VIRGINIA:

IN THE CIRCUIT COURT FOR THE CITY OF RICHMOND John Marshall Courts Building

THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, INC., a Virginia corporation,)))
PEOPLE'S ALLIANCE FOR CLEAN ENERGY, a chapter of Blue Ridge Environmental Defense League, Inc.,)))
BARBARA J. CRAWFORD,)
GARY MULLER, and	
ARDEN "TERSH" NORTON,)
Appellants,) }
v.) Case No
COMMONWEALTH OF VIRGINIA, ex rel. VIRGINIA STATE WATER CONTROL BOARD Serve: David K. Paylor, Executive Secretary State Water Control Board 629 E. Main Street Richmond, VA 23219)))))
and)
DAVID K. PAYLOR Director, Department of Environmental Quality Serve: 629 E. Main Street Richmond, VA 23219 and VIRGINIA ELECTRIC AND POWER COMPANY d/b/a Dominion Virginia Power, Serve: CT Corporation System Registered Agent	DEC 2812007 3 BEVILLAM. DEC 2.812007 3 BEVILLAM. DEC 2.812007 D.C.
4701 Cox Road, Suite 301 Glen Allen, VA 23060))
Appellees.))

PETITION FOR APPEAL

THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, INC. ("BREDL"), on behalf of itself and its individual members, a non-profit Virginia corporation, the PEOPLE'S ALLIANCE FOR CLEAN ENERGY ("PACE"), on behalf of itself and its individual members, BARBARA J. CRAWFORD, GARY MULLER, and ARDEN "TERSH" NORTON (collectively "BREDL"), 1 pursuant to Virginia Code §§ 62.1-44.29 and 2.2-4026 and Rule 2A:4 of the Rules of the Supreme Court of Virginia, file this Petition for Appeal seeking judicial review of the re-issuance of Virginia Pollution Discharge Elimination System Permit No. VA0052451 ("the Permit"). On October 29, 2007, upon the recommendation of the Virginia Department of Environmental Quality ("DEQ"), the Virginia State Water Control Board ("the Board") reissued the Permit to Virginia Electric and Power Company, doing business as Dominion Virginia Power, for its Dominion-North Anna Power Station ("NAPS") in Louisa County, Virginia.

The Board's re-issuance of this Permit was in violation of Virginia's State Water Control Law, the federal Clean Water Act, and the Virginia Pollution Discharge Elimination System, as well as other laws and regulations governing water quality. Specifically, state and federal laws and regulations require regulation of and limitations on thermal pollution discharges into Virginia's waters. There was ample evidence presented to the Board and DEQ as contained in the record which demonstrated that thermal pollution discharges from NAPS into Lake Anna are causing and contributing serious harm to the lake and to Virginia citizens' use and enjoyment of that natural resource. Despite the mandate under state and federal law and the record evidence of the thermal pollution problem in Lake Anna from NAPS, this Permit contains virtually no limits at all on thermal pollution. For the reasons stated in this Petition for Appeal, BREDL asks this Court to suspend and set aside the Permit and to remand the Permit to the Board and DEQ for further proceedings consistent and in compliance with federal and state water laws and regulations.

¹ Unless otherwise indicated or apparent from the context, "BREDL" will refer to all Appellants collectively.

CASE DECISION APPEALED

- DEQ, acting on behalf of the Board, reissued Permit No. VA0052451 to NAPS on
 October 29, 2007. A copy of this permit as issued is attached hereto as Exhibit A.
- 2. Pursuant to Rules 2A:3 and 2A:4 of the Rules of the Supreme Court of Virginia, BREDL timely filed and served their Notice of Appeal on November 28, 2007, a copy of which is attached as Exhibit B.
- 3. Permit No. VA0052451 allows NAPS to discharge heated water into Lake Anna, causing and contributing to serious harm to the wildlife in and around the lake and impairing the enjoyment and use of the lake by neighboring landowners and others.
- 4. BREDL appeals the Board's re-issuance of Permit No. VA0052451 because it violates, among other laws, the federal Clean Water Act, 33 U.S.C. § 1326 *et seq.*, its implementing regulations, Virginia's State Water Control Law, Virginia Code § 62.1-44:15 *et seq.*, and its implementing regulations, and Virginia Water Quality Standards, including 9 VAC 25-260-50, 9 VAC 25-260-60, 9 VAC 25-260-70, 9 VAC 25-260-80, and 9 VAC 25-260-90.
- 5. The Board's decision to reissue Permit No. VA0052451 was not supported by substantial evidence that the Permit will not cause or contribute to violations of water quality standards, particularly the promulgated water quality standards for thermal pollution.
- 6. The Board's re-issuance of this Permit was also arbitrary and capricious in that the Board failed to require adequate limits on thermal pollution discharges from the NAPS, despite law requiring it, and the fact that the Board and DEQ acknowledged they have the authority to impose the necessary restrictions as it has done at other permitted locations. The Board's re-issuance of this Permit without any such restrictions was without substantial evidence and was without any valid justification or support.

