



COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL HEARING BOARD

CONCERNED CITIZENS OF UPPER MOUNT BETHEL TOWNSHIP	:	
	:	
	:	
v.	:	EHB Docket No. 2023-001-CS
	:	
COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION and NEW DEMI ROAD, LLC, Permittee	:	Issued: March 14, 2025
	:	

ADJUDICATION

By Judge Sarah L. Clark, in which Judge MaryAnne Wesdock joins

Judge Bernard A. Labuskes, Jr. files a separate Opinion, in which Chief Judge and Chairperson Steven C. Beckman joins

Judge Paul J. Bruder, Jr. is recused

Synopsis

The status quo is maintained and this third-party appeal of a Major Amendment to an Individual NPDES permit is dismissed where one of the Board’s judges is recused, and the remaining Board judges are evenly divided on the merits of this third-party appeal.

FINDINGS OF FACT

The Parties stipulated to the following facts:

1. Appellant Concerned Citizens of Upper Mount Bethel Township is a citizens group who oppose the issuance of the major amendment to the Permit at issue in this appeal. (Parties’ Joint Stipulation of Facts No. (“Stip.”) 1.)

2. The Department is the agency with the duty and authority to administer and enforce The Clean Streams Law, Act of June 22, 1937, P.L. 1987, No. 394, as amended, 35 P.S. §§ 691.1-691.1001 (“Clean Streams Law”); Section 1917-A of the Administrative Code, the Act of April 9, 1929, P.L. 177, as amended, 71 P.S. § 510-17 (“Administrative Code”); and the rules and regulations promulgated thereunder. (Stip. 2.)

3. The Department administers the Title 25 Chapter 102 regulations (relating to erosion and sediment control and post-construction stormwater management), which were promulgated under the authority of the Clean Streams Law (“Chapter 102 Regulations”). (Stip. 3.)

4. The Department has the authority to delegate certain regulatory functions to County Conservation Districts. 3 P.S. § 859(2); 25 Pa. Code § 102.41. The Northampton County Conservation District (“NCCD”), at the time of the review and issuance of the major amendment of the permit subject to the instant appeal, was the Department’s designee for the administration of the Post Construction Stormwater Management (“PCSM”) Program and for the administration and enforcement functions of the Erosion and Sediment (“E&S”) Pollution Control Program for the discharge of stormwater associated with construction activities within the political boundaries of Northampton County, consistent with 3 P.S. § 859(2) and 25 Pa. Code § 102.41. (Stip. 4.)

5. Permittee is New Demi Road, LLC, a limited liability company registered to do business in Pennsylvania and abroad. Permittee is the owner of 60.84 acres of real property located at 303 New Demi Road, Mount Bethel PA 18343, which is approximately 2,750 feet southwest of River Road in Upper Mount Bethel Township, Northampton County, PA (“Property”). Permittee is the recipient of the Major Amendment to NPDES Permit No. PAD480132 (“Amended Permit”). (Stip. 5.)

6. Permittee is a successor in interest to property owned by Portland Properties, LLC (“Portland”). (Stip. 6.)

7. The Project Site covered by the Amended Permit is located in the I-2 General Industrial Zoning District. It is bounded by Demi Road and commercial properties to the north, residential properties to the west, and wooded land and open agricultural land to the south and east. (Stip. 7.)

8. In its pre-development state, the Project Site is undeveloped, with existing and historic use of the property being 16% agriculture and 84% forest/woodland. (Stip. 8.)

9. The surface cover of the Project Site generally consists of surficial forest litter with fallen branches/trees and sporadic cobbles/boulders. (Stip. 9.)

10. Topographically, the Project Site is located on a slope, strongly sloping in the southeast to northwest direction, and separated by a very steep slope/ridge near the southeastern property edge. (Stip. 10.)

11. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, along its eastern edge, the Project Site’s elevation ranges from approximately 595 feet near the southeast corner to approximately 540 feet near the northeastern corner. Along its western edge, the Project Site’s elevation ranges from approximately 405 feet in the southwest corner to approximately 390 feet in the northwest corner. (Stip. 11.)

12. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, an unnamed tributary of the Delaware River is located partially within and along the Project Site’s western boundary. (Stip. 12.)

13. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, the unnamed tributary of the Delaware River located partially within

and along the Project Site's western boundary drains directly to the Delaware River approximately 4,500 feet to the east. (Stip. 13.)

14. Using the northern, western, southern and eastern edge or property boundary of the site as depicted on Joint Exhibit 1, the unnamed tributary of the Delaware River partially within and along the Project Site's western boundary is classified under 25 Pa. Code Chapter 93 as Cold-Water Fishes, Migratory Fish (CWF-MF). (Stip. 14.)

15. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, the unnamed tributary of the Delaware River partially within and along the Project Site's western boundary as well as the Delaware River is not impaired and is a non-TMDL watercourse. (Stip. 15.)

16. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, wetlands are present along the western boundary of the Project Site. (Stip. 16.)

17. The wetlands along the western boundary of the Project Site are Exceptional Value (EV) wetlands of the Commonwealth because of the presence of bog turtle habitat. (Stip. 17.)

18. The bog turtle is listed as an endangered species under Pennsylvania's Fish and Boat Code, 30 Pa.C.S. §§ 2102 and 2305. (Stip. 18.)

19. The bog turtle is listed as a threatened species under the federal Endangered Species Act, 16 U.S.C. § 1531 *et seq.* (Stip. 19.)

20. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 1, the EV wetlands on the western side of the Project Site range in elevation from approximately 405 feet at their southernmost point in the southwest corner of the

Project Site to approximately 390 feet at their northernmost point in the northwest corner of the Project Site. (Stip. 20.)

21. The proposed project is the development of the Project Site with a 420,000 ft² building with associated employee parking lot consisting of 97 spaces, rear truck court for 42 loading dock spaces, 72 trailer spaces, and direct access to the Demi Road cul-de-sac (“Proposed Development”). (Stip. 21.)

22. The Proposed Development will involve earth disturbance activities that would disturb approximately 50.99 acres of the Project Site. (Stip. 22.)

23. The Proposed Development includes 15.64 ac. +/- of new impervious surfaces. (Stip. 23.)

24. The building plans indicate a proposed finished floor elevation of the building of 495.95 feet. (Stip. 24.)

25. Maximum cuts are anticipated to be on the order of approximately 12 feet at the southern building corner, 36 feet for the southern parking area, and 61 feet for the eastern parking area. (Stip. 25.)

26. Maximum fill at the Project Site will be approximately 33 feet in the north building corner. (Stip. 26.)

27. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 2, surface flows of stormwater falling east of the cut on the eastern side of the Project Site will be managed by a newly-constructed diversion swale. The swale will run along the eastern edge of the Project Site until the [Swale] reaches the northern boundary of the Project Site, where stormwater will enter a pipe running along the northern boundary and flowing

towards the west, ultimately discharging via an outlet across a riprap apron at the north[west]¹ corner of the site to the unnamed tributary of the Delaware running along the western edge of the Project Site. (Stip. 27.)

28. Stormwater falling on the building, parking lot and associated facilities proposed for the Project Site will be managed by three dry extended detention basins onsite: Basin 1A, 1B, and 1C. (Stip. 28.)

29. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 2, Basin 1A is an underground detention basin located directly south of the building. It is designed to collect stormwater falling on the southern half of the building roof as well as on constructed areas south of the building. (Stip. 29.)

30. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 2, Basin 1B is an above-ground detention basin located near the northwest corner of the building. It is designed to collect stormwater falling on the northern half of the building roof, and the constructed areas north of the building. (Stip. 30.)

31. Using the northern, western, southern and eastern edge or boundary of the site as depicted on Joint Exhibit 2, Basin 1C is an underground detention basin located on the eastern side of the building near the buildings southeast corner. It is designed to collect stormwater falling on the paved areas on the east side of the building. (Stip. 31.)

32. The three basins were not designed for infiltration due to unacceptable infiltration test results and perched and/or seasonal high-water tables in those areas. (Stip. 32.)

¹ While the Parties' Joint Stipulation as to Facts states that the clean water diversion swale discharges to the *northeast* of the Project Site, the Board believes that the clean water diversion swale discharges into the voluntary riparian forest buffer in the *northwest* corner of the Project Site. A review of the PCSM Plan confirms this. (Joint. Exhibit 1.)

33. Basins 1A, 1B, and 1C are all designed to discharge their stormwater via three level spreaders located to the west of the northern half of the building, although Basin 1B includes an emergency overflow outlet to the pipe carrying flow from the diversion swale. (Stip. 33.)

34. The Proposed Development utilizes a bog turtle conservation zone that is designed to extend approximately 300 feet from the edge of the wetlands on the western side of the Project Site up the slope of the Project Site, but sections of the bog turtle conservation zone south and west of the proposed building were modified as approved by the U.S. Fish and Wildlife Service. (Stip. 34.)

35. In 2004, a Bog Turtle Phase II Visual Survey was performed by Amy S. Greene of Environmental Consultants, Inc. (ECI) during which two (2) bog turtles were found in a wetland located on, and adjacent to the west of, the project parcel. Because of this, a 300-foot habitat protection buffer was established from the wetlands where the bog turtles were found, except for a small portion of an entrance road being located within it. (Stip. 35.)

36. In August of 2019, Permittee, through Vertek, retained Herpetological Associates, Inc. (HAI) to provide consultation services for the bog turtle associated with the NPDES Permit Boundary (as defined in Stipulated Fact #57), which included (1) review all available project information related to the bog turtle and proposed development plans, including Phase I and II bog turtle reports, wetland delineation reports, wetland maps, project maps, permits, agency correspondence and Pennsylvania Natural Diversity Inventory (PNDI) results, (2) a field view to examine all wetlands and determine their suitability for bog turtles, and (3) assist Permittee and Vertek in the preparation of a document package for review by United State Fish and Wildlife Service (USFWS), including any modification of the typical 300-foot bog turtle buffer. (Stip. 36.)

37. On March 24, 2020, HAI conducted a site visit of the bog turtle habitat within the NPDES Permit Boundary (as defined in Stipulated Fact #57), and HAI’s field visit of the habitat confirmed that suitable bog turtle habitat is still present, although the wetland is being negatively impacted by the growth of cattail and reed canary grass. (Stip. 37.)

38. In a letter to USFWS dated April 13, 2020, HAI noted that “the majority of the wetland is classified as emergent and hydrology is provided by multiple sources including seeps that emerge along the northwestern wetland edge, and by larger springs that emerge laterally near the base of the slope along the southeastern, forested wetland edge.” HAI also noted the following in the letter:

An unnamed tributary enters the wetland from the western corner and two culverts drain water under a gravel road from the south. Two channels from along the northwestern and southeastern wetland edges, and the overall direction of water flow through the wetland is from southwest to northeast. Numerous smaller rivulets spread water flow through the wetland.

(Stip. 38.)

39. The 300 ft. +/- bog turtle buffer is primarily wooded (which HAI described as “mixed hardwood forest with mature trees and a moderately dense understory”). (Stip. 39.)

40. The soils within the 300 ft. +/- buffer are mapped primarily as the Conotton soil series. The Conotton series is designated as Hydrologic Soil Group A (HSG A), which are highly permeable soils. While these soils might be suitable for stormwater recharge, no testing was performed in this area as construction within the 300-ft bog turtle buffer is not permitted. (Stip. 40.)

41. A portion of the grading associated with the proposed driveway and stormwater management facility, including outfalls from onsite stormwater structures, for the Proposed Development encroaches within the margins of the 300-foot buffer up to a maximum of 75 feet

when accounting for construction of the proposed improvements. As a result, Permittee, through HAI, on April 13, 2020 requested the United States Fish and Wildlife Service (“USFW”) to review a modification to the 300-foot wide/deep bog turtle buffer criteria in certain areas because of these encroachments as indicated in Vertek’s April 9, 2020 letter. (Stip. 41.)

42. On August 6, 2020, in response to HAI’s April 13, 2020 letter about the modification to the 300-foot bog turtle buffer, USFW sent a letter in which it stated:

The proposed Demi Road Logistics Center project is a new 300,000 square-foot building and associated parking, loading, and unloading areas, driveway, stormwater management and conveyance facilities, and other associated improvements on what is currently a primarily forested 67.7-acre property. A portion of the grading associated with the proposed driveway and stormwater management facility, including outfalls from onsite stormwater structures, encroaches within 300 feet of the wetland along the project’s western boundary up to a maximum of 75 feet when accounting for construction of the proposed improvements . . .

As proposed, the Logistics Center encroaches within the surrounding [bog turtle] conservation zone by 75 feet for a portion of the driveway and stormwater management facilities. This conservation zone was previously diminished by development on adjacent properties. The project proponents assert that, as designed, the proposed action will preserve the hydrology in the wetland and avoid adverse effects to bog turtles. Based on our review of the information provided, including the project description, project plans, and anticipated consequences of construction and operation of the Logistics Center, we concur that the proposed project may affect but is not likely to adversely affect the bog turtles or their habitat.

