COMMONWEALTH OF PENNSYLVANIA
BEFORE THE ENVIRONMENTAL HEARING BOARD

FOOD & WATER WATCH	:	
	:	
v.	:	EHB Docket No. 2018-108-L
	:	(Consolidated with 2017-114-L)
COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, and KEYSTONE PROTEIN COMPANY, Permittee.	:	

AMICUS CURIAE BRIEF OF THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, VIRGINIA NUTRIENT CREDIT EXCHANGE ASSOCIATION, VIRGINIA ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, VIRGINIA MUNICIPAL STORMWATER ASSOCIATION, MARYLAND ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, MARYLAND MUNICIPAL STORMWATER ASSOCIATION, NORTH CAROLINA WATER QUALITY ASSOCIATION, SOUTH CAROLINA WATER QUALITY ASSOCIATION, WEST VIRGINIA MUNICIPAL WATER QUALITY ASSOCIATION, AND ASSOCIATION OF MISSOURI CLEAN WATER AGENCIES

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Through this appeal of a single permit issued by the Pennsylvania Department of Environmental Protection (DEP), the Washington, D.C.-based Appellant, Food & Water Watch, is seeking to challenge the United States Environmental Protection Agency (EPA) and its longstanding interpretation and implementation of the federal Clean Water Act (CWA), 33 U.S.C. § 1251 *et seq*. Indirectly, this appeal challenges the grounds for many hundreds of National Pollutant Discharge Elimination System (NPDES) permits throughout the Nation that were issued by EPA (or by the States under authorization from EPA) to protect water quality in part through the authorization and regulation of water quality trading.

The Municipal Associations[1] represent hundreds of member local governments and clean water agencies leading the Nation's clean water effort. Many of the Municipal Associations' Members operate publicly owned treatment works (POTWs) to receive and treat wastewater from millions of residences, businesses, and institutions in Pennsylvania, in other States in the Chesapeake Bay Watershed, and across the Nation. Other Members in these same geographic areas manage stormwater within municipal separate storm sewer systems (MS4s) for drainage, flood control, and water quality protection purposes. Like the permittee in this appeal, the Municipal Associations' Members operate their POTWs and MS4s under NPDES permits issued under the authority of the federal CWA.

Water quality trading as it is currently being implemented in 23 States across the Nation has proven to be extremely beneficial in the ongoing progress toward achieving the CWA's water

[1] The amici curiae joining this brief, which are referred to the "Municipal Associations," are the National Association of Clean Water Agencies, Virginia Nutrient Credit Exchange Association, Virginia Association of Municipal Wastewater Agencies, Virginia Municipal Stormwater Association, Maryland Association of Municipal Wastewater Agencies, Maryland Municipal Stormwater Association, North Carolina Water Quality Association, South Carolina Water Quality Association, West Virginia Water Quality Association, and Association of Missouri Cleanwater Agencies.

quality goals.[2] For example, the Virginia General Assembly created the Chesapeake Bay Watershed Nutrient Credit Exchange Program in 2005 to facilitate trading throughout the watershed. Va. Code § 62.1-44.19:12; *see also* 9 Va. Admin. Code § 25-820. This program has a history of facilitating 100% compliance with the annual Chesapeake Bay nutrient wasteload allocations for over 100 facilities within the Virginia Nutrient Credit Exchange Association, in addition to aiding Virginia's wastewater sector in collectively achieving its 2025 target nutrient reductions in 2017.[3] Based on this success, Virginia has expanded trading to MS4s and nonpoint sources. Va. Code §§ 62.1-44.19:20, :21. Similarly, the Maryland General Assembly authorized the use of nutrient trading in 2010. Md. Code Ann. Ag. § 8-901. The Maryland Department of the Environment issued a policy statement in 2015 concluding that "trading offers an attractive alternative to more traditional approaches for reducing water quality problems and can often achieve results faster and at a lower cost." *Md. Water Quality Nutrient Trading Policy Statemen*t (Oct. 2015).[4] In 2018, Maryland finalized its first set of water quality trading regulations making municipal and industrial wastewater discharges and MS4s eligible to purchase credits generated by other regulated dischargers, farmers, and others. Code of Md. Reg. 26.08.11. In December 2018, Maryland modified the MS4 permits issued to three counties to allow these permittees to be the first to trade under the State's new regulations to satisfy costly Chesapeake Bay nutrient

[2] EPA, Water Quality Trading, https://www.epa.gov/npdes/water-quality-trading.
[3] *See generally* Va. DEQ, VPDES Watershed General Permit for Nutrient Discharges to the Chesapeake Bay, https://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/NutrientTrading.aspx.
[4] *Available at* https://mde.maryland.gov/programs/Water/Documents/WQTAC/Nutrient-Trading-Policy-3-Pager-10-23-15(4).pdf.

reduction requirements. The first nutrient credits in Maryland were placed on the State's registry on February 15, 2019.[5]

Appellant's campaign to change federal law and practice—of which this permit appeal is only a convenient battleground—is contrary to nearly 40 years of CWA permitting practice and precedent. Ironically, if Appellant were to prevail, it would only succeed in hindering, not helping, the extraordinary clean water progress of the Municipal Associations' Members toward improving and protecting waterbodies like the Chesapeake Bay and others nationwide. Therefore, in the interest of clean water in the Chesapeake Bay watershed and beyond, the Municipal Associations are compelled to share their perspective on this critically important federal CWA implementation procedure.

