

The Department's issuance of the NPDES permit is overturned.

INTRODUCTION

This matter presents the question of the relationship between the Chapter 102 stormwater discharge erosion and sediment control regulations and the Chapter 93.4a-d antidegradation regulations. In this case the Department of Environmental Protection (DEP or Department) granted an individual NPDES (National Pollution Discharge Elimination System) stormwater discharge permit to Alpine Rose Resorts, Inc. (Alpine) in connection with Alpine's construction of a road course for sports cars and high performance vehicles. The stormwater discharge will be to the Aquashicola Creek (Creek), a High Quality, Cold Water Fishery of this Commonwealth.

Blue Mountain Preservation Association (BMPA) appealed the granting of the permit to the Board. It raised various arguments but the only one it has taken through to this stage is its claim that the permit was granted in contravention of the antidegradation regulations.

Chief Judge Michael L. Krancer presided over the trial in this matter for four consecutive days from March 28, 2006 through March 31, 2006 in Norristown, Pennsylvania.

FINDINGS OF FACT

1. Appellant Blue Mountain Preservation Association, Inc. (BMPA) is a nonprofit organization located in Eldred Township, Monroe County, Pennsylvania. Stip. ¶ 1.
2. Frank O'Donnell is the President of BMPA. Stip. ¶ 2.
3. Appellee DEP is an agency of the Commonwealth of Pennsylvania responsible for issuing NPDES Stormwater Permits. It has the duty and authority to administer and enforce the Pennsylvania Clean Streams Law, 35 P.S. § 691.1 *et seq.*, the Pennsylvania Sewage Facilities Act, 35 P.S. §750.1 *et seq.*, Section 1917-A of the Administrative Code, 71 P.S. § 510-17, and

the rules and regulations thereunder. Stip. ¶ 3.

4. Permittee Alpine Rose Resorts (Alpine) is a Pennsylvania corporation with offices at 100 Ivy Hill Circle, Reading, PA 19606. Stip. ¶ 4.

5. The property which is the subject of the permit in this appeal is approximately a 350 acre tract on the north slope of Blue Mountain, on Upper Smith Gap Road in Eldred Township, Monroe County, Pennsylvania (Subject Property). Stip. ¶ 5.

6. The Aquashicola Creek flows through the northeast corner of the Subject Property. Stip. ¶ 6.

7. The Aquashicola Creek is designated as a High Quality, Cold Water Fishery, Migratory Fishes pursuant to 25 Pa. Code § 93.9d. Stip. ¶ 7.

8. The Subject Property project site is located within the drainage area of Aquashicola Creek. 3/30/06 Blechschmidt, p. 49.¹

9. Alpine is proposing to utilize the Subject Property to construct a road course for sports cars and high performance vehicles, as well as support facilities, including a welcome center, garages with 52 bays, paddock areas, a self-service fuel station and car wash, food service, classrooms, a pro-shop, lavatories, and supervision and control facilities. Stip. ¶ 8.

10. The Subject Property will be serviced by an on-site sewage system and treatment facility. This treatment facility will include a sewer system, a pump station, two aerated lagoons, ultraviolet disinfection and a 3.5 acre spray irrigation field with 54 nozzles in the northeast corner of the Subject Property. Stip. ¶ 9.

11. On September 17, 2002, Alpine submitted to DEP an NPDES Permit Application for stormwater discharges to the Aquashicola Creek associated with construction activities at the

¹ References to trial testimony shall be in this form, the date of the testimony, followed by name of the witness, followed by the page cite from the transcript.

Subject Property. Stip. ¶ second 8.²

12. On October 26, 2002, notice of the NPDES Permit Application was published in the *Pennsylvania Bulletin*. Stip. ¶ second 9.

13. Due to comments and concerns received after the *Pennsylvania Bulletin* notice, DEP scheduled a public hearing to discuss the Permit and project. Notice of the public hearing was published in the *Pennsylvania Bulletin* on December 14, 2002. Stip. ¶ 10.

14. On January 23, 2003, DEP held a public hearing on Alpine's application for an NPDES permit. Stip. ¶ 11.

15. Forty-one individuals and associations who attended the public hearing provided testimony as well as written comments. Stip. ¶ 12.

16. DEP subsequently issued a Comments and Response Document addressing the issues raised in the public hearing testimony and the written comments. Stip. ¶ 13.

17. On August 5, 2003, Alpine submitted to DEP a second NPDES Permit Application for stormwater discharges to the Aquashicola Creek associated with construction activities at the Subject Property. Stip. ¶ 14.

18. During the review process, Alpine was required to submit additional technical and scientific information to justify issuance of an NPDES permit for the Project. Stip. ¶ 32.

19. On August 27, 2004, Alpine submitted its revised Erosion and Sedimentation Control Plan (E&S Plan) to the Monroe County Conservation District (MCCD). Stip. ¶ 34.

20. The Monroe County Conservation District was given authority to review and approve the Erosion and Sedimentation Control Plans submitted as part of the NPDES Permit Application. 3/29/06 Mayer, p. 57.

² The Stipulation of Facts filed by the parties to the Board mis-numbered two stipulations by providing two number eights and two number nines. Here, we will signify them as second 8 and second 9.

21. Erosion and sedimentation control is governed by regulations at 25 Pa. Code § 102.
22. Section 102 regulates accelerated erosion and sedimentation control. 3/29/06 Mayer, p.59-60, 103; 3/30/06 Blehschmidt, p. 24.
23. Chapter 102 outlines Best Management Practices (BMPs) to provide for protection against accelerated erosion and sedimentation runoff and requires the implementation of BMPs aimed at preventing accelerated erosion and sedimentation runoff. 3/30/06 Blehschmidt, p. 23-24; 3/29/06 Mayer, p. 59-60.
24. Chapter 102 regulations provide for special BMPs to control accelerated erosion and sedimentation where earth disturbance activities may result in a discharge to a water of the Commonwealth classified as High Quality or Exceptional Value pursuant to Chapter 93. 25 Pa. Code § 102.4(b)(6); 3/29/06 Mayer, p. 57, 59-60.
25. These special BMPs are outlined at 25 Pa. Code § 102.4(b)(6). 3/29/06 Mayer, p. 59-60, 94-95; 3/30/06 D’Onofrio, p. 115-16, 121.
26. As with all BMPs in 25 Pa. Code § 102, the special BMPs of 25 Pa. Code § 102.4(b)(6) are aimed at control of accelerated erosion and sedimentation. 3/29/06 Mayer, p. 59-60, 103; 3/30/06 D’Onofrio, p. 115-116.
27. Infiltration of precipitation and/or stormwater into the soil is a BMP for stormwater management. 3/30/06 Donofrio, p. 116, 125-28; 3/31/06 Murin, p. 80-83,119-25.
28. The Revised E&S Plan included erosion and sedimentation control BMPs, which are required by 25 Pa. Code Chapter 102. Stip. ¶ 35; *see also* 3/29/06 Mayer, p. 103; 3/31/06 Murin, p. 36.
29. Special protection BMPs, such as sediment basins, are designed to dewater between four to seven days, rather than basins located near non-high quality water which dewater within

two to seven days, resulting in water being held longer in a high quality watershed sediment basin. 3/29/06 Mayer, p. 60.

