STATE OF NORTH CAROLINA

MECKLENBURG COUNTY

IN THE GENERAL COURT OF JUSTICE
SUPERIOR COURT DIVISION
13 CVS 14661

STATE OF NORTH CAROLINA *ex rel.* NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES,	)	
Plaintiff,	)	
v.	)	**COMPLAINT AND MOTION FOR INJUNCTIVE RELIEF RULE 65 N.C.R.C.P**
DUKE ENERGY CAROLINAS, LLC,	)	
Defendant.	)	

The Plaintiff State of North Carolina in accordance with Article 21 of Chapter 143 of the North Carolina General Statutes, and N.C. Gen. Stat. § 1A-1, Rule 65, complaining of the Defendant alleges and says:

PARTIES

1. Plaintiff is the sovereign State of North Carolina. This action is being brought upon the relation of the North Carolina Department of Environment and Natural Resources ("DENR") and its Division of Water Resources ("DWR" or division"),[1] an agency of the State established pursuant to the provisions of N.C. Gen. Stat. § 143B-279.1 *et seq.*, and vested with the statutory authority regarding protection of the environment and enforcement of environmental laws pursuant to N.C. Gen. Stat. § 143-211 *et seq.*

2. Defendant, Duke Energy Carolinas, LLC, is a corporation organized and existing under the laws of the State of North Carolina. Defendant's principal place of business is located

[1] DENR's Division of Water Quality and Division of Water Resources have been combined and are currently operating under the name of the Division of Water Resources. All actions taken by the DWQ are considered to have been taken by the DWR.

at 526 South Church Street, Charlotte, North Carolina 28202-1904. Defendant's Registered Agent is CT Corporation System, 150 Fayetteville Street, Box 1011, Raleigh, North Carolina 27601.

3. Defendant owns the following six Facilities ("6 Facilities"):

(1) ***Cliffside Steam Station*** in Rutherford County;

(2) ***Buck Steam Station*** in Rowan County;

(3) ***Allen Steam Station*** in Gaston County;

(4) ***Belews Creek Steam Station*** in Stokes County;

(5) ***Dan River Combined Cycle Station*** in Rockingham County; and

(6) ***Marshall Steam Station*** in Catawba County.

4. Defendant was doing business in all of the counties set forth in paragraph 3 above, at each of the 6 Facilities, at the time the violations or threatened violations were committed that gave rise to this action.

JURISDICTION AND VENUE

5. The Superior Court has jurisdiction of this action for injunctive relief for existing or threatened violations of various laws and rules and regulations governing the protection of the State's water resources pursuant to N.C. Gen. Stat. §§ 7A-245 and 143-215.6C, and for such other relief as the Court shall deem proper.

6. Mecklenburg County is a proper venue for this action because Defendant's principal place of business is located in Mecklenburg County.

GENERAL ALLEGATIONS

Applicable Laws and Regulations

7. Pursuant to N.C. Gen. Stat. § 143-215.3(a)(1), the Environmental Management Commission ("EMC" or the "Commission") has the power "[t]o make rules implementing Articles 21, 21A, 21B or 38 of . . . Chapter" 143 of the North Carolina General Statutes. These statutes, and the rules adopted under them, are designed to further the public policy of the State, as declared in N.C. Gen. Stat. § 143-211, "to provide for the conservation of its water and air resources . . . [and], within the context of Article [21] and Articles 21A and 21B of this Chapter [143], to achieve and to maintain for the citizens of the State a total environment of superior quality."

8. N.C. Gen. Stat. § 143-211 further provides that "[s]tandards of water and air purity shall be designed to protect human health, to prevent injury to plant and animal life, to prevent damage to public and private property, to insure the continued enjoyment of the natural attractions of the State, to encourage the expansion of employment opportunities, to provide a permanent foundation for healthy industrial development and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources."

9. The Commission has the power to issue permits with conditions attached which the Commission believes are necessary to achieve the purposes of Article 21 of Chapter 143 of the General Statutes. N.C. Gen. Stat. § 143-215.1(b)(4).

10. Pursuant to its authority in N.C. Gen. Stat. § 143-215.3(a)(4) to delegate such of its powers as it deems necessary, the Commission has delegated the authority to issue permits, and particularly discharge permits, to the Director of the Division of Water Resources ("Director"). *See* Title 15A of the North Carolina Administrative Code ("NCAC"), rule

2H.0112[2]. A copy of this rule is attached hereto as Plaintiff's Exhibit No. 1, and is incorporated herein by reference.

11. N.C. Gen. Stat. § 143-215.1 requires a permit before any person can "make any outlets into the waters of the State" or "cause or permit any waste, directly or indirectly, to be discharged to or in any manner intermixed with the waters of the State in violation of the water quality standards applicable to the assigned classifications ... unless allowed as a condition of any permit, special order or other appropriate instrument issued or entered into by the Commission under the provisions of this Article [Article 21 of Chapter 143 of the General Statutes]." N.C. Gen. Stat. §§ 143-215.1(a) (1) and (6).

12. The Commission's rules in 15A NCAC Subchapter 2L (hereinafter "2L Rules") "establish a series of classifications and water quality standards applicable to the groundwaters of the State." 15A NCAC 2L.0101(a). A copy of the 2L Rules is attached hereto as Plaintiff's Exhibit No. 2 and is incorporated herein by reference.

13. "Groundwaters" are defined in the 2L Rules as "those waters occurring in the subsurface under saturated conditions." 15A NCAC 2L.0102(11).

14. The 2L Rules "are applicable to all activities or actions, intentional or accidental, which contribute to the degradation of groundwater quality, regardless of any permit issued by a governmental agency authorizing such action or activity except an innocent landowner who is a bona fide purchaser of property which contains a source of groundwater contamination, who purchased such property without knowledge or a reasonable basis for knowing that groundwater contamination had occurred, or a person whose interest or ownership in the property is based or

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[2] 15A NCAC 2H.0112. This Rule actually delegates the authority to issue discharge permits to the Director of the former DWQ. However, this authority has now been delegated to the Director of the DWR.

derived from a security interest in the property, shall not be considered a responsible party." 15A NCAC 2L.0101(b).

15. The policy section of the 2L Rules provides that the 2L Rules "are intended to maintain and preserve the quality of the groundwaters, prevent and abate pollution and contamination of the waters of the state, protect public health, and permit management of the groundwaters for their best usage by the citizens of North Carolina." 15A NCAC 2L.0103(a).

16. "Contaminant" is defined in the 2L Rules as "any substance occurring in groundwater in concentrations which exceed the groundwater quality standards specified in Rule .0202 of the Subchapter." 15A NCAC 2L.0102(4).

