to surface waters do not require a federal permit?

VII. Did the trial court improperly deny Appellants' Motion to Present Additional Evidence?

[4] Appellant's seventh question challenges the trial court's denial of appellants' Motion to Present Additional Evidence in support of its Petition for Judicial Review of the administrative decision. Appellants failed, however, to present any argument on this issue. Therefore, we will not address it. *See* Md. Rule 8-504(a)(5) (brief shall contain "[a]rgument in support of the party's position"); *Honeycutt v. Honeycutt*, 150 Md. App. 604, 618 (refusing to address argument because appellants failed to adequately brief the argument), *cert. denied*, 376 Md. 554 (2003); *Fed. Land Bank of Balt., Inc. v. Esham*, 43 Md. App. 446, 457-58 (1979) ("where a party initially raised an issue but then failed to provide supporting argument, this Court has declined to consider the merits of the question so presented but not argued").

For the reasons that follow, we shall affirm the judgment of the circuit court.

STATUTORY BACKGROUND

A.

Federal Regulatory Scheme

Congress enacted the federal Clean Water Act ("CWA") in 1972 to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a) (2008). Among its core provisions, the CWA prohibits the "discharge of any pollutant" to waters of the United States, except as authorized by a permit issued under the National Pollutant Discharge Elimination System ("NPDES"). *Id.* §§ 1251(a)(1), 1311(a), 1342(a)(1).

The term "discharge of a pollutant" means "any addition of any pollutant to navigable waters from any point source." *Id.* § 1362(12). A "point source" is defined as "any discernible, confined and discrete conveyance," including any container or "concentrated animal feeding operation" ("CAFO") "from which pollutants are or may be discharged." *Id.* § 1362(14). An AFO becomes a CAFO in two ways: (1) automatically, if it confines a certain number of animals; and (2) if it is specifically designated as a CAFO based on a determination that it is a significant contributor of pollutants to waters of the United States. 40 C.F.R.§ 122.23(b)-(c) (2010).[5]

[5] The number of animals that qualify a facility housing poultry as a Concentrated Animal Feeding Operation ("CAFO") depends on the type of manure handling system employed. A facility qualifies as a CAFO with fewer chickens or laying hens if it operates (continued...)

Agricultural storm water runoff is excluded as a discharge requiring an NPDES permit. *See* 33 U.S.C. § 1362(14). The CWA regulates discharges to surface water; it does not regulate discharges to ground water because ground water does not qualify as "waters of the United States." *See Rice v. Harken Exploration Co.*, 250 F.3d 264, 269 (5th Cir. 2001).

Federal regulations regarding CAFOs have evolved through the years. In 2003, the Environmental Protection Agency ("EPA") expanded the definition of CAFO to include poultry operations utilizing a dry manure handling system. *See* National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs), 68 Fed. Reg. 7176, 7179-80, 7192 (Feb. 12, 2003).

The United States Court of Appeals for the Fifth Circuit recently summarized the regulations in effect in 2003:

> Under the 2003 Rule, all CAFOs were required to apply for an NPDES permit whether or not they discharged. 68 Fed. Reg. 7176, 7266 (Feb. 12, 2003). Specifically, every CAFO was assumed to have a "potential to discharge" and had to apply for an NPDES permit. *Id.* at 7266-67. However, an option built into the Rule permitted a CAFO to request from the EPA a "no

---

[5](...continued)
a liquid, as opposed to a dry, manure handling system. 40 C.F.R. § 122.23(b)(4), (b)(6) (2010). For example, an AFO is defined as a Medium CAFO if: (1) it confines 9,000 to 29,000 laying hens or broilers and uses a liquid manure handling system; or (2) it confines 25,000 to 81,999 laying hens or 37,500 to 124,999 chickens (other than laying hens), and it uses other than a liquid manure handling system. *Id.* § 122.23(b)(6)(i)(I)-(K). An AFO is defined as a Large CAFO if: (1) it confines 30,000 laying hens or broilers and uses a liquid manure handling system; or (2) it confines 82,000 laying hens or 125,000 chickens (other than laying hens), and it uses other than a liquid manure handling system. *Id.* § 122.23(b)(4)(ix)-(xi).

> potential to discharge" determination. *Id.* If the CAFO proved that it did not have the potential to discharge, the CAFO was not required to seek a permit. *Id.* The 2003 Rule also expanded the definition of exempt "agricultural stormwater discharge" to include land application discharge, if the land application comported with appropriate site-specific nutrient management practices. *Id.* at 7198. However, if the land application was not in compliance with those practices, the land application discharge would be an unpermitted discharge in violation of the CWA. *Id.* at 7197.
>
> Furthermore, the 2003 Rule created a mandatory duty for all CAFOs, applying for a permit, to develop and implement a site-specific Nutrient Management Plan (NMP). *Id.* at 7176. An NMP required a CAFO to establish "best management practices" (BMPs). *Id.* at 7213-14. The BMPs were designed to ensure adequate storage of manure and wastewater, proper management of mortalities and chemicals, and appropriate site-specific protocols for land application. *Id.* at 7176. The BMPs were neither reviewed by the EPA nor were they included in the terms of a CAFO's permit to discharge.

Nat'l Pork Producers Council v. EPA, 635 F.3d 738, 744 (5th Cir. 2011).

In 2005, in *Waterkeeper Alliance v. EPA*, 399 F.3d 486, 504-06 (2d Cir. 2005), the United States Court of Appeals for the Second Circuit held that the EPA had no authority to require CAFOs to apply for a permit based on a "potential to discharge." It held that the CWA "gives the EPA jurisdiction to regulate and control only *actual* discharges - not potential discharges, and certainly not point sources themselves." *Id.* at 505. The court also held that the 2003 Rule violated the CWA in failing to require that NMPs be included in NPDES permits. *Id.* at 502.[6]

---

[6] Nutrient Management Plans ("NMP") establish, *inter alia*, "best management practices," including standards for application of manure to land, diversion of clean water from the production area, and controlling discharge of pollutants to waters. *See* 40 C.F.R. § 122.42(e). The federal regulations require, for example, that NMPs ensure adequate (continued...)

In response to the *Waterkeeper* decision, the EPA promulgated new regulations in 2008, requiring CAFOs to obtain a NPDES permit if they discharge or "propose to discharge."[7] *See* Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the *Waterkeeper* Decision; Final Rule. 73 Fed. Reg. 70418, 70421-22 (Nov. 20, 2008) (codified at 40 C.F.R. pts. 9, 122, 412). The 2008 rule also required a CAFO seeking a permit to submit a NMP, and it required the permitting authority to review the NMP, provide the public the opportunity to comment, and incorporate the terms of the NMP as an element of the NPDES permit. *Id.* at 70422.

Additional challenges were made regarding the propriety of the 2008 rule. On March

---

[6](...continued)
storage of manure, identify appropriate conservation practices to be implemented to control runoff of pollutants to waters, and establish protocols to land apply manure to ensure appropriate agricultural utilization of the nutrients in the manure. *Id.*

Maryland similarly recognizes that the optimum time to apply manure is when the crops are ready to absorb the nutrients. *See* COMAR 15.20.08.05(H) (2006). For example, the Maryland Department of Agriculture's ("MDA") nutrient management manual provides that "[n]utrient applications to a crop shall be made as close to plant uptake periods as possible," and application timing should "maximize plant utilization efficiency and minimize the potential for nutrient movement." Maryland Nutrient Management Manual, *available at* http://www.mda.state.md.us/resource_conservation/nutrient_management/consultant_information/pdf/2004%20I-D%20p1-3%20s3.pdf. Thus, for fall application of manure, the manual provides: "Planting of the crop for which nutrients are being managed should occur in a time frame that would allow significant plant growth, in order for the plants to utilize any available nitrogen." *Id.* In the winter, however, manure should be applied only if the farm operation has inadequate storage and no other reasonable option to manage it." *Id.*

[7] The regulations deem a CAFO one that proposes to discharge "if it is designed, constructed, operated, or maintained such that a discharge will occur." 40 C.F.R. § 122.23(d)(1).

15, 2011, after the briefs were filed in this case, the United States Court of Appeals for the Fifth Circuit rendered its decision in *National Pork Producers Council*, 635 F.3d at 750-51, striking down provisions of the 2008 rule. As relevant to this appeal, the court struck down provisions of the CWA that required CAFOs to obtain a NPDES permit if they "propose to discharge" and imposed liability for a failure to apply. *Id.* The court held that "the EPA's authority is limited to the regulation of CAFOs that discharge," and "[a]ny attempt to do otherwise exceeds the EPA's statutory authority." *Id.* at 751.

Thus, pursuant to federal law, only CAFOs that discharge pollutants are required to apply for a NPDES permit. To obtain a NPDES permit, however, applicants are required to develop and implement NMPs to limit the discharge of pollutants to water.

The CWA contains other provisions to protect water quality, including limiting the issuance of a discharge permit if waters within a State's borders are identified as impaired by pollutants. The CWA requires that states develop water quality standards for water bodies within their boundaries. 33 U.S.C. § 1313(c)(2)(A) (requiring standards sufficient to "protect the public health or welfare, enhance the quality of water and serve the purposes of this Act"). It also requires states to identify those waters within its borders that are impaired by one or more pollutants. *Id.* § 1313(d)(1)(A). For those impaired waters, states are directed to establish a Total Maximum Daily Load ("TMDL") for each impairing pollutant that can be accommodated by the water body without violating water quality standards and to allocate

the available load to existing and future sources. *Id.* § 1313(d)(1)(C).[8]

All NPDES permits must ensure that permitted discharges comply with all applicable water quality standards for the body of water that receives the discharge. *Id.* § 1342(a)(1). To this end, federal regulations prohibit the issuance of an NPDES permit:

> To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA, and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:
>
> > (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
> >
> > (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. The Director may waive the submission of information by the new source or new discharger required by paragraph (i) of this section if the Director determines that the Director already has adequate information to evaluate the request. An explanation of the development of limitations to meet the criteria of this paragraph (i)(2) is to be included in the fact sheet to the permit under § 124.56(b)(1) of this chapter.

40 C.F.R. § 122(4)(h)(2)(i).

B.

Maryland Regulatory Scheme

---

[8] A Total Maximum Daily Load ("TMDL") is the sum of pollutants a body of water can absorb from all point and non-point sources, plus a margin of safety, and still meet water quality standards for its designated uses. *See* 33 U.S.C. § 1313(d)(1)(C) (2008).

MDE is charged with "managing, improving, controlling and conserving the waters of Maryland." *Northwest Land Corp. v. Md. Dep't of the Env't.*, 104 Md. App. 471, 478 (1995). The General Assembly has provided that MDE shall cooperate with others to accomplish the following objectives:

> (1) To improve, conserve, and manage the quality of the waters of this State;
>
> (2) To protect, maintain, and improve the quality of water for public supplies, propagation of wildlife, fish, and aquatic life, and domestic, agricultural, industrial, recreational, and other legitimate beneficial uses;
>
> (3) To provide that no waste is discharged into any waters of this State without first receiving necessary treatment or other corrective action to protect the legitimate beneficial uses of the waters of this State;
>
> (4) Through innovative and alternative methods of waste and wastewater treatment, to provide and promote prevention, abatement, and control of new or existing water pollution; and
>
> (5) To promote and encourage the use of reclaimed water in order to conserve water supplies, facilitate the indirect recharge of groundwater, and develop an alternative to discharging wastewater effluent to surface waters, thus pursuing the goal of the Clean Water Act to end the discharge of pollutants and meet the nutrient reduction goals of the Chesapeake Bay Agreement.