30. Skimmers are also used as a special protection BMP to skim the water from the surface of the pond which contains the smallest amount of dirt. 3/29/06 Mayer, p. 60-61.

31. Alpine's proposed BMPs for its E&S Plan included the following: topsoil stockpiles; stabilized construction entrance; a silt fence; benches; sediment basins; baffles installed in the basins; skimmer for discharge from basins; erosion control lining placed in swales; filtration device; water quality inlet structures (Stormceptors); planting of grasses, plants and trees; dry and wet ponds; swales or lined channels to direct runoff; and a riparian buffer. Alpine Ex. 52, sheet 42.

32. On August 31, 2004, the MCCD determined that the Revised E&S Plan adequately met the requirements of the Department's Chapter 102 regulations. Stip. ¶ 36.

33. Alpine's proposed BMPs do meet the requirements of 25 Pa. Code § 102(b)(6) with regard to prevention of accelerated erosion and sedimentation. 3/30/06 D'Onofrio, p. 115-16; *see also* Alpine Ex. 52, sheet 42.

34. There will be a net increase in post construction stormwater runoff, i.e., discharge into the Aquashicola Creek, as a result of the construction of the Alpine project. 3/30/06 Blehschmidt, p. 30.

35. The Aquashicola Creek is a High Quality water receiving an increase in discharge as a result of the project, thus triggering the requirement of compliance with the antidegradation regulations for the Alpine Permit. 3/30/06 Blehschmidt, p. 19, 21, 30; 3/30/06 D'Onofrio p. 136.

36. The antidegradation regulations outline a process and procedure which an applicant

proposing a new, additional or increased discharge to High Quality or Exceptional Value Waters must follow in making certain affirmative demonstrations to the Department as a prerequisite to the Department's granting of a permit for such a new, additional or increased discharge to High Quality or Exceptional Value Waters. 25 Pa. Code § 93.4c(b)(1)(i).

37. First, 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. 25 Pa. Code § 93.4c(b)(1)(i)(A) (first sentence).

38. In the event that a nondischarge alternative is demonstrated to be not environmentally sound and cost-effective, the proponent of the discharge is to show that the new, additional or increased discharge shall be subject to the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies (Antidegradation Best Available Control Technologies or ABACT). 25 Pa. Code § 93.4c(b)(1)(i)(A) (second sentence).

39. Finally, 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 is to demonstrate that the discharge will maintain and protect the existing quality of the receiving surface waters with an exception which is not relevant in this case. 25 Pa. Code § 93.4c(b)(1)(i)(B).

40. As just noted, one of the requirements of the antidegradation regulation is that the applicant shall undertake an evaluation of nondischarge alternatives to the proposed discharge. *See* 25 Pa. Code § 93.4c(b)(1)(i)(A).

41. Some nondischarge alternatives are: (1) pollution prevention and process changes; (2) alternative project siting; (3) land application of wastewater; (4) recycle/reuse of water; (5)

alternative discharge locations; (6) holding facilities and wastewater hauling; and (7) constructed treatment wetlands. BMPA Ex. 55.

42. Alpine did not undertake an analysis of non-discharge alternatives. 3/28/06 Crowley, p. 117-18.

43. Alpine and the Department considered only *one* measure that would involve non-discharge in connection with the proposing, reviewing and granting of the Permit and that was infiltration (also known as land application of wastewater). 3/30/06 D'Onofrio, p. 116, 122, 129, 135.

44. Infiltration was considered in the context of being a potential Chapter 102 erosion and sedimentation control BMP. 3/30/06 D'Onofrio, p. 116, 122, 125-26, 127.

45. Infiltration was rejected as a BMP at this site due to adverse geological conditions. 3/30/06 D'Onofrio, p. 122, 127, 129; 3/30/06 Blechschmidt, p. 29, 61; Alpine Ex. 12; BMPA Ex. 21.

46. Alpine did not perform a nondischarge alternatives analysis in this case as called for in 25 Pa. Code § 93.4c(b)(1)(i)(A); 3/28/06 Crowley, p. 118-119.

47. Alpine did not demonstrate that other nondischarge alternatives such as pollution prevention and process changes; alternative project siting; recycle/reuse of water; alternative discharge locations; holding facilities and wastewater hauling; and constructed treatment wetlands were not environmentally sound and cost effective.

48. In order to show that the applicant will be subjecting the proposed discharge into a High Quality water to the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies, the applicant must undertake an analysis of the alternatives available (i.e., an ABACT analysis). 25 Pa.Code § 94.4c(b)(1)(i)(A); 3/28/06

Crowley, p. 120.

49. Ms. Crowley, the Water Program Manager of the Department's Northeast Regional Office, whose responsibilities at the time her office issued the Permit included issuance of this and other like permits, did not know whether an analysis of alternatives as outlined in 25 Pa. Code § 93.4c(b)(1)(i)(A), *i.e.*, an ABACT analysis, had been undertaken in connection with this permit application. 3/28/06 Crowley, p. 120-21.

50. The post-construction erosion and sedimentation control plan submitted by Alpine to the Department which ultimately was approved by the Department includes the following:

a Drainage Area No. 1, Basin No. 1: This area is serviced by a water quality basin that includes wetland plantings, an aquatic beach, a micro-pool area, and a forebay for sediment removal. The outlet discharge structure is also equipped with a "snout"/water quality inlet to protect the discharge and to maintain water quality in the receiving watershed.

b Drainage Area No. 2, Basin No. 2: This area contains a basin designed with sediment forebays, micro-pools, and a "snout" which serves as a secondary treatment device. A downstream "sumped" area below Basin No. 2 is equipped with a snout with plantings around the perimeter. This sumped area is designed to intercept runoff not collected by Basin No. 2. Two other "sumped" areas are located among the other drainage areas providing additional treatment.

c Drainage Area No 3, Basin No. 3: Basin No. 3 captures the runoff from both sides of the East Paddock and the site access road areas. This area includes seven (7) Stormceptor units that pre-treat the stormwater run-off prior to collection in Basin No. 3. As with the other basins, the outlet structure is equipped with a "snout." A snout is also located on a stormwater inlet in this area for pre-treatment of stormwater discharge generated by the Welcome Center and lower access road prior to its conveyance to Basin No. 3.

d Drainage Area No. 4 and a downstream portion of Drainage Area No. 5, Basin No. 4: Basin No. 4 is located below the West Paddock area. It utilizes three (3) Stormceptor

units and a snout to separate out the solids, trash and organic components captured by the runoff and removes those pollutants from the water prior to discharging into the basins. Basin No. 4 includes two forebays north and south of the micro-pool and an aquatic bench planted with wetland species of plants for nutrient uptake.

e Drainage Area No. 5 and 3 (upstream portions) Basin No. 6: This portion of the site collects, treats and conveys runoff from the noise berm area to Basin No. 6 where treatment is provided prior to discharge including a micro-pool, forebay, and a snout. DEP Ex. 18.

