13CV011032

STATE OF NORTH CAROLINA FILED		IN THE GENERAL COURT OF JUSTICE
		SUPERIOR COURT DIVISION
COUNTY OF WAKE 2013 AUG 16 PM 4:23		13 CVS _____
STATE OF NORTH CAROLINA *ex rel.* NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, CO., C.S.C.	)	
Plaintiff,	)	
v.	)	**COMPLAINT AND MOTION FOR INJUNCTIVE RELIEF RULE 65 N.C.R.C.P.**
DUKE ENERGY PROGRESS, INC.,	)	
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 Progress, Inc. (formerly Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., prior to April 29, 2013), is a corporation

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

organized and existing under the laws of the State of North Carolina. Defendant's principal place of business is in Wake County, North Carolina and is located at 410 South Wilmington Street, PEB 17B5, Raleigh, North Carolina 27601. Defendant's Registered Agent is CT Corporation System, 150 Fayetteville Street, Box 1011, Raleigh, North Carolina 27601

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

(1) ***Mayo Steam Electric Generating Plant*** ("Mayo Steam Electric Plant") in Person County;

(2) ***Roxboro Steam Electric Generating Plant*** ("Roxboro Steam Electric Plant") in Person County;

(3) ***Cape Fear Steam Electric Generating Plant*** ("Cape Fear Steam Electric Plant") in Chatham County;

(4) ***H.F. Lee Steam Electric Plant*** ("Lee Steam Electric Plant") in Wayne County;

(5) ***Weatherspoon Steam Electric Plant*** in Robeson County; and

(6) ***L. V. Sutton Electric Plant*** ("Sutton Electric Plant") in New Hanover County.

4. Defendant or its predecessor 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. Wake County is a proper venue for this action because Defendant's principal place of business is located in Wake 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 this 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

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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.

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 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. With the exception of the Sutton Electric Plant, which began groundwater monitoring in 1984, and added new monitoring wells between 1990 and 2011, 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) ***Mayo Steam Electric Plant***– November 12, 2010;

(2) ***Roxboro Steam Electric Plant*** – November 12, 2010;

(3) ***Cape Fear Steam Electric Plant*** – January 4, 2011;

(4) ***Lee Steam Electric Plant*** – January 4, 2011;

(5) ***Weatherspoon Steam Electric Plant***– November 1, 2010; and

(6) ***Sutton Electric Plant*** – March 17, 2011 and October 24, 2011.

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

(1) ***Mayo Steam Electric Plant*** – November 2010;

(2) ***Roxboro Steam Electric Plant*** – October and November 2010;

(3) ***Cape Fear Steam Electric Plant*** – September 2010;

(4) ***Lee Steam Electric Plant*** – July 2010 and September 2012;

(5) ***Weatherspoon Steam Electric Plant*** – August 2010; and

(6) ***Sutton Electric Plant*** – 1990 to 2012.

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

(1) ***Mayo Steam Electric Plant*** – Aluminum, 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) ***Roxboro Steam Electric Plant*** – Aluminum, 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) ***Cape Fear Steam Electric Plant*** – Aluminum, 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) ***Lee Steam Electric Plant*** – 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) ***Weatherspoon Steam Electric Plant*** – 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) ***Sutton Electric Plant*** – 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, with the exception of the Sutton Electric Plant, Defendant began submitting groundwater monitoring data to the DWQ from 5 of the 6 Facilities. Although actual groundwater monitoring started in 1984, the Sutton Electric Plant NPDES Permit required groundwater monitoring to begin in the spring of 1990.

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 (Mayo Steam Electric Plant Ash Pond Exceedances Chart); No. 7 (Roxboro Steam Electric Plant Ash Pond Exceedances Chart); No. 8 (Cape Fear Steam Electric Plant Ash Pond Exceedances Chart); No. 9 (Lee Steam Electric Plant Ash Pond Exceedances Chart); No. 10 (Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart); and No. 11 (Sutton Electric Plant 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.

Mayo Steam Electric Plant

42. On July 12, 1982, 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. NC0038377 to Progress Energy for the Mayo Steam Electric Plant ("Mayo Steam Electric Plant NPDES Permit"), located in Person County, North Carolina.

43. The Mayo Steam Electric Plant NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on October 14, 2009, with an expiration date of March 31, 2012. On September 28, 2011, Progress Energy submitted a renewal application to the DWQ. Since the Defendant timely applied for re-issuance 180 days prior to the expiration date, pursuant to N.C. Gen. Stat. § 150B-3, Defendant can continue to operate under the 2009 Mayo Steam Electric Plant NPDES Permit until a new permit has been issued. A copy of the 2009

Mayo Steam Electric Plant NPDES Permit No. NC0038377 is attached hereto as Plaintiff's Exhibit No. 12, and is incorporated herein by reference.

44. A Special Order by Consent was approved by the EMC for the Mayo Steam Electric Plant on June 25, 2012 and transmitted to Progress Energy on June 26, 2012. A copy of the transmittal letter and EMC SOC WQ S10-012 is attached hereto as Plaintiff's Exhibit No. 13 and is incorporated herein by reference. To the extent that the SOC modifies the terms of the 2009 NPDES Permit for the Mayo Steam Electric Plant, the SOC controls those terms of the permit until a new NPDES permit is issued or a judicial order is issued.

45. The Mayo Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Mayo Reservoir in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Mayo Steam Electric Plant NPDES Permit.

46. The Mayo Steam Electric Plant NPDES Permit authorizes a cooling tower system less than once per year when the cooling towers and circulating water system are drained by gravity and discharges a wastestream directly into the Mayo Reservoir through Outfall 001.

47. The Mayo Steam Electric Plant NPDES Permit authorizes a cooling tower blowdown system that indirectly discharges to Mayo Reservoir via Internal Outfall 008 to the Ash Pond Treatment System at Outfall 002. Cooling tower blowdown is usually mixed with ash sluice water prior to discharge to the ash pond.