Md. Code (2007 Repl. Vol.) §§ 9-302(b)-(c) of the Environment Article ("Envir.").

One way MDE works to achieve these objectives and comply with federal law is to adopt rules and regulations regarding: (1) water quality standards, which "specify the maximum permissible short- and long-term concentrations of pollutants in the water, the minimum permissible concentrations of dissolved oxygen and other desirable matter in the water, and the temperature range for the water"; and (2) water effluent standards, which "specify the maximum loading or concentrations and the physical, thermal, chemical,

biological, and radioactive properties of wastes that may be discharged into the waters of this State." *Id.* § 9-314(b).[9]

MDE is also tasked with issuing discharge permits. *Id.* § 9-323. Maryland law prohibits the discharge of pollutants to "waters of the State," *i.e.*, surface or ground water, except as authorized by a discharge permit issued by MDE. *Id.* §§ 9-101(l), -322, -323. In this respect, Maryland law is more stringent than federal law; it regulates discharges to groundwater and surface water, whereas federal law regulates only discharges to surface water. *Compare* 33 U.S.C. § 1362(14), *and* Envir. § 9-101(l)(1), -322. MDE is authorized to issue a discharge permit upon its determination that the discharge meets all state and federal water quality standards,[10] and appropriate effluent limits. Envir. § 9-324. *Accord Northwest Land Corp.*, 104 Md. App. at 479.

Maryland, like the EPA, has regulations in place governing the issuance of general

---

[9] This Court has explained that effluent standards "'specify the permissible levels of allowable wastes'" that may be discharged into the waters of the State. *See Northwest Land Corp. v. Md. Dept. of the Env't*, 104 Md. App. 471, 478 n.1 (1995) (quoting *Howard County v. Davidsonville Area Civic & Potomac River Assos.*, 72 Md. App. 19, 23 n.1 (1987)). Effluent standards must be at least as stringent as those specified by the NPDES. Envir. § 9-314(c).

[10] The EPA may delegate NPDES licensing to a state, if the state program meets certain criteria, including implementing the federal regulations on CAFOs. 40 C.F.R. § 123.25(a). The States, however, "are not precluded from omitting or modifying any provisions to impose more stringent requirements." *Id.* The EPA continues to receive copies of applications for NPDES permits and retains power to review and veto state issued NPDES permits. 33 U.S.C. § 1342(c), (d), and (i). Maryland is one state that has received delegation to issue NPDES permits. *See* State NPDES Program Authority, *available at* http://www.epa.gov/npdes/images/State_NPDES_Prog_Auth.pdf (last visited August 1, 2011).

discharge permits. *See* COMAR 26.08.04.09 (method of obtaining coverage). A general discharge permit is issued to categories or classes of discharge that are susceptible to regulation under common terms and conditions. *See* COMAR 26.08.04.08.

Maryland's initial permit scheme, which became effective December 18, 1996, governed only CAFOs, which were defined as operations "with more than 1000 animal units; more than 55,000 turkeys; or 30,000 or more chickens which produce[] a liquid waste stream." General Permit for Concentrated Animal Feeding Operations ("1996 GP"), Part II.D. The 1996 GP did not authorize discharges of wastewater to surface water, and it did not set forth any regulations regarding dry manure handling systems. *Id.* Parts I.B-C. To be covered under the 1996 GP, an applicant needed only to submit an application and a Notice of Intent ("NOI"), and pay the required fees. *Id.* Part III.[11] The 1996 GP expired on December 17, 2001. *Id.* at 1.

MDE subsequently established a new permit scheme for AFOs, CAFOs, and Maryland Animal Feeding Operations ("MAFOs"). On September 12, 2008, MDE published a tentative determination regarding the GP at issue here. 35:19 Md. Reg. 1737 (Sept. 12, 2008). The GP established two categories of AFOs. The first category, CAFOs, are AFOs that discharge to surface waters, which are covered by the CWA and must obtain a NPDES

[11] A Notice of Intent (" NOI") referred to an application notifying MDE of an AFO's intention to comply with the terms of the GP and gave information about the facility, including the "estimated amounts of animal waste generated per year" and the "estimated amounts of animal waste transferred to other persons per year." GP, Part III.D.

permit issued by MDE. GP, Part I.A1; COMAR 26.08.03.09B(3) (2009). The second category, an AFO that qualifies as a CAFO under federal regulations, but does not discharge or propose to discharge to surface water, is classified as a MAFO. *Id.* 26.08.03.09B(1)(d). MAFOs are not required to obtain a NPDES permit because they do not discharge to surface water. The State discharge permit required for MAFOs addresses groundwater; it does not permit discharges to surface water. *Id.* 26.08.03.09C(5)(c)-(6).[12]

The GP regulations for MAFOs and CAFOs have many of the same requirements. For instance, both operations are subject to public comment on their plans. COMAR 26.08.04.09N(3). Both MAFOs and CAFOs are required to develop a NMP, although CAFOs must develop a Comprehensive Nutrient Management Plan ("CNMP"), whereas a MAFO may develop a CNMP or a NMP and a Conservation Plan.[13] GP, Part IV.A.1.

One significant difference between MAFOs and CAFOs, however, is with regard to field storage operations. CAFOs can store dry manure in the field, without separating it from

---

[12] "A MAFO automatically becomes a CAFO upon the occurrence of a discharge of pollutants to surface waters of the State or when the MAFO proposes to discharge." GP, Part I.A.5.b (emphasis omitted).

[13] The primary differences between the nutrient management practices required of CAFOs and MAFOs are who can prepare them and the source of the requirements. A Comprehensive Nutrient Management Plan ("CNMP") must be prepared by a technical service provider certified by the Natural Resource Conservation Service ("NRCS"). *See* 7 C.F.R. § 652.2. The contents of the CNMP are defined by NRCS. GP, Part II.G. *See* http://www.md.nrcs.usda.gov/technical/agronomy/cnmp.html (last visited August 1, 2011). A Conservation Plan, by contrast, can be prepared by a person other than a NRCS agent, including a University of Maryland Extension Service agent or a soil conservation district planner. GP, Part II.DD. The GP lays out standards for a Conservation Plan, *see* GP, Part IV.A.1.a-g.

ground water and storm water through use of a plastic liner and a cover, for no more than 14 days; MAFOs can store dry manure in the field for up to 90 days.[14] GP, Part IV.B.6.b-c.

FACTUAL AND PROCEDURAL BACKGROUND

After MDE reached a Final Determination authorizing the GP,[15] appellants filed with MDE a petition for a contested hearing, asserting that the GP violated both Maryland and federal law. Specifically, appellants asserted that the GP: (1) "allows open storage of poultry litter under conditions that are certain to result in discharges of pollutants to the waters and groundwaters of" Maryland; and (2) "fails to ensure compliance with water quality standards and TMDL waste load allocations prior to permit coverage approval."[16]

The case was transmitted to the Office of Administrative Hearings ("OAH") for a

---

[14] The 90-day stockpiling provision changes to 30 days within three years, after the GP has been phased into full effect and farms have been given an opportunity to make changes to their operations. GP, Part IV.B.6.c.ii. The GP states, however, that if reputable research "indicates that 30 days is more restrictive than necessary to protect water quality, and/or other more effective approaches to controlling discharges from poultry manure stockpiles are recommended and available as a result of the study, the 30 day requirement shall be automatically stayed" and the permit will be reopened to implement appropriate permit revisions. GP, Part IV.B.6.c.iii.

[15] MDE initially proposed its "Tentative Determination" regarding the GP on September 12, 2008. 35:19 Md. Reg. 1737 (Sept. 12, 2008). There was a public notice and comment process, with a round of public hearings held in November. On December 30, 2008, following the public notice and comment process, MDE reached a "Final Determination" authorizing the GP. 36:1 Md. Reg. 24, 70-71 (Jan. 2, 2009) (effective Jan. 12, 2009).

[16] With respect to the field storage, appellants argued that the provision of the GP allowing MAFOs to store dry manure in the field for 90 days, as opposed to the 14-day limit for CAFOs, was "unlawful and ignore[d] the preponderance of scientific data."

hearing before an ALJ. On March 30, 2009, MDE filed a Motion for Summary Decision, asserting that the GP was "entirely consistent with state and federal law and regulations and reflect[ed] the best scientific information available." It argued that, "because the GP requires compliance with water quality standards and applicable TMDLs," MDE was entitled to judgment as a matter of law.

MDE supported its motion with affidavits from Robert M. Summers, Ph.D., who at that time was Deputy Secretary of MDE, and Dinorah Dalmasy, a Senior Regulatory and Compliance Engineer with MDE. Attached to Dr. Summers' affidavit was a document he prepared, entitled: "Basis for Requirements to Protect Water Quality During Field Storage of Litter Stockpiles in the Maryland General Permit for Animal Feeding Operations," which explained the rationale and basis for establishing the time limits set forth in the GP regarding field storage of poultry manure.

In this document, Dr. Summers explained that "EPA regulations do not specify a time period for outdoor stockpiling of dry poultry manure, but EPA's guidance document suggests 14 days is appropriate." MDE had requested, but the EPA was not able to provide, "technical documentation of the factual basis and risk level associated with the 15th day of storage, versus 10 days or 30 days, for example."

MDE consulted with University of Maryland scientists at the Cooperative Extension Service and the Wye Research Education Center. They advised:

> [T]he scientific literature regarding loss of nutrients from field storage of poultry litter was not consistent regarding the water quality impact of

> stockpiles, whether covered or uncovered. They also stressed that it is most important to control runoff from the litter when it is applied to cropland by meeting nutrient management plan requirements for the timing and rate of application.

Dr. Summers also noted that the Chesapeake Research Consortium, at the request of the Eastern Shore Agricultural Collaborative and the University of Maryland Environmental Finance Center, had convened a group of scientists to review the scientific data regarding field storage of poultry manure and to develop a consensus as to the appropriate limits on field storage times. Among their recommendations, the scientists concluded: "[T]here is little difference (in terms of nutrient losses to the surrounding soil) between litter stockpiled for 14 days and litter stockpiled for 190 days." (Emphasis omitted). The panel recommended that:

> Temporary stockpiling of poultry litter should be encouraged when other immediate use options (e.g., field application meeting seasonal planting schedules, or regional hydrological cycles, or alternative off-site uses) are not available, regardless of the length of time required, up to a maximum of 190 days based on documented research trials of 190 days in length.

(Emphasis omitted).

Based on the information MDE was able to obtain, and "[a]bsent clear documented evidence of significant water quality impacts between uncovered litter storage of between 14 days and 90 days (and even up to 190 days, according to the Science Panel)," MDE determined that a 30-day limit for unprotected field stockpiling of litter from MAFO permitted operations "would be protective of water quality." MDE further determined that the initial 90-day time limit for a 3-year compliance period "would provide water quality

benefits by beginning to restrict field storage and still give the agricultural community time to develop alternatives other than premature field application and/or transfer to unregulated operations."[17]

Ms. Dalmasy also filed an affidavit, explaining MDE's development of TMDLs for bodies of water in the State that have been identified as impaired by pollutants. As discussed in more detail, *infra*, she asserted that the GP "contains measures intended to ensure that AFOs/CAFOs/MAFOs discharges do not cause or contribute to violations of water quality standards."

That same day, appellants filed their own motion for summary judgment, asserting that the GP, in permitting MAFOs to store poultry litter and manure for up to 90 days, violated federal and state laws "designed to protect both this nation's and Maryland's waters." They argued that the ALJ should "overturn" the GP "because it is affected by an error of law, is unsupported by competent, material, and substantial evidence, and is arbitrary and capricious."