51. Among the measures proposed is a wet pond. 3/30/06 Blechschmidt, p. 27.

52. The wet ponds used as post construction BMPs at the Project Site hold water to allow sediment to settle out of the water before it flows from the pond. 3/30/06 Blechschmidt, p. 27; *see also* Alpine Ex. 52, sheet 71-80.

53. Wet ponds should be used with caution near High Quality waters because of the temperature sensitivity of special protection waters. BMPA Ex. 58, Ch. 6, p. 154.

54. Alpine did not demonstrate that the steps it proposed to implement with respect to the discharge to the Aquashicola Creek were the best combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies. 3/28/06 Crowley, p. 121.

55. Alpine did not undertake an analysis of potential thermal impacts of stormwater leaving the site. 3/30/06 Blechschmidt, p. 56-57.

56. Alpine did not determine or show that the discharge would maintain the thermal character of the Aquashicola Creek. 3/30/06 Blechschmidt, p. 56-57.

57. Alpine did not determine or show that stormwater discharge leaving the site would maintain and protect the existing water quality of Aquashicola Creek as required by antidegradation regulations.

DISCUSSION

This case involves the Department's issuance of an NPDES permit for the discharge of stormwater associated with the construction of a road course by Alpine. The discharge would be to Aquashicola Creek, a High Quality Cold Water Fisheries water. Being a stormwater discharge to a High Quality Water, Alpine was required to have an individual NPDES permit for the discharge. As such, the permit was subject to review under the Chapter 102 Erosion and Sediment Control regulations. 25 Pa. Code §§ 102.1—102.51. As a discharge to a High Quality water, the Commonwealth's so-called "antidegradation regulations" are also implicated. 25 Pa. Code §§ 93.4a—93.4d. Thus, the case involves the interplay and intersection of the NPDES stormwater permitting program regulations and the antidegradation regulations.

The Department and Alpine proffer two basic theories, one a legal theory and the second a factual theory. First, they maintain that, as a matter of law, compliance with the special protection BMP provisions of Chapter 102 constitutes compliance with the antidegradation regulations. They say that the 2000 amendments to the Chapter 102 regulations which incorporated the special protection BMPs for High Quality Waters were meant to and did thereby incorporate the various analyses and steps set forth in the antidegradation regulations therein. Thus, the argument goes, if the permit was issued in compliance with Chapter 102 it is thereby in compliance with the antidegradation regulations. Their second but related argument is that, as a factual matter, in this case, the permit application, in following the Chapter 102 requirements, also followed the proper antidegradation regulations requirements.

We cannot accept either of those basic arguments or their dependent supports. The Chapter 102 special protection BMP provisions were not intended to nor do they incorporate fully the Chapter 93.4a-d antidegradation requirements. Also, as a factual matter, the application

did not satisfy the antidegradation requirements and the Department did not fulfill its mandate to require that it did.

25 Pa. Code Chapter 102, Erosion and Sedimentation Control

Regulation in Pennsylvania of erosion and sedimentation associated with stormwater discharges relating to earthmoving activities goes back to 1972 when the Commonwealth adopted the first version of the Chapter 102 erosion and sedimentation control regulations under the authority of the Clean Streams Law. 25 Pa. Code § 102.1 *et seq.* (citation of authority and source). The Chapter 102 regulations aim to prevent accelerated erosion and sedimentation associated with earth moving activities. “Erosion” is defined as “the natural process by which the surface of the land is worn away by water, wind or chemical action.” 25 Pa. Code § 102.1. “Accelerated erosion” is defined as “the removal of the surface of the land through the combined action of human activities and the natural processes, at a rate greater than would occur because of the natural process alone.” *Id.* “Sediment” is defined as “soils or other materials transported by surface water as a product of erosion” and “sedimentation” is defined as “the action or process of forming or depositing sediment in waters of this Commonwealth.” *Id.*

As Judge Labuskes pointed out in *O’Reilly v. DEP*, 2001 EHB 19, federal law requires that runoff from construction activity be treated as a point source requiring an NPDES permit. *Id.* at 33, *citing* 40 CFR §122.26; *Valley Creek Coalition v. DEP*, 1999 EHB 935, 949. Chapter 102 regulates discharges associated with stormwater not by imposing discreet numerical effluent limitations but, instead, through the requirement of the application of “best management practices” known commonly as “BMPs.” Again, Chapter 102 BMPs focus on control of accelerated erosion of sediment. BMPs are defined as,

Activities, 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 uses of waters within this Commonwealth.

25 Pa. Code § 102.1.

In 2000, the Chapter 102 erosion and sediment control regulations were amended to provide that special enhanced BMPs are to be used on projects affecting High Quality Waters to protect High Quality Waters from the adverse impacts of accelerated erosion and sedimentation. These special enhanced BMPs are outlined in 25 Pa. Code § 102.4(b)(6) which provides as follows,

(6) Where an earth disturbance activity may result in a discharge to a water of this Commonwealth classified as High Quality or Exceptional Value pursuant to Chapter 93, the person proposing the activity shall, as applicable, use the following Special Protection BMPs to maintain and protect the water from degradation:

(i) Special sediment basin requirements.

(A) Principal spillways shall be designed to skim water from the top 6 inches (15 centimeters) of the dewatering zone, or shall have permanent pools greater than or equal to 18 inches (46 centimeters) deep.

(B) The basin shall be designed with a flow length to basin width ratio of 4:1 or greater.

(C) The basin shall be designed so that it dewateres in at least 4 days and no more than 7 days when at full capacity.

(ii) Channels, collectors and diversions shall be lined with permanent vegetation, rock, geotextile or other nonerosive materials.

(iii) BMPs that divert or carry surface water shall be designed to have a minimum capacity to convey the peak discharge from a 5-year frequency storm.

(iv) Upon completion or temporary cessation of the earth disturbance activity, or any stage thereof, the project site shall be immediately stabilized.

(v) The Department or county conservation district may approve alternative BMPs which will maintain and protect existing water quality and existing and designated uses.

25 Pa. Code § 102.4(b)(6).

Antidegradation Regulations

The antidegradation regulations of 25 Pa. Code Chapter 93.4a-d were passed in 1999 and apply to high quality surface waters of the Commonwealth of which Aquashicola Creek is one. The regulations provide that “existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected” and high quality waters “shall be maintained and protected.” 25 Pa. Code §§ 93.4a(b), (c).³ As the Alpine project impacts the Aquashicola Creek, a high quality waterway, it is subject to the antidegradation regulations.

The antidegradation regulations outline a very specific and particular process and procedure which an applicant proposing a new, additional or increased discharge to High Quality or Exceptional Value Water must follow in making certain affirmative demonstrations to the Department as a prerequisite to the Department’s granting of a permit for such a new, additional or increased discharge. 25 Pa. Code § 93.4c(b)(1). The pertinent regulation states as follows:

(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.