48. The Mayo Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Outfall 002 that discharges directly into the Mayo Reservoir. The Ash Pond receives ash transport water, coal pile runoff, storm water runoff, cooling tower blowdown and various low volume wastes such as boiler blowdown, oily waste treatment, wastes/backwash from the

water treatment processes including Reverse-Osmosis wastewater, plant area wash down water, equipment heat exchanger water, and treated domestic wastewater.

49. The Mayo Steam Electric Plant NPDES Permit authorizes a stormwater discharge system to discharge stormwater to the Mayo Reservoir through Outfalls 004, 005, 006a, 006b, 006c, 006d, 006e, and 010. Drainage from the outside storage area discharges at Outfall 004. Drainage from the industrial area and the oil/bottled gas storage area discharges at Outfall 005. Drainage from the cooling tower(s) chemical feed building structure and the cooling tower area discharges at Outfalls 006a, 006b, 006c, 006d and 006e. Drainage from the haul road for coal ash, limestone, gypsum and gaseous anhydrous ammonia discharges at Outfall 010.

50. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the discharge from Outfall 001 (cooling tower system) require sampling for the following parameters: Flow, Free Available Chlorine, Time of Chlorine Addition, Total Chromium, Total Zinc, Priority Pollutants and pH. The Mayo Steam Electric Plant NPDES Permit prohibits the discharge of polychlorinated biphenyl compounds ("PCBs") such as those used for transformer fluid.

51. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the indirect discharge from Outfall 008 (cooling tower blowdown system) to the Ash Pond Treatment System require sampling for the following parameters: Flow, Free Available Chlorine, Time of Chlorine Addition, Total Chromium, Total Zinc, Priority Pollutants and pH. The Mayo Steam Electric Plant NPDES Permit does not authorize a direct discharge to the Mayo Reservoir.

52. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the discharge from Outfall 002 (Ash Pond Treatment System) require

sampling for the following parameters without FGD wastewater: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Acute Toxicity, Total Arsenic, Total Copper, Total Iron and pH. After the FGD system is used to treat FGD wastewater, the Mayo Steam Electric Plant NPDES Permit requires sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Acute Toxicity, Total Mercury, Total Arsenic, Total Cadmium, Total Chlorides, Total Chromium, Total Copper, Total Fluoride, Total Lead, Total Manganese, Total Nickel, Total Silver, Total Zinc, Total Barium, Total Thallium, Total Vanadium, Total Antimony, Total Boron, Total Cobalt, Total Molybdenum, Total Iron and pH. Among other things, the SOC authorizes Defendant to comply with all terms of its NPDES permit except for Interim Limits for Mercury, Selenium, Boron, Manganese and Thallium during the period of the SOC.

53. The Mayo Steam Electric Plant NPDES Permit also requires Acute Toxicity monitoring, Fish Tissue Sampling for Arsenic only, an annual biological, physical and chemical study of Selenium, and annual monitoring of the waters of Crutchfield Branch, 100 yards downstream of the ash pond, for Arsenic, Copper and Selenium.

54. The effluent limitations and monitoring requirements in the Mayo Steam Electric Plant NPDES Permit for the for the discharge from Outfall 010 (stormwater discharge system) require sampling for the following parameters: 13 Priority Pollutant Metals (Silver, Arsenic, Beryllium, Cadmium, Chromium, Copper, Mercury, Nickel Lead, Antimony, Selenium, Thallium, Zinc), Aluminum, Boron, Chemical Oxygen Demand, Total Suspended Solids, Sulfate, Oil and Grease, pH and Total Rainfall.

Unpermitted Seeps at the Mayo Steam Electric Plant

55. As mentioned above, the Defendant's Mayo Steam Electric Plant has two permitted outfalls and eight stormwater outlets discharging directly into the Mayo Reservoir which are included in the Mayo Steam Electric Plant NPDES Permit.

56. Defendant's Mayo Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Mayo Steam Electric Plant NPDES Permit.

57. The Mayo Steam Electric Plant NPDES Permit expressly prohibits a discharge from the ash pond to Crutchfield Branch. Condition A.(8) states: "There shall be no direct discharge from the ash pond to Crutchfield Branch. There shall be no violation of water quality standards in Crutchfield Branch due to any indirect discharge from the ash pond. The permittee shall monitor the waters of Crutchfield Branch, 100 yards downstream of the dike, once per year by grab sample for the following: arsenic, copper, and selenium."

58. Seeps identified at Defendant's Mayo Steam Electric Plant, include engineered discharges from the toe-drains of its Ash Pond, which are at different locations from the outfalls and stormwater outlets described in the Mayo Steam Electric Plant NPDES Permit. Defendant's Ash Pond dam has 2 engineered toe-drains (running east and west) that continuously discharge to Crutchfield Branch and Defendant does not have a permit for this direct discharge.

59. A seep or discharge from the Ash Pond of the Mayo Steam Electric Plant that is not included in the Mayo Steam Electric Plant 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 Mayo Steam Electric Plant

60. The Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Mayo Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Mayo Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 6.

61. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Chromium (10 µg/L) in compliance wells BG-1 and BG-2 during three sampling events from December 2010 to July 2012, with concentrations ranging from 10.2 µg/L to 40.1 µg/L.

62. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance wells BG-1, BG-2, CW-1, CW-1D, CW-2, CW-2D, CW-3, CW-5 and CW-6 during eight sampling events from December 2010 through May 2013, with concentrations ranging from 52.6 µg/L to 1,440 µg/L.

63. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 milligrams per liter ("mg/L")) in compliance wells CW-3 and CW-6 during three sampling events from July 2012 through April 2013, with concentrations ranging from 520 mg/L to 550 mg/L.

64. The Mayo Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron (300 µg/L) in compliance wells BG-1, BG-2, CW-2D, CW-3, CW-4, CW-5 and CW-6 during eight sampling events from December 2010 through May 2013, with concentrations ranging from 312 µg/L to 2,660 µg/L.