17. "Natural Conditions" are defined in the 2L Rules as "the physical, biological, chemical and radiological conditions which occur naturally." 15A NCAC 2L.0102(16).

18. The policy section of the 2L Rules provides further that, "[i]t is the policy of the Commission that the best usage of the groundwaters of the state is as a source of drinking water. These groundwaters generally are a potable source of drinking water without the necessity of significant treatment. It is the intent of these Rules to protect the overall high quality of North Carolina's groundwaters to the level established by the standards and to enhance and restore the quality of degraded groundwaters where feasible and necessary to protect human health and the environment, or to ensure their suitability as a future source of drinking water." 15A NCAC 2L.0103(a).

19. The policy section of the 2L Rules provides further that, "[n]o person shall conduct or cause to be conducted, any activity which causes the concentration of any substance to exceed that specified in Rule .0202 of this Subchapter, except as authorized by the rules of this Subchapter." 15A NCAC 2L.0103(d).

20. The groundwater "Standards" are specified in 15A NCAC 2L.0202. *See* 15A NCAC 2L.0102(23). Some groundwater standards and their concentrations are specifically listed in 15A NCAC 2L.0202(g) and (h). If a substance is not specifically listed and if it is naturally occurring, the standard is the naturally occurring concentration as determined by the Director. 15A NCAC 2L.0202(c). If a substance is listed, if it is naturally occurring and the substance exceeds the established standard, the standard shall be the naturally occurring concentration as determined by the Director. 15A NCAC 2L .0202(b)(3). If a substance is not specifically listed and it is not naturally occurring, the substance cannot be permitted in concentrations at or above the practical quantitation limit in Class GA or Class GSA waters, except that the Director may establish interim maximum allowable concentrations ("IMAC") pursuant to 15A NCAC 2L.0202(c). These are listed in Appendix #1 of 15A NCAC 2L. The IMACs are the established standard until adopted by rule. *See* the last page of Plaintiff's Exhibit No. 2.

21. The DWQ Director established the IMAC for Antimony on August 1, 2010 and for Thallium on October 1, 2010, substances for which standards had not been established under the 2L Rules. A copy of the Public Notice establishing the IMACs and a copy of the Approved IMACs are attached hereto as Plaintiff's Exhibit Nos. 3 and 4, respectively, and both exhibits are incorporated herein by reference. The interim maximum allowable concentration for Thallium is 0.2 micrograms per liter ("µg/L") established pursuant to 15A NCAC 2L.0202(c). The interim maximum allowable concentration for Antimony is 1 µg/L established pursuant to 15A NCAC 2L.0202(c). *See* the last page of Plaintiff's Exhibit No. 2.

22. "It is the intention of the Commission to protect all groundwaters to a level of quality at least as high as that required under the standards established in Rule .0202 of this Subchapter." 15A NCAC 2L.0103(b).

23. A "Compliance Boundary" is defined in the 2L Rules as "a boundary around a disposal system at and beyond which groundwater quality standards may not be exceeded and only applies to facilities which have received an individual permit issued under the authority of [N.C. Gen. Stat. §] 143-215.1 or [N.C. Gen. Stat. §]130A." 15A NCAC 2L.0102(3).

24. Pursuant to 15A NCAC 2L.0107(a), "[f]or disposal systems individually permitted prior to December 30, 1983, the compliance boundary is established at a horizontal distance of 500 feet from the waste boundary or at the property boundary, whichever is closer to the source."

25. The "Waste Boundary" is defined in the 2L Rules as "the perimeter of the permitted waste disposal area." 15A NCAC 2L.0102(26).

26. A "Corrective Action Plan" is defined in the 2L Rules as "a plan for eliminating sources of groundwater contamination or for achieving groundwater quality restoration or both." 15A NCAC 2L.0102(5). A site assessment pursuant to a corrective action plan should include the source and cause of contamination, any imminent hazards to public health and safety, all receptors and significant exposure pathways, the horizontal and vertical extent of the contamination, as well as all geological and hydrogeological features influencing the movement of the contamination. 15A NCAC 2L.0106 (g).

27. Pursuant to N.C. Gen. Stat. § 143-215.6C, "[w]henever the Department has reasonable cause to believe that any person has violated or is threatening to violate any of the provisions of this Part [Part 1, Article 21, of the General Statutes], any of the terms of any permit

issued pursuant to this Part, or a rule implementing this Part, . . ." the Department is authorized to "request the Attorney General to institute a civil action in the name of the State upon the relation of the Department for injunctive relief to restrain the violation or threatened violation."

28. The statute further provides that "[u]pon a determination by the court that the alleged violation of the provisions of this Part or the regulations of the Commission has occurred or is threatened, the court shall grant the relief necessary to prevent or abate the violation or threatened violation." N.C. Gen. Stat. § 143-215.6C.

29. Additionally, the section provides that "[n]either the institution of the action nor any of the proceedings thereon shall relieve any party to such proceedings from any penalty prescribed for the violation of this Part." N.C. Gen. Stat. § 143-215.6C.

30. Defendant is a person consistent with N.C. Gen. Stat. § 143-212(4) and pursuant to N.C. Gen. Stat. § 143-215.6C.

Factual and Legal Allegations

All 6 Facilities

31. Defendant implemented a voluntary groundwater monitoring program at most of the 6 Facilities in 2006.

32. In 2009, the DWQ required Defendant to place monitoring wells at the compliance boundaries of all of the Coal Ash Ponds at all 6 Facilities.

33. The DWQ approved Defendant's proposed locations of compliance boundary wells and monitoring wells at each of the 6 Facilities on the following dates:

(1) ***Cliffside Steam Station*** – October 20, 2010;

(2) ***Buck Steam Station*** – September 2, 2010;

(3) ***Allen Steam Station*** – September 2, 2010;

(4) ***Belews Creek Steam Station*** – October 19, 2010;

(5) ***Dan River Combined Cycle Station*** – October 19, 2010; and

(6) ***Marshall Steam Station*** – September 2, 2010.

34. Defendant completed construction of the compliance monitoring wells at the compliance boundaries of the Coal Ash Ponds at each of the 6 Facilities on the following dates:

(1) ***Cliffside Steam Station*** – April 2011;

(2) ***Buck Steam Station*** – December 2010;

(3) ***Allen Steam Station*** – December 2010;

(4) ***Belews Creek Steam Station*** – December 2010;

(5) ***Dan River Combined Cycle Station*** – December 2010; and

(6) ***Marshall Steam Station*** – August 2010.