³ Section 93.4a provides as follows:

(a) *Scope.* This section applies to surface waters of this Commonwealth.

(b) *Existing use protection for surface waters.* Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.

(c) *Protection for High Quality Waters*—The water quality of High Quality Waters shall be maintained and protected, except as provided in § 93.4c(b)(1)(iii) (relating to implementation of antidegradation requirements).

(d) *Protection for Exceptional Value Waters*—The water quality of Exceptional Value Waters shall be maintained and protected.

25 Pa. Code § 93.4a.

(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).

25 Pa. Code § 93.4c(b)(1)(i). The Environmental Quality Board in this regulation has established what the EHB has very accurately and appropriately described as a “hierarchical structure.” *Zlomsowitch v. DEP*, 2004 EHB 756, 782. As the EHB further noted, “the scheme devised in Section 93.4c(b)(1)(i) to prevent degradation is to require all those who propose to discharge into an Exceptional Value Water to engage in an alternatives-analysis process before obtaining a NPDES permit.” *Id.*

First, 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. 25 Pa. Code § 93.4c(b)(1)(i)(A)(first sentence). In the event that a nondischarge alternative is demonstrated to be not environmentally sound and cost-effective, the proponent of the discharge is to show that the new, additional or increased discharge shall be subject to the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies (Antidegradation Best Available Control

Technologies or ABACT). 25 Pa. Code § 93.4c(b)(1)(i)(A)(second sentence). Finally, 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 is to demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters with an exception which is not relevant in this case. 25 Pa. Code § 93.4c(b)(1)(i)(B).

Since the Alpine project involves an increased discharge into Aquashicola Creek, Alpine was subject to these provisions and required to undertake the required analyses and to make the requisite showings, and the Department was obligated to police Alpine's compliance therewith before granting the permit in this case. The Department, to be compliant with the antidegradation regulations, "must compel the discharge proponent to first evaluate whether environmentally sound 'nondischarge alternatives' are available under the circumstances, and if so, to compare the cost of such an alternative with the cost of the method proposed to discharge into the [waterway]." *Zlomsowitch*, 2004 EHB at 782, *citing* 25 Pa. Code § 93.4c(b)(1)(i)(A). Then, if "an environmentally-sound, cost-effective, nondischarge alternative is not available, the proponent of the discharge shall instead use the best available combination of pollution control methods under the circumstances." *Id.* Also, and in all cases, the proponent, in this case, Alpine, was obligated to demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters. *Zlomsowitch*, 2004 EHB at 783, *citing* 25 Pa. Code § 93.4c(b)(1)(i)(B).

Burden of Proof

This is an appeal by a third party of the Department's issuance of an NPDES permit. Thus, it is axiomatic that the Appellant has the burden of proof. The Appellant must show by a preponderance of the evidence that the Department acted contrary to the law in issuing the

permit. 25 Pa. Code § 1021.122(a), (c)(2). However, the dictates and principles outlined above regarding the antidegradation regulations have relevance with respect to what it is that the Appellants have the burden of proof to show in this case. It is clear that the antidegradation regulations require an applicant to undertake certain process and make certain showings as a prerequisite to the Department's granting of an NPDES permit. By the same token, the Department is obligated to see to it that the applicant has done so before it may grant a permit. This is nothing new. The Board in *Shuey v. DEP*, 2005 EHB 657 put it this way,

At the *permitting* stage, the burden is on the permit applicant to convince the Department that it meets all the requirements necessary for issuance of the permit. . . . At the permitting stage, the Department receives input from the public, including concerned citizens. Those citizens are provided with an opportunity to come forward with their concerns which are then investigated by the professional staff at the Department. Many times concerns are raised by citizens that must be addressed by the technical staff and other professionals hired by the permit applicant. In some cases, issues raised by concerned citizens are such that, after more investigation by the Department and further response by the professionals employed by the permit applicant, the Department decides not to issue the permit or imposes substantial conditions in the permit.

If the Department issues the permit, third parties, including concerned citizens, have the right to appeal the permit issuance to the Pennsylvania Environmental Hearing Board. The Environmental Hearing Board is the state trial court for environmental matters. At this stage in cases involving the issuance of a permit, the burden of proof is no longer on the permit applicant but on the *party challenging the permit* to show the permit should not have been issued. Appellants, therefore, must prove by a preponderance of the evidence that the permit should not have been issued.

Shuey v. DEP, 2005 EHB 657, 710-11 (footnote omitted).

So it is plain to see that the Department's and Alpine's suggestion that the Appellant's case must necessarily fail because they have not proven that there will be a degradation of Aquashicola Creek or because they have not proven that there will be an environmental harm is not so. Certainly, if Appellants made such showings at trial they would prevail, but the converse is not true. They do not need to make such showings in order to prevail. What they need to

show by a preponderance of the evidence is that Alpine did not undertake the antidegradation regulations' requisite analyses or make the appropriate showings thereunder and/or that the Department did not require that Alpine do so and issued the permit in the absence of such analyses and showings.

The Zlomsowitch Case

Much of the parties' briefing has focused on the Board's decision in *Zlomsowitch v. DEP*, 2004 EHB 756. Appellants view *Zlomsowitch* as on all fours with this case and Appellees argue it is off point. *Zlomsowitch* involved a non-coal surface mining permit. The Department had considered the applicant's proposal in that case to be a nondischarge alternative. The Board found this conclusion unreasonable. Thus, the Board remanded the case to the Department for full consideration of the antidegradation requirements. The Board said this:

By labeling the water pollution control system for the site as a "nondischarge alternative" DEP short-circuited the alternatives-analysis process prescribed by § 93.4c(b)(1)(i). The evidence at hearing did not show that alternatives in which no point source discharge into UNT Lizard Creek would be permitted were evaluated by either Lehigh or DEP. For example, there was no evidence that DEP required Lehigh to consider conveying accumulated surface water runoff into Lizard Creek, a designated warm water fishery, rather than discharging into UNT Lizard Creek, the exceptional value water. There was also no substantial evidence presented: (1) that DEP made an express finding that a cost-effective environmentally-sound nondischarge alternative does not exist for the proposed mining operation; (2) that Lehigh demonstrated, and DEP found, that Lehigh would employ the best available combination of water pollution control methods for this site; and, (3) that Lehigh properly demonstrated--with water quality monitoring data and scientific analysis of the effects on the stream from the addition of identified and quantified pollutants in a permitted discharge--that the selected control methods will maintain and protect the existing quality of UNT Lizard Creek. In short, the evidence did not show that the alternatives analysis required by the antidegradation regulation was performed here. Process, however, is the critical means of accomplishing the antidegradation regulation's fundamental purpose of maintaining and protecting the existing quality of the exceptional value water. 25 Pa. Code § 93.4c(b)(1)(i)(B). *Cf. Lathan v. Brinegar*, 506 F.2d 677, 693 (9th Cir. 1974) (the history of environmental protection may prove to largely be the 'history of observance of procedural safeguards').

Id. at 787-88 .