Appellants argued that MDE's decision to adopt the GP was "fundamentally flawed for three reasons." First, they asserted that the GP "conflicts with federal law" because "[i]t allows certain AFOs that would otherwise be classified as a [CAFO] under the [CWA], and

---

[17] Dr. Summers noted that the GP contains a provision that provides MDE access to farms to "investigate the effectiveness of management measures." The GP also provides that if approved research "documents that more effective approaches to controlling discharges from poultry litter stockpiles are recommended and available, MDE will reopen the permit and make appropriate revisions through a public process."

therefore likely subject to the [NPDES] permit pursuant to the [CWA], to instead qualify as a MAFO under State law" and maintain open storage of poultry manure for up to 90 days, an action not permitted as a CAFO.

Second, appellants argued that the GP failed to assure compliance with applicable water quality standards before issuance of permit coverage. They asserted that MDE may not, without sufficient evidence, presume that "compliance with the technical standards in the Final Permit will assure compliance with all the various water quality standards applicable in Maryland."

Third, appellants contended that the GP was not based on sufficient evidence. They argued that MDE ignored studies relating to the proper storage of poultry manure and that it "acted arbitrarily and capriciously." Appellants supported their motion with 26 documents, including several scientific studies regarding the implications of poultry manure storage.

On April 13, 2009, MDE filed its opposition to appellants' motion for summary decision. With respect to appellants' first argument, MDE argued that the GP was consistent with federal law, asserting that it required CAFO permit coverage for every facility that then qualified under the federal program. It noted that MAFOs, by definition, are not CAFOs, and therefore, they are not subject to the same federal requirements. MDE next disputed appellants' argument that the GP failed to ensure compliance with applicable water quality standards, asserting that "the NOI process, which requires the preparation of a CAFO-specific [CNMP] and subjects the NOI and related plans to public review and opportunity

for a public hearing, and the process by which [MDE] can require an individual permit, satisfy any legal requirement in this regard." Finally, MDE argued that its factual findings were based on correct determinations of relevant and material facts. MDE contended that its decision to issue the GP was based on available evidence and was neither arbitrary nor capricious.

The ALJ did not conduct a hearing on the motions. On May 5, 2009, it issued a proposed decision, denying appellants' motion for summary decision and granting MDE's motion. The ALJ initially rejected appellants' contention that the GP's open storage provision was inconsistent with federal law, reasoning that, because MAFOs are unregulated at the federal level, MDE's regulation of them was in excess of its responsibilities under the CWA. It stated that "MDE is not narrowing the definition of CAFOs as the Petitioners suggest, but instead they are expanding the group of AFOs that must submit to some sort of permitting requirement in order to operate and store manure." The ALJ likewise rejected appellants' assertion that MDE's decision to regulate MAFOs differently from CAFOs was arbitrary and capricious, noting that MDE's decision was based on available scientific information. Finally, the ALJ found that the GP complied with federal regulations governing water quality, noting: (1) all of Maryland's water quality standards had been approved at that point by the EPA; and (2) the GP was consistent with the existing approved standards.

On or about May 27, 2009, appellants filed exceptions to the ALJ's proposed decision granting MDE's motion for summary decision in its favor. Appellants argued that MDE's

regulation of MAFOs "ensures continued environmental pollution in direct contravention of both federal and state law." They stated that "[t]he most pointed demonstration of MDE's violation of federal and state law is the provision that allows MAFOs to store poultry litter outside without a cover or ground liner for up to 90 days (which may be reduced [to] 30 days in three years)," asserting "the common sense (and scientifically buttressed) observation that large open stockpiles of manure exposed to rain events will have devastating impacts on the environment." They argued that "MDE is out of step with federal and other jurisdictions in fashioning the 90-day rule."

Appellants set forth four specific exceptions to the ALJ's proposed decision. First, they argued that the proposed decision must be vacated on the procedural ground that the ALJ failed to make adequate findings of fact and conclusions of law. Second, appellants argued that the ALJ's grant of summary decision was improper because it was based on an incorrect legal standard, asserting that the briefs revealed "obvious disputed issues of material fact" regarding the basis to allow uncovered poultry manure for 90 days. Third, they argued that the ALJ failed to address the issue whether the GP contained measures to ensure that CAFO discharges do not cause or contribute to violations of water quality. Fourth, they asserted that the ALJ "relied upon incorrect statements of fact and law and reached erroneous conclusions." Appellants requested that the proposed decision be vacated and the case set for a full hearing.

On August 19, 2009, the FDM heard argument on the exceptions to the ALJ's

proposed decision granting MDE's motion for summary decision. On September 2, 2009, it issued a final decision, concluding:

> That Petitioners have demonstrated neither an error of law nor a dispute of material fact. MDE's issuance of the GP is in accord with federal and State law, is supported by substantial evidence, and is not arbitrary and capricious. For these reasons, MDE's motion for summary decision is granted, and Petitioners' motion for summary decision is denied.[18]

The FDM noted that, pursuant to the GP, "[b]oth CAFOs and MAFOs are required to comply with certain minimum standards to protect water quality." The GP regulates discharges "by regulating the management of manure as it is stored, and also when it is land applied as fertilizer."

The FDM summarized the substantive differences in the regulations for a CAFO and a MAFO:

> - A CAFO's CNMP must be submitted to [MDE] for approval before the CAFO can be covered by the GP, whereas MAFOs are allowed to submit their plans after obtaining permit coverage. GP, Part III.C.2. and B.2.
>
> - CAFOs cannot store poultry litter manure in the field for more than 14 days unless it is separated from ground water and storm water by a liner

[18] The FDM indicated that she was issuing the Final Decision "in place of the ALJ's tentative decision," and that, because her analysis differed significantly from that of the ALJ, the "final decision will serve to state and explain the reasons for the changes, modifications, and amendments to the proposed decision." Md. Code (2004 Repl. Vol., 2009 Supp.) § 10-216(b) of the State Government Article ("S.G.") (the final decision maker must "identify any changes, modifications or amendments to the proposed decision and the reasons for the changes, modifications or amendments"). *Accord* COMAR 26.01.02.34 ("The final decision maker is not bound by the hearing examiner's proposed decision even in those cases when exceptions are not filed.").

and a cover to prevent leaching or runoff of pollutants. GP, Part IV.B.6.b.

- MAFOs are allowed to store poultry litter manure for up to 90 days (scheduled to be reduced in the future to 30 days unless studies demonstrate that 30 days is more restrictive than necessary) without a liner or cover. GP, Part IV.B.6.c.[19]

The FDM rejected the argument that the GP violated federal law "by regulating as MAFOs, instead of CAFOs, certain facilities that store manure uncovered for more than 14 days." It explained:

> In Maryland, poultry litter is generally destined for application to cropland, where it can be used in place of chemical fertilizer. The litter must, however, be staged or stored after it is removed from the chicken house and before it can applied to fields. The field application has long been subject to nutrient management plans under the Water Quality Improvement Act of 1998. Md. Agric. Art. Title 8, Subtitle 8.
>
> The GP allows CAFOs to store the litter in uncovered piles for up to 14 days. GP, Part IV.B.6.b. If a CAFO wishes to store the litter for a longer period, it must use both a liner and cover to separate the pile from ground water and storm water to prevent leaching or runoff of pollutants. *Id.* Petitioners do not challenge this provision.
>
> The GP, however, allows MAFOs [to store] poultry litter manure in uncovered piles for a longer time - up to 90 days. GP, Part IV.B.6.c. Petitioners argue that uncovered storage for more than 14 days converts an AFO with a dry manure handling system to a facility with a liquid manure system.

(Footnote omitted).

---

[19] The FDM further noted that the requirements for a NMP were also different, explaining that both were required to develop a NMP and Conservation Plan, "but they may satisfy this requirement by different means." The FDM stated: "A CAFO must prepare and follow a [CNMP], whereas a MAFO may develop and follow a CNMP or, alternatively, a [NMP] and Conservation Plan."

The FDM recognized that an AFO qualifies as a CAFO with fewer animals if it has a liquid manure system. It noted, however, that appellants did not identify any "federal law or regulation that defines a liquid manure handling system or that determines that uncovered storage will cause a dry system to be classified as a liquid one." The FDM rejected appellants' "unsupported assertion that 'prolonged uncovered storage necessarily results in liquified manure.'"

The FDM was not persuaded by appellants' argument that "MAFOs that take advantage of the extended storage time will, of necessity, discharge to surface waters and therefore must be classified as CAFOs and made subject to the NPDES permitting requirements." It noted that the CWA does not apply to an AFO with the potential to discharge and that "a MAFO that discharges to surface water loses its status as a MAFO and becomes a CAFO."

The FDM further rejected the argument that the GP violated the CWA "because it fail[ed] to ensure that poultry waste discharges do not cause or contribute to violations of water quality." It noted that the CWA "does not mandate a complete ban on discharges into a waterway that is in violation of existing water quality standards," and deference should be given to the EPA's interpretation of the phrase "cause or contribute to the violation of water quality standards." The FDM stated that "the issuance of a permit that would result in a net reduction of the pollutant causing the impairment" is permissible pursuant to the CWA, and it found that, given the stringent requirements of the GP, "it is reasonable to conclude that

compliance with the GP will reduce the loading to the impaired waterbody."

The FDM concluded: "Under the particular circumstances of this case, I find that the issuance of the GP to existing CAFOs in impaired waterways, regardless whether a TMDL has been promulgated, will not cause or contribute to the violation of water quality standards."

Finally, the FDM determined that summary decision was appropriate. It found that there was no genuine dispute of material fact, and the decision of MDE to issue the GP was not arbitrary and capricious.

On October 1, 2009, appellants filed in the Circuit Court for Baltimore City a Petition for Judicial Review of the Final Decision. On January 11, 2010, appellants filed a motion to present additional evidence, requesting that the court remand the case with instructions to MDE to consider evidence that it was prevented from introducing when MDE's motion for summary decision was granted, without an evidentiary hearing.

On January 27, 2010, MDE filed its opposition to appellant's motion to present additional evidence, asserting that appellants were "free under the applicable rules, indeed they were compelled, to support their motion[] for summary decision by record evidence and affidavit providing evidence of the facts alleged in their motion[]," but they failed to do so. It argued that appellants "elected to rely exclusively on their lawyers' arguments," rather than present expert evidence needed to make their case, and that this "tactical failure" did not constitute good cause to permit them to introduce additional evidence.

On February 3, 2010, appellants filed their reply. They argued that they "were unreasonably denied an opportunity to present their view of the scientific literature and to challenge and cross-examine the MDE's view of it in a contested hearing prior to MDE's resolution of the issue as required by MDE's administrative rules of procedure."

On February 4, 2010, the circuit court denied appellant's motion to present additional evidence. On March 3, 2010, the court heard argument on the merits. It requested supplemental briefing regarding the right to an evidentiary hearing at the administrative level.

On March 9, 2010, MDE filed its bench memorandum, arguing that there is "no support for the proposition that the OAH was *required* to hold any kind of hearing on a motion for summary decision, much less a full evidentiary hearing." Appellants disagreed, arguing in their memorandum that, "[b]ecause the OAH [ALJ] improperly granted MDE summary decision, [appellants] were unlawfully denied the opportunity to present evidence at an evidentiary hearing." They asserted: "On May 5, 2009, without holding a single hearing or having the benefit of a fully developed record, in a proposed decision so fraught with legal errors it was discarded in its entirety by the Final Decision Maker . . . the ALJ granted MDE's and denied [appellants'] motion for summary decision." Appellants requested the court to "reverse and remand the matter to the administrative agency."