Parties

The State Water Control Board

- The Board was the permitting agency for Permit No. VA0052451.
- 8. The Board exists to protect the waters of the Commonwealth and to administer Virginia State Water Control Law ("SWCL"). The SWCL, Virginia Code § 62.1-44.1, *et seq.*, makes it unlawful to discharge waste into state waters, except in compliance with a permit issued by the Board. See Va. Code Ann. § 62.1-44.5(A)(1).
- 9. The SWCL's defined purposes are to "safeguard the clean waters of the Commonwealth from pollution," "prevent any increase in pollution," and to "reduce existing pollution." Va. Code Ann. § 62.1-44.2. Among the Board's duties are "to take all appropriate steps to prevent [water] quality alteration contrary to the public interest or to the standards or policies established" Va. Code Ann. § 62.1-44.15(3a).
- 10. The Board is charged with receiving, reviewing and issuing, reissuing, or denying applications for permits under the SWCL and with administering Virginia's state program under the Clean Water Act's National Pollutant Discharge Elimination System ("NPDES") program.

 See Va. Code Ann. § 62.1-44.15. The Board reviews and administers permits, such as Permit No. VA0052451, falling under the NPDES under the Virginia Pollution Discharge Elimination System ("VPDES").

David K. Paylor

- 11. David K. Paylor is the Executive Director of the Virginia Department of Environmental Quality ("DEQ") and the Executive Secretary of the Board. His powers are conferred upon him by the General Assembly pursuant to Virginia Code § 10.1-1185.
 - 12. DEQ is charged with serving as staff and advisor for the Board.
 - 13. DEQ recommended the re-issuance of Permit No. VA0052451.
- 14. Mr. Paylor's joinder is for the purpose of ensuring any relief awarded by the Court with respect to this appeal.

The Blue Ridge Environmental Defense League, Inc.

- environmental education organization and today is incorporated in Virginia, Tennessee and North Carolina. BREDL's overall mission is to encourage government agencies and citizens to take responsibility for conserving and protecting our natural resources and to take steps to protect and preserve the environment and natural resources in the Blue Ridge Mountain area. BREDL advocates grassroots involvement to empower whole communities in environmental issues. BREDL also functions as a watchdog of the environment, monitoring issues and holding government officials accountable for their actions. Among BREDL's goals and missions is to encourage, promote and lobby for clean, renewable energy sources. BREDL operates offices in Glendale Springs, Winston-Salem and Saxapahaw, North Carolina and Augusta, Georgia, and has an active regional Vice President in Roanoke, Virginia. (Aff. J. Marsh (Ex. C).)
- 16. During the last four years, BREDL has conducted many workshops, forums and training sessions on clean energy production and alternatives to nuclear power. (*Id.*) During the last two years, BREDL has become particularly concerned about the degradation of water quality at Lake Anna caused by pollution, including thermal pollution, from NAPS and has become active in the efforts to address this problem. (*Id.*)
- 17. BREDL has approximately 350 members in Virginia, some of whom reside on the banks of Lake Anna and in nearby Mineral. Many of those members regularly use Lake Anna and its surrounding area for fishing, hiking and other recreational uses and for enjoyment of its aesthetic beauty. (*Id.*)
- 18. BREDL and its members actively participated in the public comment process for this Permit by presenting written comments and oral testimony to DEQ and the Board. (*Id.*; see also Aff. J. Cruickshank (Ex. D).)
- 19. BREDL and its members have suffered and will continue to suffer an actual and imminent injuries to their recreational, aesthetic, environmental, financial, and property interests

and are threatened with future injuries to those interests as a result of the Board's re-issuance of Permit No. VA0052451 to NAPS. (Aff J. Marsh.)

- 20. The issues raised by the re-issuance of Permit No. VA0052451 are germane to BREDL's existence and its goals and mission. The nature of BREDL and its members' claims and the relief sought do not make their individual participation in the appeal a requirement.
- 21. The injuries BREDL and its members will suffer are due solely to and are directly traceable to the decision by the Board to re-issue this Permit and not the independent action of any third party. A favorable decision by the Court will redress these injuries.