Many of the attempts to distinguish *Zlomsowitch* and relegate it aside are specious. For example, *Zlomsowitch* is not beside the point because that permit was a mining permit and this one an NPDES permit. *Zlomsowitch* is not irrelevant because it involved an entirely new discharge whereas here we have an increased discharge, as are most stormwater discharges associated with construction which have some preexisting pre-development discharge. The antidegradation regulations apply alike to mining cases and NPDES cases where the discharge is into a High Quality Water regardless of whether it is new or increased discharge into a High Quality Water.

Zlomsowitch's discussion of the antidegradation regulations is applicable to this case, it is its facts which are not. *Zlomsowitch* involved an entirely different structural setting. There, the Department had found that the applicant had proposed a nondischarge alternative. Neither the applicant nor the Department had taken the antidegradation process analysis any further since they relied on the notion that compliance with the antidegradation regulations had been accomplished at the starting gate by adoption of the nondischarge alternative. The Board held that conclusion to be unreasonable. Thus, the case had to go back to undergo all steps of the antidegradation analysis which had never occurred in the first place and no party had contended had occurred. Here, Appellees contend that all steps of the antidegradation process did occur.

BMPA focuses on the language of *Zlomsowitch* which they say lays down the rule that the Department must make specific findings on the various steps of the antidegradation process. They point to the language which states,

There was also no substantial evidence presented: (1) that DEP made an *express finding* that a cost-effective environmentally-sound nondischarge alternative does not exist for the proposed mining operation; (2) that Lehigh demonstrated, *and DEP found*, that Lehigh would employ the best available

combination of water pollution control methods for this site...

Id. at 788 (emphasis added). From that language, BMPA argues that DEP must make specific findings and, in the absence of evidence of those specific findings, compliance with the antidegradation regulations is not complete. We would not go so far and we do not read *Zlomsowitch* or the antidegradation regulations as going that far either. Immediately after the language from *Zlomsowitch* quoted above the Board continued in the same sentence,

. . . (3) that Lehigh properly demonstrated--with water quality monitoring data and scientific analysis of the effects on the stream from the addition of identified and quantified pollutants in a permitted discharge--that the selected control methods will maintain and protect the existing quality of UNT Lizard Creek.

Id. There is no talk there of any “finding” in any particular form or format on the subject. The key was the absence of evidence that the applicant had made the required demonstrations. Also, the antidegradation regulations require the applicant to make the required showings as a prerequisite to obtaining a permit. While such showings must necessarily be made to the Department since it is the permit granting authority, the regulations do not speak of the Department making findings in any particular form nor do they require that the Department follow any particular documentation method in its permit review process. We recognize that it could be argued that DEP’s making findings is a necessary implication of the regulation’s requiring that showings be made to DEP as a prerequisite to DEP’s granting the permit. We will, however, adhere to the specific terms of the regulation on this question which do not specifically require that the Department produce “findings” in any particular form or format.

For future cases though, it seems that the presence of such Department “findings” would be substantially helpful. If the question is, as it is in this case, was the permit issued in compliance with the antidegradation regulatory process, the presence of such findings might help shed light on the answer. Also, the discipline and routine of the Department’s making such

findings and having them in the record would serve to routinize and police compliance with the antidegradation regulations.

The Chapter 102/Chapter 93.4a-d Relationship

There is no question that the NPDES permit in this case is faithful to the requirements of 25 Pa. Code § 102.4(b)(6) and that the special BMPs for High Quality waters are to be implemented. Alpine and the Department claim that this alone constitutes compliance under the Chapter 93 antidegradation regulations. We cannot agree.

As we have discussed, the Chapter 102 regulations are focused on accelerated erosion and sedimentation control. The language of the Chapter 102 regulations makes this plain to see. The antidegradation regulations, on the other hand, apply to all physical, chemical and biological characteristics of the receiving water. In other words, the antidegradation regulations, applying as they do to preserving and protecting existing uses, cover more than do the Chapter 102 erosion and sedimentation regulations.

DEP itself recognizes that Chapter 102 is an erosion and sedimentation oriented regulation. As DEP puts it, BMPs of Chapter 102 are “aimed at keeping the soil on the site and preventing sedimentation runoff pollution.” DEP Post Trial Brief., p. 13. The Department also tells us that, “the stormwater construction program is aimed at preserving an existing discharge while keeping the sediment out of that discharge, and maintaining its natural rate and volume flow.” *Id.*, p. 17.

Judge Labuskes provided an excellent description of the Chapter 102 program in *O’Reilly v. DEP*, 2001 EHB 19, which underscores the “sediment-centric” nature of the Chapter 102 program. The Board said there, “the overriding purpose of NPDES permits is to ensure that pollutants in discharges are controlled in the interest of protecting the quality of receiving

streams.” *Id.* at 32 *citing* 25 Pa. Code § 92.3. Furthermore, “the pollutant of primary concern for construction projects is sediment.” *Id.* at 33 *citing* 25 Pa. Code § 102.2. The Chapter 102 program, noted the Board, “is designed to minimize the potential for accelerated erosion and sedimentation.” *Id.* at 33. Thus,

[t]he permits are designed almost exclusively to control the discharge of sediment because that is what has proven to be the potential pollutant at construction sites. *See* 25 Pa. Code Chapter 102. The permits are not specifically designed to control the discharge of any pollutants not associated with sediment (beyond ensuring that spills are managed).

Id. at 33. Indeed, it was on this basis that the Board in *O’Reilly* rejected O’Reilly’s contention that the permit should have contained limits for pollutants other than sediment, saying that such a contention has “no basis in fact or law.” *Id.* at 34.

DEP maintains that the special BMPs of Section 102.4(b)(6) incorporate the process and analyses of the antidegradation program into the Chapter 102 program. DEP says that the antidegradation regulations, in the stormwater management permit context, are implemented in full through Chapter 102. DEP Post Trial Brief, p. 12. Thus, its argument goes, proper adherence to Chapter 102 also constitutes full adherence to the antidegradation regulation. However, that is not the case.

The express language of Chapter 102 does not provide that the entirety of the antidegradation regulations’ process or analyses are incorporated therein. Chapter 102 does not provide for the process, analyses and showings required by the antidegradation regulation. Moreover, Chapter 102 does not include the entire panoply of physical, chemical, biological and thermal parameters that are involved in the antidegradation regulation.

As we have already discussed, Chapter 102 covers sediment pollution and the rate and volume of stormwater runoff. Special BMPs for High Quality waters cover, in an enhanced

manner, erosion and sediment control. Again, BMPs are defined as “activities, 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 uses of waters within this Commonwealth.” 25 Pa. Code § 102.1. Thus, the special BMPs of Section 102.4(b)(6) are enhanced measures used to “minimize accelerated erosion and sedimentation” to protect, maintain, reclaim and restore the quality of waters and the existing and designated uses of waters from an erosion and sediment pollution perspective. 25 Pa. Code § 102.4 (b)(6).