On April 8, 2010, the court issued an Order and Memorandum affirming MDE's Final Decision. It stated that appellants were "unable to establish that a per se 'right' to an evidentiary hearing during a contested case is required." The court found that substantial

evidence existed in the record to support the Final Decision, and accordingly, it affirmed.

This timely appeal followed.[20]

STANDARD OF REVIEW

The Court of Appeals has explained the standard of review of an agency decision:

> "A court's role in reviewing an administrative agency adjudicatory decision is narrow; it 'is limited to determining if there is substantial evidence in the record as a whole to support the agency's findings and conclusions, and to determine if the administrative decision is premised upon an erroneous conclusion of law.'
>
> "In applying the substantial evidence test, a reviewing court decides 'whether a reasoning mind reasonably could have reached the factual conclusion the agency reached.' A reviewing court should defer to the agency's fact-finding and drawing of inferences if they are supported by the record. A reviewing court 'must review the agency's decision in the light most favorable to it; . . . the agency's decision is prima facie correct and presumed valid, and . . . it is the agency's province to resolve conflicting evidence' and to draw inferences from that evidence.
>
> "[A] court's task on review is *not* to 'substitute its judgment for the expertise of those persons who constitute the administrative agency.' Even with regard to some legal issues, a degree of deference should often be accorded the position of the administrative agency. Thus, an administrative agency's interpretation and application of the statute which the agency administers should ordinarily be given considerable weight by reviewing courts. Furthermore, the expertise of the agency in its own field should be respected."

Najafi v. Motor Vehicle Admin., 418 Md. 164, 173-74 (2011) (quoting *Md. Aviation Admin. v. Noland*, 385 Md. 556, 571-72 (2005)). When an agency acts in a "'discretionary'"

---

[20] During the course of the circuit court proceedings, the EPA completed its review of the GP for consistency with the CWA. In February 2010, it notified MDE that it would not object to the issuance of the GP as proposed.

capacity, we will overturn its decision only upon a finding that its action is "'arbitrary and capricious.'" *Md. Bd. of Physicians v. Elliott*, 170 Md. App. 369, 406 (quotations omitted), *cert. denied*, 396 Md. 12 (2006). *Accord* S.G. § 10-222(h)(3)(vi).

The rationale for this deferential standard of review has been set forth as follows:

> "State administrative 'agencies are created in order to perform activities which the Legislature deems desirable and necessary' to further the public health, safety, welfare, and morals.
>
> * * *
>
> "The powers vested in the courts, by statute or inherence, to review administrative decisions does not carry with it the right to substitute its fact finding process for that of an agency."

Northwest Land Corp., 104 Md. App. at 488 (quoting *Sec'y of Health & Mental Hygiene v. Crowder*, 43 Md. App. 276, 281 (1979)).

In reviewing a circuit court decision on appeal from an administrative agency decision, "our role 'is precisely the same as that of the circuit court.'" *Tabassi v. Carroll County Dep't of Soc. Servs.*, 182 Md. App. 80, 85 (2008) (quoting *Howard County Dep't of Soc. Servs. v. Linda J.*, 161 Md. App. 402, 407 (2005)). We "review[] the agency's decision, and not that of the circuit court." *P Overlook, LLLP v. Bd. of County Comm'rs of Wash. County*, 183 Md. App. 233, 247 (2008). *Accord Elliott*, 170 Md. App. at 401.

DISCUSSION

I.

As the discussion of the background of this case illustrates, one of appellants' primary concerns is the provision in the GP that allows MAFOs "to store poultry litter on bare

ground, in uncovered piles," for more than the 14 days permitted for CAFOs.[21] They argue that the FDM's decision, to uphold this provision of the GP by granting MDE's motion for summary decision, was erroneous for several reasons. Initially, appellants argue that the FDM erred in failing to find that the decision to promulgate the GP was arbitrary and capricious because: (1) MDE did not "provide any evidentiary support for its decision to adopt a 3-year, 90/30 day phase-in-period"; (2) the GP is contrary to "the 'policy goals' of the Maryland Environmental Article" to "'prevent, abate, and control pollution of the waters of this State'"; and (3) the FDM "failed to address substantial evidence provided by Appellants." Moreover, they argue that the FDM erred in deciding the case by summary decision because there were disputes of material fact involving: (1) "the water quality impacts of litter stockpiling"; and (2) "whether discharges to groundwater and discharges to surface water pose the same risks."

MDE disagrees. It asserts that there was substantial evidence to support the provisions of the GP, and there was no dispute of material fact precluding the FDM's ruling by summary decision. MDE contends that, "absent clear documented evidence of significant water quality impacts between uncovered litter storage of between 14 and 90 days," the "90/30 day limit imposed within the MAFO portions of the GP" was not "arbitrarily lax." MDE further asserts that "[a]ppellants do not explain how regulating agricultural operations

[21] Pursuant to the GP, if a CAFO intends to store poultry litter for more than 14 days, it must use both a liner and a cover to separate the pile from ground water and storm water and prevent leaching or runoff of pollutants. GP, Part IV.B.6.b.

that were 'previously unregulated' . . . is 'contrary to or inconsistent with' . . . MDE's statutory charge." It argues that appellants' desire for "stricter controls on farms is not grounds for reversal," particularly given the deference that should be afforded to an agency decision "relat[ing] to scientific matters traditionally left to agency expertise."

A.

We will address first appellants' contention that MDE's final decision was "arbitrary and capricious and unsupported by substantial evidence." Appellants contend that MDE failed "to provide any evidentiary support for its decision to adopt a 3-year, 90/30 day phase-in-period." The record reflects, however, that MDE did provide support for its decision.

MDE submitted the affidavit of Dr. Summers, who stated that, as Deputy Secretary of MDE, he had been involved with efforts "to establish through the GP requirements to protect water quality during field storage of poultry litter." He attached a document he prepared, entitled: "Basis for Requirements to Protect Water Quality During Field Storage of Litter Stockpiles in the Maryland General Permit for Animal Feeding Operations," which described MDE's rationale for adopting the provisions of the GP establishing time frames for field storage of poultry litter. Dr. Summers noted that "EPA regulations do not specify a time period for outdoor stockpiling of dry poultry manure, but EPA's guidance document suggests 14 days is appropriate."[22] Dr. Summers explained that, in determining how stringent

[22] Dr. Summers cited the following guidance from the NPDES Permit Writers' Guidance Manual and Example NPDES Permit for Concentrated Animal Feeding Operations:

(continued...)

to make the storage requirement for the GP, MDE had requested, "but EPA was not able to provide, technical documentation of the factual basis and risk level associated with the 15th day of storage, versus 10 days or 30 days, for example."

Dr. Summers explained that MDE consulted with University of Maryland scientists at the Cooperative Extension Service and the Wye Research and Education Center. He summarized their thoughts as follows:

> Their guidance was that the scientific literature regarding loss of nutrients from field storage of poultry litter was not consistent regarding the water quality impact of stockpiles, whether uncovered or covered. They also stressed that it is most important to control runoff from the litter when it is applied to cropland by meeting nutrient management plan requirements for the timing and rate of application. Stacking of litter in the appropriate locations in the field as far as possible, but at least 100 feet from waterways, including field ditches[,] provides better water quality protection compared to premature field spreading since the surface area of exposed litter is much smaller in a stockpile than it is spread on a field. A stringent field storage time limit encourages spreading of litter at times of the year that are not optimal for crop uptake.

Based on concerns relating to a stringent field storage time limit, "MDE determined that a 30 day limit for unprotected field stockpiling of litter from MAFO permitted operations was a more reasonable time frame that could be applied to all farms in Maryland, through modifications to the [Maryland Department of Agriculture ("MDA")] administered State

---

[22](...continued)
It is acceptable for litter to be stored under a tarp as long as rain and runoff is diverted around the pile in lieu of constructing covered storage facilities. Temporary short-term stacking of litter (i.e., 2 weeks) on or near a field where it will be applied may also be an acceptable handling provided manure is applied in a timely manner.

Nutrient Management Regulations." Dr. Summers explained that the "initial 90 day requirement for three years allows a reasonable phased-in compliance period for the agricultural community to adjust whole-house clean out schedules, build additional storage capacity, or other compliance steps needed to meet the 30 day restriction."

The document prepared by Dr. Summers explained that, subsequent to MDE's publication of its Tentative Determination for the GP, the Chesapeake Research Consortium "convened a group of scientists to review the pertinent scientific data and develop a consensus document to provide guidance for consideration in making a final determination on Maryland's General Permit." Pertinent to this appeal, Dr. Summers set forth the recommendation regarding the issue of limits of field storage as follows: "[T]here is little difference (in terms of nutrient losses to the surrounding soil) between litter stockpiled for 14 days and litter stockpiled for 190 days." (emphasis omitted). He noted that the panel also recommended:

> Temporary stockpiling of poultry litter should be encouraged when other immediate use options (e.g., field application meeting seasonal planting schedules, or regional hydrological cycles, or alternative off-site uses) are not available, regardless of the length of time required, up to a maximum of 190 days based on documented research trials of 190 days in length. . . . Due to a lack of consistent differences between covered and uncovered litter storage piles with regard to nutrient runoff, the Panel does not support mandatory covering of temporary field stockpiles as a technique to reduce nutrient loading to soils or water.

(Emphasis omitted).

MDE considered all comments, including those from the scientists. It concluded:

> Since available evidence indicates that there are water quality impacts resulting from storage of litter in the field and those impacts are highly variable, it is very likely that the differences between a 14-day storage limit and a 30-day storage limit would be un-measurable. Absent clear documented evidence of significant water quality impacts between uncovered litter storage of between 14 days and 90 days (and even up to 190 days, according to the Science Panel), MDE concluded that the 30-day limit would be protective of water quality. MDE also concluded that the initial 90-day limit for a 3-year compliance period would provide water quality benefits by beginning to restrict field storage and still give the agricultural community time to develop alternatives other than premature field application and/or transfer or unregulated operations.

The FDM considered this evidence and rejected the argument that there was not a substantial basis for the GP. It found that MDE "had a rational basis for the decision to allow MAFOs to store poultry manure uncovered for up to 90 days for the next 3 years, and that the decision was not arbitrary and capricious." The FDM noted that, in the absence of definitive data "on the questions of whether a cover reduces the leaching of nutrients and how, in what amounts, and over what [] period of time nitrogen and phosphorus are lost from a poultry manure litter pile," MDE sought advice from experts in the field. The FDM found that the initial 90-day storage period was consistent with the advice MDE received, and this advice provided a substantial basis for MDE's decision.

Appellants do not dispute the factual assertions set forth in the document prepared by Dr. Summers. Rather, they fault MDE for not conducting "its own analysis or review of the scientific literature." They further state that "[t]he summary cited in the Summers Affidavit also largely relies on one sentence drawn from a 'Poultry Litter Experts Science Forum' white paper that summarizes the proceedings of a 2008 meeting of academic experts

convened in response to the tentative General Permit," suggesting that the unpublished study was not a substantial basis for MDE to adopt the 90-day storage provisions in the GP.

As indicated, our inquiry is whether a "reasoning mind reasonably could have reached the factual decision the agency reached." *Najafi*, 418 Md. at 173. That test is satisfied here.