(Stip. 42.)

43. On January 5, 2021 and January 12, 2021, Vertek and HAI, respectively, sent a follow-up request to USFW for minor modification to the 300-foot bog turtle buffer based on the increase in building size from 300,000 sf to 420,000 sf. (Stip. 43.)

44. Through a response dated May 14, 2021, USFW sent a form stating:

The federally listed bog turtle occurs or may occur in or near the project area. However, based on our review of the information provided, including the project description and location (Modifications to previously reviewed construction proposal are minor and not likely to impact bog turtle habitat) no adverse effects to

this species is likely to occur. If there is any change in the location, scale, scope, layout or design of the project, further consultation or coordination with the Service will be necessary.

(Stip. 44.)

45. On or about October 20, 2021, Value Engineering sent a follow-up request to USFW requesting an updated clearance letter after an additional PNDI search was conducted.

(Stip. 45.)

46. On December 3, 2021, USFW sent a response to the October 20, 2021 request on a form which stated:

The federally listed bog turtle occurs or may occur in or near the project area. However, based on our review of the information provided, including the project description and location (Updated PNDI polygon only. No changes to scope, work proposed, or project impacts. Comments issued in our letter of August 6, 2020, remain valid) no adverse effects to this species is likely to occur. If there is any change in the location, scale, scope, layout or design of the project, further consultation or coordination with the Service will be necessary.

(Stip. 46.)

47. On September 26, 2016, the Department issued NPDES Permit No. PAI024816005 to Portland Properties, LLC for development of the Site that centered around the potential construction of a forty thousand (40,000) square foot industrial building along with associated site improvements (parking, access drives, stormwater management, etc.) on a 23.4 acre lot. (Stip. 47.)

48. On June 18, 2020, NPDES Permit No. PAI024816005 was transferred to New Demi Road and reassigned as NPDES Permit No. PAD480132 (“transferred permit”). (Stip. 48.)

49. Permittee retained Vertek to prepare the stormwater management design that included preparation of Erosion and Sedimentation (E&S) Plans, E&S Narrative Report, Post Construction Stormwater Management (PCSM) plans, and PCSM Report and assist Permittee in

the preparation and submission of application for a major amendment to the transferred NPDES Permit. (Stip. 49.)

50. On March 11, 2020, June 17, 2020, July 22, 2020; and January 27, 2021, the NCCD held pre-application meetings with representatives of New Demi Road and their design consultants to discuss, among other things, general design, environmental, technical, and regulatory considerations associated with development of the Property. (Stip. 50.)

51. During the preapplication meetings, the Applicant's consultant, Geo-Technical Associates, Inc. ("GTA"), submitted a "Stormwater Infiltration Report" after performing a predevelopment site characterization of the on-site soils ("Soil Characterization"). (Stip. 51.)

52. As to the potential for infiltration BMPs within the area proposed for development and earth disturbance, GTA's Report included its finding that "infiltration of stormwater on the site is considered marginally feasible and very limited." (Stip. 52.)

53. On or about February 9, 2021, Permittee, through Vertek, submitted an application for a major amendment to the transferred NPDES Permit ("Major Amendment Application") signed by Permittee on January 22, 2021, describing the Proposed Development as follows:

Construction of a 420,000 sf general industrial/logistics center with associated employee parking lot consisting of 97 spaces and rear truck court for 72 trailer spaces and direct access to Demi Road. Two dry extended detention basins discharging via level spreaders over a 250'-300' wide riparian buffer are provided to manage stormwater rate and volume. The site is being served with public water and on lot sewage.

(Stip. 53.)

54. On or about May 14, 2021, Permittee submitted to DEP/NCCD a General Information Form (GIF), dated May 6, 2021, concerning the development of the Project Site with a 420,000 ft² building with associated employee parking lot consisting of 97 spaces, rear truck court for 42 loading dock spaces, 72 trailer spaces, and direct access to Demi Road. (Stip. 54.)

55. On June 10, 2021, NCCD found the Major Amendment Application administratively complete, and published the Major Amendment Application on June 26, 2021. (Stip. 55.)

56. On November 1, 2021, in response to the Department Technical Deficiency Letter dated September 30, 2021, Permittee, through Vertek, resubmitted a Major Amendment Application signed by Permittee on 10-27-2021. (Stip. 56.)

57. The Major Amendment Application is for a total permit boundary area of 86.04 ac (“NPDES Permit Boundary”), consisting of the following parcels:

- The Property, which is a 60.84 acre parcel and the proposed devilment area (“Project Site”);
- Additional tax parcel to the west of the Project Site (5.5 ac. +/-); and
- An offsite area to the east of the Project Site (19.7 ac. +/-), which is the Ultra-Poly site to be utilized as a haul road/temporary construction access and possible future public sanitary sewer connection (“Ultra-Poly Site”). The Ultra-Poly Site is associated with an open/active NPDES permit # PAC480057 and POI #1.

(Stip. 57.)

58. In connection with its application, Permittee submitted a Post-Construction Stormwater Management (PCSM) Plan. (Stip. 58.)

59. As a result of the Department’s and NCCD’s review of the Application and associated documents, and to ensure compliance with applicable Department regulations, two technical deficiency letters were sent to New Demi Road. The NCCD issued the first technical deficiency letter on September 30, 2021. (Stip. 59.)

60. In response to the September 30, 2021 deficiency letter, a resubmission from New Demi Road was received by the NCCD on or about November 1, 2021. (Stip. 60.)

61. The NCCD issued its second deficiency letter to New Demi Road on February 24, 2022; DEP Exhibit 33, Second Technical Deficiency Letter, dated February 24, 2022. (Stip. 61.)

62. In response to the February 24, 2022 deficiency letter, New Demi Road submitted a second resubmission on or about April 14, 2022. (Stip. 62.)

63. The Department and NCCD determined that each of the deficiencies included in both the September 30, 2021 and February 24, 2022 deficiency letters were fully and adequately addressed. Therefore, on August 5, 2022, the Department issued its draft Major Amendment to NPDES Permit No. PAD480132 and published notice of its issuance in the Pennsylvania Bulletin for review and comment on August 9, 2022. (Stip. 63.)

64. On September 19, 2022, the Department issued to Permittee a Major Amendment to Individual NPDES Permit No. PAD480132 for 303 Demi Road Planned Industrial Park, Upper Mt. Bethel Township and Portland Borough, Northampton County. The Amended Permit authorizes the discharge of stormwater from an earth disturbance activity to UNT to Delaware River (CWF, MF) and UNT to Delaware River via EV Wetlands (EV) in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the Amended Permit. (Stip. 64.)

65. Until the Permittee has received written approval of the Notice of Intent to Terminate (NOT) the Amended Permit, the Permittee, and co-permittees, are “responsible for compliance with the permit terms and conditions, including long-term operation and maintenance of all PCSM BMPs on the project site and is responsible for violations occurring on the project site.” (Stip. 65.)

66. The Amended Permit requires the Permittee “at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including

BMPs, which are installed or used by the permittee to achieve compliance with the terms and conditions of [the Amended Permit].” (Stip. 66.)

67. On November 3, 2022, Permittee recorded the Stormwater Management Plan and Declaration of Restrictions and Covenants. (Stip. 67.)

68. Public Notice of the issuance of the Amended Permit was placed in the Pennsylvania Bulletin on December 3, 2022. (Stip. 68.)

69. On January 2, 2023, Appellant filed its Notice of Appeal of the Amended Permit. (Stip. 69.)

Additional Findings of Fact

70. The EV Wetlands are primarily groundwater fed. (A. Ex. 71.)

71. Stormwater infiltrates into the soil prior to reaching the EV Wetlands (T. Vol. 2 pp. 107-108.)²

72. A level spreader takes the erosive properties out of stormwater runoff by dispersing the water in a sheet flow manner. (T. Vol. 2 pp. 37-38.)

73. The three level spreaders are designed to “replicate predevelopment flow” and drain it through the proposed voluntary riparian forest buffer. (T. Vol. 2 p. 39.)

74. The soils in the voluntary riparian forest buffer downslope from the level spreaders are, Conotton soils and Hydrologic Soil Group A soils, which are more sandy in nature, and are the “most porous and infiltrate the most water.” (T. Vol. 2 pp. 50-51.)

² Because the transcript of the hearing on the merits was provided to the Board and Parties in three nonconsecutively paginated volumes, we indicate the volume number in the citations to the transcript throughout this Adjudication.

75. Looking at the area on the Site, 36% of the preconstruction stormwater flow to the southern half of the wetlands will be diverted to the northern half of the wetlands post construction. (T. Vol. 2 p. 56.)

76. The 14.3 acres of the 39-acre Project Site that drain to the southern portion of the EV Wetlands during preconstruction will be diverted to the northern portion of the EV Wetlands post construction and 24.7 acres, or 64%, of the preconstruction stormwater runoff will continue to flow to the southern half of the EV Wetlands post construction. (T. Vol. 2 p. 56.)

77. The reduction in stormwater flow to the southern wetlands post construction, when considering the entire watershed, is only 5% of total volume. (T. Vol. 2 p. 57.)

78. The entire watershed consists of 293 acres that drain to the EV Wetlands (T. Vol. 2 p. 57.)

79. The volume of stormwater runoff being redirected to the northern portion of the EV Wetlands will be negligible and will not have a negative impact on the hydrology of the southern half of the EV Wetlands. (T. Vol. 2 pp. 60-61.)

80. The TR-55 is a primary modeling software used for calculating stormwater runoff and relying on the USDA Web Soil Survey is industry standard practice. (T. Vol. 2 p. 18.)

81. There are three wetland swale “fingers” or channels that project into the voluntary riparian forest buffer and concentrate flow. (T. Vol. 2 p. 40).

82. The draft five level spreader plan is infeasible due to the presence of the wetland swale channels because they will negate sheet flow through the buffer. (T. Vol. 3 171-172.)

83. The Permittee does not control the Kinney Property from the first 50 feet from the top of the bank of the UNT to the western edge of the Project Site, so a conservation easement could not be obtained to ensure that the voluntary riparian forest buffer would remain there in

perpetuity as required by 25 Pa. Code §102.14(g), making the area to the south of the Kinney Property not viable for locating level spreaders. (T. Vol 2 p. 39; T. Vol. 3 pp. 171-172.)

84. The bottom corner of Basin 1C may dip into the seasonal high water table, but its entire 341.5-foot length will not sit below the seasonal high water table. (T. Vol. 3 pp 58-59.)

85. The facilities that appear to be below the groundwater contour elevations are very localized and will not adversely impact the groundwater flow to the EV Wetlands. (T. Vol. 3 pp. 60-61, 105-106.)

86. The PCSM design preserves hydrologic support to the northwest and southwest wetlands in a similar manner as occurs presently, with stormwater collected and gradually released at the topographically lower portion of the Site, and the gradually released stormwater will infiltrate and move through the relatively permeable surface soils that flank the northwest and southwest wetlands, maintaining Site recharge.” (T. Vol. 2 p. 111; A. Ex. 71.)

87. The Bog Turtle Grading Plan incorporates voluntary conservation recommendations. (T. Vol. 3 pp. 130-132.)

88. Bog turtles require a specific, predominantly groundwater-fed wetland habitat, but they are adaptable to variations in the overall saturation of their habitat throughout the year. (T. Vol. 2 pp. 131, 133-134.)

89. Bog turtles are able to swim and are comfortable on land as well. (T. Vol. 2 p. 135.)

90. A nondischarge alternative eliminates the net change in stormwater rate, volume and water quality, while ABACT manages the net change and can allow for a change. (T. Vol. 3 p. 239.)

91. A nondischarge alternative is always the Department’s preferred option. (T. Vol. 3 p. 239.)

92. A pipe and endwall that discharge stormwater from the Swale is located within the riparian forest buffer. (T. Vol. 3 p. 228.)

93. The pipe and endwall cannot discharge in a sheet flow because it is a pipe outfall. (T. Vol. 3 p. 229.)

94. The Swale diverts offsite stormwater in a non-erosive manner. (T. Vol. 3 pp. 194-195.)

95. The 2-year/24-hour storm is the design basis that the PCSM BMPs are designed to address. (T. Vol. 3 p. 158.)

96. The net change in volume does not exceed preconstruction rates. (T. Vol. 3 p. 188.)

97. The required pollutant reductions are exceeded by the reduction credits, which indicates that the net change in water quality is adequately managed. (T. Vol. 3 p. 191.)

98. The stormwater analysis shows that the net change in peak rate for the 2, 10, 50, and 100 year storms will be adequately managed. (T. Vol. 3 p. 164, 167; DEP Ex. 26 (at 1761).)