I. USE AND BENEFITS OF WATER QUALITY TRADING

Water quality trading is a market-based compliance method by which NPDES permittees that cause third parties to control pollutants and make reductions on their behalf may take credit for those controls and reductions in satisfaction of the pollutant reduction requirements of their NPDES permits. This helps achieve the same (or often greater) water quality improvements "at the overall lowest cost to society, and for all parties involved." EPA, *Water Quality Trading Evaluation* 1-1 (Oct. 2008).[6]

Although the specific details of trading programs vary State-to-State, they typically share certain common characteristics. The first and most basic characteristic is a demand for water quality pollutant reduction credits. Demand typically derives from stringent CWA total maximum

[5] *See* Md. Dep't of the Env't, Water Quality Trading Program Home, https://mde.maryland.gov/programs/Water/WQT/Pages/index.aspx.
[6] *Available at* https://www.epa.gov/sites/production/files/2015-09/documents/epa-water-quality-trading-evaluation.pdf.

daily load (TMDL) allocations for various point and nonpoint source discharges and, in the case of point sources, particularly the related NPDES permit limit for the pollutant of interest. Setting the allocations in the first place for numerous point and nonpoint sources discharging the pollutant to the waterbody involves the exercise of judgment and discretion by permitting authorities like DEP. Indeed one alternative to a stringent allocation and permit limit for a point source that is authorized to trade is for the permitting authority to simply forego that stringent level of control on that source and make the trade-off itself by assigning a portion, or higher portion, of the same pollutant control responsibility to a different source.

Second, allowing the demand for pollutant reduction credits to be fulfilled at the facility-level through the exchange of water quality credits, subject to State and EPA oversight, creates an incentive for other parties to reduce pollutant discharges to the waterbody, especially if they can do so at a lower cost. Contrary to Appellant's assertion that trading frustrates the "technology forcing" objective of the CWA, App. Memo. 8, the financial opportunities created by water quality trading markets catalyze action and technological innovation. *See Md. Draft Phase III WIP* 11–12 (Apr. 2019).[7] While these trade-offs may occur between point sources, it is especially noteworthy that they may involve pollutant reductions by nonpoint sources that otherwise have no legal obligation to make reductions but might do so if their voluntary improvement is tradeable to some degree.

Third, the most widely used programs target a pollutant that is suitable for trading over a large area, such as phosphorus and nitrogen (collectively referred to as "nutrients") as at issue here. These nutrients are not acutely toxic to aquatic life. Rather, they act as fertilizer that fuels the

[7] *Available at* https://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Pages/Phase3WIP.aspx.

growth of algae and aquatic plants typically over the course of the annual growing season. *See In re Homedale*, 16 E.A.D. 421, 431 (EPA Envtl. App. Bd. 2014). For nutrients, controlling *total annual* pollutant loadings to a waterbody from *all sources* is more relevant to protecting water quality than managing short-term discharges from any given facility. *See* EPA, Chesapeake Bay Total Maximum Daily Load 6-4 (2010) ("Chesapeake Bay TMDL").[8] Because variations in the specific timing and location of nitrogen and phosphorus discharges to a waterbody generally are immaterial to water quality, nutrients are ideally suited to water quality trading among various sources in the same watershed over the course of an annual compliance period.

Despite a successful and constantly growing national track record to the contrary, Appellant has argued for years that water quality trading somehow reduces protection of water quality. As a threshold matter, contrary to Appellant's characterization, it is important to understand that water quality trading is a tool for NPDES permittees to more efficiently protect water quality, not to avoid protecting water quality. Following standard CWA procedures, States or EPA set TMDLs at levels necessary to protect water quality. TMDLs are implemented through effluent limitations included in NPDES permits that generally must be as stringent as necessary to protect water quality.[9] 40 C.F.R. § 122.44(d)(vii); *see also* 25 Pa. Code § 92a.44 (incorporating 40 C.F.R. § 122.44 into DEP's regulations). Water quality trading is simply a technique for achieving the level of pollutant control required by the limit in the permit.

[8] *Available at* https://www.epa.gov/chesapeake-bay-tmdl/chesapeake-bay-tmdl-document.

[9] Although NPDES permits for MS4s typically do not require numeric permit limits to implement TMDLs in the same manner as POTWs because MS4s are subject to a different requirement "to reduce the discharge of pollutants to the maximum extent practicable," 33 U.S.C. § 1342(p)(3)(B)(iii), MS4s may also, and in many cases do, utilize water quality trading as a means of achieving pollutant reductions more cost-effectively than would otherwise be possible.

A recent study by the United States Government Accountability Office (GAO) conducted upon request of Congress noted that "trading provided point sources with flexibility that allowed them to manage risk, reduce the cost of compliance, and better manage the timing of upgrades of their nutrient removal technology." GAO, *Some States Have Trading Programs to Help Address Nutrient Pollution, but Use Has Been Limited* 12 (Oct. 2017) ("GAO Rpt.").[10] The GAO report, which highlighted the success of Pennsylvania's trading program as one of the three most effective programs in the Nation, gave this example:

> [I]n Pennsylvania, a point source credit buyer explained that the point source planned to complete a multi-year $34 million upgrade of its facilities in 2017 to meet discharge limits that came into effect in October 2012. To meet discharge limits in the meantime, the point source developed a program to purchase nitrogen credits from local nonpoint sources that would implement cover crop conservation practices to generate the necessary reductions. Therefore, trading allowed the point source to meet discharge limits during the period it was planning and completing the upgrade.