MDE sought advice regarding the water quality impact of various poultry litter storage times from several different sources: the EPA; the University of Maryland scientists at the Cooperative Extensive Service; the Wye Research and Education Center; and scientists at the Chesapeake Research Consortium. None of these sources advised that 30 to 90 days of storage would significantly increase nutrient loss to the environment. And, as indicated, the scientific experts at the Chesapeake Research Consortium gave the following recommendation:

> The available data suggests that while any stockpiled litter presents a potential for nutrient loss to the environment, the majority of this risk occurs within the first days of litter pile construction. In other words, there is little difference (in terms of nutrient losses to the surrounding soil) between litter stockpiled for 14 days and litter stockpiled for 190 days. Still, the impact is greater than zero, and minimizing the need for such stockpiles will reduce even these minimal loads.
>
> * * *
>
> Temporary stockpiling of poultry litter should be encouraged when other immediate-use options (e.g., field application meeting seasonal planting schedules, or regional hydrological cycles, or alternative off-site uses) are not available, regardless of the length of time required, up to a maximum of 190 days based on documented research trials of 190 days in length.

(Emphasis omitted).

The rationale set forth by Dr. Summers made clear that MDE considered the lack of evidence of any significant differences in water quality impacts between litter storage of 14 and 90 days, and it weighed that against the potential adverse effects of a stringent field storage time limit, as well as the need to give chicken farmers time to makes changes to their business practices to comply with the new requirements. Under these circumstances, we hold that MDE had a reasonable basis for establishing the three year, 90-day phase-in-period for the storage of uncovered manure by MAFOs. Appellants have not stated a ground for reversal of the agency's decision in this regard.

B.

Appellants next assert that MDE's decision was "arbitrary and capricious because it is contrary to the 'policy goals' of the Maryland Environmental Article," particularly the goal to "'prevent, abate, and control pollution of the waters of this State.'" (Quoting Envir. § 9-302(a)). They dispute MDE's argument that the GP satisfies this goal because it provides some regulation in an area that was previously unregulated, arguing that "merely chipping away at what was 'previously unregulated' does not make the General Permit protective of water quality, particularly when the previous policy led to the environmental crisis faced by the Chesapeake Bay."

MDE disagrees. It states: "Appellants do not explain how regulating agricultural operations that were 'previously unregulated' . . . is 'contrary to or inconsistent with,' . . . MDE's statutory charge."

We agree with MDE. Its decision to regulate MAFOs, which, as indicated, previously were not regulated, is consistent with the statutory policy goal to "prevent, abate, and control pollution of the waters of this State." Envir. § 9-302(a). That appellants would like stricter controls on MAFOs is not dispositive. As noted, our review of MDE's decision to issue the GP is limited to the narrow issue whether there was substantial evidence to support MDE's determination. We have already determined that there was, and appellants' policy arguments are not a basis for reversing the agency determination.

C.

Appellants next assert that, even if there was substantial evidence to support the issuance of the GP, the FDM disregarded "well-settled legal principles" in granting MDE's motion for summary decision when there were several disputed issues of material fact. Specifically, appellants allege two disputes of material fact: (1) "whether there are discernible water quality impacts between covered and uncovered manure storage"; and (2) "whether discharges to groundwater and discharges to surface water pose the same risks."

MDE argues that there were no disputes of material fact as alleged by appellants. It contends that the FDM properly granted summary decision in its favor.

The rules of procedure for the OAH permit a party to move for summary decision on any appropriate issue in the case. COMAR 28.02.01.16.D(2) (2001). The rules provide: "A judge may grant a proposed or final summary decision if the judge finds that: (a) [t]here is no genuine issue of material fact; and (b) [a] party is entitled to prevail as a matter of law."

Id. This standard is the same as that applied in the courts in determinating whether to grant summary judgment to a party. *See* Md. Rule 2-501(a) (providing that a trial court may grant summary judgment when there is "no genuine dispute as to any material fact" and the moving party is entitled to judgment "as a matter of law"). *See also Eng'g Mgmt. Servs, Inc. v. Md. State Highway Admin.*, 375 Md. 211, 229 (2003) (noting that the standard of review for the grant of summary judgment, whether it is "legally correct," is "the same standard of review we apply to the question of the legal correctness of an administrative agency's decision").

We address first appellants' contention that there was a dispute of material fact regarding "whether there are discernible water quality impacts between covered and uncovered manure storage." MDE asserts that Dr. Summers' affidavit demonstrated that "the existing scientific literature 'was not consistent' on whether there is a discernible difference in water quality impacts between covered and uncovered manure storage beyond 14 days." MDE asserts that, "having produced such evidence, the burden then shifted to [a]ppellants to come forward with their own affidavits or other admissible evidence to contradict the fact that the scientific community had not developed a consensus as to the relative impact of uncovered versus covered manure storage," which they failed to do.

The FDM rejected appellants' argument that summary decision was inappropriate because there was a dispute of material fact regarding whether the GP, which allows MAFOs to store poultry litter on the ground, in uncovered piles, beyond 14 days, adequately protected water quality. The FDM found that appellants: (1) did not raise a genuine dispute of fact;

and (2) failed to show that the allegedly disputed fact was material.

The FDM explained:

> There is no dispute that piles of poultry manure release nitrogen and phosphorus to the environment, whether the piles are covered or uncovered. The GP is the mechanism by which the release to ground water is regulated and permitted. The literature cited in support of their respective positions by [appellants] and [MDE] document losses in various ways, but do not provide sufficient information to specifically quantify the differences, either by whether the piles are covered or uncovered, or how long an uncovered pile remains. Indeed, [appellants] cite with apparent approval a study that determined that the greatest losses occur during the first few days after the pile is constructed, which would seem to indicate that the risk of nutrient loss declines as time passes. It may be the "fact" [appellants] wish to dispute cannot be answered with the available scientific data. Clearly, [appellants] have not alleged that they can better quantify the losses, or demonstrate that the differences between 14 day storage and 90 day storage would be measurable, much less presented an actual factual dispute by the use of affidavits or otherwise. [Appellants] have failed to raise a factual dispute.
>
> Even if [appellants] were able to quantify the losses from uncovered piles precisely over time, it would not answer the question whether the conditions "adequately" protect ground water, because [appellants] have not identified any law or regulation that would provide the standard by which to judge "adequacy." In oral argument, [appellants] indicated that the only acceptable time was "the shortest time possible." If this were the legal measure of adequacy, the "fact" is not material. I find that [appellants] have not raised a genuine dispute of material fact.

(Footnote omitted).

The FDM stated that it had reviewed the scientific literature referred to by appellants. It noted that the studies reported "different observations on the questions of whether a cover reduces the leaching of nutrients and how, in what amounts, and over what [] period of time

nitrogen and phosphorus are lost from a poultry manure litter pile."[23]

We find no error in the FDM's conclusion that there existed no dispute of material fact in this regard precluding summary decision in favor of MDE. As the FDM stated, appellants did not submit any evidence, by affidavit or otherwise, stating that there were quantifiable differences in nutrient loss for 90-day storage of poultry litter as opposed to 14-day storage.[24] Given the lack of evidence quantifying the nutrient losses for uncovered piles of poultry manure over time, there was no material dispute of fact that the 90-day provision in the GP, based on the recommendation of the Chesapeake Research Consortium, did not adequately protect water quality.

We turn next to appellants' argument that there existed a "fierce dispute" of material fact regarding "whether discharges to groundwater and discharges to surface water pose the same risks." Appellants argue that MDE did not provide any evidence in support of its claim

---

[23] This statement refutes appellants' claim that the FDM "failed to discuss, address, or even cite even one of the scientific studies" appellants submitted. The FDM clearly addressed the studies; appellants cite no rule that required the FDM to explicitly discuss each piece of evidence presented by the parties. *See* S.G. § 10-221(b)(1) (requiring only that the final decision separately set forth findings of fact, conclusions of law, and an order).

[24] Appellants claim that they were not given the opportunity to present evidence on this issue, but that is not accurate. Appellants could have submitted an affidavit in response to MDE's affidavit. COMAR 28.02.01.12D(3) (providing for filing of affidavit opposing a motion for summary decision). *See also* Md. Rule 2-501(a)-(b) (noting that a motion for summary judgment "shall be supported by affidavit" if it is "based on facts not contained in the record," and a response to a motion for summary judgment "asserting the existence of a material fact or controverting any fact contained in the record shall be supported by an affidavit or other written statement under oath"). That appellants chose not to do so does not translate to the court preventing them from doing so.

that "'soils can prevent or inhibit transport' of potential pollutants, such as nitrates, from manure piles to groundwater." They note that they cited studies indicating that groundwater is particularly susceptible to contamination by nitrates, which, unlike phosphorus, bind to soils and threaten surface water by runoff. They argue that the FDM ignored these studies and "resolved this disputed issue by finding '[d]ischarges to groundwater and discharges directly to surface water are not the same and do not pose the same risk.'"

MDE responds that its position below was not that "soils prevent *nitrates* from migrating to groundwater," but rather that "*nitrogen, phosphorus*, and other *nutrients* are taken up by crops and other vegetation, making MAFO discharges – which, by definition, are to ground water, not surface water – less likely to cause water pollution than CAFO discharges to surface waters." It asserts that the ability of plants to "take up the nutrients within the soil is the very principle upon which the agricultural use of manure is based," and that appellants acknowledge that crop and pasture land can absorb nutrients. Accordingly, MDE argues that the FDM "properly found that there was no dispute of fact on this point and that the ability of vegetation and soils to take up nutrients justifies separate standards for agricultural operations that discharge to surface waters and those that do not."

The statements to which appellants now object were made by the FDM in the context of appellants' argument that MDE's decision to establish a class of AFOs as MAFOs, and regulate them less stringently than CAFOs, was arbitrary and unsupported by the record. The FDM rejected this argument, noting that MAFOs were regulated differently from CAFOs

because they do not discharge to surface water. It stated:

> Discharges to groundwater and discharges directly to surface water are not the same and do not pose the same risk. Concentration of contaminants discharged to groundwater can be reduced by dilution, attenuation, chemical or biological reactions, and uptake by plants before that groundwater enters surface water. The GP does not leave MAFOs unregulated. They are subject under the GP to design and operational standards and a NMP.

The FDM's comments do not indicate that they were made in response to an argument, as alleged on appeal, that there was a dispute of material fact regarding "whether discharges to groundwater and discharges to surface water pose the same risks." We have reviewed the record and have been unable to find anywhere that this argument was made before the ALJ or the FDM.[25] Under these circumstances, this contention is not preserved for our review. *See Motor Vehicle Admin. v. Weller*, 390 Md. 115, 129 (2005) ("'We do not allow issues to be raised for the first time in actions for judicial review of administrative agency orders entered in contested cases because to do so would allow the court to resolve matters *ab initio* that have been committed to the jurisdiction and expertise of the agency.'")

---

[25] In their opposition to MDE's Motion for Summary Decision, appellants argued that the GP's open storage provision was not supported by substantial evidence. In their exceptions to the ALJ's ruling in favor of MDE, appellants argued that there existed "disputed issues of material fact concerning the scientific basis of the Agency's decision to allow the uncovered, unlined storage of chicken manure in a field for 90 days for the first three years of permit coverage, and 30 days thereafter, subject to longer open storage times if warranted by other scientific research." We do not have a transcript of the hearing before the FDM, and therefore, no basis to find that this argument was raised before the FDM. *See Whack v. State*, 94 Md. App. 107, 127 (1992) (appellant's failure to make tape recordings or transcripts thereof part of the record precluded appellate review), *cert. denied*, 330 Md. 155 (1993). *Accord Holt v. State*, 129 Md. App. 194, 211 (1999) (recognizing that it is impossible to engage in meaningful review of a court's order "absent a complete record").

(quoting *Delmarva Power & Light Co. v. Pub. Serv. Comm'n*, 370 Md. 1, 32 (2002)). Accordingly, we will not consider this issue.

II.

