IN THE CIRCUIT COURT FOR MONTGOMERY COUNTY, MARYLAND

IN RE PETITION OF ASSATEAGUE COASTAL TRUST	:	
FOR JUDICIAL REVIEW OF THE DECISION OF: THE MARYLAND DEPARTMENT OF THE ENVIRONMENT	:	Case No.: 482915-V
IN THE MATTER OF: LAND AND MATERIALS ADMINISTRATION DETERMINATION TO RE-ISSUE GENERAL DISCHARGE PERMIT FOR ANIMAL FEEDING OPERATIONS STATE DISCHARGE PERMIT #19AF/ NPDES # MDG01	:	

MEMORANDUM OPINION

This matter came before the Court on January 26, 2021, on Petitioner Assateague Coastal Trust's administrative appeal of the Maryland Department of the Environment's ("MDE") reissuance of State Discharge Permit No. 19AF/National Pollution Discharge Elimination System Permit No. MDG01 ("the Permit"), which includes requirements for concentrated animal feeding operations ("CAFOs"). The Court has considered the record in this case, the memoranda filed by the parties, arguments of counsel, and applicable case law.

BACKGROUND

I. APPLICABLE LAW

A. The Clean Water Act

The Clean Water Act (the "CWA") prohibits the discharge of pollutants into waters of the United States by creating a federal-state partnership to regulate the introduction of pollution by point sources. 33 U.S.C. § 1251 *et. seq.* "Through the National Pollution Discharge Elimination System (the "NPDES"), 33 U.S.C. § 1342, either the Environmental Protection Agency (the

"EPA") or an EPA-approved state, such as Maryland, may issue permits exempting a discharger from this prohibition." *Anacostia Riverkeeper v. Md. Dep't of the Env't*, 447 Md. 88, 96 (2016). The EPA or an approved state can issue either individual permits, which regulate site specific locations at individual point sources, or general permits, which regulate multiple point sources operating similar facilities and producing similar waste. *See Texas Indep. Producers and Royalty Owners Assoc. et al. v. EPA*, 410 F.3d 964, 967–68 (7th Cir. 2005) (discussing the legislative progression establishing general permits for dumping). In Maryland, the MDE has been designated by the EPA to issue discharge permits that limit pollution introduced into the Chesapeake Bay (the "Bay"). *Anacostia Riverkeeper*, 447 Md. at 96.

Acquiring a permit does not enable a point source to dump pollutants indiscriminately. Rather, permits contain specific limitations that allow point sources to discharge a certain amount of pollutants, called effluent limitations, while also requiring best management practices to reduce the accidental introduction of any contaminants into the Bay. 33 U.S.C. § 1362(11). The effluent limitations outlined in a permit are determined by the Total Maximum Daily Load ("TMDL") which is the maximum amount of pollutants a body of water can receive before violating applicable water quality standards. 33 U.S.C. § 1313(d)(1)(c). The EPA has developed a specific TMDL for the Bay that imposes limitations on each Bay state's ability to pollute waters within the Bay's watershed. Each Bay state is charged with creating a Watershed Implementation Plan that "functions as a 'roadmap' for how and when [each] State will reach the pollution reduction goals set forth in the Bay TMDL." *Md. Dep't of the Env't v. Cty. Commissioners of Carroll Cty.*, 465 Md. 169, 195 (2019) (quoting *Anacostia Riverkeeper*, 447 Md. at 109).

B. Maryland's Expansion of the Clean Water Act

The CWA regulates concentrated animal feeding operations ("CAFOs") as point sources, and requires the owner/operator to obtain a National Pollutant Discharge Elimination System ("NPDES") permit. Admin. R. at 000269. The CWA enables and encourages states to build upon the CWA's framework to better protect waters within a state's borders. Maryland has used this authority to broaden the scope of protection afforded by the CWA and has charged the MDE "with managing, improving, controlling, and conserving the waters of Maryland." *Northwest Land Corp. v. Md. Dep't of Env't*, 104 Md. App. 471, 478 (1995); MD. CODE. ANN. ENVIR. § 9-322 *et. seq.*