People's Alliance for Clean Energy

- 22. BREDL has an active chapter, People's Alliance for Clean Energy (PACE), centered in the counties of Louisa, Albemarle and Spotsylvania and the City of Charlottesville.
- 23. PACE was accepted as a chapter by the BREDL Board of Directors on March 9, 2004 and enjoys all chapter privileges as stipulated in BREDL Bylaws.
- 24. PACE is dedicated to conserving natural resources, protecting public health and promoting renewable energy in the Lake Anna area. Like BREDL and its members, many PACE members attended public hearings and provided testimony on the Permit. (*Id.*; see also Aff. E. Day (Ex. E).) Also, many of those PACE members regularly use Lake Anna and its surrounding area for fishing, hiking and other recreational uses and for enjoyment of its aesthetic beauty. (*Id.*)
- 25. PACE and its members have suffered and will continue to suffer an actual and imminent injuries to their recreational, aesthetic, environmental, financial and property interests and are threatened with future injuries to those interests as a result of the Board's re-issuance of Permit No. VA0052451 to NAPS.
- 26. The issues raised by the re-issuance of Permit No. VA0052451 are germane to PACE's existence and its goals and mission. The nature of PACE and its members' claims and the relief sought do not make their individual participation in the appeal a requirement.

27. The injuries PACE and its members will suffer are due solely to and are directly traceable to the decision by the Board to re-issue this Permit and not the independent action of any third party. A favorable decision by the Court will redress these injuries.

Gary Muller

- 28. Gary Muller is a member of BREDL. He lives at 581 Busbees Point Road, Bumpass, Virginia 23024, and has lived there for eight (8) years. (Aff. G. Muller (Ex. F).)
- 29. Mr. Muller has, over the years, enjoyed recreational activities on Lake Anna including swimming, boating, fishing and jet skiing. He also enjoys the view of the lake from his home on the "hot side" of Lake Anna. His uses of Lake Anna have been impaired by the discharges coming from NAPS.
- 30. Recently, Mr. Muller has noticed problems regarding the lake. He is unable to put his boats in the water because of the low water level. His private dock is 35 feet from the water. New, unmarked hazards in the lake including tree stumps and rocks are closer to the surface, making it dangerous to boat or ski.
- 31. Mr. Muller is a realtor and low lake levels have reduced the value of nearby lots causing them to sell at a lower price. The lower water levels caused by NAPS and its discharges have also lowered Mr. Muller's property values.
- 32. Mr. Muller has measured lake water temperatures of over 100 degrees

 Fahrenheit. In fact, the problem has gotten so bad that he calls the area around Dike One the
 "hot tub." When water temperatures are high, he often sees "floaters," or dead fish, in the lake.

 When the lake water is very hot, he has seen a brown scum on the surface. These problems
 have diminished and impaired his ability to enjoy the lake for fishing and water activities.
- 33. The problems Mr. Muller has noticed with Lake Anna are caused or contributed to by thermal pollution and draw-down from NAPS, which uses the lake for intake cooling water and heated water discharge.

- 34. He attended a Board and DEQ public hearing on August 16, 2006 at the Louisa County Middle School. Also, he has e-mailed letters to his elected representatives asking them to improve the conditions in and around the lake.
- 35. He believes that allowing Dominion-Virginia Power to continue to operate in the way that it has will likely cause further damage to his property, interfere with his enjoyment and use of the lake for recreation and aesthetic enjoyment, ruin fishing and make swimming dangerous due to bacterial or amoebic infections.
- 36. His injuries are due solely to and are directly traceable to the decision by the Board to issue this permit and not the independent action of any third party. A favorable decision by the Court will redress his injuries

Barbara Jones Crawford

- 37. Barbara Jones Crawford is a member of BREDL. She lives in her home located at 139 Cedar Hill Trail Mineral, Virginia 23117, and has lived there for five (5) years. (Aff. B. Crawford (Ex. G).)
- 38. She has enjoyed recreational activities on and around the lake including hiking and swimming.
- 39. Recently, she has also noticed problems with the lake. Lake levels have dropped and she sees more docks on dry land.
- 40. She is afraid to eat fish from the lake because of the PCB water pollution and health advisories.
- 41. The possible growth of dangerous bacteria and amoeba make it impossible for her to enjoy swimming in the lake at this time.
- 42. The problems Ms. Crawford has observed and experienced with Lake Anna are also caused or contributed to by thermal pollution and draw-down from NAPS, which uses the lake for intake cooling water and heated water discharge.

- 43. Ms. Crawford attended the Board and DEQ's public hearing on July 18, 2007 at the Louisa County Middle School, gave oral testimony and submitted written comments. She attended the Board meeting in Richmond on October 25, 2007 and signed up to speak; she ceded her time to Harry Ruth of the Friends of Lake Anna and in doing so included Harry Ruth's comments as her own. The record comments of Harry Ruth are included here by reference evidencing the concerns of Ms. Crawford.
- 44. Like Mr. Muller, Ms. Crawford believes that allowing Dominion-Virginia Power to continue to operate under the recently re-issued Permit will impair her use and enjoyment of the lake. Her injuries are due solely to and are directly traceable to the decision by the Board to re-issue this Permit and not the independent action of any third party. A favorable decision by the Court will redress her injuries.