Water Quality Standards

The CWA, in addition to controlling point source discharges into bodies of water, also requires states to set water quality standards for the waters in their state. 33 U.S.C. § 1313(c)(1)-(2). "Water quality standards are retained as a supplementary basis for effluent limitations, however, so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels." *EPA v. Cal. ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 205 n.12 (1976). A state's water quality standards are established by "taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation." 33 U.S.C. § 1313(c)(2)(A). Waterbodies that do not meet water quality standards are deemed "water quality limited" or "impaired." *See* 33 U.S.C. 1313(d)(1)(A).

The CWA requires states to identify waters that are "impaired" and develop TMDLs to bring those impaired waters back into compliance with water quality standards. *Id.* § 1313(d)(1)(C). As indicated, a TMDL sets forth the specified maximum amount of a pollutant that can be discharged into the water from all point and nonpoint sources, plus a

margin of safety, and still meet water quality standards for its designated uses. *Id.*[26] The CWA directs that TMDLs "shall be established at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." *Id.* The FDM stated, and the record reflects, that MDE has prepared TMDLs for some waterbodies and that others "are under development or planned."

Appellants argue that the GP violates federal regulations governing water quality standards. They make two arguments in this regard.

First, they note that federal regulations prohibit the issuance of a NPDES permit "'[t]o a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.'" (Quoting 40 C.F.R. 122.4(i)). They acknowledge that there is an exception to this prohibition, but they assert that the exception is limited to the situation where "a TMDL has been established for the water segment that would receive the discharge," and the permit applicant demonstrates: (1) that "there are sufficient allocations for the discharge pursuant to the TMDL"; and (2) there are "'compliance schedules' to bring the water into compliance with applicable water standards." Appellants argue that the GP violates this law because it "authorizes 'new dischargers' to discharge to impaired waters without demonstrating compliance with the

[26] A TMDL is comprised of "wasteload allocations" ("WLAs"), pollutants that are allocated to "point sources" such as CAFOs, and "load allocations" ("LAs"), pollutants that are allocated to "nonpoint" sources. 40 C.F.R. § 130.2(g)-(i).

requirements of 40 C.F.R. § 122.4(i)." [27]

Second, appellants assert that, pursuant to 40 C.F.R. § 122.44(d)(1), MDE is required to conduct a case-by-case reasonable potential analysis ("RPA") for each CAFO to determine whether water quality-based effluent limits ("WQBELs") are necessary for the specific NPDES to meet water quality standards of receiving water bodies. They argue that the GP fails to comply with this requirement.

MDE contends that the GP, which requires site-specific NMPs and CNMPs, ensures compliance with water quality standards. It disputes appellants' assertion that 40 C.F.R. § 122.4(i) establishes a blanket prohibition on the issuance of new permits in impaired waters. It frames the issue as "whether the discharge of pollutants authorized by the GP causes or contributes to such a violation when the GP will actually decrease the amount of pollution that is discharged." MDE argues that "the better view," and the view accepted by EPA, is that "a permitted discharge does not 'cause or contribute' to impairment if it constitutes a *net reduction* in the loading of the substance causing the impairment."[28]

---

[27] Appellants' argument in this regard, because it is based solely on federal law, applies only to permits for CAFOs, not MAFOs, which do not discharge to surface water.

[28] This is MDE's primary argument and the basis for the FDM's decision. MDE further argues:

> [T]he only obligations that § 122.4(i) imposes on permitting authorities regarding waters for which *no* TMDL has been developed is the general obligation not to issue coverage if an operation "will cause or contribute to the violation of water quality standards." By its own terms, the regulation's requirement that a new source demonstrate that an allocation is available and
>
> (continued...)

MDE contends that the GP does not violate § 122.4(i) "because CAFOs that are authorized by, and operate in accordance with, the general permit will not cause or contribute to a violation of water quality standards." It notes that new CAFOs are subject to a "zero discharge" standard. *See* 40 C.F.R. 412.46; COMAR 26.08.03.09B. With respect to existing sources, it argues that the GP "requirement that covered facilities implement MDE-approved NMPs and CNMPs," which are farm-specific plans to ensure protection of water resources through appropriate management practices, "provides further assurance that GP-authorized facilities will not violate water quality standards." MDE asserts that it "reviews each NMP/CNMP to make sure that the *specific* practices proposed are sufficiently protective given the circumstances of the *specific* farm and the *specific* waterway that may be affected by the farm's operation," giving MDE "the opportunity to impose additional restrictions, identify specific load allocations, and even kick the farm out of the GP and require an individual NPDES permit."

---

[28](...continued)
that existing dischargers are on compliance schedules applies *only* where the proposed discharge is to impaired waters "for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged." The existence of load allocations is a *precondition* to the prohibition, not a separate showing that the permittee must make, as Appellants argue. . . . Accordingly, it has no application where a TMDL has not yet been developed. For these waters, Appellants' argument is plainly unsupported.

A.

Appellants' first argument relies on 40 C.F.R. § 122.4(i). It prohibits the issuance of a NPDES discharge permit:

> (i) To a new source or a new discharger, if the discharge from its operation will cause or contribute to a violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA, and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:
>
> (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
>
> (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. The Director may waive the submission of information by the new source or new discharger required by paragraph (i) of this section if the Director determines that the Director already has adequate information to evaluate the request. An explanation of the development of limitations to meet the criteria of this paragraph (i)(2) is to be included in the fact sheet to the permit under § 124.56(b)(1) of this chapter.

40 C.F.R. § 122.4(i).

As indicated, the parties have different interpretations of the meaning of the phrase "cause or contribute" in the first sentence of this statute. MDE argues that a net reduction in the pollutant, due to offsets, should be considered in determining whether a new discharger "causes or contributes" to a violation of water quality standards. It argues that the discharge of pollutants authorized by the GP do not "cause or contribute" to violations of water quality standards because "the GP will actually *decrease* the amount of pollution that is discharged."

Appellants argue that *any* discharge to an "impaired water" necessarily "causes or contributes to a violation of water quality standards," prohibiting issuance of a permit unless a TMDL has been completed and the permit applicant makes the requisite showing regarding pollutant load allocations and compliance schedules. They contend that the GP violates "this regulation by allowing CAFOs that will discharge into impaired Maryland waterways to receive a NPDES permit without consideration of whether the conditions set forth in § 122.4(i) are satisfied."

The FDM rejected appellants' argument that the first sentence of § 122.4(i) functions as an absolute prohibition to new discharges to an impaired water. It explained:

> The first sentence of 40 C.F.R. 122.4(i) reads: "No permit may be issued: . . . To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards." The phrase "cause or contribute to the violation of water quality standards" is susceptible to different interpretations. One view is that the new discharge does not "cause or contribute" to the impairment if the new discharge will result in a net reduction in the loading of the substance causing the impairment. This is a view EPA has espoused. In addition, it seems to comport with the CWA, that requires limits "which can reasonably be expected to contribute to the attainment or maintenance of such water quality." . . . On the other hand, "cause or contribute" could mean the addition of any amount of the impairing substance to the impaired waterway.
>
> The CWA itself does not mandate a complete ban on discharges into a waterway that is in violation of existing water quality standards. *Arkansas v. Oklahoma*, 503 U.S. 91, 197 (1992). Because the phrase "cause or contribute to the violation of water quality standards" is subject to more than one reasonable interpretation, and because it is well established [that] deference should be given to an agency's interpretation of the statutes it implements and its own regulation, I find that deference should be given to EPA's interpretation: the issuance of permit that would result in a net reduction of the pollutant causing the impairment is permissible under the first sentence.

(Footnotes omitted).

In determining the meaning of the phrase "cause or contribute" in the regulation, we apply well-settled rules of statutory construction, "'the cardinal rule of [which] is to ascertain and effectuate the intent of the Legislature.'" *Headen v. Motor Vehicle Admin.*, 418 Md. 559, 569 (2011) (quoting *Rosemann v. Salsbury, Clements, Bekman, Marder & Adkins, Inc.*, 412 Md. 308, 314 (2010)). *Accord Carven v. State Ret. & Pension Sys.*, 416 Md. 389, 408 (2010) (applying rules of statutory construction to regulations). The Court of Appeals has explained:

> The primary source from which to determine legislative intent is the plain meaning of the statutory language. When the plain meaning is clear and unambiguous, and consistent with both the broad purposes of the legislation and the specific purpose of the provision being interpreted, our inquiry ordinarily is at an end. If, after considering the plain language in its ordinary and common sense meaning, two or more equally plausible interpretations arise, however, then the general purpose, legislative history, and language of the act as a whole is examined in an effort to clarify the ambiguity.

Wal Mart Stores, Inc. v. Holmes, 416 Md. 346, 359 (2010) (quoting *Schlosser v. Uninsured Employers Fund*, 414 Md. 195, 203-04 (2010)).

As indicated, "[w]hen applying these rules of statutory construction, we give deference to an administrative agency's interpretation of the statutes it administers." *Headen*, 418 Md. at 570. The Court of Appeals has explained:

> "[A] court's task on review is not to substitute its judgment for the expertise of those persons who constitute the administrative agency. Even with regard to some legal issues, a degree of deference should often be accorded the position of the administrative agency. Thus, an administrative agency's interpretation and application of the statute which the agency administers

should ordinarily be given considerable weight by reviewing courts."

Id. (quoting *Bd of Physicians Quality Assurance v. Banks*, 354 Md. 59, 68 (1999)).

Thus, we look first to the plain language of the regulation. It does not define or explain the phrase "cause or contribute" to a water quality violation. A review of dictionary definitions reveals that: (1) "cause" is defined as: "To bring about or effect," BLACKS LAW DICTIONARY 251 (9th ed. 2009); and (2) "contribute" is defined as: "[T]o give or supply in common with others" or "to play a significant part in bringing about an end or result." MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 285 (11th ed. 2005). In this case, the effect or result would be a violation of water quality standards, but the definitions do not shed light on the proper analysis to assess whether the GP brings about that result.

The phrase "cause or contribute" is ambiguous; it is susceptible to "two or more equally plausible interpretations." *See Wal Mart Stores*, 416 Md. at 360. The phrase could mean, as appellants contend, that *any* discharge to an impaired water necessarily causes or contributes to a violation of water quality standards. It also could be interpreted, however, as MDE maintains, to mean that a discharge does not cause or contribute to a violation of water quality standards if there is a net reduction in pollution. In other words, a discharge does not cause or contribute to a violation of water quality standards if the discharge is offset by a corresponding reduction.

Several courts have addressed the meaning of the phrase "cause or contribute" in § 122.4(i). The United States Court of Appeals for the Ninth Circuit rejected the "offset"

interpretation relied on by MDE and adopted by the FDM. *Friends of Pinto Creek v. EPA*, 504 F.3d 1007, 1012 (9th Cir. 2007), *cert. denied*, 555 U.S. 1097 (2009). In that case, the EPA issued a NPDES permit to Carlota Copper Company, permitting "mining related discharges of copper into Arizona's Pinto Creek, a water body already in excess of water quality standards for copper." *Id.* at 1009. The permit contained an "offset provision," requiring Carlota to remediate sources of copper from an inactive mine site. *Id.* at 1010.

The Ninth Circuit rejected EPA's contention that the permit would not allow a discharge that would "cause or contribute" to a violation of water quality standards because remediation of the discharge for the inactive mine site would offset the new discharge of pollutants. *Id.* at 1012. It stated that "there is nothing in the Clean Water Act or the regulation that provides an exception for an offset when the waters remain impaired and the new source is discharging pollution into that impaired water." *Id.* The court held that, because the discharge did "cause and contribute to the violation of water quality standards," and the applicant did not produce evidence pursuant to 40 C.F.R. § 122.4(i)(1) and (2), the EPA erred in issuing the NPDES permit to Carlota. *Id.* at 1017.