The broad scope of Maryland's statutory scheme is exemplified by the expanded definitions of several terms that enlarge the MDE's mandate and enables the MDE to regulate multiple categories of pollutants. *Compare*, MD. CODE. ANN. ENVIR. § 9-101 (defining "discharge" as "the addition, introduction, leaking, spilling, or emitting of a pollutant into the waters of this State" and "pollutant" as "any other liquid, gaseous, solid, or other substance that will pollute any waters of this State"), *with* 33 U.S.C. § 1362 (failing to define the term discharge and enumerating specific categories of waste that are considered a pollutant). Further, Maryland has created an additional category of regulated livestock operations separate from CAFOs to ensure that all point sources in Maryland are subject to dumping restrictions. These operations, called Maryland Animal Feeding Operations ("MAFOs"), are nearly identical to CAFOs but include livestock businesses that are outside the purview of the CWA because they do not discharge storm water directly to surface waters of the State. COMAR 26.08.01.01.

II. RELEVANT FACTS

Maryland's Eastern Shore is home to a robust poultry industry that produces over 300 million broilers annually. Admin. R. at 000484–86 (letter from Chesapeake Legal Alliance).[1] These poultry operations often house well over 50,000 animals and are usually designated as either a CAFO or an MAFO. *Id.* The large size of these operations is paralleled by the amount of waste that they produce. For example, "in 2017, poultry broiler production in Maryland generated approximately 440 million pounds of manure." *Id.* at 000485. The manure also creates gaseous ammonia that is typically blown out of poultry houses by industrial fans only to settle on nearby land and waterways, causing significant pollution to the Bay. Petitioner's Memorandum at 2. The MDE regulated the discharge of waste from CAFOs into the Chesapeake Bay through the CWA and Maryland's related statutory regime through a General Discharge Permit for Animal Feeding Operations (GD Permit), Maryland Permit #19AF, NPDES Permit #MDG01 ("the Permit"). On September 4, 2019, the MDE made a tentative decision to reissue the Permit without limitations on the discharge of gaseous ammonia from CAFOs. Admin. R. at 000003–37 ("the Permit"). After release of the initial draft, the MDE held a public comment period in which Petitioner participated. In *Response to Public Comments Regarding General Discharge Permit for Animal Feeding Operations Maryland Discharge Permit No. 19AF, NPDES Permit No. MDG01 July 8, 2020*, the MDE set forth topics of broad public comment categories, followed by its response to each. Admin. R. 000268-285. In Section V, Monitoring, the public comments were summarized in pertinent part:

> **The Permit does not adequately address air pollution (particulate matter/ammonia depositions) from poultry house exhaust fans and manure sheds that are deposited in the air and make their way to surface waters**

[1] Petitioner is represented by Chesapeake Legal Alliance and most of the references to the record refer to the organization's submission made during the public comment period after release of the initial draft of the Permit.

> **causing health and water quality impairments. . . . The Permit must be amended to reflect air emissions and monitoring requirements based on results from studies to be conducted by December 1, 2021. . . . . How will MDE regulate these emissions in the Permit and determine impacts to resources? What is the monitoring strategy?**

Admin. R. 000277 (bold in original). MDE responded in pertinent part:

> EPA does not regulate odors or air quality through its CAFO permitting program. *See generally* 40 CFR 122.23. While MDE derives much of its NPDES permitting authority from EPA and the CWA, it is authorized, as a delegated program, to impose requirements that are more stringent than what is required by CWA or EPA's regulations. Therefore, MDE included in the draft General Discharge Permit provisions that require AFO owners or operators to implement BMPs [best management practices] in order to reduce nuisance odors and address any air quality resource concerns using appropriate NRCS Practice Standard(s). *See* General Discharge Permit at Part IV.D.1-2. . . . . Ammonia emissions/ammonia deposition have been considered and addressed to the extent permissible under the Clean Water Act and the state's water pollution control law and implementing regulations with the requirement of several NRCS practices including litter amendments and hedgerows/shelterbelts.

Id. at 000277-278.

The MDE issued the five-year Permit that became effective on July 3, 2020, and will expire on July 7, 2025. Admin. R. at 000003-37 (State Discharge Permit No. 19AF/National Pollution Discharge Elimination System Permit No. MDG01). The limitations contained within the Permit authorize CAFOs and MAFOs to discharge numerous pollutants into the bay in accordance with MDE's mandated limitations and the Bay's TMDL. On September 23, 2020, Petitioner appealed the MDE's final determination to reissue the Permit without gaseous ammonia prohibitions.