GAO Rpt. 22. As this example demonstrates, trading does not lessen water quality protection but furthers it. The referenced discharge was in compliance with its October 2012 limits at all times. From a water quality perspective, it is immaterial to the downstream Chesapeake Bay whether those reductions were generated by the operation of that particular facility or from offsite agricultural pollutant control measures funded by the facility owner. However, the facility derived a substantial benefit in the flexibility to plan, finance, and construct the $34 million treatment upgrade that would soon replace its interim purchase of nutrient credits.

Water quality trading is particularly important to jurisdictions in the Chesapeake Bay watershed like Pennsylvania, which is confronting logistical and cost challenges in meeting the Chesapeake Bay TMDL's aggressive nitrogen and phosphorus reduction targets by the current

[10] *Available at* https://www.gao.gov/assets/690/687755.pdf.

consensus-based goal of the Bay watershed jurisdictions (2025). Pennsylvania's draft *Phase 3 Chesapeake Bay Watershed Implementation Plan* ("*PA Phase 3 WIP*") issued for public comment in April 2019 estimates a $257 million annual funding gap and projects a substantial shortfall in the nitrogen reductions necessary to attain the Chesapeake Bay TMDL's targets. *Id.* at 111. However, Pennsylvania's wastewater sector, which has had access to a robust water quality trading program since 2006, has met its allocated 2025 nutrient reduction goals. *Id*. at 49. In fact, EPA expressed its expectation that Pennsylvania *expand* its trading program to cover municipal stormwater dischargers (i.e., MS4s) as a strategy to help that sector achieve sufficient pollutant reductions and get back on track to meet its 2025 reduction goals. EPA, *Expectations for the Phase III Watershed Implementation Plans* 16 (June 2018).[11] This expectation is fully consistent with the Chesapeake Bay Commission's conclusion that water quality trading could reduce the nutrient reduction compliance costs for municipal stormwater discharges by as much as an astonishing 82%.[12] The respective draft Phase 3 Watershed Implementation Plans for Virginia and Maryland also cite water quality trading as a key tool for achieving their Chesapeake Bay TMDL goals.[13]

In sum, there is an overwhelming consensus among EPA and State regulators, NPDES-permitted dischargers, and other stakeholders that water quality trading is necessary and beneficial to facilitating compliance with the CWA's increasingly demanding and costly requirements to meet the Nation's water quality goals. Appellant's worn-out contention that this approach is an *impediment* to improving water quality is indefensible.

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[11] *Available at* https://www.epa.gov/sites/production/files/2018-06/documents/epa-phase-iii-wip-expectations-6-19-18.pdf.
[12] Ches. Bay Comm'n, *Nutrient Credit Trading for the Chesapeake Bay: An Economic Study* 47 (May 2012).
[13] *Va. Draft Chesapeake Bay TMDL Phase III Watershed Implementation Plan* 9 (Apr. 2019), *available at* https://www.deq.virginia.gov/Programs/Water/ChesapeakeBay/ChesapeakeBayTMDL/PhaseIIIWatershedImplementationPlanning.aspx; Md. Draft Phase III WIP at 11–12.

II. AUTHORITY FOR WATER QUALITY TRADING IS WELL-GROUNDED IN THE TEXT AND HISTORY OF THE CLEAN WATER ACT AND CONTINUING CONGRESSIONAL OVERSIGHT

Appellant challenges the provision of Keystone Protein's permit authorizing water quality trading on two grounds: (1) the CWA does not "expressly or impliedly" authorize trading and (2) trading is in "direct conflict" with the statute. App. Memo. 3. These arguments reflect a fundamental misunderstanding of the history and text of the CWA and also mischaracterize subsequent congressional oversight.

A. EPA and DEP's Longstanding Guidance on the Construction of the Clean Water Act as Permitting Water Quality Trading Is Entitled to Deference

Appellant correctly states that water quality trading is not *expressly* mentioned in the text of the CWA. But that observation is of little consequence. It is a bedrock principle of administrative law that agencies are charged with the authority to "fill any gap left, implicitly or explicitly, by Congress" in the statues they administer. *Chevron USA Inc. v. NRDC*, 467 U.S. 837, 843 (1984) (quoting *Morton v. Ruiz*, 415 U.S. 199, 231 (1974)). When a "statute is silent or ambiguous with respect to the specific issue, the question . . . is whether the agency's answer is based on a permissible construction of the statute." *Id*. Stepping back to consider the larger CWA picture, water quality trading is only one of literally hundreds of elements of a complex regulatory scheme that are not expressly set forth in the statute itself. In fact, most of the implementation requirements, practices, and procedures comprising the CWA's regulatory scheme are mandated by regulation or recommended by policy memoranda and guidance documents. *See, e.g.,* 40 C.F.R. Parts 131 (water quality standards), 130 (TMDLs), and 122–127 (NPDES permits). In this respect, the overall legal analysis offered by the Appellant, if accepted, would serve equally well to undo much of EPA's and DEP's regulatory programs to the extent the details are not spelled out in statute.