That Chapters 102 and 93 are different and not a union is obvious by putting the two side by side. Chapter 102 is about BMPs which are “activities, facilities, measures, or procedures” aimed at controlling erosion and sedimentation while Chapter 93 is about a detailed and specific preferential hierarchical process and procedure aimed at arriving at an outcome which will prevent degradation by all physical, chemical, biological parameters. The Chapter 93 process not only drives to a particular result depending on the circumstances, it also requires that a particular process or procedure be followed which leads to the result. Nowhere in Chapter 102 is the preferential “hierarchical process” of Chapter 93 included. Nowhere in Chapter 102 is an applicant directed to first evaluate nondischarge alternatives. Nowhere in Chapter 102 is the applicant allowed to use a discharge alternative only when it demonstrates that the nondischarge alternatives studied are not environmentally sound and cost-effective. Chapter 102 does not even mention or discuss evaluation of a nondischarge preference. Chapter 102 does not even contemplate a nondischarge situation since it assumes a discharge and outlines BMPs aimed at controlling erosion and sedimentation pollution from such discharges. Nowhere in Chapter 102 is the applicant then required to demonstrate that the discharge will be subject to the best available combination of cost-effective treatment, land disposal, pollution prevention and

wastewater reuse technologies such that the existing use of the receiving water will not be maintained. Nowhere in Chapter 102 is an applicant required to demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters as to all parameters such that the water's designated use will not be degraded.

The 2000 Preamble to the Chapter 102 regulations shows that those regulations were not intended to be a complete implementation of the antidegradation regulations. The Preamble says that the Chapter 102 regulations are to “work *in conjunction with* the Department's antidegradation program,” not that Chapter 102 works to cover the whole of the Department's antidegradation program or works as an incorporation of the antidegradation regulations. 30 *Pa. Bull.* 111, 118. (emphasis added). Even the Department admits that this reference in the Preamble “does not directly articulate [the] intention” to integrate the antidegradation regulations' requirements fully and directly into the Chapter 102 regulation. DEP Post Trial Brief, p. 20-21. That is an understatement. It is the opposite intention which is “directly articulated.”

BMPA points out that DEP in its post-trial brief cites three documents which are not even in evidence to try to support its notion that the antidegradation regulations are incorporated into Chapter 102. Those documents include the 2002 Comprehensive Stormwater Management Policy Comment/Response (DEP Post Trial Brief., p. 21); 2001 Erosion and Sedimentation Control Program Manual (DEP Post Trial Brief., p. 22); and the 2006 Instructions for a General (PAG-2) or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities (DEP Post Trial Brief., p. 22, 23, 24). These documents are not in evidence and we will not consider them. Even if they were, they would stand in opposition to the express language of Chapter 102 itself, the contemporaneous memorialization of its framers in the

Preamble, and the express language of Chapter 93.

The Department argues that its interpretation of Chapter 102 as encompassing lock, stock and barrel, the Chapter 93 antidegradation regulations should be granted deference citing *NARCO v. DEP*, 791 A.2d 461, 466 (Pa. Cmwlth. 2002). However, as we have just demonstrated, that interpretation is unreasonable and contrary to the language of both regulations. Also, the framers of the 2000 amendments to the Chapter 102 regulations expressed clearly that the Chapter 102 regulations were to be read in conjunction with the antidegradation regulations not as the conjunction of or the conjoining of them.

The Factual Question of Antidegradation Regulation Compliance

DEP and Alpine argue that the antidegradation analysis was done in this case, as a matter of fact, *via* their mutual compliance with the special BMP requirements of Chapter 102. In short, DEP and Alpine try to make Chapter 102(b)(6) compliance fit Chapter 93.4a-d antidegradation regulation compliance as a factual matter in this case. While DEP's and Alpine's Chapter 102(b)(6) compliance may be close to Chapter 93 compliance, especially with respect to degradation by accelerated erosion and sedimentation, the fit is not complete at all. As a factual matter in this case the Appellees' compliance with Chapter 102(b)(6) does not constitute compliance with Chapter 93.4a-d.

Nondischarge Alternatives Analysis, 25 Pa. Code § 93.4c(b)(1)(i)(A)(First Sentence)

The antidegradation regulations require, as a threshold step, that the applicant "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." 25 Pa. Code § 93.4c(b)(1)(i)(A). DEP's guidance manual on antidegradation, "DEP Water Quality Antidegradation Implementation Guidance," provides a list of common

nondischarge alternatives that are customarily evaluated. BMPA Ex. 55. According to the manual, such alternatives include: (1) pollution prevention and process changes; (2) alternative project siting; (3) land application of wastewater, *i.e.*, infiltration; (4) recycle/reuse of water; (5) alternative discharge locations; (6) holding facilities and wastewater hauling; and (7) constructed treatment wetlands. *Id.* DEP and Alpine say that they considered infiltration, a nondischarge alternative, but that the geological conditions were unsuitable. DEP Post Trial Brief, p. 30; Alpine Post Trial Brief, p. 20. This they say satisfies the nondischarge alternatives analysis requirement of the antidegradation regulations. *Id.* We do not agree.

While infiltration was considered, no Section 93.4c(b)(1)(i)(A) nondischarge alternatives analysis was done. First, on a most basic level, the antidegradation regulations require an analysis of non-discharge alternatives, in the plural. Even if infiltration had been considered and ruled out on valid grounds, which does appear to be the case here, it was the only nondischarge alternative considered. The antidegradation regulations create “a hierarchical structure which prefers no new point source discharge into [High Quality waters]” *Zlomsowitch*, 2004 EHB at 782. To look at only one nondischarge alternative is not faithful to that requirement. No consideration was given to the other measures as alternatives to the discharge into Aquashicola Creek.

Kate Crowley, the Water Program Manager of the Department’s Northeast Regional Office, whose responsibilities included heading the office which issued this permit, admitted that no Chapter 93 nondischarge alternatives analysis was performed in this case. In response to the question whether a nondischarge analysis was prepared in connection with this permit application Ms. Crowley admitted that, “it’s my understanding that an analysis such as you inquire about was not performed *per se*...” 3/28/06 Crowley, p. 118.

We reject the testimony of Mr. D’Onofrio who testified that a nondischarge alternatives analysis was performed. Mr. D’Onofrio, at the time the permit was issued, was a senior civil hydraulic engineer in the Department’s Northwest Regional Office. He reviewed the erosion and sediment control measures proposed by the applicant. He admitted that infiltration was the only nondischarge alternative he considered. 3/30/06 D’Onofrio, p.135. He limited his review to only the single nondischarge alternative, *i.e.*, infiltration, on account of his opinion that to do anything else would be to “come up with some Star Trek methodology.” *Id.* At 135-36. This testimony is clearly not credible and actually preposterous since DEP’s own guidance manual on antidegradation, which we just discussed, lists six nondischarge alternatives that are plainly earth-bound technologies, not “Star Trek” technologies. This testimony shows that Mr. D’Onofrio simply did not have antidegradation compliance in his mind when he was reviewing this permit application.