Arden "Tersh" Norton

- 45. Arden "Tersh" Norton is a member of BREDL. He lives at 3505 Johnsons Drive Bumpass, Virginia 23024. He bought this property in 1980, built a house and began living there part-time in 1985 and full-time since 2003. (Aff. A. Norton (Ex. H).)
- 46. Over the years, Mr. Norton has enjoyed recreational activities on the lake including boating, fishing, swimming, sailing, water skiing and entertaining and aesthetic enjoyment.
- 47. Recently, he has also noticed problems with Lake Anna. Lake water temperatures have increased. Also, he has observed lake water temperature fluctuations when the power plants are taken off line: the temperature temporarily drops about 6-8 degrees Fahrenheit and lake levels rise several inches when the plant is shut down.
- 48. About ten years ago, an abundant growth of hydrilla plants in Lake Anna caused many people to take their boats off the lake. Carp had to be added to the lake to try to control the problem. Hydrilla is a noxious and problematic plant that interferes with all sorts of water uses. See, e.g., http://www.dcr.virginia.gov/natural_heritage/documents/fshyve.pdf;

http://www.ecy.wa.gov/programs/wq/plants/weeds/hydrilla.html . The proliferation of these hydrilla plants was caused or contributed to by the thermal pollution from the NAPS facility. The thermal pollution and temperature and water level fluctuations are also harmful to the fish population and make swimming, sailing and water skiing problematic.

- 49. The problems Mr. Norton has observed are due to thermal pollution and draw-down from NAPS, which uses the lake for intake cooling water and heated water discharge.
- 50. Mr. Norton attended the Board and DEQ's public hearing on July 18, 2007 at the Louisa County Middle School and also ceded his time to Harry Ruth of the Friends of Lake Anna and in doing so included Harry Ruth's comments as his own. The record comments of Harry Ruth are included here by reference evidencing Mr. Norton's concerns.
- 51. Mr. Norton believes that allowing Dominion-Virginia Power to continue to operate under its present Permit will impair his uses and enjoyment of the lake. It will interfere with his use of the lake for recreation and make swimming dangerous due to bacterial or amoebic infections. Unless the Permit is modified to reduce the negative impacts, he may have to sell his house and move.
- 52. Mr. Norton's injuries are due solely to and are directly traceable to the decision by the Board to issue this permit and not the independent action of any third party. A favorable decision by the Court will redress his injuries.

Background and Reasons Why This Case Decision Is Unlawful Permit No. VA0052451, Lake Anna, and the Problem of Thermal Pollution

53. Heat is a pollutant which can cause harm to marine life and water bodies.

Nuclear electric power plants produce large amounts of heat which must be discharged to the environment as a byproduct during their normal course of operation. This waste heat, or thermal pollution, when discharged into bodies of water causes a whole host of problems for the water body, including lowering the dissolved oxygen content by decreasing the solubility of oxygen in water. Warmer water also causes aquatic organisms to increase their respiration

rates and consume oxygen faster, and it increases their susceptibility to disease, parasites, and toxic chemicals. Discharge of heated water into shallow water near the shore of a lake also may disrupt spawning and kill young fish.

- 54. In addition to the problems mentioned above, the water quality and public health issues associated with thermal pollution impacts at Lake Anna also include the growth of a harmful strain of amoeba (naegleria fowleri) which thrives in hot water and which was found in both main reservoir and cooling lagoons in the summer of 2007. The proliferation of the hydrilla plants has also been associated with thermal pollution. Also ,elevated water temperatures contributed to a major fresh water clam die-off in the lake in 2007.
- both the CWA and the SWCL have designated heated water as a pollutant subject to regulation. See, e.g., 33 U.S.C. § 1326 (discussing requirements for thermal discharges); Va. Code Ann. § 62.1-44.3 (definition of "pollution"); 9 VAC 25-260-50 & 60 through 90 (regulating thermal discharges). As a result, thermal discharges into any waters of the United States, including the waters of the Commonwealth, must meet certain water quality standards, see infra ¶¶ 86-96, and Lake Anna water temperatures must be regulated and limited under the CWA and SWCL and other applicable laws and regulations.
- According to the Permit's Fact Sheet, Lake Anna is part of the York River Basin and is classified as a Class III water under Virginia's water quality standards regulations. Under this designation, the upper limit on temperature is 32 degrees Celsius, or 89.6 degrees Fahrenheit. 9 VAC 25-260-50. Further, any rise above natural temperature, or the temperature which existed before the addition of artificial heat, must not exceed 3 degrees Celsius, or 5.4 degrees Fahrenheit, per 9 VAC 25-260-60 and 9 VAC 25-260-80. However, lakeside residents on both the "hot side" and "cool side" of Lake Anna have observed water temperatures over 100 degrees Fahrenheit. Other temperature-related phenomena observed include dead fish, brown

scum, excessive underwater plant growth and low lake levels. Thus, Lake Anna has a serious problem with thermal pollution and is suffering from that pollution.