In this case, trading is but one detail or statutory gap in CWA implementation practices and procedures that EPA and DEP have filled with guidance documents spanning decades and, in DEP's case, regulations, 25 Pa. Code § 96.8, establishing water quality trading in a manner consistent with and in furtherance of the CWA. The agencies' longstanding position is entitled to deference. *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944); *Dep't of Educ. v. Empowerment Bd. of Ctrl. of the Chester-Upland Sch. Dist.*, 938 A.2d 1000, 1010 (Pa. 2007) ("[I]t is well settled that a [statutory] interpretation by the agency charged with the administration of a particular law is normally accorded deference, unless clearly erroneous.").

EPA issued its first official policy statement on water quality trading in 1996, emphasizing that trading is a "supplemental" implementation procedure to more-efficiently meet the CWA's water quality objectives:

> EPA will actively support and promote effluent trading within watersheds to achieve water quality objectives, including water quality standards, to the extent authorized by the Clean Water Act and implementing regulations…. Trading supplements the current regulatory approach. It is a method to attain and/or maintain water quality standards, by allowing sources of pollution to achieve pollutant reductions through substituting a cost-effective and enforceable mix of controls on other sources of discharge.

61 Fed. Reg. 4994, 4995 (Feb. 9, 1996). EPA followed this policy statement with its first draft trading guidance later in 1996 in which EPA explained how a well-designed water quality trading program is consistent with the CWA:

> To work within the framework of laws, regulations, and policies for attaining water quality in the United States, trading should follow eight principles:
>
> 1. Trading participants meet applicable CWA technology-based requirements.
>
> 2. Trades are consistent with water quality standards throughout a watershed, as well as anti-backsliding, other requirements of the CWA, other federal laws, state laws, and local ordinances.

3. Trades are developed within a TMDL process or other equivalent analytical and management framework.

4. Trades occur in the context of current regulatory and enforcement mechanisms.

5. Trading boundaries generally coincide with watershed or waterbody segment boundaries, and trading areas are of a manageable size.

6. Trading will generally add to existing ambient monitoring.

7. Careful consideration is given to the types of pollutants traded.

8. Stakeholder involvement and public participation are key components of trading.

EPA, *Draft Framework for Watershed-Based Trading* 2-4 (May 1996).[14]

EPA updated its 1996 guidance in 2003 with EPA's *Water Quality Trading Policy Statement* (Jan. 2003).[15] The 2003 federal guidance provides additional detail on how to design water quality trading programs to meet the requirements and objectives of the CWA. *Id*. at 6–7. EPA updated this guidance again earlier this year. EPA, *Updating the Environmental Protection Agency's Water Quality Trading Policy to Promote Market-Based Mechanisms for Improving Water Quality* (Feb. 2019).[16] The 2019 guidance reiterates that "EPA has long interpreted the Clean Water Act to allow pollutant reductions from water quality trading" and urges States to accelerate the implementation of trading programs. *Id*. at 2.

DEP also has a lengthy history of overseeing water quality trading through guidance and regulation. DEP published its *Final Trading of Nutrient and Sediment Reduction Credits–Policy and Guidelines* (392-0900-001) in 2006 following an extensive public process. The guidance

[14] *Available at* https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20001QL1.TXT.
[15] *Available at* https://archive.epa.gov/ncer/events/calendar/archive/web/pdf/finalpolicy2003.pdf.
[16] *Available at* https://www.epa.gov/sites/production/files/2019-02/documents/trading-policy-memo-2019.pdf.

affirms that the Commonwealth's trading policy is "consistent with legal requirements under applicable laws and regulations, including with the federal Clean Water Act and Clean Streams Law." *Id*. at 5. Pennsylvania codified the trading policy in regulations in 2010, 25 Pa. Code § 96.8, which were developed in consultation with EPA, 40 Pa. B. 5790, 5791 (Oct. 9, 2010). The Pennsylvania Environmental Quality Board found that DEP's proposed trading regulations were fully consistent with the applicable statutory authorities. *Id*. at 5799.

EPA and DEP are empowered and possess the expertise to implement the CWA, including establishing detailed implementation procedures and practices for this complex regulatory area that fill the gaps in the CWA. In the absence of any evidence in the text or legislative history to the contrary, the agencies' longstanding conclusion that water quality trading is permissible under the CWA should not be disturbed.

B. Congress Is Well-Aware of and Has Approved the Use of Water Quality Trading under Clean Water Act Authority

Appellant draws patently wrong conclusions from its summary of the CWA's legislative history with respect to water quality trading. Congress is well-aware that EPA and States have been utilizing trading programs under the authority of the CWA since the early 1980s, and Congress's consistent response has been unqualified acceptance. This "is persuasive evidence that [EPA and DEP's] interpretation is the one intended by Congress.'" *Commodity Futures Trading Comm'n v. Schor*, 478 U.S. 833, 846 (1986) (quoting *NLRB v. Bell Aerospace Co.*, 416 U. S. 267, 274–75 (1974)).

Wisconsin implemented the first point source-to-point source water quality trading program for the Fox River in 1981.[17] Colorado implemented the first trading program incorporating nonpoint sources in 1984.[18] As early trading programs were springing up around the country, Congress overhauled the CWA in 1987, Water Quality Act of 1987, Pub. L. No. 100-4, 101 Stat. 7 (1987), including making substantial revisions to the NPDES permit provisions in 33 U.S.C. §§ 1311 and 1342, water quality standards provisions in § 1313, and the definitions in § 1362. Congress took no action to stifle these existing water quality trading programs.