III. STANDARD OF REVIEW

Judicial review of discharge permits is provided for in MD. CODE. ANN. ENVIR. § 1-601(a)(3)(c). The review is limited to issues presented in the administrative record before the Department. §1-601(d). "In reviewing an agency's legal conclusions, it is a fundamental

principle of administrative law that a reviewing court should not substitute its judgment for the expertise of those persons who constitute the administrative agency." *John A. v. Bd. of Educ. For Howard Cty.*, 400 Md. 363, 381–82 (2007). "A court's role [in an administrative appeal] 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." *United Parcel v. People's Counsel*, 336 Md. 569, 577 (1994).

An agency's fact-based decision must be given great deference. "The substantial evidence and arbitrary and capricious standards apply where an 'organic statute' authorizes judicial review without a contested case hearing and does not set forth a standard of review." *Anacostia Riverkeeper*, 447 Md. at 118. Substantial evidence exists when a "reasoning mind reasonably could have reached the factual conclusion the agency reached." *Bd. of Physician Quality Assur. v. Banks,* 354 Md. 59, 68 (1999) (quoting *Bulluck v. Pelham Woods Apts.,* 238 Md. 505, 512 (1978)).

An agency's interpretation of law is afforded less deference upon review. "More weight is appropriate when the interpretation resulted from a process of 'reasoned elaboration' by the agency, when the agency has applied that interpretation consistently over time, or when the interpretation is the product of contested adversarial proceedings or formal rule making." *Cty. Commissioners of Carroll Cty.*, 465 Md. at 204. However, courts are "under no constraints in reversing an administrative decision which is premised solely on an erroneous conclusion of law." *Md. Bd. of Physicians. v. Elliot*, 170 Md. App. 369, 406 (2006).

IV. DISCUSSION

Petitioner argues that the Permit is deficient under both federal and state law due to the lack of effluent limitations restricting the ability of CAFOs and MAFOs to discharge ammonia in

the Bay. First, Petitioner alleges that the MDE's finding that gaseous ammonia is not within the purview of the CWA is an erroneous conclusion of law based on several statutory definitions contained within the CWA and the Environment Article of the Annotated Code of Maryland. According to Petitioner, these definitions greatly expand the MDE's reach and demand the regulation of gaseous ammonia discharged by CAFOs and MAFOs. Alternatively, Petitioner argues that the factual conclusions relied on by the MDE in their decision making process are not supported by the administrative record. Current limitations, both technology based, and water quality based, disregard ammonia emissions entirely and, according to Petitioner, any finding that such limitations are sufficient is arbitrary. The Court will address Petitioner's first argument below.

Whether the MDE erroneously concluded that gaseous ammonia emissions are not governed by the CWA and the Environment Article

As stated above, deference is owed to an agency's interpretation of law. The Court, however, may substitute its judgment if there are erroneous conclusions of law. *See Md. Dept. of Environment v. Ives*, 136 Md. App. 581, 585 (2001). The amount of deference owed to a legal conclusion varies and "more weight is appropriate when the interpretation resulted from a process of 'reasoned elaboration' by the agency, when the agency has applied that interpretation consistently over time, or when the interpretation is the product of contested adversarial proceedings or formal rule making." *Cty. Commissioner of Carroll Cty*, 465 Md. at 203–04 (quoting *Balt. Gas & Electric Co. v. Pub. Service Comm'n*, 305 Md. 145, 161 (1986)). "Nevertheless, the rule is firmly established that when statutory language is clear and unambiguous, administrative constructions, no matter how well entrenched, are not given weight." *Macke Co. v. Comptroller of the Treasury*, 302 Md. 18, 22–23 (1984).

A court must determine the meaning of a statute based on several relevant factors and must read the "words in the context of the entire legislative scheme and in a way that does not lead to a nonsensical construction." *Employees' Retirement System of City of Baltimore v. Dorsey*, 430 Md. 100, 115 (2013) (analyzing the meaning of "impairment" in Baltimore City Code). In *Cty. Commissioners of Carroll Cty.* the Court explained:

> In construing a statute, a reviewing court applies the oft-stated approach to statutory construction. That is, the court seeks to ascertain legislative intent – whether that of the General Assembly or of Congress. That endeavor begins with the plain meaning of the text, keeping in mind that the plainest language is controlled by the context in which it appears. The legislative history of the statute may then be reviewed to understand the purpose of the legislation, resolve ambiguities, and confirm the apparent meaning of the text. Past case law construing a provision is, of course, also helpful.