- 57. BREDL and others presented extensive evidence on the problems of thermal pollution and the need for proper regulation of thermal pollution from NAPS to the Board and DEQ. Indeed, the record contains substantial evidence on these issues.
- 58. Despite the ongoing thermal pollution discharge problems at Lake Anna, VPDES Permit No. VA0052451 contains almost no limits at all on thermal pollution.
- 59. Specifically, as approved and re-issued by the Board, the Permit allows 25 distinct water discharge points from NAPS to Lake Anna. From one of these points, Outfall 101, NAPS discharges heated water/thermal pollution from the atomic reactors' condenser cooling system into what NAPS calls its Waste Heat Treatment Facility ("WHTF"), which is a portion of Lake Anna that NAPS has diked off and which has become known as the "hot side" of Lake Anna. Surface water then exits the WHTF from NAPS's Outfall 001 into the so-called "cool side" of Lake Anna.
- 60. There is no dispute that the NAPS facility discharges heated water or thermal pollution. Indeed, the Dominion Virginia Power website admits this, as well as the fact that Lake Anna and the WHTF are a "popular outdoor recreational area, whose shoreline is dotted with homes, cabins." *Available at* http://www.dom.com/about/stations/nuclear/northanna/index.jsp.
- 61. The Permit contains one provision addressing thermal pollution from the Outfall 101 discharge into the "hot side," but that provision falls short of what state and federal law require and contains no meaningful numeric limits for thermal pollution. The Permit instead uses a "heat rejected" approach that does not adequately address thermal pollution into the lake.
- 62. The Outfall 001 discharge from the "hot side" into the "cool side" contains no limits at all for thermal pollution.

63. None of the other 24 water discharge points include any limitations whatsoever on thermal pollution discharge.

Statutory and Regulatory Law Require Meaningful Limitations on Thermal Pollution

64. There are numerous sources of state and federal law, including those set out below in more detail, requiring regulation of and controls and limits on thermal pollution and governing the re-issuance of this Permit. This Permit, with its minimal to nonexistent regulation of thermal pollution, violates these legal requirements.

The Clean Water Act

- 65. "The main purpose of the CWA is to 'restore and maintain the chemical, physical, and biological integrity of the Nation's waters' by reducing, and eventually eliminating, the discharge of pollutants into these waters." *Natural Resources Defense Council, Inc. v. EPA*, 16 F.3d 1395, 1399 (4th Cir. 1993) (citing 33 U.S.C. § 1251(a)).
- 66. "As a primary means of achieving its ultimate goals, the CWA prohibits the discharge from any point source into protected national waters of any pollutant unless that discharge complies with specific requirements of the CWA." *Westvaco Corp. v. EPA*, 899 F.2d 1383, 1384 (4th Cir. 1990) (citing 33 U.S.C. § 1311(a)).
- 67. The CWA allows states to operate their own programs under the National Pollutant Discharge Elimination System ("NPDES"), provided the states adhere to standards at least as stringent as the federal requirements. See 33 U.S.C. § 1342(b) & (c)(1); 40 C.F.R. § 122.1(a)(2); see also State Water Control Board v. Smithfield, 261 Va. 209 (2001).
- 68. CWA § 303 authorizes Virginia to adopt water quality standards ("WQS") which must include (a) designated uses, (b) water quality criteria and (c) anti-degradation requirements. Pursuant to CWA § 304(a), EPA adopted water quality criteria which serve as guidance for state programs to develop their own WQS. State WQS must be based on sound scientific rationale and are subject to review by the EPA every three years.

- 69. "Permits must incorporate technology-based controls, i.e., limitations based on the degree of effluent control which can be achieved by point sources using various levels of pollution control technology." *Westvaco*, 899 F.2d at 1384 (citing 33 U.S.C. § 1311, 1314); see also NRDC, 16 F.3d at 1399. "In addition to technology-based controls, permits must contain any more stringent limitations that are necessary to meet water quality standards developed by the states pursuant to § 303." *Id.* (citing 33 U.S.C. 1313).
- 70. Pursuant to the CWA, the Board has promulgated several water quality standards, both numeric and narrative, which address thermal pollution. See 9 VAC 25-260-50 & 60 through 90; see also infra ¶¶ 86-96 ("Virginia Water Quality Standards"). DEQ and the Board's decision to reissue Permit No. VA0052451 without meaningful thermal pollution or heat discharge limits was contrary to the established case law interpreting states' obligations under the NPDES and their corresponding state programs. The failure of VPDES Permit No. VA0052451 to ensure a healthy aquatic habitat for fish and other organisms is a violation of the CWA and implementing federal regulations at 40 C.F.R. § 122.44(d).
- 71. The Fourth Circuit has stated that "once water quality standards have been set, NPDES permit limitations must be established to ensure compliance, regardless of the availability or effectiveness of treatment technologies." *Westvaco Corp.*, 899 F.2d at 1384.
- 72. Indeed, "once a water quality standard has been promulgated, section 301 of the CWA <u>requires</u> all NPDES permits for point sources to incorporate <u>discharge limitations</u> necessary to satisfy that standard." *Am. Paper Inst. v. EPA*, 996 F.2d 346, 350 (D.C. Cir. 1993) (emphases added).
- 73. The Permit, with its lack of meaningful limits on thermal pollution and its variance for thermal discharges, violates the CWA..