In 1992, Representative Robert Roe, who was the principal drafter of the 1987 overhaul of the CWA, asked the GAO to evaluate water quality trading as a cost-effective means of obtaining pollutant reductions. GAO, *Pollutant Trading Could Reduce Costs If Uncertainties Are Resolved* (1992).[19] The GAO found that although the CWA "contains provisions that suggest trading is allowed," there would be "benefits in amending the act to more clearly signal that trading is permissible." *Id*. at 5. No action was taken at that time.

Congress took up the GAO's suggestion in a 1995 bill, which would have added a section to the CWA clarifying the statutory authority for trading. Clean Water Amendments of 1995, H.R. 961, 104th Cong. § 302 (1995) (proposed to be codified at 33 U.S.C. §§ 1311(r)). The House Transportation and Infrastructure Committee report on the bill is enlightening. Summarizing the bill, the Committee emphasized that the proposed revisions would change the existing law to empower EPA and States to use trading to modify *technology-based* permit limits, H.R. Rep. No.

[17] EPA, *Incentive Analysis for Clean Water Act Reauthorization: Point Source/Nonpoint Source Trading for Nutrient Discharge Reductions* 21 (Apr. 1992), *available at* https://www.epa.gov/sites/production/files/2017-09/documents/ee-0443_1-5_acc.pdf.
[18] *Id*. at 20.
[19] *Available at* https://www.gao.gov/assets/220/216390.pdf.

104-112 (1995),[20] which historically has not been allowed in *water quality-based* trading programs.[21] The Committee made no mention of the fact that the same amendment would also provide express authorization for the use of trading to comply with water quality-based permit limits like those at issue in Keystone Protein's permit. Such trades had been occurring with EPA's blessing and Congress's knowledge for years, and the Committee did not appear to view the amendment as substantively changing the law on trading in this respect. The bill passed the House but was not taken up in the Senate.

Nearly a decade later, Congress tasked its Congressional Research Service (CRS) with evaluating EPA's 2003 Water Quality Trading Policy. After summarizing Congress's interest in oversight of EPA and State water quality trading programs in the past, CRS noted that Congress could consider codifying the trading policy in the CWA. CRS, *EPA's Water Quality Trading Program* 6 (2003).[22] Congress saw no need to write express trading language into the CWA.

More recently, the GAO was again instructed by Congress to review State water quality trading programs and evaluate the factors of the most successful programs. GAO Rpt. The GAO reported that, as of 2014, 19 nutrient credit trading programs were active in 11 States. Pennsylvania, Virginia, and Connecticut were identified as having the most successful programs. *Id*. at 12. Similar to the 1992 report, the GAO also found that although the "Clean Water Act does not explicitly identify trading as an option," EPA guidance reiterates that "the act provides

[20] *Available at* https://www.congress.gov/congressional-report/104th-congress/house-report/112/1.

[21] DEP's trading regulations generally prohibit the use of credits and offsets to comply with technology-based effluent limitations. 25 Pa. Code § 96.8(b)(6).

[22] *Available at* https://www.everycrsreport.com/files/20030129_RS21403_27b7a5dca649327bccd6e8b79c1f5957037f9b17.pdf.

authority for EPA and states to develop a variety of programs and activities to control pollution[,] including trading programs." *Id*. Once again, Congress was not compelled to act.

In an action more directly related to the permit at issue in this appeal, Congress also endorsed the use of water quality trading for restoring the Chesapeake Bay. In 2000, EPA's Chesapeake Bay Program Office was in the process of finalizing Bay-wide trading guidance, and three Bay States (including Pennsylvania) had developed formal or draft trading policies in concert with the tributary basin strategies called for in the multi-state Chesapeake Bay Agreement. *See* Chesapeake Bay Program, *Nutrient Trading Fundamental Principals and Guidelines* 6–9 (2001).[23] Congress continued those efforts by passing the Chesapeake Bay Restoration Act of 2000 directing EPA to continue supporting implementation of the Chesapeake Bay Agreement and the Bay States' respective "tributary basin strategies"—which included the template for the trading program at issue in this appeal. Pub. L. No. 106-457, § 203(g), 114 Stat. 1967 (2000) (codified at 33 U.S.C. § 1267(g)).

In sum, Congress's oversight and response to almost four decades of water quality trading has been awareness and unqualified acceptance. "Congress is presumed to be aware" that EPA, State agencies, and courts have consistently found that water quality trading is permitted under the CWA, *see Forest Grove Sch. Dist. v. T. A.*, 557 U.S. 230, 239–40 (2009). However, Congress has done nothing to disturb water quality trading programs when it has revisited relevant sections of the CWA. Moreover, in 2000, Congress authorized EPA to continue the work of the Chesapeake Bay Program, which was engaged in fostering trading programs including the one at issue in this appeal. This long history of congressional acquiescence to EPA, States, and, as discussed further below, courts' views on water quality trading under the CWA, despite numerous amendments to

[23] *Available at* https://www.chesapeakebay.net/content/publications/cbp_12268.pdf.

the CWA over the years, contradicts Appellant's arguments in this appeal. *See Commodity Futures Trading Comm'n*, 478 U.S. at 846 (noting that "congressional failure to revise or repeal the agency's interpretation is persuasive evidence that the interpretation is the one intended by Congress").