465 Md. at 203.

This Court has applied the foregoing principles in its analysis of the legal conclusion reached by the MDE that gaseous ammonia is outside the purview of the CWA. This Court finds that the MDE's legal conclusion is erroneous based on both the language and legislative intent of the Environment Article. The Court bases this finding on the statutory definition of "emitting" and "pollutant."

Maryland's expansion of the CWA unambiguously includes gaseous ammonia.

Maryland's legislators made their intent to expand the CWA clear through the codification of their legislative policy in the Environment Article. *See* § 9-302 (stating: "The purpose of th[e] subtitle is to establish effective programs and to provide *additional and cumulative* remedies to prevent, abate, and control pollution of the waters of this State") (emphasis added).

This intent is exemplified by the adoption of broad key terms throughout Maryland's water pollution control laws. Of particular relevance is the term "pollutant," defined as "any

liquid, *gaseous*, solid, or other substance that will pollute any waters of this State." § 9-101(g)(2) (emphasis added). Of further importance is the term "discharge," which is defined as "the addition, introduction, leaking, spilling, or *emitting* of a pollutant into the waters of this State." § 9-101(b)(1) (emphasis added). Notably "pollutant" is not only limited to wastewater. *See* § 9-101 (g)(1) (defining pollutant as "any *waste* or wastewater that is discharged from" either a water treatment work or industrial source").

The clear intent to expand the CWA's reach, and the broadened definitions contained in the Environment Article, require the MDE to regulate ammonia as a water pollutant. In coming to this conclusion, the Court examines first the definition of several words contained in § 9-101, specifically the words "gaseous" and "emitting."

Ammonia is a gaseous pollutant under § 9-101.

Merriam-Webster defines "gaseous" as something "having the form of or being gas" or "lacking substance or solidity." MERRIAM-WEBSTER.COM, https://www.merriam-webster.com/dictionary/gaseous. Ammonia is a form of nitrogen and is emitted from poultry waste through a process called volatilization. Through this process ammonia changes composition and converts to a gas emitted by manure inside poultry houses and manure storage sheds. Admin. R. at 000290-91; 000484-86. Accordingly, ammonia is a gaseous pollutant in accordance with § 9-101 and is subject to regulation by the MDE under the Environment Article. § 9-323(a)(1). Any other interpretation of ammonia would "lead to a nonsensical construction" that greatly inhibits the MDE's ability to protect the Bay. *Dorsey*, 430 Md. at 115.

CAFOs emit gaseous ammonia into the bay through the use of industrial fans.

CAFOs and MAFOs in Maryland actively emit gaseous ammonia into the Bay designating them as dischargers of pollutants in accordance with § 9-101 of the Environment Code. *See* Admin. R. at 000484-85, Wheeler, Eileen F., et al, "Ammonia emissions from twelve

US broiler chicken houses." Transactions of the ASABE 49.5 (2006) 1495-1512. Merriam-Webster defines "emit" as "to throw or give off or out." MERRIAM-WEBSTER.COM, https://www.merriam-webster.com/dictionary. In applying this definition to the case at hand, it is clear that CAFOs in Maryland, particularly CAFOs operating as poultry farms, emit gaseous ammonia by discharging noxious fumes onto the waters of the State via industrial fans.

Regulating gaseous ammonia does not expand the CWA.

MDE argues that the interpretation discussed above, propounded by Petitioner, and supported by the applicable law, is too broad and would necessitate water discharge "permits for things as varied as 'cars and chimneys.'" MDE Memorandum at 17 (citing *Chemical Weapons Working Group, Inc. v. U.S. Dep't of the Army*, 111 F.3d 1485, 1490 (10th Cir. 1997)). MDE relies on *Chemical Weapons Working Group, Inc. v. U.S. Dept. of the Army* [hereinafter referred to as "*Chemical Working Group*"] to support its argument. The facts in that case, however, are distinguishable from the facts at hand.

In *Chemical Working Group*, the Tenth Circuit was tasked with determining whether the government's one-time destruction of chemical weapons, pursuant to Congressional authorization, violated § 301(f) of the CWA, which proscribed the introduction of chemical weapons to waterways. The Court rejected the Army's argument, holding that its interpretation of the CWA "is completely at odds with Congressional knowledge, approval, and funding of [the] incineration" of chemical weapons. *Id.* at 1490.