Virginia's State Water Control Law

- 74. Virginia enacted the SWCL to "safeguard the clean waters of the Commonwealth from pollution," to "prevent any increase in pollution," and to "reduce existing pollution." Va. Code Ann. § 62.1-44.2.
- 75. Virginia enacted the SWCL long before Congress enacted the CWA. *Id.* Thus, the SWCL should provide additional protections for Virginia's waters, above and beyond what is required by the CWA. *See Treacy v. Newdunn Assocs., LLP*, 2003 WL 22093616 (4th Cir. 2003) (stating that Virginia's regulation of its waters, beyond the federal mandate and under the SWCL, is purely a question of state law). Moreover, Virginia has made itself and all its political subdivisions, including the Board, subject to court control in battling water pollution. *See Wilson v. United States*, 425 F. Supp. 143 (E.D. Va. 1977).
- 76. The SWCL defines pollution as "such alteration of the physical, chemical or biological properties of any state waters as is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish, or aquatic life" Va. Code Ann. § 62.1-44.3.
- 77. The SWCL also recognizes there is no right for anyone, even a long-standing permittee, to continue to degrade Virginia's water quality. See Va. Code Ann. § 62.1-44.4 ("No right to continue existing quality degradation in any state water shall exist").
- 78. The SWCL also compels DEQ and the Board to prevent such degradation and to restore state waters "to such condition of quality that any such waters will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them." Va. Code Ann. § 62.1-44.4(1).
- 79. The SWCL also requires the Board to "take all appropriate steps to prevent quality alteration contrary to the public interest" Va. Code Ann. § 62.1-44.15(3a).
- 80. The Permit, with its lack of meaningful limits on thermal pollution and its variance for its thermal discharges, violates the SWCL.

The VPDES Program Requirements

- 81. The Board is charged with administering the VPDES program pursuant to statutory mandate under the SWCL, Va. Code Ann. § 62.1-44.15, and in accordance with its own regulations, 9 VAC 25-31-10 *et seq*.
- 82. Those VPDES regulations require that "each VPDES permit shall include . . .

 [a]ny requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under §§ 301, 304, 306, 307, 318, and 405 of the CWA necessary to . .

 [a]chieve water quality standards established under the law and § 303 of the CWA, including state narrative water criteria for water quality." 9 VAC 25-31-220(D) (emphases added).
- 83. The regulations also require that permit "[I]imitations <u>must control all pollutants</u>... which the board determines are or may be discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion <u>above any Virginia water quality standard, including Virginia narrative criteria for water quality</u>." *Id.* (emphases added). This provision requires a specific factual determination by the Board prior to issuing or reissuing a permit.
- 84. The regulations also prohibit the issuance or re-issuance of a permit "[w]hen the conditions of the permit do not provide for compliance with the applicable requirements of the CWA or the law, or regulations promulgated under the CWA or the law." 9 VAC 25-31-50(C)(1).
- 85. The Permit, with its lack of meaningful limits on thermal pollution and its variance for its thermal discharges, violates the VPDES requirements.

Virginia Water Quality Standards

- 86. Pursuant to the mandate of Virginia Code § 62.1-44.15(3a) and the authority under the CWA, the Board has established water quality standards for Virginia's waters.
- 87. "Water quality standards are a critical component of the CWA regulatory scheme because such standards serve as a guideline for setting applicable limitations in individual discharge permits." *NRDC*, 16 F.3d at 1399.

- 88. The Board's regulations have defined WQS as "provisions of state or federal law which consist of a designated use or uses for the waters of the Commonwealth and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the State Water Control Law (§ 62.1-44.2 *et seq.* of the Code of Virginia) and the federal Clean Water Act (33 USC §1251 *et seq.*)." 9 VAC 25-260-5.
- The Board further defined "criteria" to include "elements of the board's water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use." *Id.*; see also Westvaco Corp. v. EPA, 899 F.2d 1383, 1384 (4th Cir. 1990) ("The state 'water quality criteria' may be expressed as numerical concentration limits or in narrative form.") (citing 40 C.F.R. § 131.3(b)).
- 90. The WQS regulations also require that "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life." 9 VAC 25-260-20(A). Moreover, the WQS regulations specifically require that "[e]ffluents which tend to raise the temperature of the receiving water will also be controlled." *Id.*
- 91. The Board has promulgated a WQS for temperature which requires that "[a]ny rise above natural temperature shall not exceed 3°C " 9 VAC 25-260-60. The Board has also established a WQS for the "maximum hourly temperature change," requiring that it shall not exceed "2°C." 9 VAC 25-260-70.
- 92. In addition, the Board has established a WQS for "thermal discharges into lakes and impoundments," which states that "[i]n lakes and impoundments receiving thermal

discharges, the temperature of the epilimnion,² or surface water when there is no stratification, shall not be raised more than 3°C above that which existed before the addition of heat of artificial origin." 9 VAC 25-260-80. That WQS further provides that "[t]he temperature of releases from these lakes and impoundments shall be consistent with standards established for the receiving waters." *Id.* These WQS are all known as "numeric criteria."