35. Each of the 6 Facilities have a specific set of parameters being monitored:

(1) ***Cliffside Steam Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(2) ***Buck Steam Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(3) ***Allen Steam Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(4) ***Belews Creek Steam Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc;

(5) ***Dan River Combined Cycle Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead,

Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc; and

(6) ***Marshall Steam Station*** – Antimony, Arsenic, Barium, Boron, Cadmium, Chromium, Chloride, Copper, Iron, Lead, Manganese, Mercury, Nickel, Nitrate, pH, Selenium, Sulfate, Thallium, Total Dissolved Solids, Water Level, and Zinc.

36. In 2010 and 2011, Defendant began submitting groundwater monitoring data to the DWQ from the 6 Facilities.

37. On June 17, 2011, the DWQ adopted a Policy for Compliance Evaluation of Long-Term Permitted Facilities with No Prior Groundwater Monitoring Requirements (hereinafter the "Policy for Compliance Evaluation"). A copy of the Policy for Compliance Evaluation is attached hereto as Plaintiff's Exhibit No. 5 and is incorporated herein by reference.

38. The Policy for Compliance Evaluation establishes an approach to evaluate groundwater compliance at long-term permitted facilities. Specifically, the Policy for Compliance Evaluation requires staff and responsible parties to consider multiple factors before determining if groundwater concentrations in samples taken at the permitted facility are a violation of the groundwater standards, or if the concentration is naturally occurring. Such factors considered are well design, sample integrity, analytical methods, statistical testing, etc.

39. All 6 Facilities are subject to the Policy for Compliance Evaluation and Plaintiff has been working with the Defendant to move through the evaluative process as described in the policy.

40. Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the 6 Facilities. The 6 Facilities began submitting data in 2010, and Plaintiff's Aquifer Protection staff prepared 6 charts of the Ash Pond Exceedances from 2010 to July 16, 2013. The 6 charts are labeled by National Pollutant Discharge

Elimination System (NPDES) Permit number and facility name. Each chart is attached hereto and labeled individually as Plaintiff's Exhibit: No. 6 (Cliffside Steam Station Ash Pond Exceedances Chart); No. 7 (Buck Steam Station Ash Pond Exceedances Chart); No. 8 (Allen Steam Station Ash Pond Exceedances Chart); No. 9 (Belews Creek Steam Station Ash Pond Exceedances Chart); No. 10 (Dan River Combined Cycle Station Steam Station Ash Pond Exceedances Chart); and No. 11 (Marshall Steam Station Ash Pond Exceedances Chart); respectively, and are incorporated herein by reference.

41. Each of the 6 charts contains the following information: the well number, the parameter sampled, the date of the sample, the 2L Groundwater Standard, the sampling result and the unit of measurement.

Cliffside Steam Station

42. On March 3, 1976, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Federal Water Pollution Control Act, as amended ("Clean Water Act" or "CWA"), 33 U.S.C. §§ 1251 *et seq.*, the DWQ issued NPDES Permit No. NC0005088, to Defendant or Defendant's predecessor for the Cliffside Steam Station ("Cliffside Steam Station NPDES Permit"), located on NCSR 1002, south of Cliffside, in Rutherford County, North Carolina.

43. The Cliffside Steam Station NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on February 20, 2012, with an effective date of March 1, 2011, and with an expiration date of July 31, 2015. A copy of the current Cliffside Steam Station NPDES Permit No. NC0005088 is attached hereto as Plaintiff's Exhibit No. 12, and is incorporated herein by reference.

44. The Cliffside Steam Station NPDES Permit authorizes the continued discharge of treated wastewater to receiving waters designated as Broad River (Class C waters), in the Broad River Basin, in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Cliffside Steam Station NPDES Permit.

45. The Cliffside Steam Station NPDES Permit authorizes the continued discharge of treated wastewater through Outfall 002 from the Ash Settling Basin. The Ash Settling Basin contains low volume wastes, coal pile runoff, metal cleaning wastes, treated domestic wastewater, chemical metal cleaning wastes, water treatment system wastewaters, ash transport water, landfill leachate (landfill contains fly and bottom ash, and gypsum from the Flue Gas Desulfurization ("FGD") system), cooling towers blow down, and runoff from the limestone stacking area and the gypsum stacking area.

46. In addition, the Cliffside Steam Station NPDES Permit authorizes the continued discharge of emergency yard drainage basin overflow through Outfall 002A.

47. Further, the Cliffside Steam Station NPDES Permit authorizes the facility to discharge metal cleaning waste, coal pile runoff, ash transport water, domestic wastewater, landfill leachate, cooling tower blowdown, limestone and gypsum stacking area runoff, and low volume wastes from Internal Outfall 004 -- FGD Wastewater Treatment System into the Ash Settling Basin.

48. The effluent limitations and monitoring requirements in the Cliffside Steam Station NPDES Permit require sampling for the following parameters from the ash settling pond discharge from Outfall 002: Flow, Oil and Grease, Total Suspended Solids, Total Copper, Total Iron, Total Arsenic, Total Selenium, Chronic Toxicity, Total Nitrogen, Total Phosphorus, pH,

Total Cadmium, Total Chromium, Total Mercury, Total Nickel, Total Silver, Total Zinc, and Temperature.

49. The Cliffside Steam Station NPDES Permit prohibits the discharge of floating solids or visible foam other than in trace amounts.

50. The effluent limitations and monitoring requirements in the Cliffside Steam Station NPDES Permit require sampling for the following parameters from emergency yard drainage overflow from Outfall 002A: Flow, Oil and Grease, Total Suspended Solids, pH, Total Copper and Total Iron.

51. The effluent limitations and monitoring requirements in the Cliffside Steam Station NPDES Permit require sampling for the following parameters from the internal discharge from Outfall 004 -- FGD Wastewater Treatment System into the Ash Settling Basin: Total Suspended Solids, Total Arsenic, Total Cadmium, Total Chromium, Chloride, Total Mercury, Total Nickel, Total Selenium, Total Silver and Total Zinc.

Unpermitted Seeps at the Cliffside Steam Station

52. As mentioned above, the Defendant's Cliffside Steam Station has three permitted outfalls (two external outfalls (002) and (002A) which discharge directly into the Broad River and one internal outfall (004)) which are included in the Cliffside Steam Station NPDES Permit.

53. Defendant's Cliffside Steam Station NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Cliffside Steam Station NPDES Permit.

54. Seeps identified at Defendant's Cliffside Steam Station, include engineered discharges from the toe-drains of Ash Settling Basin, which are different locations from the outfalls described in the Cliffside Steam Station NPDES Permit.