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

Roxboro Steam Electric Plant

66. On June 30, 1981, 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. NC0003425 to Progress Energy for the Roxboro Steam Electric Plant ("Roxboro Steam Electric Plant NPDES Permit"), located in Person County, North Carolina.

67. The Roxboro Steam Electric Plant NPDES Permit has been renewed subsequently. The current NPDES Permit was re-issued on April 9, 2007, with an expiration date of March 31, 2012. On October 10, 2011, Progress Energy submitted a renewal application to the DWQ. Since the Defendant's predecessor timely applied for re-issuance 180 days prior to the expiration date, pursuant to N.C. Gen. Stat. § 150B-3, Defendant can continue to operate under the 2009 Roxboro Steam Electric Plant NPDES Permit until a new permit has been issued. A copy of the 2007 Roxboro Steam Electric Plant NPDES Permit No. NC0003425 is attached hereto as Plaintiff's Exhibit No. 14, and is incorporated herein by reference.

68. The Roxboro Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Hyco Lake in the Roanoke River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Roxboro Steam Electric Plant NPDES Permit.

69. The Roxboro Steam Electric Plant NPDES Permit authorizes a Heated Water Discharge Canal System at Outfall 003. At the point that the discharge canal enters Hyco Lake, it contains flows from several wastestreams including once through cooling water, stormwater runoff and the effluent from the Ash Pond at Internal Outfall 002.

70. The Roxboro Steam Electric Plant NPDES Permit authorizes a coal pile runoff treatment system at Outfall 006 that handles runoff from the coal pile and other coal handling areas, including limestone piles, gypsum piles and truck wheel washwater. The waters are routed to a retention pond for treatment by neutralization, sedimentation and equalization prior to being discharged directly into Hyco Lake.

71. The Roxboro Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Internal Outfall 002 that discharges to the heated water discharge canal and ultimately into the Hyco Lake through Outfall 003. The Ash Pond treats ash transport, low volume wastewater, runoff from the ash landfill, dry flyash handling system washwater, coal pile runoff silo washwater, stormwater runoff, cooling tower blowdown from unit number 4 and domestic sewage plant effluent.

72. The Roxboro Steam Electric Plant NPDES Permit authorizes a cooling tower blowdown system from unit number 4 at Internal Outfall 005 which discharges into the Ash Transport System, and ultimately flows into the Ash Pond at Internal Outfall 002.

73. The Roxboro Steam Electric Plant NPDES Permit authorizes a chemical metal cleaning treatment system at Internal Outfall 009 that occasionally discharges a wastestream to the Ash Pond Treatment System. It contains chemical metal cleaning wastes.

74. The Roxboro Steam Electric Plant NPDES Permit authorizes a domestic wastewater treatment system at Internal Outfall 008 that flows into the Ash Pond Treatment System.

75. The Roxboro Steam Electric Plant NPDES Permit authorizes discharges from an FGD treatment system at Internal Outfall 010. This wastestream is generated from blowdown

from the FGD treatment unit. After treatment in the bioreactors, this effluent is discharged into the heated water discharge canal.

76. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Outfall 003 (heated water discharge canal system to the Hyco Reservoir) require sampling for the following parameters: Flow, Total Residual Chlorine, Total Phosphorus, Total Nitrogen, Temperature, Total Arsenic, pH and Acute Toxicity. The Roxboro Steam Electric Plant NPDES Permit prohibits the discharge of floating solids or visible foam in other than trace amounts.

77. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Outfall 006 (coal pile runoff treatment system to the Hyco Reservoir) require sampling for the following parameters: Flow, Total Suspended Solids, Acute Toxicity and pH.

78. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 002 (Ash Pond Treatment System) require sampling for the following parameters: Flow, Total Selenium, Oil and Grease and Total Suspended Solids.

79. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 005 (cooling tower blowdown system) require sampling for the following parameters: Flow, Free Available Chlorine, Total Residual Chlorine, Total Chromium, Total Zinc and 126 Priority Pollutants.

80. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 008 (domestic wastewater

treatment system) to the Ash Pond require sampling for the following parameters: Flow, Biochemical Oxygen Demand, Total Suspended Solids, Total Ammonia and pH.

81. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 009 (heated water discharge canal system) require sampling for the following parameters: Flow, Total Suspended Solids, Oil and Grease, Total Copper and Total Iron.

82. The effluent limitations and monitoring requirements in the Roxboro Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 010 (FGD treatment system), require sampling for the following parameters: Flow, Total Beryllium, Total Mercury, Total Antimony, Total Selenium, Total Silver and Total Vanadium.

83. Stormwater runoff to the heated water discharge canal is included in the Roxboro Steam Electric Plant NPDES Permit.

Unpermitted Seeps at the Roxboro Steam Electric Plant

84. As mentioned above, the Defendant's Roxboro Steam Electric Plant has seven permitted outfalls, with two outfalls (Outfalls 003 and 006) discharging directly into Hyco Lake which are included in the Roxboro Steam Electric Plant NPDES Permit.

85. Defendant's Roxboro Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Roxboro Steam Electric Plant NPDES Permit.

86. Seeps identified at Defendant's Roxboro Steam Electric Plant, include 7 engineered discharges to the heated water discharge canal, which are at different locations from the outfalls and stormwater outlets described in the Roxboro Steam Electric Plant NPDES Permit.

87. Seeps identified at Defendant's Roxboro Steam Electric Plant, include 2 stormwater discharges directly to Hyco Lake, which are at different locations from the outfalls and stormwater outlets described in the Roxboro Steam Electric Plant NPDES Permit.

88. A seep or discharge from the Ash Pond or any other part of the Roxboro Steam Electric Plant that is not included in the Roxboro Steam Electric Plant 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 2L Groundwater Standards at the Roxboro Steam Electric Plant

89. The Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Roxboro Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Roxboro Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 7.

90. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in monitoring well CW-5 during seven sampling events from November 2010 to April 2013, with concentrations ranging from 296 mg/L to 873 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. Monitoring well CW-5 is located at the compliance boundary of the Ash Pond Treatment System at the Roxboro Steam Electric Plant.

91. Defendant's exceedances of the 2L Groundwater Standards for Sulfate at or beyond the compliance boundary of the Roxboro Steam Electric Plant Ash Pond are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Roxboro Steam Electric Plant

92. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Chromium (10 µg/L) in compliance well BG-1 during five sampling events from November 2010 to November 2012, with concentrations ranging from 11.1 µg/L to 42.7 µg/L. The last sample from this well remained an exceedance of the 2L Groundwater Standard. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows additional exceedances from the 2L Groundwater Standard for Total Chromium in wells CW-1, CW-2D, and CW-4 during three sampling events from November 2010 through July 2011, with concentrations ranging from 16.9 µg/L to 29.6 µg/L.

93. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance well CW-3D during eight sampling events from November 2010 through April 2013, with concentrations ranging from 84.8 µg/L to 416 µg/L. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese in compliance wells CW-1 and CW-2 during one sampling event in November 2010, with concentrations of 180 µg/L and 52.9 µg/L, respectively.

94. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in CW-3, CW-4 and CW-5 during seven sampling events from November 2010 through April 2013, with concentrations ranging from 570 mg/L to 652 mg/L in CW-3; with a value of 612 mg/L in CW-4 in November 2011; and with concentrations ranging from 616 mg/L to 1,510 mg/L in CW-5.

95. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron (300 μ/L) in compliance well BG-1 during six sampling events, from November 2010 to November 2012 with concentrations ranging from 307 μg/L to 881 μg/L. The Roxboro Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Iron in compliance wells CW-1, CW-2, CW-2D, CW-3, CW-3D and CW-4 during eight sampling events from November 2010 through April 2013, with concentrations ranging from 321 μg/L to 2,290 μg/L.

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

Cape Fear Steam Electric Plant

97. 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, the DWQ issued NPDES Permit No. NC0003433 to Progress Energy for the Cape Fear Steam Electric Plant ("Cape Fear Steam Electric Plant NPDES Permit"), located in Chatham County, North Carolina.

98. The Cape Fear Steam Electric Plant NPDES Permit has been renewed subsequently. The current Cape Fear Steam Electric Plant NPDES Permit was re-issued on July 22, 2011, with an effective date of September 1, 2011, and with an expiration date of July 31, 2016. A copy of the current Cape Fear Steam Electric Plant NPDES Permit No. NC0003433 is attached hereto as Plaintiff's Exhibit No. 15, and is incorporated herein by reference.

99. The Cape Fear Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as an unnamed tributary to the Cape Fear River in the Cape Fear River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the NPDES permit.

100. The Cape Fear Steam Electric Plant NPDES Permit authorizes the West Ash Pond Treatment System (Internal Outfall 001) to discharge through Outfall 007 into an unnamed tributary of the Cape Fear River. The West Ash Pond receives treated wastewater including ash sluice waters (bottom and fly), coal pile runoff, No. 2 fuel oil tank runoff, settling basin drains, sand bed filter backwash, parking lot drains, equipment cooling tower blowdown and drain, boiler blowdown, metal cleaning waste, oil unloading area drains, softener regenerate, demineralizer regenerate, acid/caustic sump wastewater, yard and floor drains, and ash trench drain wastewater.

101. The Cape Fear Steam Electric Plant NPDES Permit authorizes a Once-Through Cooling Water and Stormwater System (Internal Outfall 003) that discharges a wastestream through Outfall 007 into an unnamed tributary of the Cape Fear River.

102. The Cape Fear Steam Electric Plant NPDES Permit authorizes the East Ash Pond Treatment System (Internal Outfall 005) to discharge through Outfall 007 into an unnamed tributary of the Cape Fear River. The East Ash Pond receives treated wastewater including ash sluice waters (bottom and fly), runoff from yard drains, air preheater washes, electrostatic precipitator washes, metal cleaning wastes, spent sandblast material, and treated sanitary wastewater.

103. The Cape Fear Steam Electric Plant NPDES Permit authorizes the discharge of the Combined Wastewater to the Cape Fear River at Outfall 007, which is a combination of all the internal outfalls.

104. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 001 (West Ash Pond Treatment System) require sampling for the following parameters: Flow, Oil and Grease, Total

Suspended Solids, Total Arsenic, Total Selenium, Ammonia-Nitrogen, Total Iron and Total Copper.

105. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 003 (Once-Through Cooling Water and Stormwater System) require sampling for Flow.

106. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Internal Outfall 005 (East Ash Pond Treatment System) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Total Selenium, Fecal Coliform, Ammonia-Nitrogen, Total Iron and Total Copper.

107. The effluent limitations and monitoring requirements in the Cape Fear Steam Electric Plant NPDES Permit for the discharge from Outfall 007 (Combined wastewater and stormwater discharge) require sampling for the following parameters: Flow, Total Chromium, Total Arsenic, Total Selenium, Total Mercury, Total Nickel, Total Copper, Total Nitrogen, Total Phosphorus, Fecal Coliform, Temperature, pH and Chronic Toxicity. The permit also prohibits the discharge of floating solids or visible foam in other than trace amounts.

Unpermitted Seeps at the Cape Fear Steam Electric Plant

108. As mentioned above, the Defendant's Cape Fear Steam Electric Plant has four permitted outfalls, with one (Outfall 007) discharging directly into the Cape Fear River or into an unnamed tributary to the Cape Fear River, which are included in the Cape Fear Steam Electric Plant NPDES Permit.

109. Defendant's Cape Fear Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Cape Fear Steam Electric Plant NPDES Permit.

110. Seeps identified at Defendant's Cape Fear Steam Electric Plant, include potential discharges from its 1985 Ash Pond, which are at different locations from the outfalls and stormwater outlets described in the Cape Fear Steam Electric Plant NPDES Permit.