- 93. The Board has further designated that the uses for "[a]II state waters," including Lake Anna, include "recreational uses, e.g., swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; and the production of edible and marketable natural resources, e.g., fish and shellfish." 9 VAC 25-260-10(A). These criteria are known as "narrative criteria."
- 94. The SWCL and its regulations require the Board to ensure full attainment of <u>both</u> numeric and narrative criteria. See 9 VAC 25-31-220(D). The Clean Water Act also requires this. See *supra* ¶¶ 65-73.
- 95. A permit that allows the discharge of effluent that causes and contributes to a violation of the WQS for thermal pollution violates the law. Moreover, a permit that fails to include any thermal pollution limitations for discharges into lakes and impoundments, even assuming the "hot side" of Lake Anna would properly be considered an "impoundment," violates Virginia law and its water quality standards.
- 96. The Permit, with its lack of meaningful limits on thermal pollution and its variance for its thermal discharges, violates Virginia's water quality standards and regulations.

The Board's Antidegradation Policy

97. The Board also promulgated its Antidegradation Policy, which provides that, "All surface waters of the Commonwealth shall be provided with one of the following three levels, or

² The epilimnion is the top-most layer in a thermally-stratified lake.

tiers, of antidegradation protection. This antidegradation policy shall be applied whenever any board-regulated activity is proposed that has the potential to affect existing water quality." 9 VAC 25-260-30(A).

- 98. Essentially, the Antidegradation Policy exists to ensure that Virginia's waters do not "backslide" in terms of water quality. 9 VAC 250260-30(A)(1) ("As a minimum, existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.").
 - 99. This Permit also violates the Board's Antidegradation Policy.
- 100. The Permit, with its lack of meaningful limits on thermal pollution and its variance for its thermal discharges, violates the Antidegradation Policy.

Permit No. VA0052451 - The Re-issuance Application Process

- 101. The re-issuance process on Permit No. VA0052451 began with the submission of an application for re-issuance of the NAPS permit.
 - 102. DEQ then issued a draft VPDES permit and advertised it for public comment.
- 103. A public hearing pursuant to 9 VAC 25-230-10 *et seq.*, was held on July 18, 2007. Approximately 40 people attended the hearing, with 27 people speaking on behalf of themselves and various organizations.
- 104. In addition to BREDL and numerous adjacent landowners, numerous other interested parties submitted comments including environmental and civic groups like the Sierra Club, Natural Resources Defense Council, Friends of Lake Anna, Lake Anna Civic Association, all of whom raised serious concerns regarding the Permit.
- 105. The DEQ Fact Sheet for Permit No. VA0052451 states that "representatives of adjacent landowners have asked that the permit contain specific maximum temperature levels in the WHTF so as to protect the health of the people using it for recreation." In other words, the landowners wanted a simple, practical and common sense way for those who would be most immediately impacted by thermal pollution to monitor water quality and lake temperature. DEQ

rejected this reasonable request, stating only that the "facility is being used within its defined design parameters."

- 106. In addition, before the Board, NAPS and DEQ relied on the argument that the WHTF (i.e., the "hot side") is an "impoundment" and is therefore excluded from the requirements for limitations on and regulation of thermal pollution discharge. However, the record evidence as well as the applicable law contradicted this position.
- 107. For instance, in a letter to DEQ, John Capacasa, Director, Water Protection Division, EPA Region III, July 13, 2007 explained: "EPA's regulation defining 'waters of the United States' [40 C.F.R. § 122.2] and Virginia's similar regulation defining 'surface waters,' 9 VAC 25-31-10, both include lakes, rivers and streams, <u>as well as impoundments of such waters</u>." (Emphasis added). In other words, federal and state law are the same. Mr. Capacasa further explained that "VaDEQ recognizes that the main reservoir of Lake Anna, <u>as well as the tributaries flowing into</u> both the main reservoir and <u>cooling lagoons/WHTF</u>, are surface waters, subject to the state's water quality standards and VPDES permitting requirements." (Emphasis added).
- 108. At the public hearing, BREDL, PACE and others demonstrated that the draft Permit violated state and federal law and regulations by improperly limiting thermal pollution discharges and failing to include specific numeric temperature limits for discharges into Lake Anna. The Permit opponents demonstrated and explained how the applicable laws and regulations clearly required thermal pollution discharge limitations, even if the WHTF/"hot side" were considered an "impoundment." Moreover, the Outfall 001 discharge into the "cool side" required thermal pollution discharge limitations. See, e.g., 9 VAC 25-260-80.
- 109. Nonetheless, DEQ opposed this position before the Board, arguing that it did not have the authority to put numeric limits for thermal pollution in this or any other VPDES permit, despite the volumes of materials BREDL, PACE and others cited not only authorizing but mandating permit limits.