DISCUSSION

Concerned Citizens of Upper Mount Bethel Township (“Appellant”), a citizens group, has appealed the Department of Environmental Protection’s (“Department”) issuance of the Major Amendment to Individual NPDES Permit No. PAD480132 (“Amended Permit”) to New Demi Road, LLC (“Permittee”), a limited liability company registered to do business in Pennsylvania and abroad. The Amended Permit authorizes the discharge of stormwater from earth disturbance activity related to a proposed development project (“Project”), to an unnamed tributary to the Delaware River (“UNT”) and an unnamed tributary to the Delaware River via Exceptional Value Wetlands (“EV Wetlands”) in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the Amended Permit. (Joint Stipulation of the Parties (“Stip.”) 64.)

The EV Wetlands are designated as such because of the presence of critical habitat for the bog turtle, a species threatened at the federal level and listed as endangered by the Commonwealth. (Stip. 17-19.) There has been a 300-foot habitat protection buffer (“bog turtle conservation zone”)³ since the discovery of two bog turtles at the proposed Project Site (“Project Site” or “Site”) in 2004, and the proposed development encroaches within the bog turtle conservation zone up to a maximum of 75 feet. (Stip. 35, 41).

Project and Best Management Practices

The Project Site is undeveloped land located in Upper Mount Bethel Township, Northampton County, with a wooded hillside that strongly slopes in the southeast to northwest direction and is separated by a steep ridge near the southeastern property edge. (Stip. 8,9,10.) At about the central point of the western boundary of the Site, there is what has been referred to as a “notch” of land (“Kinney Property”) that intrudes into the Project Site that is owned by Frank Kinney, Jr, and is thus beyond the control of the Permittee. A UNT of the Delaware River is located partially within and along the Project Site’s western boundary and drains directly to the Delaware River approximately 4,500 feet to the east. (Stip. 12, 13.) The UNT is classified as Cold-Water Fishes, Migratory Fish (“CWF-MF”) under Chapter 93. (Stip. 14.) The UNT is not impaired and therefore does not have an assigned Total Maximum Daily Load. (Stip. 15.) Along its western boundary, the Project Site contains wetlands, which are primarily groundwater fed, a fact upon which all parties agree, and are considered Exceptional Value due to the presence of critical habitat of the bog turtle, a species considered threatened at the federal level and endangered by the Commonwealth of Pennsylvania. (A. Ex. 71 at 14; Stip. 16, 17.)

³ The record identifies this area as the “bog turtle habitat protection buffer”, the “bog turtle buffer”, and the “bog turtle conservation zone.” Because there is also a voluntary riparian forest buffer at issue in this appeal, we have chosen to use “bog turtle conservation zone” to avoid any confusion.

The Project is the development of the Project Site with a 420,000 ft² building and associated parking lot and truck court, and is estimated to generate 50.99 acres in earth disturbance. (Stip. 21,22.) When more than one acre of earth disturbance is proposed for a project, the requirement to treat runoff from construction activity as a point source and obtain an NPDES permit under Chapter 102 Erosion and Sediment Control regulations is triggered. 25 Pa Code §102.5(a); *O'Reilly v. DEP*, 2001 EHB 19, 33. An individual NPDES permit is required when the proposed earth disturbance is within a special protection watershed, as here.

The Chapter 102 regulations aim to prevent accelerated erosion and sedimentation associated with earth moving activities. *Blue Mountain Preservation Association, Inc. v. DEP*, 2006 EHB 589, 600. Chapter 102 regulates discharges associated with stormwater by requiring the application of best management practices (“BMPs”) instead of discreet numerical effluent limits. *Blue Mountain*, 2006 EHB at 600. BMPs are defined as “[a]ctivities, facilities, measures, or procedures used to minimize accelerated erosion and sedimentation to protect, maintain, reclaim and restore the quality of waters and the existing and designated use of waters within this Commonwealth.” 25 Pa. Code § 102.1. Any person proposing a new earth disturbance activity that requires permit coverage under Chapter 102 is responsible to develop, implement, operate and maintain a post construction stormwater management plan (“PCSM Plan”) in accordance with the requirements in Section 102.8. 25 Pa. Code § 102.8(a). A PCSM Plan is “A site-specific plan consisting of both drawings and a narrative that identifies BMPs to manage changes in stormwater runoff volume, rate and water quality after earth disturbance activities have ended and the project site is permanently stabilized.” 25 Pa. Code §102.1.

The main PCSM BMPs contained in the PCSM Plan prepared and submitted by the Permittee include dry extended detention basins, level spreaders, and a voluntary riparian forest

buffer (“buffer”). Stormwater falling on the building, parking lot, and associated facilities will be managed by three dry extended detention basins. (Stip. 28.) Basin 1A is an underground detention basin located directly south of the building and is designed to collect stormwater falling on the southern half of the proposed building roof as well as on constructed areas south of the proposed building. (Stip. 29.) Basin 1B is an above-ground detention basin located near the northwest corner of the proposed building and is designed to collect stormwater falling on the northern half of the proposed building’s roof and constructed areas north of the building. (Stip. 30.) Basin 1C is an underground detention basin located on the eastern side of the proposed building near the building’s southeast corner and is designed to collect stormwater falling on the paved areas on the east side of the building. (Stip. 31.) The three basins are designed to discharge their stormwater into a 150-foot wide, 760-foot long voluntary riparian forest buffer located within a 300-foot bog turtle conservation zone, via three level spreaders located to the west of the proposed building, north of the Kinney Property. (Stip. 33.)

Offsite stormwater falling east (upslope) of the cut on the eastern side of the Project Site will be managed by a newly-constructed clean water diversion swale (“Swale”), which will run along the eastern edge of the Project Site until it reaches the northern boundary, where stormwater will enter a pipe running along the northern boundary and flowing towards the west, ultimately discharging via an outlet across a riprap apron at the northwest corner of the Site to the UNT. (Stip. 27.) While this Swale is included in the overall E&S controls at the Site, it is not a component of the proposed PCSM Plan and is therefore not implicated by the regulations controlling the PCSM Plan.

Standard

The Board reviews Department actions *de novo*, meaning the Board “decide[s] the case anew on the record developed before” it. *Borough of St. Clair v. DEP*, 2016 EHB 299, 318 (citing *Dirian v. DEP*, 2013 EHB 224, 232; *O’Reilly v. DEP*, 2001 EHB 19, 32; *Warren Sand & Gravel Co. v. Dep’t of Env’tl. Res.*, 341 A.2d 556 (Pa. Cmwlth. 1975)). In a third-party appeal such as this one, the Appellant bears the burden of proof. 25 Pa. Code § 1021.122(c)(2). The Appellant must show by a preponderance of the evidence that the Department acted unreasonably or contrary to the law, that its decision is not supported by the facts, or that the decision is inconsistent with the Department’s obligations under the Pennsylvania Constitution. *Brockway Borough Mun. Auth. v. DEP*, 2015 EHB 221, 236, *aff’d* 131 A.3d 578 Pa. Cmwlth. 2016); *Friends of Lackawanna v. DEP*, 2017 EHB 1123, 1156. “To prove one’s case by a ‘preponderance of the evidence’ means that the ‘evidence in favor of the proposition must be greater than that opposed to it...It must be sufficient to satisfy an unprejudiced mind as to the existence of the factual scenario sought to be established.’” *Untied Refining Co. v. DEP*, 2016 EHB 442, 449 (quoting *Noll v. DEP*, 2005 EHB 505, 515 (quoting *Bethenergy Mines, Inc. V. DER*, 1994 EHB 925, 975 (quoting *Midway Sewage Auth. V. DER*, 1991 EHB 1445, 1476)). Therefore, a third-party appellant of the issuance of a permit such as Concerned Citizens of Upper Mount Bethel Township must present evidence showing that the Department’s issuance of the Permit here “was not appropriate or did not conform with the applicable law or was unreasonable, and its evidence must be greater than the evidence showing that the issuance of the permit was appropriate or in accordance with the applicable law.” *United Refining*, 2016 EHB at 449. It is insufficient to “raise an issue and then speculate that all types of unforeseen calamities may occur.” *Id.* Rather, the third-party appellant must prove – by a preponderance of the evidence – that the issues it raises are likely to occur. *Id.* Finally, technical issues raised must be supported with technical evidence, including but not limited to expert

testimony, that is more credible than the technical evidence brought by the Department and Permittee. *Id.*

Failure to mimic preconstruction stormwater conditions

The Appellant’s main argument in this appeal is that the Amended Permit was improperly issued because the proposed PCSM BMPs fail to mimic preconstruction stormwater runoff conditions at the Site as required by 25 Pa. Code §102.11(a)(2). Section 102.11 states:

102.11 General requirements.

(a) *BMP and design standards.* A person conducting or proposing to conduct an earth disturbance activity shall:

....

(2) If required to develop a PCSM Plan, design, implement and maintain PCSM BMPs to mimic preconstruction stormwater runoff conditions to protect, maintain, reclaim and restore water quality and existing and designated uses. Various PCSM BMPs and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual* (Stormwater BMP Manual), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

The Appellant focuses specifically on the word “mimic,” and argues that the proposed discharge of stormwater runoff from the developed areas of the Project Site via the level spreaders through the voluntary riparian forest buffer to the northern portion of the EV Wetlands, as proposed in the Permittee’s PCSM Plan, fails to mimic preconstruction stormwater runoff conditions. The Appellant cites testimony given by Daniel Ahn (“Mr. Ahn”), District Engineer, Lehigh County Conservation District,⁴ an expert stipulated to and accepted by the presiding judge in post construction stormwater management, in which he stated that the word “mimic” as used in Section

⁴ While Mr. Ahn is currently the District Engineer for the Lehigh County Conservation District, he served in the same position at the Northampton County Conservation District from August 2017 to February 2023, where he performed the technical review of the application for the Amended Permit at issue here. (T. Vol. 3 p. 111, 119.)

102.11(a)(2) means to “imitate, match to the extent practical.” (T. Vol. 3 p. 142.) The Appellant contends that stormwater falling on the southern half of the Project Site will have “much different” runoff conditions post construction than in its preconstruction state, and therefore does not “imitate” or “match to the extent practical” preconstruction stormwater runoff conditions. (A. Post-Hearing Brief at 48.) The Appellant refers to testimony provided by Charles R. Dutill (“Mr. Dutill”), an expert in stormwater management systems and site hydrology who was stipulated to by the parties and accepted by the presiding judge. Mr. Dutill testified that wetlands are often fed by surface water, and there is indication that the wetlands on the Project Site are fed to “some significant degree” by surface water. In his opinion, preconstruction stormwater flows down the slope from east to west, where a “smaller portion” is taken up by the trees, a “significant portion” infiltrates into the soil and flows into the groundwater, flowing to the wetland area through the groundwater, and the remainder flows over the surface to the wetland area. (T. Vol. 1 pp. 16-17, 23.) Mr. Dutill further testified that the stormwater falling on the southern half of the Project Site in its preconstruction state would flow from east to west and end up in the southern half of the wetlands, and that the stormwater falling on the northern half of the Project Site in its preconstruction state would flow from east to west and end up in the northern half of the wetlands. (T. Vol. 1 pp. 23-24.)

In regards to the flow of stormwater post construction, Mr. Dutill testified that the stormwater that falls uphill (offsite) on the southern portion of the property will flow into the Swale and discharge at the northern part of the site post construction, so none of the stormwater from that area will reach the southern half of the wetlands. (T. Vol. 1 pp. 27-28.) Mr. Dutill further testified that stormwater falling on the developed portion of the site post construction will flow to the level spreaders, which are proposed to be located on the northwestern portion of the site, then down to

the wetlands area, resulting in all of the stormwater for those sections flowing to the northern half of the wetlands instead of the southern half of the wetlands. (T. Vol. 1 p. 28.) Mr. Dutilt then opined that, given these changes, the stormwater flow to the southern portion of the EV Wetlands will be reduced by approximately 60-70% post construction. (T. Vol. 1 pp. 28-29.)

In response, the Permittee contends that the PCSM BMPs proposed in the PCSM Plan indeed mimic preconstruction conditions because they are designed to maintain the designated preconstruction use of the EV Wetlands as required by Section 102.11(a)(2) by directing stormwater to continue to flow towards the UNT along the western boundary of the property and infiltrate prior to reaching the wetland. (P. Post-Hearing Brief at 39.) Stephen Dadio (“Mr. Dadio”), an expert in ecology and hydrology, including ecologic, hydrologic and wetland impact evaluations, who was stipulated to by the Parties and accepted by the presiding judge, and who prepared a Wetlands Impact Report for the Proposed Project, provided testimony that preconstruction stormwater flows in a westerly direction toward the UNT and infiltrates into the soil prior to reaching the EV wetland, feeding the wetland as groundwater. (T. Vol 2 pp. 101-102; T. Vol 2 p. 108; *See also* T. Vol 3 pp. 37, 40.) Mr. Dadio testified that he did not see any evidence of surface run-off or rills or gullies forming in the area during any of his site visits. (T. Vol. 2 p. 105.) Mr. Dadio also reported that he saw no evidence of runoff that would indicate that the soils would not drain, or “any surface impacts to the wetland through evidence of erosion” and concluded that the stormwater infiltrated into the soil prior to reaching the EV wetlands. (T. Vol. 2 pp. 107-108.)