55. A seep or discharge from the Ash Settling Basin or any other part of the Cliffside Steam Station that is not included in the Cliffside Steam Station NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances of the 2L Groundwater Standards at the Cliffside Steam Station

56. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Cliffside Steam Station from April 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Cliffside Steam Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 6.

57. The Cliffside Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in MW-20D, MW-20DR, MW-22DR, MW-23D, MW-23DR, MW-24D, MW-24DR and MW-25DR during seven sampling events from April 2011 through April 2013, with concentrations ranging from 330 μg/L to 9,890 μg/L.

58. The Cliffside Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in MW-20D, MW-20DR, MW-21D, MW-22DR, MW 23-D, MW-23DR, MW-24D, MW-24DR and MW-25DR during seven sampling events from April 2011 through April 2013, with concentrations ranging from 51 μg/L to 750 μg/L.

59. The Cliffside Steam Station Ash Pond Exceedances Chart also shows an exceedance from the 2L Groundwater Standard for Chromium (10 μg/L) in MW-23D and MW-25DR during one sampling event on April 2011, with concentrations of 14 μg/L and 45 μg/L, respectively.

60. The Cliffside Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for pH (6.5-8.5) in MW-25DR during three

sampling events from April 2011 through December 2011, with concentrations ranging from 8.7 to 9.5.

61. The Cliffside Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for pH (6.5-8.5) in MW-21D, MW-22DR and MW-24D during seven sampling events from April 2011 through April 2013, with concentrations ranging from 4.7 to 6.4.

62. The Cliffside Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 milligrams per liter ("mg/L")) in MW-23D during seven sampling events from April 2011 through April 2013, with concentrations ranging from 590 mg/L to 820 mg/L.

63. The Cliffside Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Total Sulfate (250 mg/L) in MW-23D during six sampling events from April 2011 through December 2012, with concentrations ranging from 280 mg/L to 420 mg/L.

64. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Buck Steam Station

65. On March 31, 1976, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0004774 to Defendant or Defendant's predecessor for the Buck Steam Station ("Buck Steam Station NPDES Permit"), located in Rowan County, North Carolina.

66. The Buck Steam Station NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on December 2, 2011, with an effective date of January 1,

2012, and with an expiration date of August 31, 2016. A copy of the current Buck Steam Station NPDES Permit No. NC0004774 is attached hereto as Plaintiff's Exhibit No. 13, and is incorporated herein by reference.

67. The Buck Steam Station NPDES Permit authorizes the continued discharge of treated wastewater to receiving waters designated as the Yadkin River (Class WS-IV & B waters) in subbasin 03-07-06 of the Yadkin-Pee Dee River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth therein.

68. The Buck Steam Station NPDES Permit authorizes the continued discharge of once-through non-contact cooling water through Outfall 001.

69. In addition, the Buck Steam Station NPDES Permit authorizes the continued discharge of treated wastewater from the Ash Basin through Outfall 002.

70. Further, the Buck Steam Station NPDES Permit authorizes the continued discharge of yard sump overflows through Outfall 002A.

71. Outfalls 002 and 002A consist of coal pile runoff, ash transport water, metal cleaning wastes, treated domestic wastewater, remediated groundwater, low volume wastes, blowdown from wet cooling towers for combined cycle unit, and boiler blowdown.

72. The effluent limitations and monitoring requirements in the Buck Steam Station NPDES Permit for the discharge from Outfall 001 requires sampling for the following parameters: Flow and Temperature from June to September and October to May.

73. The Buck Steam Station NPDES Permit prohibits chlorination of the once-through cooling water.

74. The Buck Steam Station NPDES Permit includes special low-flow condition when the High Rock Lake drawdown is ten feet or greater. In that instance, the Buck Steam

Station can use no more than two-thirds of the stream flow for condenser cooling and Buck Steam Station must ensure that minimum unheated daily average stream flow does not fall below the one-third of the 7-day 10-year low flow (7Q10).

75. The effluent limitations and monitoring requirements in the Buck Steam Station NPDES Permit for Outfall 002 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Copper, Total Iron, Total Arsenic, Total Selenium, Chronic Toxicity, Total Nitrogen, Total Phosphorus, pH, and Total Mercury. The metal cleaning waste, coal pile runoff, remediated groundwater, flows from floor drains, laboratory flows, ash transport water, domestic wastewater and low volume wastes must be discharged to the Ash Settling Pond.

76. The effluent limitations and monitoring requirements in the Buck Steam Station NPDES Permit for Outfall 002A require sampling for the following parameters: Flow, pH, Total Suspended Solids, Fecal Coliform and Iron.

77. The Buck Steam Station NPDES Permit prohibits the discharge of floating solids or visible foam other than in trace amounts from any of its outfalls.

Unpermitted Seeps at the Buck Steam Station

78. As mentioned above, the Defendant's Buck Steam Station has three permitted outfalls (001, 002 and 002A) discharging directly into the Yadkin River which are included in the Buck Steam Station NPDES Permit.

79. Defendant's Buck Steam Station NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Buck Steam Station NPDES Permit.

80. Seeps identified at Defendant's Buck Steam Station, include engineered discharges from the toe-drains of its Ash Basin and Ash Settling Ponds, which are different locations from the outfalls described in the Buck Steam Station NPDES Permit.

81. A seep or discharge from the Ash Basin, the Ash Settling Ponds or any other part of the Buck Steam Station that is not included in the Buck Steam Station NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances in Violation of the 2L Groundwater Standards at the Buck Steam Station

82. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Buck Steam Station from March 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Buck Steam Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 7.

83. The Buck Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 μg/L) in MW-11D during seven sampling events from March 2011 to March 2013, with concentrations ranging from 1,130 μg/L to 1,290 μg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicate impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

84. The Buck Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in MW-10D, MW-11D and MW-11S during seven sampling events from March 2011 to March 2013, with concentrations ranging from 56 μg/L to 1,130 μg/L. Although Manganese is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicate impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

85. The Buck Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in MW-10D during six sampling events from March 2011 to March 2013, with concentrations ranging from 561 mg/L to 630 mg/L. The presence of Total Dissolved Solids in groundwater and the specific occurrence at this site indicate impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

86. The Buck Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in MW-10D during seven sampling events from March 2011 to March 2013, with concentrations ranging from 320 mg/L to 350 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicate impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

87. The Buck Steam Station Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in MW-11D during seven sampling events from March 2011 to March 2013, with concentrations ranging from 318 μg/L to 3,230 μg/L. Although Iron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicate impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

88. Defendant's exceedances of the 2L Groundwater Standards for Boron, Manganese, Total Dissolved Solids, Sulfate and Iron, at or beyond the compliance boundary of the Ash Basin and the Ash Settling Ponds at Buck Steam Station, are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of the 2L Groundwater Standards at Buck Steam Station

89. The Buck Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Chromium (10 μg/L) in MW-12S during three sampling events from March through November 2011, with concentrations ranging from 11 μg/L to 28 μg/L.