The petitioner in *Chemical Working Group* then argued that the pollution created from incineration would ultimately fall back to Earth, polluting waterways in violation of the CWA. *Id.* The Court similarly rejected that claim as irrational. *Id.* Under that logic, the Court opined that such a broad interpretation of the CWA would lead to permitting of "sources of water pollution such as cars and chimneys." *Id.* Implicit in the Court's determination was the idea that

point sources should not be responsible for the indirect, attenuated introduction of pollutants which may, or may not enter the water at an unknown point in the future. See *id.* (the petitioner's argument "would necessarily result in regulation under § 301(a) of any air emission that might possibly result in atmospheric deposition into navigable waters").

The MDE urges this Court to apply the same logic but the Court declines to do so in light of key factual differences between the matter at hand and in *Chemical Working Group*. The incineration of chemical weapons in violation of the CWA's absolute prohibition against doing so in *Chemical Working Group* was expressly authorized by Congressional statute. Here, no authorization exists from either Congress or the Maryland General Assembly that enables CAFOs and MAFOs to dump ammonia into the Bay. Rather, Maryland has chosen to strengthen the CWA by broadening the key definitions of emit and gaseous as discussed above.

Further, the pollution discussed in *Chemical Working Group* was the result of the onetime incineration of chemical weapons and the connection between the government's actions and violation of the CWA through water pollution was tenuous. 111 F.3d at 1487–89. In contrast, CAFOs continuously and repeatedly emit ammonia directly into the Chesapeake Bay with roughly 40% of emitted ammonia redepositing within 2.5 kilometers, or 1.5 miles, of the source. Admin. R. at 000485. Additionally, 70% of emitted ammonia is redeposited within 50 kilometers, or 31 miles, of the source. *Id.* The introduction of ammonia from CAFOs cannot be compared to the theoretical reintroduction of chemical pollutants discussed in *Chemical Working Group* as the record in this case indicates that there is a definite and real impact on the Bay. *Cf. Chem. Working Group*, 111 F.3d at 1490–91 (questioning the connection between the incineration of chemical weapons and water pollution).

The Court finds no support for MDE's argument that interpreting the Environment Article to include the emission of gaseous ammonia will lead to the regulation of tenuous forms of water pollution originating from the air. The concrete and measurable nature of the pollution in this case does not justify the broad view of the CWA that MDE warns of. Again, the theoretical reintroduction of pollutants that were originally discharged some time and distance away is simply not comparable to the facts at hand. The record reflects that ammonia discharge is a specific, calculable event that the MDE is obligated to regulate in accordance with their responsibility to properly administer the CWA. Admin. R. 000473–76. The Court finds that this conclusion is consistent with both the language and policy of the Environment Article and poses no risk of over expanding the MDE's permitting responsibilities beyond what is already statutorily prescribed.[2] The MDE erred as a matter of law in concluding that gaseous ammonia emissions are not governed by the CWA and the Environment Article.

CONCLUSION

For the reasons set forth above, the Maryland Department of the Environment's final determination is REVERSED. The Permit is remanded to the MDE to mandate effluent limitations for ammonia and other water quality based effluent limitations.

A separate order will be entered.

March 11, 2021

Sharon V. Burrell

SHARON V. BURRELL, Judge
Circuit Court for Montgomery County, Maryland

[2] In light of the Court's ruling that MDE committed an error of law, it will not address Petitioner's argument that MDE's factual conclusions are not supported by the administrative record.

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ORDER

Upon consideration of Assateague Coastal Trust's Petition for Judicial Review, and for the reasons set forth in the accompanying memorandum opinion, it is this 11th day of March, 2021, by the Circuit Court for Montgomery County, Maryland, hereby

ORDERED, that the Maryland Department of the Environment's final determination is REVERSED; and it is further

ORDERED, that Maryland Permit No. 19AF/National Pollution Discharge Elimination System Permit No. MDG01 is remanded to the Maryland Department of the Environment to mandate effluent limitations for ammonia and other water quality based effluent limitations.

Sharon V. Burrell

SHARON V. BURRELL, Judge
Circuit Court for Montgomery County, Maryland

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