Michael Sodl (“Mr. Sodl”), an expert in stormwater hydrology, stormwater modeling and stormwater management design, who was stipulated to and accepted by the presiding judge, and who prepared the PCSM Report and PCSM Plan for the Proposed Project, testified that the PCSM

BMPs are designed so that the stormwater will continue to flow toward the UNT along the western boundary of the property and infiltrate into groundwater prior to reaching the EV Wetlands. (T. Vol. 2 pp. 14, 50-51, 60-61, 66-70; *see also* T. Vol. 3 pp 65-66.) As described above, the stormwater falling on the developed area of the Project Site is conveyed through the dry detention basins to three level spreaders, which discharge into the proposed voluntary riparian forest buffer in the northwest portion of the Project Site. According to Mr. Sodl, a level spreader takes the erosive properties out of stormwater runoff by dispersing the water in a sheet flow manner. (T. Vol. 2 pp. 37-38.) Mr. Sodl testified that the three level spreaders are designed to “replicate predevelopment flow” and drain it through the proposed voluntary riparian forest buffer. (T. Vol. 2 p. 39.) He further testified that the soils in the voluntary riparian forest buffer downslope from the level spreaders are, according to the USDA Web Soil Survey, Conotton soils and Hydrologic Soil Group A soils, which are more sandy in nature, and are the “most porous and infiltrate the most water.” (T. Vol. 2 pp. 50-51.)

The Permittee counters Mr. Dutil’s opinion regarding the 60-70% reduction in post construction stormwater flow to the southern half of the EV Wetlands with additional testimony from Mr. Sodl. Mr. Sodl testified that, looking at the area on the site, 36% of the preconstruction stormwater flow to the southern half of the EV Wetlands will be diverted to the northern half of the EV Wetlands post construction. (T. Vol. 2 p. 56.) He explained that the 14.3 acres of the 39-acre Project Site that drain to the southern portion of the EV Wetlands during preconstruction will be diverted to the northern portion of the EV Wetlands post construction, and 24.7 acres, or 64%, of the preconstruction stormwater runoff will continue to flow to the southern half of the EV Wetlands post construction. (T. Vol. 2 p. 56.) Mr. Sodl opined that the reduction in stormwater flow to the southern wetlands post construction, when considering the entire watershed, is only

5% of total volume. (T. Vol. 2 p. 57.) He explained that the entire watershed consists of 293 acres that drain to the EV Wetlands,⁵ and 14.3 acres of volume is being diverted to the northwest wetlands via the PCSM BMPs. (T. Vol. 2 p. 57.) Mr. Sodl concluded that, based on these calculations, the volume of stormwater runoff being redirected to the northern portion of the EV Wetlands will be negligible and will not have a negative impact on the hydrology of the southern half of the EV Wetlands. (T. Vol. 2 pp. 60-61.)

Weighing competing expert testimony is one of the Board's core functions. *Montgomery Twp. Friends of Family Farms v. DEP*, EHB Docket No. 2020-082- L, slip op. at 19 (Adjudication, Nov. 15, 2024). See also *DEP v. EQT*, 2017 EHB 439, 497, aff'd, 193 A.3d 1137 (Pa. Cmwlth. 2018). The weight given an expert's opinion depends upon factors such as the expert's qualifications, presentation and demeanor, preparation, knowledge of the field in general and the facts and circumstances of the case in particular, and the quality of the expert's data and other sources. *Crum Creek Neighbors v. DEP*, 2009 EHB 548, 561. "We also look to the opinion itself to assess the extent to which it is coherent, cohesive, objective, persuasive, and well grounded in the relevant facts of the case." *EQT*, 2017 EHB at 497. "Resolution of evidentiary conflict, witness credibility, and evidentiary weight are matters committed to the discretion of the Board." *EQT Prod. Co. v. Dep't of Env'tl. Prot.*, 193 A.3d 1137, 1149 (Pa. Cmwlth. 2018) (citing *Kiskadden v. Dep't of Env'tl. Prot.*, 149 A.3d 380, 387 (Pa. Cmwlth. 2016)).

Mr. Dutill was not asked to, and did not, provide testimony or cite evidence to support his opinion that the EV Wetlands were significantly fed by surface water, and the parties agree that

⁵ The Appellant argues that there is nothing on the record to independently support that the 293-acre watershed is feeding the southern portion of the EV Wetlands. (A. Post-Hearing Brief at 60.) However, the Appellant, who bears the burden in this appeal, does not offer any proof that this is not an accurate representation of the overall acreage in the watershed, while Mr. Sodl offered testimony to support his calculations, and we therefore credit the testimony and calculations of Mr. Sodl and accept this figure as representative of the entire acreage.

the EV Wetlands are predominantly groundwater fed. (A. Post-Hearing Brief at 40-41; P. Post-Hearing Brief at 55; DEP Post-Hearing Brief at 51.) On the other hand, Mr. Dadio’s opinions were based on personal observations he made during “the half a dozen times” he was on the site to conduct the wetland evaluation and jurisdictional determination and prepare the Wetlands Impact Report. (T. Vol. 2 p. 105.) Although the parties stipulated to Mr. Dutill’s expertise in the areas of stormwater management systems and site hydrology, and the Board finds Mr. Dutill to be qualified in those areas, his testimony failed to explain how he calculated his 60%-70% reduction estimation. Further, when questioned on cross about how he calculated his estimation, Mr. Dutill responded that he did not have the numbers that he used for the calculation memorized and appeared to confirm that he did not provide a calculation in his expert report. (T. Vol. 1 pp. 48-49.) Conversely, Mr. Sodl testified that he calculated his estimated 5% reduction using both the Department’s Worksheet 4, which is included in the BMP Manual⁶ and used to calculate the change in runoff volume for the 2-year storm, and the Soil Conservation Service TR-55 urban hydrology model (“TR-55”), receiving similar results with each. (T. Vol. 2 p. 60.) The TR-55 is a program that calculates runoff volume and rate for small watersheds under about 200 acres and generates hydrographs for stormwater management calculations. (T. Vol. 2 p. 17.) Mr. Sodl explained that his organization relied upon the USDA Web Soil Survey, which provides the underlying soils and hydrologic soil groups for the property. (T. Vol. 2 p. 18.) Mr. Dadio’s personal observations of the soils on the Project Site from using a hand auger and walking the property were in “general agreement” with the data in the USDA Web Soil Survey. (T. Vol. 2 p.

⁶ This Board has held on previous occasions that Department guidance documents do not have the weight of properly promulgated regulations, and the Board is under no duty to follow them. *PQ Corp. v DEP*, 2016 EHB 826, 837; *Winner v. DEP*, 2014 EHB 1023, 1035. *United Refining Co. v. DEP*, 2006 EHB 846. We do however recognize such documents as a tool used by the Department for the purpose of trying to establish consistent application of existing regulations.

104.) Mr. Sodl further testified that the TR-55 is one of the primary modeling software used for calculating stormwater runoff and relying on the USDA Web Soil Survey is industry standard practice. (T. Vol. 2 p. 18.)

In a battle of the experts such as this, the failure to provide relevant calculations used to arrive at the conclusions drawn is simply insurmountable in the face of opposing expert opinion based solidly in calculations made using tools and methodologies recognized and accepted by the professional communities to which these experts belong. While the Permittee’s experts, Mr. Dadio and Mr. Sodl, provided the methodologies and calculations used to arrive at the conclusion of a 5% reduction in flow, the Appellant’s expert, Mr. Dutill, could neither articulate nor point to the calculations in his expert report by which he came to his prediction of a 60-70% reduction in flow. For these reasons, the Board credits the opinions of Mr. Dadio and Mr. Sodl on the question of the extent of the reduction in surface water flow to the southern EV Wetlands and finds that the post construction reduction in flow to the southern EV Wetlands will be approximately 5%.

Five Level Spreader Plan

The Appellant next refers to a draft Bog Turtle Grading Plan (A. Ex. 74) that the Permittee included in its first request to the U.S. Fish & Wildlife Service (“USFWS”) on April 8, 2020 for an opinion on a 75-foot encroachment into the 300-foot bog turtle conservation zone. (A. Post-Hearing Brief at 51.) The Bog Turtle Grading Plan proposed to utilize five level spreaders instead of three, with three of the spreaders proposed to be located south of the Kinney Property. The Appellant cites the existence of this plan as evidence that the discharge of stormwater to the southern half of the wetlands is “doable” and thereby, under Mr. Ahn’s term, “practical,” seemingly concluding that the absence of level spreaders in the southwest portion of the Project

Site indicates that PCSM BMPs do not mimic preconstruction stormwater runoff. (A. Post-Hearing Brief at 51.)

The Permittee responds that the five level spreader plan was abandoned during the design of the PCSM Plan because it was determined to be infeasible. (P. Post-Hearing Brief at 45.) Mr. Sodl testified that there are three existing wetland swale “fingers,” or channels, that project into the riparian forest buffer and concentrate flow, which will “defeat the purpose of what the riparian buffers are designed to do,” which is to promote sheet flow. (T. Vol. 2 p. 40.) Mr. Ahn agreed with this assessment in his testimony, explaining that the channels are within the buffer and would negate the sheet flow through the buffer. (T. Vol. 3 pp. 171-172.) Mr. Sodl and Mr. Ahn also testified that, since the Permittee does not control the Kinney Property from the first 50 feet from the top of the bank of the UNT to the western edge of the Project Site, a conservation easement could not be obtained to ensure that the voluntary riparian forest buffer would remain there in perpetuity as required by 25 Pa. Code §102.14(g), thus the area to the south of the Kinney Property was not viable for locating level spreaders. (T. Vol 2 p. 39; T. Vol. 3 pp. 171-172.)

The Appellant did not present any testimony or evidence beyond the existence of the Bog Turtle Grading Plan to show that using level spreaders south of the Kinney Property is feasible. Further, the Appellant did not provide testimony or evidence of any kind to rebut Mr. Sodl and Mr. Ahn’s opinion that utilizing level spreaders in the southern half of the Project Site was not feasible. The Board is not convinced that the mere fact that a conceptual plan proposed to utilize level spreaders in the southwestern half of the Project Site demonstrates that it is feasible or practical, or that the Department erred in approving a PCSM Plan that did not utilize level spreaders in the southwestern portion of the Project Site. Therefore, we find that the Appellant has not met its burden of proving by a preponderance of the evidence that it was unreasonable of

the Department to approve the three level spreader plan where the only proffered proof of that said unreasonableness is that a plan involving five level spreaders had once been ideated.

Basin 1C

The Appellant next asserts that specific aspects of the proposed PCSM BMPs, such as Basin 1C, show that the Project fails to “mimic” preconstruction stormwater runoff conditions. (A. Post-Hearing Brief at 52.) The Appellant points to the Hydrologic Evaluation Report prepared by GTA (“GTA Report”) (A. Ex. 71), which states that the bottom of Basin 1C and portions of the related stormwater conveyances have profiles that “may extend below the seasonal high groundwater table, with depths below groundwater potentially ranging from slightly more than zero to less than 10 feet.” (A. Post-Hearing Brief at 52; A. Ex. 71 (at 15).) The Appellant then cites testimony provided by Paul Scott (“Mr. Scott”), an expert in hydrology and hydrogeology, including hydrologic and hydrogeologic impact evaluations, who was stipulated to by the Parties and accepted by the presiding judge, and who prepared the GTA Report. When questioned about the seasonal high groundwater contour elevation and whether the proposed retaining walls would impede groundwater flow to the EV Wetlands, Mr. Scott stated “...when you see a wall and it’s parallel to the contours and perpendicular to the flow, you can infer that it would be a barrier.” (T. Vol. 3 p. 62.) The Appellant uses this statement to argue that the entire 341.5-foot length of Basin 1C would act as a barrier to the flow of groundwater from east (upslope) of Basin 1C.

The Permittee clarifies that neither Mr. Scott nor the GTA Report indicated that the entirety of the 341.5-foot length of Basin 1C would sit below the seasonal high water table. Mr. Scott testified that the bottom corner of Basin 1C *may* dip into the seasonal high water table. (T. Vol. 3 pp. 58-59.) Mr. Scott elaborated that the facilities that appear to be below the groundwater contour elevations are “very localized,” explaining that “...water will move around them, but also the

aquifer is very thick so water will continue to move down towards the wetlands and will not be impeding,” and concluded that they “would not adversely impact the groundwater flow to the wetlands.” (T. Vol. 3 pp. 60-61, 105-106.) Additionally, Mr. Scott testified that the seasonal high water level can move ten feet or more in a year, will drop throughout the course of the year, and may drop completely below all of the features that appear to be below it. (T. Vol. 3 p. 58.)

The Appellant did not provide any expert testimony or evidence, other than the mere existence of Basin 1C and the fact that a portion of it may sit below the seasonal high water table at various times throughout the year, to show that groundwater could be impeded, and that the PCSM BMPs would not mimic preconstruction stormwater conditions. This claim is speculative, and without supporting evidence stronger than that brought by the opposition, there simply is no showing that it is likely that the groundwater would be impeded by the depth and placement of Basin 1C. We find that the Appellant did not meet its burden on this issue. *See United Refining Co.*, 2016 EHB at 449.