C. Courts Have Uniformly Held that Water Quality Trading Is Permissible under the Clean Water Act

No court has ever held that water quality trading is unlawful under the CWA. In a similar action brought by Appellant Food & Water Watch in the District of Columbia federal district court in 2012, Appellant claimed that the pollution trading and offset provisions under the Chesapeake Bay TMDL are "contrary to the Clean Water Act, and arbitrary and capricious in violation of the Administrative Procedure Act." *Food & Water Watch v. EPA*, 5 F. Supp. 3d 62, 66 (D.D.C. 2013). Although the court dismissed Appellant's complaint on procedural grounds, the court also appeared to reject Appellant's substantive position by noting that "[o]ffsets and trades are but *one option in the States' arsenal* for achieving" goals under the CWA. *Id.* at 78 (emphasis added).

In another challenge to the Chesapeake Bay TMDL filed in the U.S. District Court for the Middle District of Pennsylvania in 2011, the court observed that "the TMDL *supports the use of water quality trading programs* that permit point and non-point sources to trade pounds of phosphorus or nitrogen, provided such trading does not result in exceedances of water quality standards and is otherwise consistent with the CWA and applicable regulations." *Am. Farm Bur. Fed. v. EPA*, 984 F. Supp. 2d 289, 294 (M.D. Pa. 2013) (emphasis added).

Outside of the Chesapeake Bay TMDL context, the handful of other courts that have addressed water quality trading have not questioned its lawfulness under the CWA. *See, e.g.*, *Ohio Valley Envtl. Coalition v. Horinko*, 279 F. Supp. 2d 732, 776 (S.D. W. Va. 2003) (EPA's interpretation of trading provisions for pollutant offsets in West Virginia's antidegradation

implementation policies were reasonable and EPA's approval was not arbitrary or capricious because the "provisions can reasonably be read to mean that the trade must result in an improvement in water quality in the water segment where the new or expanded discharge is located."); *In re City of Annandale*, 731 N.W.2d 502, 524 (Minn. 2007) (concluding that "allowing offsets from another source in determining whether a new source will cause or contribute to the violation of water quality standards is reasonable and is consistent with the purposes and principles of the CWA"); *Assateague Coastkeeper v. Md. Dep't of the Env't*, 28 A.3d 178, 207 (Md. Ct. Spec. App. 2011) ("[A]llowing the consideration of pollution offsets in determining whether a discharge 'causes or contributes' to a violation of water quality standards, is reasonable.").

D. There Is No Conflict Between Water Quality Trading and Any Provision of the Clean Water Act

1. Keystone Protein's Permit Contains Enforceable Effluent Limitations for Nitrogen and Phosphorus

Appellant's assertion that the net annual nitrogen and phosphorus limits in Keystone Protein's permit do not meet the CWA's definition of "effluent limitations" due to the permit's trading provision disregards the plain meaning of the statute's text. An effluent limitation is "*any restriction*" on the discharge of pollutants from a point source. 33 U.S.C. § 1362(11) (emphasis added). Giving these undefined words their "common and approved usage," 1 Pa.C.S. § 1903(a), the annual nitrogen and phosphorus discharge limits in Part A.I.D of Keystone Protein's permit are clearly "any restrictions" on the quantity of nutrients that can be discharged. The permit restricts Keystone Protein's annual discharges of nitrogen and phosphorus to 19,786 and 380.5 pounds, respectively, or the defined higher level of one additional pound for each credit or offset reduction it procures from a third party. Although the restriction on the amount discharged from Keystone Protein's outfall might equate to, say, 390 pounds of phosphorus if the facility obtains

about 10 pounds of reduction credits from another source, that 390 pound limitation with accompanying offset is a restriction nonetheless under the CWA definition of "effluent limitations" including "any restriction." EPA and DEP's determination that the net permit limits at issue in this appeal are effluent limitations is the only reasonable reading of the statutory definition, and the agencies' construction is entitled to deference.

2. Water Quality Trading Is Consistent with the Statutory Intent of Water Quality-Based Effluent Limitations

Not only are the permit's net annual nitrogen and phosphorus limits consistent with the text of the CWA, they are consistent with the spirit as well. Appellant loses sight of the fact that the express intent of imposing water quality-based effluent limitations in permits is to ensure that water quality in the receiving waterbody is protected. *See* 33 U.S.C. § 1311(b)(1)(C); 40 C.F.R. § 122.44(d)(vii). Water quality trading ensures that the total quantity of pollutants discharged to the subject waterbody is equal to—and often less (i.e., better) than[24]—the level necessary to protect water quality.