Mr. D’Onofrio’s review and consideration was limited to Chapter 102 compliance only, *i.e.*, erosion and sedimentation control. He said that his responsibilities involved only, "to make sure all of the information required for permitting was in the permit application package or file and for the review for the post construction plans and the [erosion and sedimentation] control plans." 3/30/06 D’Onofrio, p. 113.⁴ When he was asked on what basis he concluded that the nondischarge alternatives analysis had been done, his response was a mechanical, “there were no sediments leaving the site.” *Id.* at 123. This answer is a *non sequitur*. A Section 93.4c(b)(1)(i)(A) nondischarge alternatives analysis is obviously an analysis, a study, a process. It is not a status or a condition and it is not described or defined as “there are no sediments

⁴ This case does not present the question whether the Department has the authority under Chapter 102 to require a post-construction stormwater management plan.

leaving the site”. This answer demonstrates to us that Mr. D’Onofrio is completely unfamiliar and unschooled about what a 25 Pa. Code § 93.4c(b)(1)(i)(A) nondischarge analysis is and what it involves. We credit the testimony of his superior, Ms. Crowley, who admitted that no Chapter 93 nondischarge alternatives analysis was done. She was a much more knowledgeable and creditable witness with respect to that particular question.

Also, to the extent infiltration was reviewed as an option, it was not reviewed as part of a nondischarge alternatives analysis under Chapter 93, but, instead, as a potential BMP under Chapter 102. Mr. Murin, the Chief of the Department of Environmental Protection, Central Office, Division of Waterways, Wetland and Stormwater Management, testified that “the Northeast Regional Office...recommend[ed] that infiltration not be a BMP at this site.” 3/31/06 Murin, p. 111-12, 119-25. As well, Joseph England testified at length about infiltration as a Chapter 102 BMP. He said that, “there are various ways that infiltration applies to best management practices . . . the best mix of best management practices sort of composite utilizing a mix of various types of best management practices” 3/31/06 England, p. 80-83. Project documents characterize infiltration solely as a Chapter 102 BMP. The “Post Construction Stormwater Management Report for Alpine” is a narrative which details the various BMPs for the Project Site, in which it states “no infiltration is proposed for this project.” BMPA Ex. 17; DEP Ex. 16; Alpine Ex. 16. Attached to that document is a “Stormwater Infiltration Investigation/Study by Alternative Environmental Solutions” dated February 2, 2004, which characterizes the study of infiltration as a BMP. *Id.* The “PCSM Plan Review” characterizes the use of infiltration at the Project Site as a PCSM-BMP, and it states that “in place of infiltration, the applicant has proposed several other PCSM-BMPs to protect and maintain the water quality.” BMPA Ex. 57; DEP Ex. 34; Alpine Ex. 52. Lastly, the “Comment and Response Document for

NPDES Permit No. PAS10S119,” comment 8, addressed infiltration. The response provided that “infiltration technology is an impractical BMP that will not be utilized on this proposed project” DEP Ex. 5; Alpine Ex. 23.

All of this tells us that Alpine and DEP are now attempting, after the fact, to say that the consideration of one nondischarge alternative, infiltration, in the content of its consideration as a potential Chapter 102 BMP constitutes a Chapter 93 nondischarge alternatives analysis. We can no more accept that now than could Ms. Crowley at trial when she told us that, “it is my understanding that [a Chapter 93.4 nondischarge alternatives analysis]...was not performed *per se*” in this case.⁵ 3/28/06 Crowley, p. 118.

We do not suggest here that any of the nondischarge alternatives mentioned in the DEP manual would fit this project under Chapter 93 analysis. What we do say is that there was no consideration of that question as to anything other than infiltration. There was no demonstration here that, after consideration of nondischarge alternatives, one or more working in combination would not be environmentally sound and cost-effective. 25 Pa. Code § 93.4c(b)(1)(i)(A).

ABACT Analysis, 25 Pa. Code § 93.4c(b)(1)(i)(A)(Second Sentence)

As we have stated, the antidegradation regulations provide as the next step, “[i]f 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*” (ABACT). 25 Pa. Code §

⁵ There was much discussion in the parties’ presentations whether the antidegradation regulations require a specific document entitled, “Nondischarge Alternatives Analysis” or some like title. Obviously, there was no such document in this case. DEP and Alpine took pains to argue that the regulation does not require that there be such a specific tangible document. We cannot say that the regulations specifically require that there be such a specific document. However, we think BMPA has a point when it says that the presence of such a document in these cases would not be a bad idea because it would make compliance with the antidegradation regulations far easier for DEP and the Board to determine. BMPA Post Trial Reply Brief, p. 14-15, n. 12. For the reasons we discussed before and for the reasons BMPA mentions, it might behoove applicants and DEP in future Chapter 93 cases to have such a document on hand.

93.4c(b)(1)(i)(A) (emphasis added). This requires not just that some or all of the aforementioned techniques happen to be employed but that the best available combination of them be employed so as to ensure against any degradation of the receiving water.

Obviously, the starting point to knowing and employing the best available combination of techniques is to do an analysis of what the alternatives are. When asked whether she agreed with that statement, Ms. Crowley said, “I would think so, yes.” 3/28/06 Crowley, p. 120. We agree with her and we think so too. Ms. Crowley admitted that she did not know whether an analysis of such alternatives had been undertaken in this case. *Id. at 120-21.*

Both DEP and Alpine argue that implementing the selection of BMPs at the site satisfies ABACT. DEP Post Trial Brief., p. 30; Apline Post Trial Brief., p. 33-46. Alpine especially points out there are BMPs which will be used at the site which fall into the various categories mentioned in 25 Pa. Code § 93.4c(b)(1)(i)(A). But this would be like saying that by happening to have all food groups on your plate once you come back from the buffet line you have satisfied an obligation to deliberate, contemplate and conclude before going through the buffet line what would be the best combination of foods to put on your plate to promote health. Alpine did not demonstrate before it received the permit that the mere presence of techniques in the various categories represents a deliberated and considered conclusion that those intended to be employed are the best available combination of those techniques which will ensure that Aquashicola Creek is not degraded.

In addition, even granting that the BMPs to be used at the site do represent the best combination of techniques to prevent erosion and sedimentation from reaching the Creek and thus protecting the Creek from degradation in the form of increased sediment deposits, that does not mean that there is ABACT with respect to the broader range of parameters and concerns

which the antidegradation regulations implicate. The question of possible thermal impact of the discharge to the Creek is illustrative in this regard. Since this creek is a High Quality, Cold Water Fishery the antidegradation regulation requires that the applicant demonstrate before receiving its permit that the temperature limitations on the Creek will be maintained so as to persevere and maintain its status as a High Quality, Cold Water Fishery. Water quality criteria temperature parameters and allowable changes in temperature are set in very specific detail by 25 Pa. Code § 93.7(a). Mr. Blechschmidt, Alpine's consultant, admitted that Alpine "did not prepare a thermal analysis" of the potential impact of the discharge to the Creek in this case. 3/30/06 Blechschmidt, p. 56-57. We have no way of knowing whether the Section 93.7(a) parameters and allowances will be met.