111. During an NPDES inspection on September 23, 2009, documented sample results from swamp/drainage area near permitted Internal Outfall 005 indicated the possibility of seepage from the 1985 Ash pond. A grab sample was taken during the inspection by Progress Energy and processed at Tritest Lab in Raleigh. Another grab sample was taken by DWQ and processed at the DWQ Lab. The lab results showed the following: for Aluminum (the Tritest Lab reported 216 µg/L; the DWQ Lab reported 1,400 µg/L); for Arsenic (the Tritest Lab reported <3 µg/L; the DWQ Lab reported 140 µg/L); for Molybdenum (the Tritest Lab reported <5 µg/L; the DWQ Lab reported 550 µg/L); for Selenium (the Tritest Lab reported <2 µg/L; the DWQ Lab reported 240 µg/L); and for Vanadium (the Tritest Lab reported 13.3 µg/L; the DWQ Lab reported 250 µg/L). Based on its review of the above results, the Plaintiff's Raleigh Regional Office Surface Water Protection Staff concludes there may be seepage from Defendant's 1985 Ash Pond.

112. A seep or discharge from the Ash Ponds or any other part of the Cape Fear Steam Electric Plant that is not included in the Cape Fear Steam Electric Plant 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 2L Groundwater Standards at the Cape Fear Steam Electric Plant

113. Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Cape Fear Steam Electric Plant from December 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in the Cape Fear Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 8.

114. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in monitoring well CMW-1 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 1,790 µg/L to 2,950 µg/L; in monitoring well CMW-6 during six sampling events from December 2010 to March 2013, with concentrations ranging from 704 µg/L to 1,010 µg/L; and in monitoring well CMW-8 during eight sampling events from December 2010 to March 2013,with concentrations ranging from 1,070 µg/L to 1,340 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 waste water treatment and disposal associated with coal burning activities.

115. Monitoring well CMW-1 is located at the southwest corner of the compliance boundary of the West Ash Pond Treatment System at the Cape Fear Steam Electric Plant. Well CMW-1 is located immediately adjacent to the compliance boundary and the Cape Fear River. Monitoring well CMW-6 is located at the southeast corner of the compliance boundary of the East Ash Pond Treatment System at the Cape Fear Steam Electric Plant. The monitoring well is located approximately 300 feet southeast of the East Ash Pond. Monitoring well CMW-8 is located on the western side of the compliance boundary of the West Ash Pond Treatment System

at the Cape Fear Steam Electric Plant. CMW-8 is located immediately between the compliance boundary and the Cape Fear River.

116. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Selenium (20 µg/L) in monitoring well CMW-3 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 20.6 µg/L to 41.2 µg/L. Although Selenium 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.

117. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in monitoring well CMW-2 during seven sampling events from November 2010 to March 2013, with concentrations ranging from 260 mg/L to 630 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 waste water treatment and disposal associated with coal burning activities.

118. Monitoring well CMW-2 is located adjacent to the 1956 Semi-Active Ash Pond located in the northwest corner of the site. CMW-2 is also located on the west-northwest compliance boundary, immediate adjacent to the Cape Fear River

119. Defendant's exceedances of the 2L Groundwater Standards for Boron, Selenium and Sulfate at or beyond the compliance boundary of the Cape Fear Steam Electric Plant Ash Ponds are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Cape Fear Steam Electric Plant

120. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well

CTMW-8 during one sampling event in June 2012, with a concentration of 10.5 µg/L. However, Arsenic is naturally occurring and no other exceedances of arsenic have been identified in this well or in other compliance monitoring wells.

121. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in CMW-1 during eight sampling events from December 2010 to March 2013, with a maximum observed concentration of 54,600 µg/L; in compliance wells CMW-7, CMW-8, CTMW-1 and CTMW-8 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 416 µg/L to 52,700 µg/L; in compliance wells BGMW-4, BGTMW-4, CMW-2, CMW-3, CMW-5, CMW-6, CTMW-2 and CTMW-7 during eight sampling events from December 2010 to March 2013, with concentrations ranging from 303 µg/L to 5,950 µg/L.

122. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance monitoring wells BGMW-4, CMW-1, CMW-2, CMW-3, CMW-5, CMW-6, CMW-7, CMW-8, CTMW-1, CTMW-2, CTMW-7 and CTMW-8, during eight sampling events from December 2010 to March 2013, with concentrations ranging from 51.9 µg/L to 18,000 µg/L.

123. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron in monitoring well CMW-3 during seven sampling events from December 2010 through March 2013, with concentrations ranging from 714 µg/L to 1,260 µg/L. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart also shows an exceedance from the 2L Groundwater Standard for Sulfate in CMW-3 during one sampling event with a concentration of 388 mg/L. Monitoring well CMW-3 is located at the

northwest corner of the compliance boundary of the West Ash Pond Treatment System at the Cape Fear Steam Electric Plant, adjacent to the 1956 Semi-Active Ash Pond.

124. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in compliance wells CMW-2, CMW-3, CMW-6, and CTMW-8, during eight sampling events from December 2010 to March 2013, with concentrations ranging from 502 mg/L to 1,100 mg/L.

125. The Cape Fear Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for pH levels in monitoring well BGTMW-4 during three sampling events from December 2010 to March 2013, with concentrations of 10.3, 9.4 and 9.1, respectively. However, recent sampling events did not identify pH outside the acceptable 2L Groundwater Standard range of 6.5 to 8.5.

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

Lee Steam Electric Plant

127. 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, the DWQ issued NPDES Permit No. NC0003417 to the Progress Energy for the H.F. Lee Steam Electric Plant ("Lee Steam Electric Plant NPDES Permit"), located in Wayne County, North Carolina.

128. The Lee Steam Electric Plant NPDES Permit has been renewed subsequently. The current Lee Steam Electric Plant NPDES Permit was re-issued on October 14, 2009, with an effective date of November 1, 2009, and with an expiration date of May 31, 2013. A copy of the current Lee Steam Electric Plant NPDES Permit No. NC0003417 is attached hereto as Plaintiff's Exhibit No. 16, and is incorporated herein by reference.