Part C.I.A of Keystone Protein's permit explains that the permit's net annual nutrient limits are water quality-based effluent limitations imposed "to meet the downstream water quality standards" in the Chesapeake Bay. DEP has determined, and Appellant has not disputed, that the annual limits on the discharges of nitrogen and phosphorus from Keystone Protein's facility are sufficiently stringent to be consistent with water quality standards in the Chesapeake Bay. Of course, the nutrients discharged from Keystone Protein's facility will commingle with nutrients from thousands of other sources in the Susquehanna River watershed flowing toward the Bay. If

[24] For example, DEP's trading regulations require that 10% of all credits generated by an entity must be set aside for DEP's credit reserve and are unavailable for use by any permittee. 25 Pa. Code § 96.8(e)(3)(v). This set-aside mechanism effectively means that 1.1 pound of nitrogen or phosphorus reduction must be achieved for every 1.0 pound of credit that is generated for trade.

the facility discharges 100 pounds of nitrogen in excess of its 19,786-pound annual limit, it must offset that increase by having a third party reduce by 110 pounds (accounting for 10% credit set aside mandated by DEP's trading regulations). The use of water quality trading to comply with the nitrogen limit therefore results in an extra reduction in nitrogen loads delivered to the Bay *below* the quantity all parties agree would meet water quality standards. This is clearly consistent with the CWA goal of protecting water quality in the Chesapeake Bay.

3. Water Quality Trading Does Not Violate the Public Participation Requirements of the Clean Water Act

Appellant claims the trading provisions in Keystone Protein's permit violate the CWA's public participation requirements by referencing a statutory policy statement and a clearly distinguishable case. The provision of the CWA cited by Appellant directs EPA to "publish regulations specifying minimum guidelines for public participation" in the development of effluent limitations. 33 U.S.C. § 1251(e). EPA responded to this provision by promulgating regulations affording the public the right to review and comment on draft NPDES permits and to have their comments responded to by the permitting agency. 40 C.F.R. §§ 124.11, 124.17. Nothing in the record suggests that Appellant has been denied these rights. To the contrary, Appellant's assertion that its public participation rights have been violated "is contradicted by the record evidence of [its] extensive participation in every stage of the" of the permitting process. *Am. Coke & Coal Chems. Inst. v. EPA*, 452 F.3d 930, 943 (D.C. Cir. 2006).

Appellant's discussion of *Waterkeeper Alliance Inc. v. EPA*, 399 F.3d 486 (2d. Cir. 2005), is no more persuasive. In that case, a court found that EPA's Concentrated Animal Feeding Operation (CAFO) regulation violated the CWA's public participation requirements because interested parties could not review and comment on nutrient management plans required to be developed by CAFOs. *Id*. at 504. The court explained that the applicable effluent limitation for a

CAFO permit is the numeric "rate" (or quantity) at which a CAFO can apply manure to its fields. *Id*. at 502. That rate would be established by the CAFO itself in the course of developing its nutrient management plan—which would not be subject to review by the public or the relevant permitting agency. *Id*. at 502. According to the court, this gave the public no basis to know, much less comment on, the actual effluent limitation for any given CAFO. *Id*.

A permit condition allowing water quality trading to satisfy a numeric effluent limitation on nutrient discharges is not comparable to the nutrient management plans at issue in *Waterkeeper Alliance*. As a reminder, Keystone Protein can utilize water quality trading *only* to satisfy the water quality-based effluent limitations in its permit established to protect downstream water quality in the Chesapeake Bay. During the public comment period, Appellant was fully aware of the net quantity of nutrients that could be discharged to the Bay if Keystone Protein's then-draft permit was issued. This permitted quantity of nutrients discharged to the Bay would be the same whether or not Keystone Protein were to take advantage of trading to comply with the limit—in fact, the discharge will be even lower if the permittee uses trading due to DEP's 10% set-aside requirement for credit generation and trades as discussed above. Moreover, it is well-established that the public's meaningful opportunity to comment on draft permits is not violated merely because certain details about the specific methods of compliance will be determined after the permit is issued. *See Md. Dep't of Env't v. Anacostia Riverkeeper*, 134 A.3d 892, 941–42 (Md. 2016). Appellant possessed all material information necessary to provide comments on whether this water quality-based effluent limitation complies with the CWA and the purpose of the limits to protect water quality in the Chesapeake Bay.

4. A Properly Designed Water Quality Trading Program Presents No Threat to Local Water Quality

Any properly designed water quality trading program will include provisions to ensure that trading does not present a threat to local water quality. DEP's trading program accomplishes this objective by prohibiting the use of credits and offsets if discharges from the permitted facility would violate any applicable local water quality standards. 25 Pa. Code § 96.8(i)(1). Additionally, trading cannot be used to satisfy technology-based effluent limitations or where trading would be inconsistent with a local TMDL. *Id*. § 96.8(i)(3)–(4).

Appellant's insinuation that water quality trading somehow allows Keystone Protein to discharge an unlimited quantity of nutrients into Little Swatara Creek is absurd. As Appellant recognizes, under Section I.A. of the permit, the facility is subject to a daily maximum mass limit for Total Phosphorus and concentration limits for Total Phosphorus and Total Nitrogen. These nutrient limits must be met at the facility; the permit does not allow them to be satisfied through trading. Especially in light of these limits, there is no reasonable basis for Appellant to claim that engaging in water quality trading to meet additional, more stringent limitations on the quantity of nutrients discharged for purposes of protecting the downstream Chesapeake Bay will harm local water quality in Little Swatara Creek.

III. WATER QUALITY TRADING IS ENTIRELY CONSISTENT WITH THE CHESAPEAKE BAY TMDL

As discussed above, implementation of the management measures necessary to achieve the Chesapeake Bay TMDL's target reductions by the target 2025 timeframe is a monumental and expensive endeavor. Denying States and permittees hte use of water quality trading would likely increase the overall cost by hundreds of millions of dollars and significantly delay implementation.