As the Board has explained previously, the purpose of the Chapter 102 regulations is to prevent pollution of waters of the Commonwealth due to accelerated erosion and sedimentation caused by stormwater runoff from impervious surfaces as a result of development. The regulations are not intended to completely preclude the development of property, but to ensure that development is done in a manner which is protective of water quality. If the Board were to adopt the Appellant’s interpretation of the word “mimic” to mean that preconstruction and post construction stormwater runoff conditions must be nearly identical, it would effectively prohibit the development of any property, as installing impervious surfaces will always change stormwater runoff conditions. The record shows that the Permittee considered all PCSM BMPs and chose those that were feasible for the Project Site. (T. Vol. 2 pp. 43-45.) The Board finds that the

Permittee has designed the PCSM BMPs in a way that will mimic preconstruction stormwater runoff to the extent that they will ensure the continued designated use of the EV Wetlands as critical bog turtle habitat as required by 102.11(a)(2).

Impacts to Exceptional Value Wetlands and Critical Bog Turtle Habitat

The Appellant’s arguments regarding the Project’s impact on the EV Wetlands and the critical bog turtle habitat contained therein are twofold. First, the Appellant contends that the alleged failure to mimic preconstruction conditions will result in a failure to “protect, maintain, reclaim and restore water quality and designated uses” of the EV Wetlands under § 102.11(a)(2). Second, the Appellant broadly states that the record establishes that the post construction stormwater system will alter the southern portion of the EV Wetlands and adversely impact the critical bog turtle habitat therein, and that in approving such a plan, the Department failed in its regulatory duty to ensure protection of the critical bog turtle habitat under 25 Pa. Code § 93.4c(a)(2).

As detailed above, the proposed PCSM Plan for the Project includes the use of three level spreaders that discharge post construction stormwater falling on the developed areas of the Project Site through the voluntary riparian forest buffer in the northwestern portion of the Project Site. The Appellant argues that this configuration will reduce groundwater flow to the southern half of the EV Wetlands, in turn adversely impacting the EV Wetlands and their provided critical bog turtle habitat. In support of this contention, the Appellant points to the opinion of its accepted expert on wetlands and wetland ecology, James A. Schmid (Dr. Schmid”), who testified that reducing the amount of water going into a wetland may cause the extent of the wetland to be decreased and may result in there being less water in the wetland. (T. Vol. 2 p. 74.) According to Dr. Schmid, a 60%-70% reduction in stormwater flow as estimated by Mr. Dutill, would have a

“dramatically adverse effect” on the bog turtle habitat. (T. Vol. 1 p. 77.) However, the Board has already credited the opinion of Mr. Sodl that the decrease in stormwater flow to the EV Wetlands between preconstruction and post construction is 5%.

As the Board has already discussed, the Permittee asserts that the proposed PCSM BMPs are designed to maintain the protected use of the EV Wetlands as bog turtle habitat as required by Section 102.11(a)(2), and the Permittee’s experts provided extensive testimony on the design and function of the proposed PCSM BMPs. Again, the parties agree that the EV Wetlands are primarily groundwater fed. Mr. Dadio, who prepared the Wetlands Impact Report, testified that he believed the post construction stormwater discharged by the level spreaders will infiltrate into the groundwater and equilibrate, so the EV Wetlands “should not be adversely impacted.” (T. Vol. 2 p. 111.) Mr. Dadio concluded: “I don’t believe that the groundwater level will be impacted by this project, so I think that they are groundwater fed and I think it remains consistent.” Mr. Scott’s findings in the GTA Report support Mr. Dadio’s opinion. In the GTA Report, Mr. Scott concluded that the PCSM design “preserves hydrologic support to the NW and SW wetlands in a similar manner as occurs presently, with stormwater collected and gradually released at the topographically lower portion of the site.” The GTA Report further states: “This gradually released stormwater is expected to infiltrate and move through the relatively permeable surface soils that flank NW and SW wetlands, such that site recharge is maintained.” (A. Ex. 71.)

Dr. Schmid testified on cross-examination that he expects that there would be an adverse impact to a wetland if the amount of water going into the wetland is decreased, and he did not believe there would be a threshold below which there would be no impact. (T. Vol. 1 p. 91.) However, Dr. Schmid stated that the impacts to the EV wetlands depend on the “precise volumetric change.” (T. Vol. 1 p. 74.) Further, Dr. Schmid acknowledged that he had not seen “specific

numbers on the volumes of liters per square foot of water reaching a particular square foot of wetland,” so it would be difficult to predict the exact impact, but he expected that the greater the reduction, the greater the impact. (T. Vol. 1 p. 78.) Dr. Schmid did not provide an opinion on the potential impact of Mr. Sodl’s 5% estimated reduction in stormwater flow. When asked whether he visited the area of the EV Wetlands, Dr. Schmid responded that he visited some neighboring properties to the west of the UNT. (T. Vol. 1 p. 79.) Dr. Schmid further conceded on cross-examination that he did not conduct any groundwater testing, and did not review Mr. Scott’s Hydrologic Evaluation Report. (T. Vol. 1 pp. 82, 89.)

It thus appears from the record that Dr. Schmid’s opinions regarding the potential impacts to the EV Wetlands at issue are largely speculative. And to the extent that his opinions are based on any figures or calculations, they seem to be based exclusively on Mr. Dutil’s unsupported prediction of a 60-70% reduction in flow, which the Board has already declined to adopt. As we have said before, speculative claims unsupported by technical evidence are simply insufficient to meet the burden carried by appellants in third-party appeals. Where, as here, the opinions of opposing experts are well-supported, they must carry the day. Thus, we find that the Appellant has not met its burden on the question of whether the alleged failure to mimic preconstruction conditions will result in a failure to “protect, maintain, reclaim and restore water quality and designated uses” of the EV Wetlands under § 102.11(a)(2).

The Appellant further argues that by permitting this PCSM Plan and its alleged alteration of flow to the southern EV Wetlands, the Department is in derogation of its regulatory duty to ensure protection of the critical bog turtle habitat within the EV Wetlands:

(2) *Endangered or threatened species.* If the Department has confirmed the presence, critical habitat, or critical dependence of endangered or threatened Federal or Pennsylvania species in or on a surface water, the Department will ensure protection of the species and critical habitat.

25 Pa. Code § 93.4c(a)(2). The Appellant argues that nothing in the record establishes or even suggests that the Department took specific steps to ensure the protection of the critical bog turtle habitat, and, without pointing to anything specific in the record to support its claim, broadly asserts that the record establishes that any alteration of flow to the southern half of the EV Wetlands will adversely impact the critical bog turtle habitat. We disagree.

First, the Permittee was issued technical deficiency letters regarding the EV Wetlands. (T. Vol. 2 p. 101; Stip. 59; P. Ex. 30.) In response, the Permittee furnished the Northampton County Conservation District (“NCCD”) and the Department with the Wetlands Impact Report, resubmitted the Major Amendment Application twice, and shortly thereafter the Department and NCCD determined that each deficiency included in the letters had been fully and adequately addressed. (Stip. 63.) This generally indicates that the Department was not simply rubber stamping this Major Modification Application without regard for potential impact to the critical bog turtle habitat, but rather that the Department initially found the Application insufficient for the protection of that habitat and required adjustments to the plan to ensure its protection. In other words, issuing the technical deficiency letters was one specific step the Department took to ensure protection of the critical bog turtle habitat.

In support of its contention that the Department did not take specific steps to ensure protection of the critical bog turtle habitat, the Appellant takes issue with the Department’s seeming reliance on letters issued by the USFWS determining no impact to the critical bog turtle habitat, apparently on the basis of the Appellant’s belief that USFWS granted approval based only on the outdated, and never formalized, five level spreader plan discussed above. USFWS’ reference to what the Appellant refers to as an “obsolete plan” should have caused the Department – pursuant to its duty to ensure protection of the critical bog turtle habitat – to raise questions

regarding USFWS' analysis of the potential impact to the critical bog turtle habitat. This tenuous argument seems to be based on the idea that, because USFWS pointed back to a letter issued in August of 2020, and stated the letter's continued validity in its determination of no impact in December 2021, USFWS must necessarily have based that determination on the never officially submitted five level spreader plan. This basis is mere conjecture and indeed belies the record, which includes further communication between the Permittee and USFWS, such as requests to USFWS in January of 2021 for comment specifically on the modification to the bog turtle conservation zone, which included the updated Bog Turtle Grading Plan showing the increased building size and three – not five – level spreaders. (Stip. 43; P. Ex. 13, 14, 15.) USFWS issued a response to that comment request in May of 2021:

The federally listed bog turtle occurs or may occur in or near the project area. However, based on our review of the information provided, including the project description and location (**Modifications to previously reviewed construction proposal are minor and not likely to impact bog turtle habitat**) no adverse effects to this species is [sic] likely to occur. If there is any change in the location, scale, scope, layout or design of the project, further consultation or coordination with the Service will be necessary.

(Stip. 44.) (emphasis added). It is clear from the language above that USFWS was indeed responding to the current Plan, and to the extent that the Department relied on this determination of no impact by USFWS, we find that such reliance was reasonable. While we decline to speculate on USFWS' state of mind when referencing back to the earlier letter in its final communication, the August 2020 letter did contain several voluntary conservation recommendations – many incorporated by the Permittee into the Bog Turtle Grading Plan – that go above and beyond what is required by the Chapter 102 regulations or permit conditions. (T. Vol. 3 pp. 130-132.) We fail to see how the Department's approval of this Amended Permit wherein the Plan contains not only

what is required to ensure protection of the critical bog turtle habitat, but also includes voluntary measures to protect that habitat, is not a specific step undertaken to ensure that protection.

Finally, the Appellant argues that the Department failed to fulfill its duty to ensure the continued protection of the critical bog turtle habitat “by approving and issuing a Major Amendment to the Permit that authorizes the use of stormwater BMPs that will result in...adverse impacts” to the critical bog turtle habitat. (A. Post-Hearing Brief at 102.) For this contention, the Appellant does not cite any specific testimony or other record evidence, but rather broadly states that the record establishes that the PCSM BMPs will alter the southern half of the EV Wetlands and adversely impact the critical bog turtle habitat. As made clear above, this assertion is simply not in line with the totality of the evidence taken, and instead, we presume, based exclusively on the testimony of Appellant’s experts, Mr. Dutill and Dr. Schmid. As we explained above, Mr. Dutill’s opinion that the PCSM BMPs would rather dramatically alter the flow to the southern EV Wetlands was unsupported by calculations and thus not creditable, particularly in the face of the Permittee’s experts, Mr. Dadio and Mr. Sodl, who did provide relevant calculations and methodologies to support their far less dramatic conclusions regarding the flow of stormwater runoff to the southern EV Wetlands. Because we have already credited the opinions of Mr. Dadio and Mr. Sodl on this issue, we need not further expound here.

The Appellant’s expert, Dr. Schmid, testified that any reduction in the amount of water flowing to a wetland could cause the wetland to decrease and become drier over time. (T. Vol. 1 p. 74.) He explained that this alteration could result in changes to the plant composition of the wetland over time, causing the soils to become firm and not easily penetrated by the bog turtle, as well as a change in the kinds of insects and invertebrates that are present in the wetland that may provide the food supply for bog turtles. (T. Vol. 1 pp. 74-75.) While Dr. Schmid was stipulated to

and accepted by this Board as an expert on wetlands and wetland ecology, the Appellant also offered him as an expert in bog turtle habitat.⁷ In contrast, the Permittee’s well-qualified bog turtle expert, Michael Torocco (“Mr. Torocco”), a herpetologist who has been studying bog turtles since 1994, is a USFWS qualified bog turtle surveyor. Mr. Torocco, who was stipulated to and accepted by the presiding judge to offer expert testimony on the impact of the Project to the ecology and herpetology of the EV Wetlands, concluded that the Project would not have adverse effects or a long-term impact on the bog turtles and their critical habitat within the EV Wetlands. (T. Vol. 2 pp. 125-128, 130.) Mr. Torocco supported this opinion with a detailed description of bog turtles’ perhaps surprising adaptability.