90. The Buck Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in MW-12S, MW-6S, MW-7D, MW-7S, MW-8S, and MW-9S during seven sampling events from March 2011 to March 2013, with concentrations ranging from 52 μg/L to 444 μg/L.

91. The Buck Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in MW-10D, MW-11S, MW-12D, MW-12S, MW-6S, MW-7D, MW-8D, MW-8S, MW-9D and MW-9S during four sampling events from March 2011 to March 2013, with concentrations ranging from 323 μg/L to 2,000 μg/L.

92. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Allen Steam Station

93. On February 8, 1977, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0004979, to Defendant or Defendant's predecessor for the Allen Steam Station ("Allen Steam Station NPDES Permit"), located in Belmont, Gaston County, (NCSR 2525), North Carolina.

94. The Allen Steam Station NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on January 18, 2011, with an effective date of March 1, 2011, and with an expiration date of February 28, 2015. A copy of the current Allen Steam

Station NPDES Permit No. NC0004979 is attached hereto as Plaintiff's Exhibit No. 14, and is incorporated herein by reference.

95. The Allen Steam Station NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Catawba River and the South Fork Catawba River in the Catawba River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Allen Steam Station NPDES Permit.

96. The Allen Steam Station NPDES Permit authorizes a Condenser Cooling Water ("CCW") once through discharge directly into the South Fork Catawba River from Outfall 001.

97. The Allen Steam Station NPDES Permit authorizes the operation of a septic tank and ash pond with pH adjustment and the discharge of domestic wastewater, stormwater runoff, ash sluice, water treatment system wastewaters, FGD system blowdown, landfill leachate and miscellaneous cleaning and maintenance wash waters discharge from Outfall 002.

98. The Allen Steam Station NPDES Permit authorizes a coal yard sump overflow discharge from Outfall 002A.

99. The Allen Steam Station NPDES Permit authorizes a power house sump overflow discharge from Outfall 002B.

100. The Allen Steam Station NPDES Permit authorizes miscellaneous equipment non-contact cooling and sealing water discharges from Outfall 003.

101. The Allen Steam Station NPDES Permit authorizes miscellaneous non-contact cooling water, vehicle washwater, and intake screen backwash discharges from Outfall 004.

102. The Allen Steam Station NPDES Permit authorizes an FGD wet scrubber wastewater treatment system consisting of a flow equalization tanks, a maintenance tank, feed systems for lime, sulfide, ferric chloride, polymer hydrochloric acid, and molasses-based

nutrient, two clarifiers, dual heat exchangers, a selenium reduction bioreactor and a sludge treatment system including three filter presses and it discharges through Internal Outfall 005 to the ash settling basin.

103. The Allen Steam Station discharges into the Catawba River (Class WS-IV B waters) from Outfalls 002, 0002A, 002B and 004, and discharges into the South Fork Catawba River (Class WS-V waters), from Outfalls 001 and 003. Both discharges are in the Catawba River Basin.

104. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from Outfall 001 for the once through condenser cooling water ("CCW") requires sampling for the following parameters: Flow and Temperature from June to September and October to May. Chlorination of the CCW is not allowed under this permit.

105. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from Outfall 002 (the Ash Pond effluent), require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, pH, Total Mercury, Total Iron, Total Arsenic, Total Beryllium, Total Cadmium, Total Chromium, Total Copper, Total Nickel, Total Silver, Total Zinc, Total Nitrogen, and Chronic Toxicity.

106. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from Outfall 002A (the Coal Yard Sump Overflows), require sampling for the following parameters: Flow, Oil and Grease, pH, Total Iron, Total Suspended Solids and Fecal Coliform. The Allen Steam Station NPDES Permit also prohibits a discharge of floating solids or foam from Outfall 002A.

107. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from Outfall 002B (the Power House Sump Overflows),

require sampling for the following parameters: Flow, Oil and Grease, pH, Total Iron, Total Suspended Solids and Total Copper. The Allen Steam Station NPDES Permit also prohibits a discharge of floating solids or foam from Outfall 002B.

108. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from the once through cooling water from Outfall 003, miscellaneous equipment non-contact water and sealing water, require sampling for the Flow parameter. No chlorination is allowed under this permit.

109. The effluent limitations and monitoring requirements in the Allen Steam Station NPDES Permit for the discharge from the once through cooling water from Outfall 004 (miscellaneous non-contact water, vehicle waste water and intake screen backwash), require sampling for the following parameters: Oil and Grease and Flow.

110. The effluent limitations and monitoring requirements in the Allen Plant NPDES permit for the discharge from Internal Outfall 005 (treated FGD wet scrubber wastewater to the Ash Pond) require sampling for the following parameters: Flow, Total Suspended Solids, Total Mercury, Total Iron, Total Arsenic, Total Beryllium, Total Cadmium, Total Chromium, Chloride, Total Nickel, Carbonaceous Oxygen Demand ("COD"), Total Silver, and Total Zinc.

Unpermitted Seeps at the Allen Steam Station

111. As mentioned above, the Defendant's Allen Steam Station has six permitted outfalls discharging directly into the Catawba River and the South Fork Catawba River which are included in the Allen Steam Station NPDES Permit.

112. Defendant's Allen Steam Station NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Allen Steam Station NPDES Permit.

113. Seeps identified at Defendant's Allen Steam Station, include engineered discharges from the toe-drains of its Ash Pond, which are different locations from the outfalls described in the Allen Steam Station NPDES Permit.

114. Upon information and belief, Plaintiff believes there are other non-engineered seeps at Defendant's Allen Steam Station, which are different locations from the outfalls described in the Allen Steam Station NPDES Permit.

115. A seep or discharge from the Ash Pond or any other part of the Allen Steam Station that is not included in the Allen Steam Station NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances of the 2L Groundwater Standards at the Allen Steam Station

116. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Allen Steam Station from March 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Allen Steam Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 8.

117. The Allen Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in compliance wells AB-1R, AB-11D, AB-12D, AB-13D, and AB-14D during seven sampling events from March 2011 through March 2013, with concentrations of ranging from 301 μg/L to 8,350 μg/L.