129. The Lee Steam Electric Plant NPDES Permit was also modified on November 1, 2009, to reflect a name change.

130. On November 20, 2012, Defendant submitted a renewal application to the DWQ. While the renewal application is being processed, Defendant continues to operate the Lee Steam Electric Plant under the 2009 Lee Steam Electric Plant NPDES Permit.

131. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of treated wastewater to receiving waters designated as the Neuse River in the Neuse River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Lee Steam Electric Plant NPDES Permit.

132. The Lee Steam Electric Plant NPDES Permit authorizes an Ash Pond Treatment System at Outfall 001 that discharges directly into the Neuse River. The Ash Pond receives ash transport water, including effluent from a Rotamix System, storm water runoff, various low volume wastes (such as filter plant blowdown and wash water, combustion turbine wash water), and precipitator and air pre-heater wash water.

133. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of re-circulated condenser cooling water, non-contact cooling water, coal pile runoff, low volume waste, sanitary wastes, stormwater runoff and evaporative cooler wastewater and contaminant stormwater from the combustion turbine site directly into the Neuse River through Outfall 002.

134. The Lee Steam Electric Plant NPDES Permit authorizes the discharge of filter plant wastewater, equipment and contaminant drains, reverse osmosis reject and filter backwash, and quenched-heat recovery steam generator blowdown via Outfall 003 directly into the Neuse River. Generally, chemical metal cleaning wastes are treated by evaporation in boilers.

Unpermitted Seeps at the Lee Steam Electric Plant

135. As mentioned above, the Defendant's Lee Steam Electric Plant has three permitted outfalls discharging directly into the Neuse River which are included in the Lee Steam Electric Plant NPDES Permit.

136. Defendant's Lee Steam Electric Plant NPDES Permit does not authorize the Defendant to make any outlet or discharge any wastewater or stormwater other than those included in the Lee Steam Electric Plant NPDES Permit.

137. Upon information and belief, Plaintiff believes there are non-engineered seeps at Defendant's Lee Steam Electric Plant, which are at different locations from the outfalls described in the Lee Steam Electric Plant NPDES Permit.

138. A seep or discharge from the Ash Pond or any other part of the Lee Steam Electric Plant that is not included in the Lee Steam Electric Plant 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 Lee Steam Electric Plant

139. Plaintiff's Aquifer Protection staff compiled tables of the analytical results of groundwater samples collected at the Lee Steam Electric Plant from December 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Lee Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 9.

140. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well CMW-6 during six sampling events from December 2010 through June 2012, with a maximum concentration of 665 µg/L; in replacement well CMW-6R during two sampling events from October 2012 and March 2013, with concentrations of 30.2 µg/L and 10.2 µg/L, respectively; and in CMW-10 during one

sampling event in December 2010, with a concentration of 12 µg/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.

141. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in CMW-5 and CMW-6 (with the last two samples taken in CMW-6's replacement well CMW-6R) during eight sampling events from December 2010 through March 2013, with maximum concentrations of 3,940 µg/L and 4,940 µg/L, respectively; in CMW-8 during two sampling events in April 2012 and in March 2013, with concentrations of 754 µg/L and 1,170 µg/L, respectively; and in CW-3 during three sampling events from October 2011 through March 2012, with a maximum concentration of 947 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 waste water treatment and disposal associated with coal burning activities.

142. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Chromium (10 µg/L) in CMW-10 during two sampling events in December 2010 and March 2012, with concentrations of 50.3 µg/L and 20.2 µg/L, respectively. Although Chromium 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.

143. Defendant's exceedances of the 2L Groundwater Standards for Arsenic, Boron, and Chromium at or beyond the compliance boundary of the Lee Steam Electric Plant are violations of the groundwater standards as prohibited by 15A NCAC 2L .0103(d).

Other Exceedances of 2L Groundwater Standards at the Lee Steam Electric Plant

144. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows consistent exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in compliance well BGMW-9 during eight sampling events from December 2010 through March 2013, with a maximum concentration of 2,960 µg/L; in compliance wells CMW-10, CMW-6/CMW-6R, and CMW-7 during eight sampling events from December 2010 through March 2013, with maximum concentrations of 33,600 µg/L, 11,200 µg/L and 12,400 µg/L, respectively; in compliance well BW-1 during five sampling events from October 2011 through March 2013, with a maximum concentration of 26,700 µg/L; in compliance well CMW-5 during six sampling events from December 2010 through March 2013, with a maximum concentration of 1,140 µg/L; in compliance well CW-2 during five sampling events from October 2011 through March 2013, with a maximum concentration of 17,500 µg/L; in compliance well CW-4 during five sampling events from October 2011 through March 2013; with a maximum concentration of 13,200 µg/L; in compliance well CTMW-1 during seven sampling events from December 2010 through March 2013, with a maximum concentration of 3,690 µg/L; in compliance wells CW-1 and CW-3 during four sampling events from October 2011 through March 2013, with maximum concentrations of 8,540 µg/L and 28,600 µg/L, respectively; and in compliance wells BGMW-10 and CMW-8 during one sampling event in March 2013 with maximum concentrations of 6,050 µg/L and 898 µg/L, respectively.

145. The Lee Steam Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance wells CMW-6/6R and CMW-7 during eight sampling events from December 2010 through March 2013, with maximum concentrations of 936 µg/L and 616 µg/L, respectively; in compliance wells CMW-10 and CTMW-1 during seven sampling events from December 2010 through

March 2013, with maximum concentrations of 732 µg/L and 102 µg/L, respectively; in compliance well BGMW-9 during six sampling events from December 2010 through October 2012, with a maximum concentration 322 µg/L; in compliance well CMW-5 during five sampling events from December 2010 through March 2012, with a maximum concentration of 163 µg/L; in compliance wells CW-1, CW-2, CW-3, CW-4, and BW-1 during eight sampling events from October 2011 through March 2013, with maximum concentrations of 494 µg/L, 205 µg/L, 3,080 µg/L, 1,260 µg/L and 1,130 µg/L, respectively; in compliance well CMW-8 during two sampling events in March 2012 and March 2013, with concentrations of 51.1 µg/L and 2,340 µg/L, respectively; and in compliance well BGMW-10 during one sampling event in March 2013, with a concentration of 83 µg/L.