The erosion and sedimentation control BMPs do not directly address the potential thermal impact from the discharge. As mentioned before, Chapter 102 BMPs address accelerated erosion and sedimentation. Indeed, a BMP wet pond approved for use at this site to control erosion and sedimentation, may have a tendency to exacerbate thermal pollution of the Creek. The wet pond special protection BMP intended to be used here holds water in the basin for a longer period of time than a wet pond in a non-high quality area. 3/30/06 Blechschmidt, p. 27; Alpine Ex. 52, sheet 71-80; 3/39/06 Mayer, p. 60. While this increased time in the basin allows for a longer period of time for sediment to fall out of the water, it also increases the time that the water will be exposed to the sun. As Mr. Blechschmidt admitted, the increased exposure time to the sun would heat the water in the basin because "it absorbs solar radiation." 3/30/06 Blechschmidt, p. 56; 3/31/06 Murin, p. 119.

This raises the potential that the water would be heated before discharging into the Aquashicola Creek and degrade the thermal quality of the Creek. There was testimony by Mr.

D'Onofrio that this potential would be reduced by the placement of shade trees around the ponds which might keep the water temperatures down. 3/30/06 D'Onofrio, p. 134-35. Mr. Blechschmidt testified likewise. 3/30/06 Blechschmidt, p. 56. However, Mr. D'Onofrio never followed through on this to draw any conclusions whether there would or would not be an adverse thermal impact to the Creek from the stormwater discharge. We do not credit Mr. D'Onofrio's bare "yes" response to the question "are the thermal controls (vegetation and plantings) adequate to protect and maintain the water quality of the Aquashicola?" 3/30/06 D'Onofrio, p. 139. Mr. D'Onofrio offered no basis or substantiation for that answer and it is clear that he had done no analysis or consideration of that question either at trial or when he reviewed the permit application. Likewise, as we have already noted, Mr. Blechschmidt testified that Apline conducted no thermal analysis. Also, Mr. D'Onofrio's testimony was contradicted by Mr. Murin who when asked if the trees planted near the ponds would help cast shade on the ponds, thus reducing the water temperature, answered—"I don't know if I can answer that. I'd say no. It will not necessarily reduce that temperature." 3/31/06 Murin, p. 116-17.

We do not and cannot make any finding on this open thermal impact question at this point. There is not enough evidence in the record to make any such finding even now after a full trial of the matter. What this discussion of the potential thermal impact does, though, is to demonstrate quite graphically the essence of the failure in this case of compliance with the antidegradation regulations. At this point, even after a full trial of the matter, nobody knows whether there will or will not be an adverse thermal impact on the Creek from the discharge. The antidegradation regulations require that the applicant demonstrate that there will not be an adverse thermal impact on the Creek before getting a permit.

Maintain and Protect the Existing Water Quality, 25 Pa. Code § 93.4c(b)(1)(i)(B)

The last requirement of Section 93.4c(b)(1) states, “[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 . . .*” 25 Pa. Code § 93.4c(b)(1)(i)(B) (emphasis added). Our discussion above sufficiently shows that this demonstration was not made in this case.

Conclusion

Based on the foregoing, we must overturn the Department’s granting of this NPDES permit. Alpine did not undertake the required analyses or make the requisite showings under the antidegradation regulations. Likewise, the Department failed in its duty to assure that the permit be issued only upon the applicant’s performance of the required analyses and its making of the requisite showings under the antidegradation regulations. Whether the permit would be the same after appropriate antidegradation analysis we cannot know and is not a question we can deal with or answer at the Board. For this case, the antidegradation analyses need to take place at the time of the application, before a permit is issued, to be considered by the Department in its review of the application before granting the permit. None of that took place here with respect to this permit. An appropriate order will follow.

CONCLUSIONS OF LAW

1. The antidegradation regulations outline a process and procedure which an applicant proposing a new, additional or increased discharge to High Quality or Exceptional Value Waters must follow in making certain affirmative demonstrations to the Department as a prerequisite to the Department’s granting of a permit for such a new, additional or increased discharge to High

Quality or Exceptional Value Waters. 25 Pa. Code § 93.4c(b)(1)(i)(A).

2. First, 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. 25 Pa. Code § 93.4c(b)(1)(i)(A).

3. In the event that a nondischarge alternative is demonstrated to be not environmentally sound and cost-effective, the proponent of the discharge is to show that the new, additional or increased discharge shall be subject to the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies (Antidegradation Best Available Control Technologies or ABACT). 25 Pa. Code § 93.4c(b)(1)(i)(A).

4. Finally, 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, is to demonstrate that the discharge will maintain and protect the existing quality of receiving surface waters with an exception which is not relevant in this case. 25 Pa. Code § 93.4c(b)(1)(i)(B).

5. The Department must require that the applicant for a permit for a new or increased discharge into a High Quality Water undertake the requisite analyses and make the requisite showings as a precondition to granting the discharge permit.

6. The enhanced Best Management Practices provisions of 25 Pa. Code § 102.4(b)(6) do not completely incorporate the totality of the requirements of the antidegradation regulations.



7. Alpine did not make the requisite showings required by the provisions of the antidegradation regulations in connection with the issuance by the Department of this NPDES permit.



COMMONWEALTH OF PENNSYLVANIA
ENVIRONMENTAL HEARING BOARD

BLUE MOUNTAIN PRESERVATION :
ASSOCIATION, INC. :
 :
 :
 v. : EHB Docket No.2005-077-K
 :
 :
 COMMONWEALTH OF PENNSYLVANIA, :
 DEPARTMENT OF ENVIRONMENTAL :
 PROTECTION and ALPINE ROSE RESORTS, :
 INC., Permittee :

ORDER

AND NOW this 7th day of September 2006, it is HEREBY ORDERED that the appeal of Blue Mountain Preservation Association is **sustained**. The Department’s issuance of the NPDES Permit No. PAS10S119 to Alpine Rose Resorts, Inc. is **vacated**. The matter is remanded to the Department for further proceedings consistent with this opinion.

ENVIRONMENTAL HEARING BOARD

MICHAEL L. KRANCER
Chief Judge and Chairman

GEORGE J. MILLER
Judge

THOMAS W. RENWAND
Judge

MICHELLE A. COLEMAN
Judge

BERNARD A. LABUSKES, JR.
Judge

DATED: September 7, 2006

c: DEP Bureau of Litigation:
Attn: Brenda K. Morris, Library

For the Commonwealth, DEP:
Fay Dempsey, Esquire
Northeast Regional Counsel

Margaret O. Murphy, Esquire
Office of Regulatory Counsel

For Appellant:
Kenneth T. Kristl, Esquire
Mid-Atlantic Environmental Law Center
4601 Concord Pike
Wilmington, DE 19803

For Permittee:
Emil W. Kantra, II, Esquire
FITZPATRICK LENTZ & BUBBA, P.C.
4001 Schoolhouse Lane, P.O. Box 219
Center Valley, PA 18034-0219