118. The Allen Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in AB-12S, AB-13D, AB-13S, AB-14D and AB-4S during seven sampling events from March 2011 through March 2013, with concentrations of ranging from 53 μg/L to 945 μg/L.

119. The Allen Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Nickel (100 μg/L) in AB-14D during seven sampling events from March 2011 through March 2013, with concentrations ranging from 121 μg/L to 544 μg/L.

120. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Belews Creek Steam Station

121. On June 30, 1977, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, DWQ issued NPDES Permit No. NC0024406 to Defendant or Defendant's predecessor for the Belews Creek Steam Station ("Belews Creek Steam Station NPDES Permit"), located in Stokes County, North Carolina.

122. The Belews Creek Steam Station NPDES Permit has been renewed subsequently. The current Belews Creek Steam Station NPDES Permit was re-issued on October 12, 2012, with an effective date of November 1, 2012, and with an expiration date of February 28, 2017. A copy of the current Belews Creek Steam Station NPDES Permit No. NC0024406, is attached hereto as Plaintiff's Exhibit No. 15, and is incorporated herein by reference.

123. Belews Creek Steam Station NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the West Belews Creek/Belews Lake, and the Dan River in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the NPDES permit.

124. The Belews Creek Steam Station NPDES Permit authorizes an Ash Basin discharge at Outfall 003 that discharges into West Belews Creek/Belews Lake. The ash pond receives wastestreams from the power house and yard holding sumps, ash sluice lines, chemical

holding pond, coal yard sumps, stormwater and remediated groundwater, and treated FGD wastewater from Internal Outfall 002.

125. The Belews Creek Steam Station NPDES Permit authorizes once through cooling water that discharges a wastestream into West Belews Creek/Belews Lake at Outfall 001.

126. The Belews Creek Steam Station NPDES Permit authorizes an FGD wet scrubber wastewater treatment system which discharges to the Ash Pond via Internal Outfall 002.

127. The effluent limitations and monitoring requirements in the Belews Creek Steam Station NPDES Permit for Outfall 003 (the Ash Pond Treatment System) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Chlorides, Total Iron, Total Copper, Total Selenium, Total Silver, Fluoride, Total Phosphorus, Total Nitrogen, Sulfates, pH, Bromides, Total Mercury and Chronic Toxicity.

128. The effluent limitations and monitoring requirements in the Belews Creek Steam Station NPDES Permit for Outfall 001 (the once through non-contact cooling water system) require sampling for the following parameters: Flow and Temperature.

129. The effluent limitations and monitoring requirements in the Belews Creek Steam Station NPDES Permit for Internal Outfall 002 (FGD wet scrubber wastewater treatment system) include Flow, Total Suspended Solids, Total Arsenic, Chlorides, Total Mercury, and Total Selenium.

Unpermitted Seeps at the Belews Creek Steam Station

130. As mentioned above, the Defendant's Belews Creek Steam Station has three permitted outfalls discharging directly into West Belews Creek/Belews Lake and the Dan River which are included in the Belews Creek Steam Station NPDES Permit.

131. Defendant's Belews Creek Steam Station NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Belews Creek Steam Station NPDES Permit.

132. Seeps identified at Defendant's Belews Creek Steam Station, include engineered discharges from the toe-drains of its Ash Pond, which are different locations from the outfalls described in the Belews Creek Steam Station NPDES Permit.

133. A seep or discharge from the Ash Pond or any other part of the Belews Creek Steam Station that is not included in the Belews Creek Steam Station NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances of the 2L Groundwater Standards at the Belews Creek Steam Station

134. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Belews Creek Steam Station from January 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Belews Creek Steam Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 10.

135. The Belews Steam Station Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Chromium (10 μg/L) in MW-202D during one sampling event in January 2011, with a concentration of 15 μg/L.

136. The Belews Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in MW-200D, MW-200S, MW-201D, MW-202D, MW-204D and MW-204S during eight sampling events from January 2011 to May 2013, with concentrations ranging from 310 μg/L to 14,100 μg/L. However, over half of these wells showed three samples that were under the 2L Groundwater Standard and thus the compliance status for these wells is unclear pending further information.

137. The Belews Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in MW-200D, MW-200S, MW-201D, MW-202D, MW-204D, and MW-204S, during eight sampling events, from January 2011 to May 2013, with concentrations ranging from 53 μg/L to 3,600 μg/L.

138. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Dan River Combined Cycle Station

139. On August 30, 1976, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, DWQ issued NPDES Permit No. NC0003468 to Defendant or Defendant's predecessor for the Dan River Combined Cycle Station ("Dan River Combined Cycle Station NPDES Permit"), located in Rockingham County, North Carolina.

140. The Dan River Combined Cycle Station NPDES Permit has been renewed subsequently. The current Dan River Combined Cycle Station NPDES Permit was re-issued on January 31, 2013, with an effective date of March 1, 2013, and with an expiration date of April 30, 2017. A copy of the current Dan River Combined Cycle Station NPDES Permit No. NC0003468 is attached hereto as Plaintiff's Exhibit No. 16, and is incorporated herein by reference

141. The Dan River Combined Cycle Station NPDES permit authorizes the discharge of treated wastewater to receiving waters designated as the Dan River in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Dan River Combined Cycle Station NPDES permit.

142. The Dan River Combined Cycle Station NPDES Permit authorizes an Ash Basin Discharge at Outfall 002 that discharges directly into the Dan River. The ash pond receives low volume wastes, boiler cleaning wastewater, ash disposal, stormwater, boiler blowdown, and metal washing wastewater.

143. The Dan River Combined Cycle Station NPDES Permit authorizes a once through cooling water and cooling tower blowdown from the combined cycle unit, intake screen backwash, plant collection sumps (low volume wastes), and treated domestic wastewater that discharges a wastestream directly into the Dan River through Outfall 001.

144. The Dan River Combined Cycle Station NPDES Permit authorizes wastes from the filtered water plant including miscellaneous washdown water and laboratory wastes (low volume waste sources) from Internal Outfall 001A.

145. The Dan River Station NPDES Permit authorizes a yard sump overflow consisting of stormwater runoff, miscellaneous sumps and coal yard runoff via Outfall 002A.

146. The effluent limitations and monitoring requirements in the Dan River Combined Cycle Station NPDES Permit for Outfall 002 (the Ash Pond Treatment System) require sampling for the following parameters: Flow, pH, Total Iron, Total Suspended Solids, Sulfate, Acute Toxicity, Oil and Grease, Nitrate/Nitrate Nitrogen, Total Kjeldahl Nitrogen, Total Nitrogen, and Total Phosphorus.