146. The Lee Steam Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) in CW-1 during one sampling event in March 2012, with a concentration of 1,900 mg/L.

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

Weatherspoon Steam Electric Plant

148. On March 20, 1980, 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. NC0005363 to Progress Energy for the Weatherspoon Steam Electric Plant ("Weatherspoon Steam Electric Plant NPDES Permit"), located in Robeson County, North Carolina.

149. The Weatherspoon Steam Electric Plant NPDES Permit has been renewed subsequently. The current Weatherspoon Steam Electric Plant NPDES Permit was re-issued on

November 20, 2009, with an effective date of January 1, 2010, and with an expiration date of July 31, 2014. A copy of the current Weatherspoon Steam Electric Plant NPDES Permit No. NC0005363 is attached hereto as Plaintiff's Exhibit No. 17, and is incorporated herein by reference.

150. The Weatherspoon Steam Electric Plant NPDES Permit authorizes the continued discharge from a 225-acre cooling pond ("Ash Pond") under extremely severe weather conditions, where unavoidable to prevent loss of life, severe property damage, or damage to the cooling pond structure, or during pond maintenance. The Ash Pond receives recirculated cooling water, coal pile runoff, storm water runoff, ash sluice water, domestic wastewater, various low volume wastes including reject water from operation of a reserve osmosis water treatment unit, and chemical metal cleaning wastewater, discharged from Outfall 001 (potentially).

151. The Weatherspoon Steam Electric Plant NPDES Permit authorizes the continuous discharge of Non-Contact Cooling Water from heat exchanger units through Outfall 002.

152. The Weatherspoon Steam Electric Plant NPDES Permit authorizes a Stormwater Discharge System to discharge stormwater from outfalls SW-1, SW-2, and SW-3 into the Lumber River.

153. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the discharge from Outfall 001 (Ash Pond) require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Copper, Total Iron, Total Arsenic, Total Selenium pH, Temperature and Acute Toxicity.

154. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the discharge from Outfall 002 (Non-Contact Cooling Water

system) require sampling for the following parameters: Flow, Temperature, Total Residual Chlorine, Time of Chlorine Addition and pH.

155. The effluent limitations and monitoring requirements in the Weatherspoon Steam Electric Plant NPDES Permit for the Stormwater Discharge System require sampling for the following parameters: 40 CFR Part 43 Appendix A 13 Priority Pollutant Metals, Aluminum, Boron, Chemical Oxygen Demand, Total Suspended Solids, Sulfate, Oil and Grease, pH and Total Rainfall. Stormwater from the Weatherspoon Plant must also be assessed for qualitative monitoring requirements, including: Color, Odor, Clarity, Floating Solids, Suspended Solids, Foam, Oil Sheen, Erosion or deposition at the outfall and other obvious indicators of stormwater pollution.

Exceedances in Violation of 2L Groundwater Standards at the Weatherspoon Steam Electric Plant

156. The Aquifer Protection staff of Plaintiff's predecessor division compiled a table of the analytical results of groundwater samples collected at the Weatherspoon Steam Electric Plant from November 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 10.

157. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the alternate 2L Groundwater Standard for Iron (above the naturally occurring background concentration of 2,040 µg/L) in compliance wells CW-1 and CW-3 during eight sampling events from November 2010 through March 2013, with concentrations ranging from 2,060 µg/L to 4,140 µg/L; and in monitoring well CW-3 during two sampling events in June 2011 and June 2012, with concentrations of 3,740 µg/L and 2,120 µg/L, respectively. Although Iron is a naturally occurring element, its presence in groundwater and specific occurrence at this

site indicates impacts to groundwater resulting from the waste water treatment and disposal associated with coal burning activities.

158. Defendant's exceedances of the 2L Groundwater Standards for Iron at or beyond the compliance boundary of the Weatherspoon Steam Electric Plant Ash Pond are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Other Exceedances of 2L Groundwater Standards at the Weatherspoon Steam Electric Plant

159. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Thallium (0.2 µg/L) in background monitoring well BW-1 during one sampling event in June 2012, with a concentration of 0.66 µg/L. Background monitoring well BW-1 is located at the compliance boundary of the Ash Pond Treatment System at the Weatherspoon Plant. Well BW-1 is located about 600 feet northwest of the active ash pond. Whether one exceedance of the Thallium standard is sufficient to constitute a violation is unclear.

160. The Weatherspoon Steam Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in monitoring well CW-1 during two sampling events in November 2010 and June 2011, with concentrations of 53.4 µg/L and 53.5 µg/L respectively; and in monitoring well CW-3 during one sampling event in March 2013, with a concentration of 55 µg/L.

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

Sutton Electric Plant

162 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, the DWQ issued NPDES Permit No. NC0001422 to the Progress Energy for the L. V. Sutton Electric Plant ("Sutton Electric Plant NPDES Permit"), located in New Hanover County, North Carolina.

163. The Sutton Electric Plant NPDES Permit has been renewed subsequently. The current Sutton Steam Electric Plant NPDES Permit was re-issued on December 2, 2011, with an effective date of January 1, 2012, and with an expiration date of December 31, 2016. A copy of the current Sutton Electric Plant NPDES Permit No. NC0001422 is attached hereto as Plaintiff's Exhibit No. 18, and is incorporated herein by reference.