The view expressed by the Ninth Circuit is not shared by all courts. The Supreme Court of Minnesota, for example, disagrees, adopting instead the analysis advocated by MDE in this case. *See In the Matter of the Cities of Annandale and Maple Lake NPDES/SDS Permit Issuance for the Discharge of Treated Wastewater*, 731 N.W.2d 502, 524 (Minn. 2007).

In *Annandale*, the Minnesota Pollution Control Agency ("MPCA") issued a NPDES permit to a wastewater treatment plant, which would increase phosphorus discharge to Crow River. *Id.* at 506. The MPCA concluded, however, that the increase would not contribute to the violation of water quality standards because "the increased discharge would be offset by [a substantial] reduction in phosphorus discharge due to an upgrade of a nearby wastewater treatment plant"; and therefore, "[b]ecause of the net reduction in the watershed," the proposed facility would "*not contribute* to water quality standards violations." *Id.* at 506-07 (emphasis added).

On appeal, the Supreme Court of Minnesota addressed first the appropriate standard of review of the MPCA's conclusion. The court noted that, although it gives deference to a state agency's construction of its own regulation, the regulation at issue was a federal regulation, albeit one that the agency was charged with enforcing and administering. *Id.* at 511-12. The court concluded that, "when a state agency is charged with the day-to-day responsibility for enforcing and administering a federal regulation, courts should give deference to the agency's interpretation of that regulation" if two criteria are met: (1) "the language of the agency's regulation is unclear and susceptible to different reasonable interpretations"; and (2) the "agency's interpretation of the regulation is reasonable." *Id.* at 513, 516.

Finding that the MPCA was charged with the responsibility for enforcing and administering 40 C.F.R. § 122.4(i) in Minnesota, the court then discussed the differing

interpretations that had been applied to the regulation.[29] *Id.* at 518-22. It held that "the interpretation of 40 C.F.R. § 122.4(i) is not a clear-cut issue where we can just give effect to an unambiguously expressed intent and therefore substitute our judgment for that of the MPCA." *Id.* at 522.

The court then proceeded to determine if the MPCA's interpretation of 40 C.F.R. § 122.4(i), that offsets from another source within the watershed could be considered in determining whether a new discharge source "causes or contributes" to a violation of water quality standards, was "reasonable," as well as the extent to which the court should "consider the MPCA's expertise and special knowledge when making this determination." *Id.* Noting that "the determination of whether the proposed joint wastewater treatment plan will 'cause or contribute to the violation of water quality standards' requires some factual inquiry," and that MPCA used "'basin/watershed management approaches as the main policy context for addressing phosphorus,'" the court concluded that "the broad nature of the phrase 'cause or contribute to the violation of water quality standards' leaves leeway for the MPCA to make

---

[29] The court noted that the Minnesota Center for Environmental Advocacy and the Minnesota Court of Appeals had interpreted 40 C.F.R. § 122(4)(i) to mean that any discharge to an "impaired water" necessarily "cause[s] or contributes to a violation of water quality standards." *In the Matter of the Cities of Annandale and Maple Lake NPDES/SDS Permit Issuance for the Discharge of Treated Wastewater*, 731 N.W.2d 502, 518, 520-21 (Minn. 2007). On the other hand, the MPCA interpreted the statute to mean that net improvements to an "impaired water" can be considered in determining whether a new source or discharger "causes or contributes" to a violation of water quality standards. *Id.* The court then noted that the EPA, in litigation and policy positions, had taken the position that "offsets" were relevant in the attainment of water quality standards. *Id.* at 520-22.

a range of policy judgments based on the MPCA's scientific and technical knowledge." *Id.* at 522-24. The court held:

> Nothing in the language of the regulation or the structure of the CWA prohibits the MPCA from considering offsets in this situation. In light of the multitude of variables and possible approaches in determining whether a specific discharge of phosphorus will "cause or contribute to the violation of water quality standards" – not the least of which is whether the MPCA should consider the discharge in isolation or in context of other reductions in the watershed as a whole – it appears that the MPCA's interpretation of 40 C.F.R. § 122.4(i) is reasonable.

Id. at 524. The court upheld the issuance of the NPDES permit as "reasonable and [] consistent with the purposes and principles of the CWA." *Id.*

We agree with the analysis in *Annandale*. The language of 40 C.F.R. § 122.4(i) is ambiguous; it does not make clear how to assess whether a discharge of a pollutant will "cause or contribute to a violation of water quality standards," *i.e.*, whether the discharge from the new source should be considered in isolation or in the context of net reductions in the substance causing the water quality impairment. MDE is the agency tasked with enforcing and administering federal regulations regarding water quality standards, *see* Envir. § 9-324, and we give "considerable weight" to "'an administrative agency's interpretation and application of the statute which the agency administers,'" *Najafi*, 418 Md. at 174 (quoting *Md. Aviation Admin.*, 386 Md. at 572), recognizing its "expertise in its field." *Carven*, 416 Md. at 406. *Accord Adventist Health Care, Inc. v. Md. Health Care Comm'n*, 392 Md. 103, 119 (2006) ("Administrative agencies possess an 'expertise' and, thus, have a greater ability to evaluate and determine the matters and issues that regularly arise, or can

be expected to be presented, in the field in which they operate or in connection with the statute that they administer."). The resolution of the question how to interpret the phrase "cause or contribute" to a water quality violation is an issue that involves MDE's agency expertise, and we give deference to its opinion on this issue.

MDE's construction of 40 C.F.R. § 122.4(i), as allowing the consideration of pollution offsets in determining whether a discharge "causes or contributes" to a violation of water quality standards, is reasonable. Under the circumstances, we will not substitute our judgment for that of the agency.

Appellants contend, however, that even if § 122.4(i) can be interpreted to allow consideration of offsets, the GP does not ensure that new dischargers will not cause or contribute to water quality violations in impaired waterbodies. They assert that "MDE has not created TMDLs for all waters impaired by pollutants discharged by CAFOs," and "even for the impaired Maryland waterways that do have TMDLs, [] MDE has failed to properly quantify the pollutant loadings contributed to the waterway by each CAFO." They further argue that MDE has failed to identify "the quantitative significance of any purported 'offsets' to be achieved as a result of compliance with the permit terms." Appellants contend that, in the absence of "particularized and scientific analyses of the impacts of the new dischargers," MDE cannot properly conclude that the GP "would have no significant impact on the impaired waterway(s)."

MDE disagrees. It argues that CAFOs operating in accordance with the GP will not

cause or contribute to a violation of water quality standards. Initially, it notes that "the federal CAFO regulations established a 'zero discharge' new source performance standard, which permits *no* discharge of pollutants from the facility's 'production area,'" and "[t]hese zero discharge performance standards are incorporated by reference into Maryland's CAFO regulations." (Citing 40 C.F.R. § 412.46; COMAR 26.08.03.09B). With respect to existing sources, MDE contends that "[t]he GP's provisions for preparation of a site-specific CNMP or NMP and compliance with other require[d] water quality measures ensure that the GP-authorized activities will not 'cause or contribute' to a violation of water quality standards."

On this issue, MDE submitted the affidavit of Ms. Dalmasy. She stated that MDE had identified "numerous waterbody segments impaired by various pollutants, including those associated with" AFOs. She stated that MDE had developed TMDLs for impaired waterbody segments, explaining:

> TMDLs establish the assimilative capacity of a waterbody, i.e., the maximum allowable load of the specific substance the waterbody can receive without violating water quality standards. Maryland's nutrients and bacteria TMDLs include load allocations (LAs) for nonpoint sources and waste load allocations (WLAs) for point sources. The LA component of a TMDL includes allocations to agricultural landuse, urban, and forested areas; the WLA includes allocations to traditional point sources (e.g., waste water treatment plants) and NPDES-regulated stormwater discharges. MDE's current modeling tools and data resolution do not allow quantitative allocations to specific AFO/CAFO/MAFO sites. Rather, an overall LA is estimated for each impaired water quality segment, as one aggregate load that includes all agricultural practices, (e.g., cropland, pasture, AFOs/CAFOs/MAFOs). . . . Maryland's nutrient and fecal bacteria TMDL analyses developed to date include an estimate of the baseline agricultural landuse load as part of the total watershed nutrients or bacteria budget. Maryland's bacteria and nutrient TMDLs apply a watershed based approach, which considers all potential

> pollutant sources and estimates load reduction targets for those sources necessary for the attainment of State water quality standards. As an example, in Maryland's nutrient TMDLs to date, all of which have been approved by EPA, the nonpoint source loads were computed in one of two ways:
>
> 1. As the product of observed concentrations and estimated flows. These loads account for contributions from atmospheric deposition, septic tanks, agricultural land (cropland, pasture, animal feeding operations), forest, and urban land. The percentages of these loads by land use were determined using ratios of land use and load coefficients by land use from the Chesapeake Bay Program watershed model.
>
> 2. As the summation of all of the individual land use areas and multiplying by the corresponding land use loading coefficients from the Chesapeake Bay Program watershed model.
>
> Maryland's TMDLs apply a watershed-based approach, which considers all potential pollutant sources as explained above and estimates load reduction targets for those sources necessary for the attainment of State water quality standards. The agricultural load allocation includes all source categories (i.e., cropland, pasture, AFOs/CAFOs/MAFOs) but they are not broken out or quantified separately from this aggregated load. All currently approved nutrients and bacteria TMDLs were developed prior to the issuance of the January 2, 2009 Final Determination to issue the General Discharge Permit for Animal Feeding Operations.

Ms. Dalmasy stated that the GP was "consistent with existing approved TMDLs, since those TMDLs do not provide specific load allocations to this source of pollution." She further explained that "the new permit requirements will result in more stringent control of potential pollutants from these sources; and the permit's requirements will ensure that no new discharges will increase the pollutant loads in watersheds with established TMDLs." Ms. Dalmasy concluded that the GP "ensures compliance with water quality standards as

required by the Clean Water Act," and it "contains measures intended to ensure that AFOs/CAFOs/MAFOs discharges do not cause or contribute to violations of water quality standards."

The FDM reviewed this evidence and concluded:

> Compliance with the GP will result in a reduction in pollutants to State waters. Under the particular circumstances of this case, I find that the issuance of the GP to existing CAFOs in impaired waterways, regardless whether a TMDL has been promulgated, will not cause or contribute to the violation of water quality standards.[30]

In support of its conclusion, the FDM noted that the EPA has approved Maryland's use of a watershed-based approach in developing TMDLs.[31] The FDM explained:

> While no specific waste load is allocated to CAFOs in Maryland's TMDLs, a portion of the load allocation includes contributions from existing CAFOs. The TMDLs contain load reduction targets that are not specific for individual land uses or facilities. Methods available to Maryland to accomplish the load reduction targets include diverse programs that address air deposition, septic system discharges, environmental site design, and a host of BMPs, including not only those incorporated in the GP, but also such things as conservation tillage, off-stream watering, and forest buffers.

---

[30] The FDM noted that new CAFOs would be subject to new source performance standards, which contain a zero discharge requirement, and therefore, 40 C.F.R. § 120.4(i) did not prohibit issuance of a permit to them. The new source performance standards promote "up-front design, construction, operation, and maintenance to ensure that predictable discharges do not occur." 73 Fed. Reg. 70459 (Nov. 20, 2008).

[31] The FDM explained that such an approach "considers all potential pollutant sources . . . and estimates load reduction targets for those sources necessary for the attainment of State water quality standards." For example, as Ms. Dalmasy stated in her affidavit, the "agricultural load allocation includes all source categories (i.e., cropland, pasture, AFOs/CAFOs/MAFOs) but they are not broken out or quantified separately from this aggregated load."