According to Mr. Torocco, while bog turtles do require a specific, predominantly groundwater-fed wetland habitat, they are adaptable to variations in the overall dampness of their habitat throughout the year. (T. Vol. 2 pp. 131, 133-134.) Mr. Torocco explained that, depending on the relative wetness of a given year, the overall saturation of the wetland bog turtle habitat can vary. (T. Vol. 2 p. 134.) During a dry year, the springheads can dry up, thus reducing the overall saturation of the bog turtle habitat, and during a wet year, there can be excess water in the wetlands. (T. Vol. 2 p. 134.) Mr. Torocco further testified that there can also be great topographic variety in where these wetland bog turtle habitats are found, which creates variability in how the groundwater affects these habitats. (T. Vol. 2 p. 134.) In sloping wetlands, water can run off quite quickly, whereas valley wetlands can be inundated by sudden and heavy storms. (T. Vol. 2 p. 134.) In stream-fed wetlands, this water is generally discharged through a system of rivulets into nearby

⁷ Over the objections of the Permittee and Department, the presiding judge allowed the Appellant to question Dr. Schmid on impacts to the bog turtle habitat. The presiding judge noted that the Board would of course give any testimony provided by Dr. Schmid on the question of impacts to the bog turtle habitat the appropriate weight – if any.

tributaries, typically discharging any influx of water within a matter of hours or days. (T. Vol. 2 p. 134.) In addition, other natural processes can affect the relative saturation of the wetland, such as beavers causing flooding to portions of the wetland and creating deeper areas. (T. Vol. 2 pp. 134-135.) Mr. Torroco opined that, while deeper water is not preferred, it does not impact the bog turtle habitat to the extent that bog turtles cannot adapt. (T. Vol. 2 p. 135.) According to Mr. Torocco, while bog turtles are not the strongest swimmers, they can swim and are “quite able” to adapt to these periodic inundations. (T. Vol. 2 p. 135.) Mr. Torocco further testified that bog turtles are very comfortable on land and able to adapt in dryer conditions, such as late summer when springs can reduce to a mere trickle. (T. Vol. 2 p. 135.)

In addition to being a well-established expert in bog turtles and their critical habitat, Mr. Torocco was brought into the Project at the application stage to determine whether the modifications to the Bog Turtle Grading Plan would adversely impact the critical bog turtle habitat. (T. Vol. 2 p. 128.) In addition to reviewing the plans, Mr. Torocco conducted a site visit in which he walked the EV Wetlands and evaluated the sources of hydrology to the Wetlands from a surface view. (T. Vol. 2 p. 129.) While Dr. Schmid is an accepted expert in wetlands and wetland ecology, one of the Board’s core functions is weighing expert testimony, and on the question of whether the project will adversely affect the bog turtles and their critical habitat, we credit the opinion of Mr. Torocco and find that the PCSM BMPs proposed here will not adversely impact the bog turtles or their critical habitat. Further, we find that the Department did not derogate its duty under Section 93.4c(a)(2).

Failure to Follow Antidegradation Regulations

The Appellant's final claim is that the Amended Permit was issued in violation of regulatory antidegradation requirements, specifically, the provisions found in 25 Pa. Code §93.4c(b)(1):

(b) *Protection of High Quality and Exceptional Value Waters.*

(1) *Point source discharges.* The following applies to point source discharges to High Quality or Exceptional Value Waters.

(i) *Nondischarge alternatives/use of best technologies.*

(A) A person proposing a new, additional or increased discharge to High Quality or Exceptional Value Waters shall evaluate nondischarge alternatives to the proposed discharge and use an alternative that is environmentally sound and cost-effective when compared with the cost of the proposed discharge. If a nondischarge alternative is not environmentally sound and cost-effective, a new, additional or increased discharge shall use the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies.

(B) A person proposing a new, additional or increased discharge to High Quality or Exceptional Value Waters, who has demonstrated that no environmentally sound and cost-effective nondischarge alternative exists under clause (A), shall demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters, except as provided in subparagraph (iii).

As the Department indicates, the Chapter 102 regulations were amended in 2010 to, *inter alia*, incorporate the antidegradation provisions of Chapter 93.4c(b).⁸ As a result, to satisfy the

⁸ According to the Department, the 2010 amendments to the Chapter 102 regulations were adopted in part in response to the Board's decision in *Blue Mountain*, in which the Board held that compliance with the best management practice provisions of the Chapter 102 regulations for special protection waters in effect at the time did not constitute compliance with antidegradation regulations with respect to special protection waters. According to the regulatory preamble from the final rulemaking:

A number of the regulated community specifically requested that the Board clarify the antidegradation implementation provisions in the final-form rulemaking to more definitively link the antidegradation implementation requirements included in this final-form rulemaking with Chapter 93 and to provide a framework that can be relied upon to demonstrate compliance with antidegradation requirements therein.

The Preamble explained the need to clarify antidegradation requirements specific to erosion and sedimentation:

antidegradation implementation requirements in Section 93.4c(b), an applicant must evaluate and include nondischarge alternatives in its E&S Plan in accordance with Section 102.4(b)(6) and its PCSM Plan in accordance with Section 102.8(h).⁹

Section 102.8(h) lists specific requirements for PCSM Plan implementation in special protection waters, such as the EV Wetlands at issue here:

(h) *PCSM implementation for special protection waters.* To satisfy the antidegradation implementation requirements in § 93.4c(b) (relating to implementation of antidegradation requirements), an earth disturbance activity that requires a permit under this chapter and for which any receiving water that is classified as High Quality or Exceptional Value under Chapter 93, the person proposing the activity shall, in the permit application, do the following:

(1) Evaluate and include nondischarge alternatives in the PCSM Plan unless a person demonstrates that nondischarge alternatives do not exist for the project.

(2) If the person makes the demonstration in paragraph (1) that nondischarge alternatives do not exist for the project, the PCSM Plan must include ABACT, except as provided in § 93.4c(b)(1)(iii).

(3) For purposes of this chapter, nondischarge alternatives and ABACT and their design standards are listed in the *Pennsylvania Stormwater Best Management Practices Manual* Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated.

Section 102.8(h) requires an applicant proposing an earth disturbance activity that requires a permit under Chapter 102 for which the receiving water is classified as Exceptional Value to evaluate and include nondischarge alternatives in the PCSM Plan *unless* the applicant demonstrates that one does not exist for the project. A nondischarge alternative is defined as:

Section 93.4c(b) utilizes language and approaches based upon NPDES programs that regulate continuous flow such as traditional industrial discharges flowing out of pipes, whereas the discharges regulated under Chapter 102 involve wet weather driven, primarily overland diffuse runoff that is controlled with BMPs rather than numeric effluent limitations. Further, the § 93.4c(b) stated preference for “nondischarge” alternatives is confusing and when applied literally in the stormwater context is problematic.

⁹ The Appellant does not contest whether the provisions of the E&S Plan meet the requirements in Section 102.4(b)(6).

Environmentally sound and cost-effective BMPs that individually or collectively eliminate the net change in stormwater volume, rate and quality for storm events up to and including the 2-year/24-hour storm when compared to the stormwater rate, volume and quality prior to the earth disturbance activities to maintain and protect the existing quality of the receiving surface waters of this Commonwealth.

25 Pa. Code §102.1. If a demonstration is made that a nondischarge alternative does not exist, the PCSM Plan must include antidegradation best available combination of technologies (“ABACT”), which is defined as:

Environmentally sound and cost effective treatment, land disposal, pollution prevention and stormwater reuse BMPs that individually or collectively manage the difference in the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm when compared to the stormwater rate, volume and quality prior to the earth disturbance activities to maintain and protect the existing quality of the receiving surface waters of this Commonwealth.

25 Pa. code §102.1. Robert Joseph Jevin, III (“Mr. Jevin”), Environmental Group Member/Permit Section Chief, Waterways and Wetlands Program, Northeast Regional Office, Pennsylvania Department of Environmental Protection and fact witness for the Department testified that the difference between “nondischarge alternative” and “ABACT” is that the nondischarge alternative *eliminates* the net change in stormwater rate, volume and water quality, while ABACT *manages* the net change and can allow for a change. (T. Vol. 3 p. 239.) According to Mr. Jevin, a nondischarge alternative is always the Department’s preferred option. (T. Vol. 3 p. 239.) As such, Section 102.8(h) indicates a preference for nondischarge alternatives whenever practicable.

The Appellant claims that the Permittee and the Department failed to undertake the analysis required in Section 93.4c(b)(1) “because they thought they could avoid them via a shortcut involving a nondischarge alternative,” and requests that the Amended Permit be remanded to the Department for “a proper Chapter 93 analysis.” (A. Post-Hearing Brief at 80.) The nondischarge

alternative that the Appellant is referring to is the proposed voluntary riparian forest buffer, and the “shortcut” is the legal presumption afforded to riparian buffers in Section 102.14(e)(1).

A riparian buffer is “a BMP that is an area of permanent vegetation along surface waters.” 25 Pa. Code § 102.1. A riparian forest buffer is a type of riparian buffer with vegetation that is “predominantly native trees, shrubs and forbs” that is “maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream channels and banks, and separate land use activities from surface waters.” 25 Pa. Code § 102.1. Chapter 102 provides for both mandatory and voluntary riparian buffers. Mr. Ahn testified that he made the determination that the Permittee’s proposed riparian buffer is not a mandatory riparian buffer under Section 102.14(a)(1) because the proposed earth disturbance activity is not located within 150 feet of a special protection water course. (T. Vol. 3 p. 146.) Mr. Ahn further testified that the voluntary riparian buffer proposed by the Permittee meets the requirements to be a forest buffer. (T. Vol. 3 pp. 146-149.)

The Appellant does not challenge these determinations. Chapter 102 includes an “antidegradation presumption,” which provides a legal presumption that a riparian buffer meeting the requirements of Section 102.14 is a “nondischarge alternative” and satisfies §102.4(b)(6) and §102.8(h) unless data or information is provided to the Department during the review process to show that the proposed earth disturbance activity will degrade water quality. 25 Pa. Code § 102.14(e)(1) states:

(e) Utilization of riparian forest buffers.

(1) Antidegradation presumption. Except for riparian buffers protected under subsection (a)(1) or (d), a riparian forest buffer meeting the requirements of this section will prevent thermal impacts and is a nondischarge alternative. When included in an E&S Plan or PCSM Plan meeting the requirements of this chapter, the proposed earth disturbance activity will satisfy § § 102.4(b)(6) and 102.8(h), unless data or information provided or available to the Department during the

permit application or authorization review process shows that the proposed earth disturbance activity will degrade water quality.

Section 102.14(e)(3) provides that “persons that protect, convert or establish a new riparian forest buffer meeting the requirements of this section, may qualify for benefits” under Section 102.14(e)(1). The Appellant argues that the proposed voluntary riparian forest buffer does not qualify for the antidegradation presumption due to the fact that the Permittee proposed to locate a pipe and endwall,¹⁰ which discharge stormwater from the Swale, within the voluntary riparian forest buffer in the northwest corner of the property. Specifically, the Appellant contends that the proposed voluntary riparian forest buffer does not comply with Section 102.14(c)(1), which lists the following requirements for all riparian buffers, including the voluntary riparian forest buffer proposed in the Permittee’s PCSM Plan:

(c) Mandatory requirements for all riparian buffers.

(1) Management of stormwater into the riparian buffer. Stormwater and accelerated erosion and sedimentation shall be managed in accordance with §§ 102.4(b)—(e) and 102.8 (relating to erosion and sediment control requirements; and PCSM requirements) to ensure that stormwater enters the area upgrade and along the riparian buffer as sheet flow or shallow concentrated flow during storm events up to and including the 2 year/24 hour storm.

In support of its argument, the Appellant refers to Mr. Ahn’s responses to questioning regarding the pipe and endwall on cross-examination. When asked whether the endwall was upslope of the voluntary riparian forest buffer, Mr. Ahn answered that it was located within the voluntary riparian

¹⁰ During the hearing on the merits, objections were made regarding the pipe and endwall, specifically whether the doctrine of administrative finality prevents the Appellant from challenging the Amended Permit based on these facilities since they were approved in the original NPDES permit, and whether the Appellant’s arguments regarding these facilities were waived due to the Appellant’s failure to raise them in the Notice of Appeal or Pre-Hearing Memorandum. The presiding judge heard the evidence but requested briefings on the objections. In their Post-Hearing Briefs, the Permittee and Department argued that the Appellant’s argument regarding the clean water diversion swale was waived due to the Appellant’s failure to raise the issue in its Notice of Appeal or Pre-Hearing Memorandum. However, the Board is not convinced that waiver does apply here, and is convinced that the doctrine of administrative finality – which was not briefed – does not apply here. We decide this issue on the merits.

forest buffer. (T. Vol. 3 p. 228.) Mr. Ahn was then asked whether the discharge from the endwall pipe would be in a sheet flow, and Mr. Ahn responded that “by its nature” it is not a sheet flow because it is a pipe outfall. (T. Vol. 3 p. 229.) Based on Mr. Ahn’s testimony, the Appellant argues that the voluntary riparian forest buffer does not meet the regulatory requirements of Section 102.14(c)(1) because the stormwater from the pipe and endwall do not enter upgrade of the voluntary riparian forest buffer as sheet flow or shallow concentrated flow and, therefore, the voluntary riparian forest buffer is not entitled to the presumption in Section 102.14(e)(1). The Appellant then concludes that the proposed voluntary riparian forest buffer fails to meet the regulatory requirements to be a nondischarge alternative, so the Permittee and the Department were required to implement ABACT and demonstrate that the existing quality of the EV Wetlands will be maintained, and they failed to do so. (A. Post-Hearing Brief at 83.)