147. The effluent limitations and monitoring requirements in the Dan River Combined Cycle Station NPDES Permit for the once through non-contact cooling water system require sampling for the following parameters: Flow (MGD), Temperature, Total Iron, Total Suspended Solids, pH, and Total Residual Chlorine.

148. The effluent limitations and monitoring requirements in the Dan River Combined Cycle Station NPDES Permit for Outfall 001 (the once through cooling water and cooling tower blowdown and domestic wastewater) require sampling for the following parameters: Flow, Temperature, Total Iron, Total Suspended Solids, pH and Total Residual Chlorine.

149. The effluent limitations and monitoring requirements in the Dan River Combined Cycle Station NPDES Permit for Outfall 001A (the wastes from the filtered water plant) require sampling for the following parameters: Total Suspended Solids and Oil and Grease.

150. The effluent limitations and monitoring requirements in the Dan River Combined Cycle Station NPDES Permit for Outfall 002A (the yard sump overflows system) require sampling for the following parameters: Flow, pH, Oil and Grease, Total Suspended Solids and Total Iron.

Unpermitted Seeps at the Dan River Combined Cycle Station

151. As mentioned above, the Defendant's Dan River Combined Cycle Station has four permitted outfalls discharging directly into the Dan River which are included in the Dan River Combined Cycle Station NPDES Permit.

152. Defendant's Dan River Combined Cycle Station NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Dan River Combined Cycle Station NPDES Permit.

153. Seeps identified at Defendant's Dan River Combined Cycle Station, include engineered discharges from the toe-drains of its Ash Pond, which are different locations from the outfalls described in the Dan River Combined Cycle Station NPDES Permit.

154. A seep or discharge from the Ash Pond or any other part of the Dan River Combined Cycle Station that is not included in the Dan River Combined Cycle Station NPDES Permit is an unpermitted discharge in violation of N.C. Gen. Stat. § 143-215.1(a)(1) and (a)(6).

Exceedances in Violation of the 2L Groundwater Standards at the Dan River Combined Cycle Station

155. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Dan River Combined Cycle Station from January 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Dan River Combined Cycle Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 10.

156. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Antimony (1 μg/L) in MW-21S during two sampling events on September 2011 and May 2012, with concentrations of 1.19 μg/L and 1.3 μg/L, respectively; and in MW-22D during four sampling events from January 2012 to May 2013, with concentrations ranging from1.1 μg/L to 1.6 μg/L. Although Antimony is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

157. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Arsenic (10 μg/L) in MW-21S during eight sampling events from January 2011 to May 2013, with concentrations ranging from 21 μg/L to 45μg/L. Although Arsenic is a naturally occurring element, its presence in groundwater and

specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

158. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 μg/L) in MW-22D during three sampling events from January 2012 to January 2013, with concentrations ranging from 711 μg/L to 793 μg/L and in MW-22S during one sampling event in May 2013 with a concentration of 903 μg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

159. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in MW-20S and MW-22S during eight sampling events from January 2011 to May 2013, with concentrations ranging from 829 μg/L to 19,400 μg/L. Although Iron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

160. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in monitoring wells MW-20D, MW-20S, MW-21S, MW-21D, MW-22D, and MW-22S during eight sampling events from January 2011 to May 2013, with concentrations ranging from 306 μg/L to 1,050 μg/L. Although Manganese is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

161. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in MW-21D during eight sampling events from January 2011 to May 2013, with concentrations ranging from 643 mg/L to 770 mg/L. The presence of Total Dissolved Solids in groundwater and the specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

162. The Dan River Combined Cycle Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in well MW-21D during eight sampling events from January 2011 to May 2013, with concentrations ranging from 310 mg/L to 350 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

163. Defendant's exceedances of the 2L Groundwater Standards for Antimony, Arsenic, Boron, Iron, Manganese, Total Dissolved Solids and Sulfate, at or beyond the compliance boundary of the Ash Pond at the Dan River Combined Cycle Station, are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at Dan River Combined Cycle Station

164. The Dan River Combined Cycle Station Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Iron in wells MW-22D and MW-23D, and Manganese in well MW-23D during eight sampling events from January 2011 to May 2013.

165. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

Marshall Steam Station

166. On March 3, 1976, pursuant to N.C. Gen. Stat. § 143-215.1, other lawful statutes and regulations issued by the Commission, and the Clean Water Act, the DWQ issued NPDES Permit No. NC0004987 to Defendant or Defendant's predecessor for the Marshall Steam Station ("Marshall Steam Station NPDES Permit"), located in Terrell, Catawba County, (NCSR 1841), North Carolina.

167. The Marshall Steam Station NPDES Permit has been renewed subsequently. The current Marshall Steam Station NPDES Permit was re-issued on January 18, 2011, with an effective date of March 1, 2011, and with an expiration date of April 30, 2015. A copy of the current Marshall Steam Station NPDES Permit No. NC0004987 is attached hereto as Plaintiff's Exhibit No. 17, and is incorporated herein by reference.

168. The Marshall Steam Station NPDES Permit was modified on January 18, 2009 to reflect a name change to "Duke Energy Carolinas, LLC".

169. The Marshall Steam Station NPDES Permit authorizes the continued discharge of treated wastewater to receiving waters designated as the Catawba River (Lake Norman) (Class B-CA waters) in the Catawba River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth therein.

170. The Marshall Steam Station NPDES Permit authorizes a once through cooling water discharge at Outfall 001 at the intersection of Highway 150 and NCSR 1841.

171. The Marshall Steam Station NPDES Permit authorizes treated wastewater, i.e., metal cleaning waters, coal pile runoff, ash transport water, domestic wastewater, low volume wastes and an FGD wet scrubber waste water, from the Ash Settling Pond through Outfall 002.

172. The Marshall Steam Station NPDES Permit authorizes a discharge of treated FGD wet scrubber wastewater through Internal Outfall 004, upstream of the Ash Pond.

173. The Marshall Steam Station NPDES Permit authorizes discharges of sump overflows through Outfalls 002A and 002B.

174. The Marshall Steam Station NPDES Permit authorizes discharges of non-contract cooling water through Outfall 003 from the induced draft fan control house.

175. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from Outfall 001 (once through cooling water) require sampling for the following parameters: Flow, Temperature and Free Available Chlorine.

176. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from Outfall 002 (Ash Pond effluent) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Chloride, Total Copper, Total Iron, Total Mercury, Total Nickel, Total Selenium, Total Selenium limits effective July 1, 2012 ,Total Zinc, Total Nitrogen, Total Phosphorus, Chronic Toxicity and pH.

177. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from Outfall 002A (yard sump #1 overflows) require sampling for the following parameters: Flow, pH, Total Iron, and Total Suspended Solids.

178. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from Outfall 002B (yard sump #2 overflows) require sampling for the following parameters: Flow, pH, Total Iron and Total Suspended Solids.

179. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from Outfall 003 (non-contact cooling water from the

induced draft fan control house) require sampling for the following parameters: Flow, Temperature, Total Residual Chlorine, Free Available Chlorine and pH.

180. The effluent limitations and monitoring requirements in the Marshall Steam Station NPDES Permit for the discharge from the Internal Outfall 004 (treated FGD wet scrubber wastewater to the Ash Pond and effluent from the constructed wetland prior to discharge to the ash settling basin) require sampling for the following parameters: Flow, Total Selenium and Total Zinc.

181. The Marshall Steam Station NPDES Permit prohibits the discharge of floating solids or visible foam other than in trace amounts from any of its outfalls.

Exceedances in Violation of 2L Groundwater Standards at the Marshall Steam Station

182. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Marshall Steam Station from February 2011 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Marshall Steam Station Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 11.

183. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 μg/L) in wells MW-14D and MW-14S, during seven sampling events from February 2011 to February 2013, with concentrations ranging from 2,960 μg/L to 4,530 μg/L. Although Boron is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

184. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in well MW-14D during five sampling events and in well MW-14S during seven sampling events from February 2011 to

February 2013, with concentrations ranging from 51 μg/L to 192 μg/L. Although Manganese is a naturally occurring element, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

185. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in well MW-14D during four sampling events and in well MW-14S during seven sampling events from February 2011 to February 2013, with concentrations ranging from 510 mg/L to 650 mg/L. The presence of Total Dissolved Solids in groundwater and the specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

186. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 μg/L) in wells MW-14D and MW-14S in seven sampling events from February 2011 to February 2013, with concentrations ranging from 270 mg/L to 400 mg/L. Although Sulfate is a naturally occurring compound, its presence in groundwater and specific occurrence at this site indicates impacts to groundwater resulting from the wastewater treatment and disposal associated with coal burning activities.

187. Defendant's exceedances of the 2L Groundwater Standards for Boron, Manganese, Total Dissolved Solids and Sulfate, at or beyond the compliance boundary of the Ash Pond at the Marshall Steam Station, are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of the2L Groundwater Standards at Marshall Steam Station

188. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 μg/L) in wells MW-4D, MW-10S, MW-11D, MW-11S, MW-12D, MW-13S, and MW-14S during seven sampling events from February 2011 to February 2013, with concentrations ranging from 305 μg/L to 1,060 μg/L.

189. The Marshall Steam Station Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 μg/L) in wells MW-10D, MW-10S, MW-12S and MW-13S during five sampling events from February 2011 to February 2013, with concentrations ranging from 54 μg/L to 127 μg/L.

190. The DWR staff is working with the Defendant to determine if these exceedances are naturally occurring or if corrective action will be required.

CLAIMS FOR RELIEF

191. The allegations contained in paragraphs 1 through 190 are incorporated into these claims for relief as if fully set forth herein.

192. With the exception of the Marshall Steam Station, which has no unpermitted seeps, Defendant's unpermitted seeps from the 5 of the 6 Facilities (Cliffside, Buck, Allen, Belews Creek and Dan River) are violations of N.C. Gen. Stat. §§ 143-215.1(a)(1) and (a)(6).

193. Defendant's exceedances of the groundwater standards for Boron, Manganese, Total Dissolved Solids, Sulfate and Iron, at or beyond the compliance boundary of the Ash Basin and the Ash Settling Ponds at Buck Steam Station, are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

194. Defendant's exceedances of the groundwater standards for Antimony, Arsenic, Boron, Iron, Manganese, Total Dissolved Solids and Sulfate, at or beyond the compliance

boundary of the Ash Pond at the Dan River Combined Cycle Station, are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

195. Defendant's exceedances of the groundwater standards for Boron, Manganese, Total Dissolved Solids and Sulfate, at or beyond the compliance boundary of the Ash Pond at the Marshall Steam Station, are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

196. Plaintiff is entitled to injunctive relief, as set forth more specifically in the prayer for relief, pursuant to N.C. Gen. Stat. § 143-215.6C.

197. Defendant's violations of N.C. Gen. Stat. §§ 143-215.1(a)(1) and (a)(6) for the unpermitted seeps and Defendant's violations and potential violations of the 2L Groundwater Standards, without assessing the problem and taking corrective action, pose a serious danger to the health, safety and welfare of the people of the State of North Carolina and serious harm to the water resources of the State.

PRAYER FOR RELIEF

WHERFORE, the Plaintiff, State of North Carolina, prays that the Court grant to it the following relief:

1. That the Court accepts this verified complaint as an affidavit upon which to base all orders of the Court;

2. That the Court preliminarily, and upon final judgment permanently enter a mandatory injunction requiring the Defendant to abate the violations of N.C. Gen. Stat. § 143-215.1, NPDES Permits and groundwater standards at the 6 Facilities;

3. That the Court preliminarily, and upon final judgment permanently enter a mandatory injunction requiring the Defendant take the steps required in the attached "Ash Ponds

Assessment Needs," which is attached hereto as Plaintiff's Exhibit No. 18, and is incorporated herein by reference;

4. That the Defendant be taxed with the costs of this action;

5. Any other and further relief that the Court deems to be just and proper.

Respectfully submitted, this the 16 day of August, 2013.

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Attorneys for the Plaintiff
State of North Carolina ex rel.
North Carolina Department of
Environment and Natural Resources

STATE OF NORTH CAROLINA

VERIFICATION

COUNTY OF WAKE

Jeffrey Poupart, first being duly sworn, deposes and says that he is the Point Source Branch Supervisor of the Surface Water Protection Section of the Division of Water Resources in the North Carolina Department of Environment and Natural Resources; that he has read the foregoing verified Complaint and Motion For Injunctive Relief, and that he is acquainted with the facts and circumstances alleged therein; and believes them to be true.

Jeffrey Poupart

Wake County, North Carolina

I certify that the following person appeared before me this day, acknowledging to me that he signed the foregoing document: *Jeffrey Poupart.*

16th day of August, 2013.

Official Signature of Notary

Anna V. Smith

Notary's printed or typed name

My Commission Expires: 10/22/16

(Official Seal)

ANNA V. SMITH NOTARY PUBLIC WAKE COUNTY, NC