> The pollutant contributions from CAFOs already in existence that will acquire NPDES permits for the first time under the GP are taken into account in the existing LA and therefore are included in the reduction targets. Further, the requirements of the GP are quite stringent, and it is reasonable to conclude that compliance with the GP will reduce the loading to the impaired waterbody. More specifically, the GP will regulate the discharges from a significant number of CAFOs that previously had not been required to obtain a general or individual permit. For the first time, these CAFOs will be subject to stringent requirements aimed at reducing pollutant discharges to State waters. Because this represents a net reduction, it is not prohibited by 40 C.F.R. 122.4(i). As the TMDLs are further implemented, additional reductions may be required of the CAFO and nonpoint sources to fully achieve the TMDL.
>
> Where no TMDL has been prepared for an impaired water, an existing CAFO subject to the GP for the first time will also be reducing its contribution to the impaired water. At the time a TMDL is prepared, consideration will be given to the contribution of the CAFO, and it is possible that further reductions will be required.

As we previously have discussed, we begin our analysis with a determination regarding the requisite standard of review of the FDM's finding at issue. The finding here, that the issuance of the GP "will not cause or contribute to the violation of water quality standards," is a factual finding, or at least a mixed question of fact and law, which limits our review to whether there was substantial evidence in the record to support the finding and whether a "reasoning mind" could have reached that conclusion. *See Singley v. County Comm'rs of Frederick County*, 178 Md. App. 658, 666 (decision whether property constituted a "commercial greenhouse and nursery" that would be entitled to a special exception involved a mixed question of fact and law, to which appellate court applies substantial evidence test), *cert. denied*, 406 Md. 114 (2008). That standard is satisfied here.

There was a substantial basis for the FDM's finding in this regard. As MDE notes, CAFOs and MAFOs are required by the GP to implement NMPs and CNMPs, which are farm specific plans intended to protect water resources through the implementation of appropriate management practices, "including animal waste handling, nutrient management and conservation practices." GP, Part II.G (emphasis omitted); COMAR 15.20.08.04E-05.

Because the GP imposes restrictions on CAFOs and MAFOs, including farms that previously were not subject to regulation, a reasoning mind could conclude, as the FDM did, that these conservation practices would reduce, overall, the pollutants introduced to waterbodies. Thus, even with some new discharges, there would be a net reduction in pollutants to State waters. There was a substantial basis for the FDM's decision that the GP would not "cause or contribute" to a violation of water quality standards.

B.

Appellants next assert that the GP "further violates federal law because it fails to comply with other applicable federal laws governing water quality standards." They argue that, "[f]or every NPDES permit issued, the issuing agency must perform a reasonable potential analysis ('RPA') to determine whether the effluent from the permitted point source will cause a violation of water quality standards." (Citing 33 U.S.C. § 1312(a); 40 C.F.R. § 122.44(d)(1)). Appellants contend that, "[u]nder the EPA's regulations, a permit writer *must* either ensure compliance with any applicable WLA/TMDL or make a case-by-case determination of any necessary WQBELs." They assert that these site-specific requirements

"cannot be reconciled with the broad authorization to discharge" contained in the GP.

MDE argues that the GP, which requires preparation of site-specific NMPs and CNMPs, and subjects them to MDE approval, "provides ample opportunity to consider whether the plans are adequate to assure compliance with water quality standards prior to issuing permit coverage." MDE contends that, in light of the site-specific review of CAFO applications provided for, the GP "is not incompatible with any [federal] requirement that states impose" WQBELs where existing standards are insufficient to meet water quality standards," noting that MDE has the opportunity to impose WQBELs where necessary to ensure the protection of water quality. MDE concludes: "With respect to the sufficiency of [Maryland's] GP, the Court need look no further than to EPA's approval."

The FDM concluded, similar to its earlier finding, that the GP adequately ensured "that discharges do not cause or contribute to a violation of water quality standards."

The regulation on which appellants rely is 40 C.F.R. § 122.44(d). That regulation provides that an NPDES permit "shall include" requirements "more stringent than promulgated effluent limitations guidelines or standards" if they are necessary to limit pollutants that "may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an . . . excursion above [any] State water quality standard." *Id.*

The FDM stated:

> The phrase "will cause . . . or contribute to" a violation of in-stream water quality standards" in 40 C.F.R. 122.44(d) can be interpreted as in 40 C.F.R. 122.4(i): that a reduction in loading can satisfy the requirement that the discharge not "cause or contribute" to a violation. In addition, I find that the

> imposition of WQBELs is likely to be quite site-specific and therefore may be more appropriately imposed through the NOI process, including the approval of the CNMP.[32] The NOI process is a reasonable way to identify facilities that could cause or contribute to water quality impairments and to require additional WQBELs. For these reasons, I conclude that the GP will adequately ensure that discharges do not cause or contribute to a violation of water quality standards.

(Footnote omitted).

Again, this is a factual finding to which we give deference to the agency. The record reflects that the GP does provide for review of permit applications by MDE. CAFO applicants must submit a completed NOI form and a CNMP for MDE review and approval. The CNMP addresses methods to protect water quality, "including animal waste handling, nutrient management, and conservation practices." GP, Part II.G (emphasis omitted). Each NOI and CNMP is subject to public review and comment, and a CAFO will not be issued permit coverage prior to completion of the public participation process. GP, Part III.C.3.

It was within the province of MDE to determine that this process is sufficient to ensure that the issuance of new permits will not cause or contribute to the violation of water quality standards. We will not substitute our judgment for that of the agency on this issue.

III.

Appellants next argue that the GP "is less stringent than federal law because it fails

---

[32] MAFOs and CAFOs are required to submit, along with their NMP, a NOI form, which provides information regarding the farm, such as the number and types of animals at the facility. GP, Part III.A.1 & D. After MDE receives the NOI, it "may request additional information to determine whether or not the farm or proposed farm is in compliance with applicable regulations." GP, Part III.C.1.

to regulate all AFOs that meet the federal definition of 'CAFO.'" Specifically, they argue that the GP "requires that a large AFO 'discharge or propose to discharge' in order to be classified as a CAFO," whereas, pursuant to federal regulations, an AFO is defined as a CAFO based on the number of animals at the facility and the type of manure handling system employed, without regard for whether it discharges or proposes to discharge. Appellants assert that this results in less stringent regulation in two ways: (1) the GP "does not impose management practices on CAFO unpermitted discharges"; and (2) the GP's "90-day open storage provision implies that MAFOs do not need a NPDES permit."

MDE acknowledges that "some facilities that would qualify as CAFOs under federal law are regulated as MAFOs under the GP because they do not 'discharge or propose to discharge.'" It denies, however, that this results in the GP being less stringent than federal law, asserting that "the definitional distinction" results in no practical consequences. Indeed, MDE argues that the GP is broader than federal law.

A.

Appellants' first assertion is that the GP "does not impose management practices on CAFO unpermitted discharges." They argue that, under federal law, CAFOs that are not subject to permit requirements because they do not "discharge or propose to discharge" are required to comply with the site-specific management practices in order for a precipitation-related discharge of manure to be considered agricultural stormwater discharge, which is

excluded as a discharge requiring a NPDES permit.[33] They argue that "MDE has made no showing that all facilities that fall within the federal definition of CAFO, but do not fall under MDE's limited definition of CAFO, meet the federally required management practices as provided in [§] 122.23(e)(1)."

MDE argues that the GP is not less stringent than federal law, but rather, it is broader than federal law. MDE further asserts that appellants "made no showing below that the management practices required by the GP are any less stringent than those required under federal law."

The FDM rejected appellants' argument in this regard. Our review of the regulations confirm that the GP's requisite nutrient management plans are not less stringent than those required by federal law.

As noted, the GP reflects a two-tiered permit scheme. A CAFO that discharges or proposes to discharge must obtain a NPDES permit issued by Maryland. GP, Part I.A.1; COMAR 26.08.03.09B(3). An AFO that qualifies as a CAFO under federal regulations, but does not discharge or propose to discharge to surface water, is classified as a MAFO. GP,

---

[33] Appellants cite 40 C.F.R. § 122.23(e)(1), which states:

> For unpermitted Large CAFOs, a precipitation-related discharge of manure, litter, or process wastewater from land areas under the control of a CAFO shall be considered an agricultural stormwater discharge only where the manure, litter, or process wastewater has been land applied in accordance with the site-specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater, as specified in § 122.42(e)(1)(vi)-(ix).

Part I.A.4; COMAR 26.08.03.09B(1)(d). Although MAFOs are not required to obtain a NPDES permit, they pose a threat to groundwater, and therefore, they are required to get a State discharge permit. The State discharge permit required for MAFOs addresses groundwater; it does not authorize the MAFO to discharge to surface water. GP, Part I.B.2; COMAR 26.08.03.09C(5)(c)-(6).

Both MAFOs and CAFOs are required to develop a NMP. Although a CAFO must develop a CNMP, whereas a MAFO may develop a CNMP or a NMP and a Conservation Plan,[34] the GP requires all AFOs in Maryland to develop NMPs. And the GP's requirements in this regard are substantially the same as the federal requirements. *Compare* 40 C.F.R. § 122.42(e)(1) (setting forth nine best management practices that must be included in CAFO NMPs) *with* GP, Part IV.B. (setting forth virtually identical "Nine Minimum Standards to Protect Water Quality" that must be included within each MAFO's NMP and Conservation Plan). Appellants' contention that the GP does not require the same nutrient management practices as federal law is without merit.

Moreover, we agree with MDE that the GP actually is broader than federal law. As indicated, after *National Pork Producers Council*, 635 F.3d at 751, CAFOs are subject to regulation under the CWA only if they discharge to surface water. Maryland, however, still

[34] As indicated, *supra*, a CNMP must be prepared by a technical service provider certified by the National Resource Conservation Service ("NRCS"). *See* 7 C.F.R. § 652.2. A Conservation Plan, by contrast, can be prepared by a NRCS certified planner, a University of Maryland Extension Service agent or a soil conservation district planner.

regulates CAFOs that "propose to discharge." GP, Part I.A.1. (requiring a permit for an AFO that "discharge[s] or propose[s] to discharge"); Envir. § 9-101(b)(2) ("discharge" defined as including both actual discharges and "placing of a pollutant in a location where the pollutant is likely to pollute"). The GP also regulates MAFOs that do not discharge or propose to discharge to surface water. GP, Part I.A.4. Because the GP regulates facilities not subject to regulation under federal law, it is broader, not less stringent, than federal law.

B.

Appellants' final assertion is based on the provision in the GP permitting MAFOs to stockpile manure uncovered for up to 90 days. They assert that leaving manure stockpiles uncovered for more than 15 days converts a dry manure handling system to a liquid manure handling system, and because "[a] facility is deemed a CAFO at a much lower threshold of animals if it operates a liquid manure handling facility," the GP "misleads AFOs because a single discharge from the regular occurrence of rain runoff from the large piles of uncovered chicken manure into a ditch would require a CAFO permit."

The GP is not misleading as appellants suggest. As the FDM observed, the GP makes clear that, if a MAFO discharges pollutants "to surface waters of the State," it

"automatically" converts the MAFO into a CAFO. GP, Part I.A.5.b.[35] Appellants' argument that the GP is less stringent than federal law in this regard is without merit.

JUDGMENT AFFIRMED. COSTS TO BE PAID BY APPELLANTS.

[35] We further note that there are practice standards to follow to limit the potential for runoff from open field storage of manure. *See* NRCS "Maryland Conservation Practice Standard" (setting forth standards for waste storage and utilization, including the shaping of manure piles to minimize percolation of precipitation through the pile).