In response, the Permittee and the Department assert that the record shows that the proposed voluntary riparian forest buffer meets the requirements of Section 102.14, including Section 102.14(c)(1), and is entitled to the antidegradation presumption in Section 102.14(e)(1). The Permittee and the Department refer to lengthy testimony provided by Mr. Ahn in which he detailed his review of the proposed voluntary riparian forest buffer and the applicable regulations. Mr. Ahn testified that the NCCD reviews discharges into a buffer to verify that they meet the criteria in Section 102.14(c)(1). (T. Vol. 3 p. 151.) When asked to identify the proposed discharges into the voluntary riparian forest buffer, Mr. Ahn responded that the proposed level spreaders discharge the stormwater from the developed areas of the Project Site into the voluntary riparian forest buffer. (T. Vol. 3 p. 151.) The level spreaders are proposed to be constructed upslope of the voluntary riparian forest buffer to ensure that the stormwater is discharged in shallow or sheet flow. (T. Vol. 3 p. 151.) Mr. Ahn proceeded through the rest of the regulatory provisions and

concluded that the proposed voluntary riparian forest buffer meets the regulatory requirements in Section 102.14. (*See* T. Vol. 3 pp. 173-176.) Aside from Section 102.14(c)(1), the Appellant does not specifically challenge whether the proposed voluntary riparian forest buffer meets the remaining requirements outlined in Section 102.14.

In order to rebut the Appellant’s contention that the voluntary riparian forest buffer does not meet the requirements of Section 102.14(c)(1) due to the proposed siting of a pipe and endwall within the voluntary riparian forest buffer, the Department cites Section 102.14(f), which provides a list of practices and activities that are allowable in a riparian buffer when authorized by the Department. The list of activities includes the “Construction or placement of roads, bridges, trails, storm drainage, utilities, or other structures.” 25 Pa. Code § 102.14(f)(2)(i). The Department again refers to testimony provided by Mr. Ahn. When asked whether the Swale would be considered “storm drainage” under Section 102.14(f), Mr. Ahn replied in the affirmative and agreed that it would therefore be an allowable activity in the proposed voluntary riparian forest buffer. (T. Vol. 3 p. 231.)

While “storm drainage” is not a defined term within the regulations, a review of the regulatory record shows that the Department intended for the term to include not just storm drainage structures, but actual storm drainage. In the comment response document included in the 2010 rulemaking package, a commenter asked specifically why storm drainage activities are acceptable in a buffer when permitted by the Department, but an applicant is not allowed to use concentrated flow. The Department responded: “Storm drainage structures that are allowed will be permitted by the Department and will minimize or eliminate concentrated flow so as not to impact the integrity of the riparian buffer.” In light of this, Section 102.14(c)(1) and Section 102.14(f)(2) are clearly irreconcilable. Section 102.14(c)(1) contains mandatory requirements for

all riparian buffers and requires all stormwater to enter upgrade and along the riparian buffer as sheet flow or shallow concentrated flow, yet Section 102.14(f)(2) allows the placement of “storm drainage” within a riparian buffer if authorized by the Department. Section 1934 of the Pennsylvania Rules of Statutory Construction provides that “...whenever, in the same statute, several clauses are irreconcilable, the clause last in order of date or position shall prevail.” Here, Section 102.14(f)(2) is the clause last in order and thus prevails. The question then becomes whether the Department’s determination that the pipe and endwall are allowable storm drainage within the voluntary riparian forest buffer is reasonable under these circumstances.

Again, no definition of “storm drainage” is supplied in the regulations, and Section 102.14(f) places no constraints upon the additions of such structures within a buffer beyond that they must be authorized by the Department. Mr. Ahn was not asked – and thus did not provide – testimony describing what is required for the Department to find that a structure is an allowable activity within a buffer beyond guidance indicating that storm drainage into a buffer must be non-erosive. Nor was Mr. Ahn asked how he determined that the discharge from the pipe and endwall in the buffer at issue here would be non-erosive. Likewise, the Permittee’s experts were neither asked why the pipe and endwall were placed within the buffer, nor whether there were any viable alternative locations for this discharge. Finally, the Appellant did not provide evidence that the discharge would in fact be erosive. Indeed, the parties overall failed to provide testimony – expert or otherwise – that is helpful in determining whether the placement of the pipe and endwall within the buffer is indeed a reasonable, non-erosive allowable activity that should stand, or whether the Department erred in allowing the discharge from the Swale within the buffer. Thus, in order to determine whether the Department’s permitting of this discharge into the proposed buffer as an

allowable activity was reasonable, we review *de novo* the totality of the evidence relevant to this issue.

First, it is important to note that the discharge from the pipe and endwall must travel across/through a riprap apron, rather than simply landing straight from the pipe and endwall directly into the buffer soil. A riprap apron is a type of outlet protection, typically made of crushed stone, that is designed to prevent the erosive action of flowing water from the outfall of a pipe or channel. (DEP Ex. 4.) Very little testimony or other evidence was given on the specifics of the riprap apron here, but to the extent that it is designed and created to meet the controlling requirements and does indeed control and disperse the discharge so that it does reach the buffer in a non-erosive way, we are satisfied that the discharge from the pipe and endwall is unlikely to cause erosion within the buffer.

While we are satisfied that the riprap apron is likely to reduce the potential for erosion from this discharge, our inquiry does not end there. Next, we must consider whether the buffer soils are sufficiently permeable so that the flow from this pipe and endwall does not cause erosion and inundate the EV Wetlands, but rather enters the groundwater via the buffer. The Appellant suggests that the answer to this question is a resounding no. (A. Post-Hearing Brief at 88-89.) As previously discussed, Mr. Dadio, soil scientist and expert for the Permittee whose opinion we have already credited, used a variety of tools to establish that the soils within the buffer are Conotton soils, which are classified as Hydrologic Soil Group A, meaning that they are among the fastest draining soils. (T. Vol. 2 p. 104.) The Appellant's concern vis a vis the permeability of the soils within the buffer stems from the fact that soil testing was conducted on the Site in soils with the same classification as those within the buffer and were found to have low recharge potential. (A. Post-Hearing Brief at 88-90.) Were this the only evidence on the record regarding the soils at the

Site and within the buffer, we may very well agree with the Appellant. However, while Mr. Dadio did rely upon desktop resources including the Web Soil Survey to understand the underlying soil conditions within the buffer and EV Wetlands because more usual excavation was not an option due to the bog turtle conservation zone, he also made field visits to the Site to confirm the information generated by the Web Soil Survey. (T. Vol. 2 pp. 102-103.)

In addition to visual observations made while walking the Site, Mr. Dadio testified that he used a hand auger to help confirm the permeability of the soil. (T. Vol. 2 p. 104.) While he could not auger down particularly deeply due to the presence of rounded rocks – a sign in and of itself of the soils’ speedy drainage – he stated that “there was a thick layer of organic material and nice granular structure in the surface,” creating “more pathways for water to drain through.” (T. Vol. 2 p. 105.) As well as testing the permeability as best he could with his hand auger, Mr. Dadio also looked to the vegetation within the buffer, which also influences infiltration rates. (T. Vol. 2 p. 104.) He testified that forested soils generally infiltrate better than agricultural soils for a variety of reasons, including the lack of tractors driving upon and compacting the soils, and the presence of roots primarily belonging to perennial plants, which have strong roots that help enhance soil structure and thus enhance infiltration into the soil. (T. Vol. 2 p. 104.) He added that “a good layer” of leaf litter and organic material also improves soil structure and infiltration into the soil. (T. Vol. 2 pp. 104-105.) At the Site, Mr. Dadio noted the presence of mature forest with big trees, which is exactly the kind of forest that creates the above-described conditions. (T. Vol. 2 p. 104-105.) Further, Mr. Dadio testified that he evaluated the buffer area for signs of erosion and stated that “in the half dozen times I was on the [S]ite between the wetland evaluation jurisdictional determination [and] these EV [W]etland studies, I didn’t see any evidence of surface run-off or rills forming or gullies forming in this area.” (T. Vol. 2 pp. 105-106.) Mr. Dadio was particularly

attentive to signs of erosion because of the heavy rain occurring prior to and around the times of his visits to the Site. (T. Vol. 2 p. 105.) Finally, Mr. Dadio testified that his field observations caused him to generally agree with the conclusions of the Web Soil Survey. (T. Vol. 2 p. 104.) As we have previously done, we credit the opinion of Mr. Dadio on the soil structure and likelihood of the discharge to infiltrate the buffer soils.

While the Appellant does suggest that the location of the pipe and endwall within the buffer near the EV Wetlands “raises questions” regarding the ability of the discharge from the pipe and endwall to infiltrate the buffer soils and the possibility of the discharge to cause erosion or degrade water quality, merely raising questions unsupported by testimony or other evidence on the record is insufficient to meet the burden of proof carried by third party appellants in appeals of this nature. Moreover, in his testimony, Mr. Ahn revealed that, as part of his technical review of the Application, he reviewed and evaluated the design of the Swale and its component parts, and concluded that the Swale diverts offsite stormwater in a non-erosive manner. (T. Vol. 3 pp.194-195.) This, combined with Mr. Dadio’s testimony above regarding permeability of the buffer soils, as well as the presence of the riprap apron to prevent erosive action from this discharge, and in light of the plain language of the irreconcilable regulations at issue here and the edicts of the Pennsylvania Rules of Statutory Construction, lead us to conclude that in this Appeal it was not unreasonable for the Department to determine that the discharge is an allowable activity within the buffer. This is not to say that any activity the Department deems allowable within a buffer under Section 102.14(f) is *per se* reasonable; rather, we simply hold that with the evidence presented in this Appeal and with the burden of proof being carried by the Appellant, we cannot find that the Department acted unreasonably when it permitted the discharge within the buffer.

While we share the dissent's concerns that interpreting Section 102.14(f) too broadly could theoretically allow the Department to permit stormwater for the entire site to be discharged into a buffer via a pipe and endwall, that is just not the case in this Appeal. The entirety of the onsite stormwater falling on the developed portions of the Site is being discharged through the upgrade level spreaders as sheet flow into the voluntary riparian forest buffer. There is simply no evidence on the record to indicate that the placement of the pipe and endwall within the voluntary riparian forest buffer would cause the buffer to not function as intended and the Appellant has not met its burden to show that the Department's determination that the pipe and endwall are allowable storm drainage under Section 102.14(f) was unreasonable. Therefore, the Board concludes that the Department's determination that the pipe and endwall were allowable "storm drainage," thus qualifying the voluntary riparian forest for the antidegradation presumption in 102.14(e)(1) was reasonable under these circumstances.

Additionally, the Department contends that the Department and the NCCD reviewed the proposed PCSM BMPs to evaluate whether they adequately managed changes in volume, water quality, and peak rate resulting from construction activities and determined that the Permittee has shown that post construction stormwater conditions would satisfy Section 102.8(h) related to implementation for special waters. (DEP Post-Hearing Brief at 32.) The requirements for stormwater analysis in the PCSM Plan are established in Section 102.8(g). Mr. Ahn provided extensive testimony regarding the typical process he takes when reviewing a permit application to determine if the proposed PCSM Plan meets the regulatory requirements. Section 102.8(g)(2) requires a PCSM Plan to include an analysis demonstrating that the PCSM BMPs will "manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality," and lists the criteria for the analysis. 25 Pa.

Code §102.8(g)(2). According to Mr. Ahn, the 2-year/24-hour storm is the design basis, or the amount of rainfall that the PCSM BMPs are designed to address. (T. Vol. 3 p. 158.) It is defined in the Department's E&S Manual as a storm event that occurs once every two years, meaning there is a 50% chance of that storm occurring in any given year, and is calculated over a 24-hour period. (DEP Ex. 4.) It is important to note that the Swale does not factor into this analysis because it is not a PCSM BMP and, even if it was, it has the same volume, water quality, and peak rate preconstruction as post construction (*See T. Vol. 3. P. 192.*)

Volume

Mr. Ahn testified that the Permittee used Worksheet 4, which was included in the Permit Application, to calculate the net change in volume between preconstruction and post construction. (T. Vol. 3 p. 184; Ex. 26 (at 1804).) Mr. Ahn explained that the Permittee included the total acreage of area that will be managed for stormwater (70.70 acres) and input the existing conditions, including cover type and soil groups and associated acreage, to calculate the runoff volume for existing conditions (186,768 cubic feet). Using the worksheet, the Permittee next calculated the increased volume from developed conditions (305,835 cubic feet), and then found the difference between the two values to arrive at the increase in volume (119,067 cubic feet) that would be required to be managed by the PCSM BMPs. (T. Vol. 3 pp. 184-187.)