- 110. In addition to the opposition from BREDL and others, the Board itself also questioned the propriety of this Permit. For instance, the Board expressed concern over the lack of thermal pollution discharge controls with the NAPS facility
- opinion from the Attorney General dated November 30, 2006, stating that the NAPS WHTF was a "lagoon" subject to the "waste treatment system exclusion." This advisory opinion provided an insufficient and erroneous basis for the Board's decision to re-issue this permit without any thermal pollution discharge limits. DEQ and the Board improperly relied on the Attorney General's advisory opinion instead of the express requirements under the CWA, SWCL, and the federal and state regulations in approving re-issuance of this Permit.

ERRORS ASSIGNED

- 112. BREDL, PACE, Muller, Crawford and Norton reassert the averments contained in paragraphs 1-107.
- 113. The Board's re-issuance of Permit No. VA0052451 without any limits for the discharge of thermal pollution into waters of the Commonwealth violated the Clean Water Act and its regulations, Virginia's State Water Control Law, and the Board's regulations. DEQ's recommendation and the Board's re-issuance of this Permit violated statutory and regulatory mandates to reduce pollution in Virginia's waters. DEQ and the Board failed to follow statutory and regulatory directives and procedures to ensure that this Permit would not cause or contribute to violation of water quality standards and further impairment of Virginia's waters and was in violation of governing law and the Board's authority. This Permit does nothing to control or reduce thermal pollution in Lake Anna.
- 114. DEQ's recommendation and the Board's re-issuance of this Permit with virtually no numeric limits at all for thermal pollution was wholly unsupported by any analysis or consideration of the fact that it would cause and contribute to violations of Virginia's established

WQS for temperature in violation of federal and state statutes and regulations and was without substantial evidence.

- 115. The Board's re-issuance of Permit No. VA0052451 with a variance for thermal discharge was not in compliance with the CWA, the SWCL or their implementing regulations.
- 116. The re-issuance of the Permit with little to no thermal pollution regulation and the grant of the variance for thermal pollution discharge without any explicit findings violated Virginia law. See Browning-Ferris Indus. of South Atlantic, Inc. v. Residents Involved in Saving the Environment, Inc., 254 Va. 278, 284 (1997).
- 117. DEQ's recommendation and the Board's re-issuance of this Permit was clear error and not supported by any substantial evidence or proper findings of fact.
- 118. DEQ's recommendation and the Board's re-issuance of this Permit was arbitrary and capricious in ignoring the clear mandates of federal and state law and regulations and instead relying on an unsupported and inapplicable legal opinion and other improper considerations.
 - 119. The errors assigned above are not harmless errors.

Statement of Relief Requested

- 120. BREDL, PACE, Muller, Crawford and Norton respectfully request that this Court enter a final decree finding that the challenged agency action was not in accordance with the law and, pursuant to Virginia Code § 2.2-4029, grant the following relief:
 - a. Suspend and set aside VPDES Permit No. VA0052451;
 - b. Remand VPDES Permit No. VA0052451 to the Board and DEQ for further proceedings with instructions (1) to reissue the Permit with numeric limits for thermal discharges which will ensure that water quality standards are met and which are protective of water quality, (2) to make the requisite findings of fact confirming that the Permit limits are protective of water quality and will not cause or contribute to a violation of water quality standards; and (3) to

comply fully with the mandates of the Clean Water Act, the State Water Control Law, and all applicable regulations.

- 121. BREDL, PACE, Muller, Crawford and Norton also request an award of reasonable costs, including attorney's fees, expended in this matter in accordance with Virginia Code § 2.2-4030(A).
- 122. BREDL, PACE, Muller, Crawford and Norton also request any other relief the Court may find appropriate, including an award of intermediate relief pursuant to Virginia Code § 2.2-4018.

THE BLUE RIDGE ENVIRONMENTAL DEFENSE LEAGUE, INC.,
PEOPLE'S ALLIANCE FOR CLEAN ENERGY,
BARBARA J. CRAWFORD,
GARY MULLER, and
ARDEN "TERSH" NORTON

By Counsel

Robert L. Wise (VSB No. 42030)

Bowman and Brooke LLP Riverfront Plaza - West Tower

901 East Byrd Street, Suite 1500

Richmond, Virginia 23219

Telephone: (804) 649-8200 Facsimile: (804) 649-1762