Fortunately, water quality trading is consistent with, and expressly authorized by, the Chesapeake Bay TMDL.

A. EPA Made Water Quality Trading an Express Assumption of Its Chesapeake Bay TMDL

Appellant correctly points out that the CWA regulations mandate that water quality-based effluent limitations must be "consistent with the assumptions and requirements of [the] wasteload allocation for the discharge." 40 C.F.R. § 122.44(d)(1)(vii)(B). However, Appellant errs by asserting that Keystone Protein's effluent limitations, or water quality trading more generally, are not consistent with assumptions and requirements of the Chesapeake Bay TMDL. App. Memo. 13. The Chesapeake Bay TMDL expressly contradicts Appellant on this point:

> EPA recognizes that a number of Bay jurisdictions already are implementing water quality trading programs. EPA supports implementation of the Bay TMDL through such programs, as long as they are established and implemented in a manner consistent with the CWA, its implementing regulations, and EPA's 2003 Water Quality Trading Policy (USEPA 2003e) and 2007 Water Quality Trading Toolkit for NPDES Permit Writers (USEPA 2007d). ***An assumption of this TMDL is that trades may occur between sources contributing pollutant loadings to the same or different Bay segments,*** provided such trades do not cause or contribute to an exceedance of WQS in either receiving segment or anywhere else in the Bay watershed.

Chesapeake Bay TMDL 10-3 (emphasis added).

Not only did EPA recognize in the Chesapeake Bay TMDL that water quality trading is a proper method for existing dischargers to comply with their respective wasteload allocations, it expressed that trading and offsets are *necessary* to accommodate new or increased discharges in the watershed:

> Where the TMDL does not provide a specific allocation to accommodate new or increased loadings of nitrogen, phosphorus, or sediment, a jurisdiction may accommodate such new or increased loadings only through a mechanism allowing for quantifiable and accountable offsets of the new or increased load in an amount necessary to implement the TMDL and applicable WQS in the Chesapeake Bay and its tidal tributaries. Therefore, the Chesapeake Bay TMDL assumes, and EPA

> expects, that the jurisdictions will accommodate new or increased loadings of nitrogen, phosphorus, or sediment that do not have a specific allocation in the TMDL with appropriate offsets supported by credible and transparent offset programs subject to EPA oversight.

Id. at 10-1. The trading provision in Keystone Protein's permit is consistent with the explicit assumptions and requirements of the Chesapeake Bay TMDL.

B. States Have Flexibility for Implementing the Chesapeake Bay TMDL's Wasteload Allocations in Individual Permits

Appellant's argument that Keystone Protein's wasteload allocation was fixed by the Chesapeake Bay TMDL and cannot thereafter be adjusted by DEP through a water quality trading provision grossly misconstrues the facts and applicable law.

As a threshold factual matter, Appellant incorrectly asserts that Keystone Protein was assigned an "individual" wasteload allocation for nutrients in the Chesapeake Bay TMDL. App. Memo. 13. In fact, only 492 "significant" dischargers were assigned individual wasteload allocations. Thousands of other "nonsignificant" dischargers, including Keystone Protein, were grouped together and assigned *aggregate* allocations. *See* Chesapeake Bay TMDL App'x Q. The fact that the TMDL did not assign individual wasteload allocations to the vast majority of individual dischargers further underscores the flexibility reserved to the Bay States to secure the type of *net* reductions in nutrient discharges that are obtained most efficiently through robust water quality trading programs.

A TMDL is a planning document and its wasteload allocations are always subject to reasonable revision and adjustment as the permit-issuing authority translates them into effluent limitations in individual permits. A federal court reviewing challenges to the Chesapeake Bay TMDL rejected the same argument Appellant raises here. In *American Farm Bureau v. EPA*, the challengers argued that the Chesapeake Bay TMDL "creates unlawfully binding, 'locked-in'

allocations." 984 F. Supp. 2d 289, 327 (M.D. Pa. 2013), *aff'd* 792 F.3d 281 (3d Cir. 2015). The court disagreed for three reasons. First, States retain a degree of flexibility to revise the allocations in the TMDL. 984 F. Supp. 2d at 327. Second, because 40 C.F.R. § 122.44(d)(1)(vii)(B) requires that permit limits be "consistent with"—*but not identical to*—applicable wasteload allocations, "a state may write an NPDES permit limit that is different from the [wasteload allocation], provided that it is consistent with the operative assumptions underlying the [wasteload allocation]." *Id*. at 328 (citing *In re City of Moscow*, 10 E.A.D. 135 (EPA Envtl. App. Bd. 2001)). Third, and most directly relevant here, the court opined that "individual sources are free to trade pollution amounts *without the need to revise or adjust the TMDL allocations*." *Id*. (emphasis added).

For all practical purposes, the *American Farm Bureau* court affirmed the practice DEP implemented here. The Chesapeake Bay TMDL assumes that permittees may engage in water quality trading to implement the wasteload allocations that are translated into their permits as effluent limitations. DEP acted well within its authority in authorizing Keystone Protein to comply with protective restrictions on nutrient discharges on a "net" basis using water quality trading.

IV. CONCLUSION

For the reasons stated herein, Municipal Associations respectfully request that the Board reject Appellant's appeal and affirm that water quality trading is permissible under the CWA.

Respectfully Submitted,

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