Mr. Ahn then detailed his review of the Permittee's submitted Worksheet 5, which itemizes the volume credits for structural BMPs. According to Mr. Ahn, the Permittee entered the volume required to be controlled from Worksheet 4 (119,067 cubic feet), subtracted the volume credits for nonstructural BMPs (4,262 cubic feet), such as re-vegetate and reforest, and then subtracted volume credits for structural BMPs, such as landscape restoration (16,453 cubic feet) and the voluntary riparian forest buffer (207,936 cubic feet), to calculate the difference in volume between

preconstruction and post construction (-109,584 cubic feet). (T. Vol 3. pp. 187-188; DEP Ex. 26 (at 1805).) Mr. Ahn testified that this result indicated that the net change in volume does not exceed preconstruction rates and that stormwater volume from the proposed development has been adequately managed. (T. Vol. 3 p. 188.) The Department and Permittee also cite the previously discussed testimony provided by Mr. Sodl, regarding the volume calculations he performed in preparing a Stormwater Management Report and PCSM Report for the project. (See T. Vol. 2 p. 9.)

Water Quality

Mr. Ahn testified that the evaluation of PCSM BMPs in relation to water quality is handled in a similar way to volume. According to Mr. Ahn, Worksheet 12 is used to calculate the pollutants that need to be mitigated by PCSM BMPs that address water quality. (T. Vol. 3 p. 189.) Mr. Ahn explained that the Permittee entered the cover types and associated acreages, as well as the runoff volumes and pollutant loads associated, into Worksheet 12 to calculate the total load of each pollutant that would need to be managed. (T. Vol. 3 p. 189.) Mr. Ahn testified that, using the methodology in Worksheet 12, the required reduction for the Project Site is 85% of total suspended solids (314.92 pounds), 85% of total phosphate (1.34 pounds), and 50% of total nitrate (1.7 pounds). (T. Vol. 3 pp. 189-190; DEP Ex. 26 (at 1808).)

Mr. Ahn then described the use of Worksheet 13 for each of these pollutants to determine whether the proposed PCSM BMPs will adequately address the required reductions from Worksheet 12. Mr. Ahn explained that the Permittee input the required reductions from Worksheet 12 and the credits provided by the proposed PCSM BMPs for each pollutant (582.21 pounds for total suspended solids, 1.74 pounds for total phosphate, 3.28 pounds for total nitrate). Since the

reduction credits exceeded the required reductions, Mr. Ahn determined that the net change showed that water quality was adequately addressed. (T. Vol. 3 p. 191.)

Peak Rate

Mr. Ahn testified that the PCSM BMPs have to be designed to manage the net change in peak rate for the 2, 10, 50, and 100 year storms. (T. Vol. 3 p. 159); *See also* 25 Pa. Code §102.8(g)(3). Using the 2-year storm as an example, Mr. Ahn explained how he reviewed the peak rate analysis and hydrographs included in the PCSM Plan to determine whether the net change in peak rate will be adequately managed as required by the regulations. (T. Vol. 3 pp. 159-167.) The hydrographs and peak rate analysis for the 2-year storm showed that the pre-development peak rate equals 5.76 CFS and the combined post-development rate equals 1.69 CFS. (T. Vol. 3 p. 164; DEP Ex. 26 (at 1761).) Mr. Ahn concluded from these calculations that the PCSM BMPs adequately managed the net change in peak rate for the 2-year storm. Mr. Ahn further testified that the stormwater analysis that the Permittee provided in its application showed that the net change in peak rates for the 10, 50, and 100 year storms would also be adequately managed. (T. Vol. 3 p. 167.) A review of the calculations in the application confirm Mr. Ahn's testimony. The Appellant does not appear to challenge the Department's compliance with Section 102.8(g).

The Board credits the testimony of Mr. Ahn and finds that the Permittee and the Department have shown through expert testimony and evidence on the record that the proposed PCSM BMPs will adequately manage the net change in volume, water quality, and rate, and therefore satisfy Section 102.8(h).

Conclusion

For the foregoing reasons, we find that the Appellant did not meet its burden and enter the following order dismissing this appeal.

CONCLUSIONS OF LAW

1. The Environmental Hearing Board has jurisdiction over this matter. 35 P.S. § 691.7; 35 P.S. § 7514.

2. The Board reviews Department actions *de novo*, meaning we decide the case anew on the record developed before us. *Borough of St. Clair v. DEP*, 2016 EHB 299, 318; *O'Reilly v. DEP*, 2001 EHB 19, 32; *Warren Sand & Gravel Co. v. Dep't Env'tl Res.*, 341 A.2d 556 (Pa. Cmwlth. 1975).

3. In third-party appeals, the appellant bears the burden of proof. 25 Pa. Code § 1021.122(c)(2); *Joshi v. DEP*, 2019 EHB 356, 364; *Jake v. DEP*, 2014 EHB 38, 47.

4. The Appellant must show by a preponderance of the evidence that the Department acted unreasonably or contrary to the law, that its decision is not supported by the facts, or that the decision is inconsistent with the Department's obligations under the Pennsylvania Constitution. *Brockway Borough Mun. Auth. v. DEP*, 2015 EHB 221, 236, *aff'd*, 131 A.3d 578 (Pa. Cmwlth. 2016); *Friends of Lackawanna v. DEP*, 2017 EHB 1123, 1156.

5. The resolution of evidentiary conflict, witness credibility, and evidentiary weight are matters committed to the discretion of the Board. *EQT Prod. Co. v. Dep't of Env'tl. Prot.*, 193 A.3d 1137, 1149 (Pa. Cmwlth. 2018); *Kiskadden v. Dep't of Env'tl. Prot.*, 149 A.3d 380, 387 (Pa. Cmwlth. 2016).

6. "Expert testimony is required where the issues require scientific or specialized knowledge or experience to understand." *Brockway Borough Mun. Auth. v. Dep't of Env'tl. Prot.*, 131 A.3d 578, 587 (Pa. Cmwlth. 2016) (citing *Dep't of Transp. v. Agric. Lands Condemnation Approval Bd.*, 5 A.3d 821, 828-29 (Pa. Cmwlth. 2010)).

7. The Appellant did not show that the proposed PCSM BMPs fail to mimic preconstruction stormwater runoff conditions to protect, maintain, reclaim and restore water quality and existing uses as required by 25 Pa. Code § 102.11(a)(2).

8. The Appellant did not show that the Department failed to ensure protection of the bog turtles or their critical habitat as required by 25 Pa. Code § 93.4c(a)(2), or that the proposed PCSM BMPs would adversely impact the bog turtles or their critical habitat.

9. The Department reasonably found that the proposed voluntary riparian forest buffer qualified for the antidegradation presumption in 25 Pa. Code § 102.14(e)(1).

10. The Department properly found that that the proposed PCSM BMPs will adequately manage the net change in volume, water quality, and peak rate and satisfied the requirements of 25 Pa. Code § 102.8(h).

11. The Appellant has not met its burden of proof on its claims in this appeal. 25 Pa. Code § 1021.122(c)(2).

ENVIRONMENTAL HEARING BOARD

s/ Sarah L. Clark
SARAH L. CLARK
Judge

s/ MaryAnne Wesdock
MARYANNE WESDOCK
Judge

DATED: March 14, 2025

Furthermore, the riparian forest buffer regulation contains detailed requirements regarding the composition and width of acceptable buffers. 25 Pa. Code § 102.14(b)(1) and (2). A buffer that does not meet those criteria does not qualify. There is nothing in the regulation that gives the Department the authority to change or waive those criteria. To the contrary, the regulation says the criteria *must* be met. 25 Pa. Code § 102.14(b). Where, as here, concentrated stormwater is discharged into the buffer itself, the Permittee has effectively defeated the requirements regarding width and zoned vegetation. For example, the average minimum width of a buffer should be 150 feet. 25 Pa. Code § 102.14(b)(2)(ii). Here, there is only 60 feet downgradient of the discharge inside the buffer. It would also seem that the discharge necessarily defeats the zoned vegetation requirements of Section 102.14(b)(1)(iii).

Presumably, the Environmental Quality Board has determined based upon scientific study and input from the public and regulated community that a buffer must have the minimum size and cover requirements that are spelled out in the regulation in order for the buffer to do its job, but the regulatory language makes clear that is only **if** stormwater directed into it originates upgradient and as sheet flow. It follows that anything less can be presumed to *not* be adequate. Here, the Department has approved a buffer that not only violates the letter of the regulation, but one which must be presumed to be inadequate to serve its intended function.

The Department has no authority to waive the requirement for an upgrade, sheet flow discharge into a buffer for a buffer to qualify as an antidegradation nondischarge alternative, but even if it did, we would have hoped that such a waiver would have been based on a determination that something different was in the best interests of the environment. The Department made no such showing here. Because the riparian buffer is being treated by virtue of

regulatory grace as the functional equivalent of a nondischarge alternative, strict compliance with the regulation should be required.

The Department offers several excuses for why it approved the Permittee's buffer as a nondischarge alternative notwithstanding the lack of compliance with Subsection 102.14(c)(1). First, it argues that the pipe does not count because it discharges water from a "clean water diversion swale." It says the swale is not a BMP in the plan because it only captures and redirects off-site stormwater. This makes no sense to us. The swale is only there because of the construction. The Permittee must have an NPDES permit to operate it. The swale has permanently altered natural stormwater flow in the drainage area by redirecting and concentrating flow in a manmade conveyance. If it is true that the volume of stormwater has not changed as claimed by the Department, the rate and character of the discharge certainly have. The swale's only purpose is to alter natural stormwater flow in a way that allows the Permittee to operate on the site. Proper post construction stormwater flow planning here should have factored in one of the Permittee's key stormwater discharges. Even if we accept the Department's curious view that the Permittee's swale and discharge are not "part of the PCSM Plan," there is nothing in Section 102.14 that says a buffer can qualify as a nondischarge alternative even if stormwater discharges via a point source into the middle of the buffer so long as the point source is not "part of the PCSM plan."¹

The Department next says the Permittee's discharge does not prevent the buffer from qualifying as a nondischarge alternative because the discharge in question is "nonerosive." The Department does not cite to an exception in Section 102.14 for "nonerosive" discharges. Nor do we see one. As previously noted, the scientific basis for using buffers as a nondischarge

¹ We fully concur in our esteemed colleagues' conclusion that the Department was not entitled to ignore the in-buffer discharge based on meritless claims of waiver and administrative finality.

alternative must depend on flow being dispersed **before** entering a buffer that meets certain nonwaivable criteria. If there is an upgradient sheet flow discharge into a buffer meeting defined criteria, it can safely be assumed that receiving waters on the other side of the buffer will not be degraded. The goal of this program must have been to eliminate the need for site-specific investigations. Yet, that is precisely what the Department attempted here when it excused compliance with Subsection 102.14(c)(1) in the form of evaluating the in-buffer discharge’s “erosivity.” Query whether the Department will now, going forward, allow the use of otherwise nonqualifying buffers at other sites so long as any discharge into them is “nonerosive,” regardless of the dictates of Section 102.14.

The Department’s next excuse is that it can disregard Subsection 102.14(c)(1) (upgrade/sheet flow discharge) because Subsection 102.14(f) contains a list of practices and activities in a buffer that are “allowable” when authorized by the Department, which includes the following:

- (i) Construction or placement of roads, bridges, trails, storm drainage, utilities or other structures.

25 Pa. Code § 102.14(f)(2)(i).

To be clear, we are not suggesting that the Permittee’s discharge is not “allowable.” It appears to be a perfectly allowable, fully permitted discharge. A permittee is free to locate a discharge in the middle of a buffer. However, by placing the discharge inside the buffer, the Permittee has precluded the use of the buffer as a nondischarge alternative for purposes of the antidegradation analysis pursuant to Subsection 102.14(e)(1) (riparian buffer must meet requirements of this section to qualify as a nondischarge alternative). We see no inconsistency between 102.14(e)(1), which specifically addresses antidegradation, and the description of allowable activities in 102.14(f). The activities are allowable; it is just that the buffer does not

then qualify as a nondischarge alternative if the other regulatory criteria—such as an upgradient sheet flow discharge—are not met. Subsection 102.14(f) is not intended to excuse compliance with the other regulatory criteria. For example, building a road through a buffer that acts as a BMP is fine and the buffer can act as a nondischarge alternative *so long as the regulatory criteria are met*. Here, they are not.

To say that the words “storm drainage” in Subsection (f) trump everything else in the regulation strikes us as the height of irony. Under the Department’s view, a permittee could channel every ounce of stormwater flow from the entire site into the middle of the buffer by virtue of Subsection (f) and this huge *discharge* would not prevent the buffer from being treated as a *nondischarge* alternative. We believe the Department is reading the language of Subsection (f) far too broadly. Subsection (f) also speaks about the “construction or placement” of “structures.” In this case, it is not the pipe or endwall that is our concern; it is the discharge from that pipe.

Accordingly, we would have remanded the permit for further consideration that does not treat the buffer as currently located vis-à-vis the swale discharge as a nondischarge alternative.

ENVIRONMENTAL HEARING BOARD

s/ Steven C. Beckman
STEVEN C. BECKMAN
Chief Judge and Chairperson

s/ Bernard A. Labuskes, Jr.
BERNARD A. LABUSKES, JR.
Judge

DATED: March 14, 2025



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