164. The Sutton Electric Plant NPDES Permit authorizes the discharge of wastewater to receiving waters designated as the Cape Fear River in the Cape Fear River Basin in accordance with the effluent limitations, monitoring requirements and other conditions set forth in the Sutton Electric Plant NPDES Permit.

165. The Sutton Electric Plant NPDES Permit authorizes the discharge of cooling pond blowdown, recirculation cooling water, non-contact cooling water and treated wastewater from Internal Outfalls 002, Internal Outfall 003, and Internal Outfall 004 via Outfall 001, which discharges directly into the Cape Fear River, Class C-Swamp waters in the Cape Fear River Basin.

166. The Sutton Electric Plant NPDES Permit authorizes the discharge of coal pile runoff, low volume wastes, ash sluice water (including wastewater generated from the Rotomix system), and stormwater through Internal Outfall 002.

167 The Sutton Electric Plant NPDES Permit authorizes the discharge of chemical metal cleaning waste through Internal Outfall 003. Generally, chemical metal cleaning wastes are treated by evaporation in boilers.

168 The Sutton Electric Plant NPDES Permit authorizes the discharge of coal pile runoff, low volume wastes, and stormwater runoff from Internal Outfall 004.

169. The Sutton Electric Plant NPDES Permit authorizes the discharge of ultrafilter water treatment system filter backwash, closed cooling water cooler blowdown, reverse osmosis/electrodeionization system reject wastewater and other low volume wastewater to the Cooling Pond from new Internal Outfall 005 after beginning operation of a natural gas fired combined cycle generation facility.

170. The Sutton Electric Plant NPDES Permit authorizes the discharge of low volume wastewater including the heat recovery steam generator blowdown and auxiliary boiler blowdown into the cooling pond from the new Internal Outfall 006 after beginning operation of a natural gas fired combined cycle generation facility.

171. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Outfall 001 require sampling for the following parameters: Flow, Temperature, Total Residual Chlorine, Time of Chlorine Addition, Total Copper, Total Nitrogen, Total Phosphorus, Dissolved Oxygen, Acute Toxicity, Total Mercury, pH, Total Suspended Solids, Total Selenium, and Total Arsenic.

172. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Internal Outfall 002 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Arsenic, Total Selenium, and Amonia-Nitrogen.

173. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Internal Outfall 003 require sampling for the following parameters: Flow, Total Copper and Total Iron.

174. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for discharges from Outfall 004 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, Total Selenium, Total Arsenic and Ammonia-Nitrogen.

175. The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for Internal Outfall 005 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, and pH.

176 The effluent limitations and monitoring requirements in the Sutton Electric Plant NPDES Permit for Internal Outfall 006 require sampling for the following parameters: Flow, Oil and Grease, Total Suspended Solids, and pH.

Exceedances in Violation of 2L Groundwater Standards at the Sutton Electric Plant

177. The groundwater monitoring requirements in the Sutton Electric Plant NPDES Permit require sampling the following compliance wells MW-4B (background), MW-5C (background), MW-7C, MW-11, MW-12, MW-19, MW-21C, MW-22B, MW-22C, MW-23B, MW-23C, MW-24B, MW-24C, MW-27B, MW-28B, MW-28C and MW-31C. All current wells being sampled are located at or beyond the Compliance Boundary. Prior to October 24, 2012, the groundwater monitoring requirements in the Sutton Electric Plant NPDES Permit required sampling the following wells MW-2C, MW-4B (background), MW-5C (background), MW-6C, MW-7C, MW-8, MW-9, MW-10, MW-11, MW-12, MW-17, MW-18, and MW-19. Some wells sampled prior to October 24, 2012, were located inside the Compliance Boundary.

178. Plaintiff's Aquifer Protection staff compiled a table of the analytical results of groundwater samples collected at the Sutton Electric Plant from March 2010 through July 16, 2013, and prepared a chart of the Ash Pond Exceedances which are listed in in the Sutton Electric Plant Ash Pond Exceedances Chart. *See* Plaintiff's Exhibit No. 11.

179. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Thallium (0.2 µg/L) in compliance wells MW-19 during four sampling events from October 2011 through March 2013, with a maximum concentration of 0.62 µg/L; and in compliance wells MW-22C and MW-24B during two sampling events in October 2012 and March 2013, with maximum concentrations of 0.35 µg/L and 0.586 µg/L, respectively. Although Thallium 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.

180. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Antimony (1 µg/L) in compliance well MW-24B during two sampling events in October 2012 and March 2013 with a maximum concentration of 1.1 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.

181. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Boron (700 µg/L) in compliance well MW-7C during two sampling events in March 2012 and June 2012, with a maximum concentration of 767 µg/L; in compliance well MW-12 during four sampling events from March 2012 through March 2013, with a maximum concentration of 1,510 µg/L; in MW-19 during five sampling events from

October 2011 through March 2013, with a maximum concentration of 1,940 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,720 µg/L; in compliance well MW-22C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,100 µg/L; in compliance well MW-23B during two sampling events in October 2012 and March 2013 with a maximum concentration of 1,330 µg/L; in compliance well MW-23C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,580 µg/L; in compliance well MW-24B during two sampling events from in October 2012 and March 2013, with a maximum concentration of 1,420 µg/L; in compliance well MW-24C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,160 µg/L; in compliance well MW-28C during one sampling event in March 2013, with a concentration of 1,030 µg/L; and in compliance well MW-31C during sampling events in October 2012 and March 2013, with a maximum concentration of 1,120 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.

182. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Selenium (20 µg/L) in compliance well MW-27B during two sampling events in October 2012 and March 2013, with a maximum concentration of 37.1 µg/L. Although Selenium 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.

183. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Total Dissolved Solids (500 mg/L) at compliance well MW-24C during two sampling events from October 2012 to March 2013, with a maximum concentration of 579 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.

184. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Sulfate (250 mg/L) in compliance well MW-21C during one sampling event in October 2012, with a concentration of 814 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 waste water treatment and disposal associated with coal burning activities.

185. The Sutton Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L GW standard for Manganese (50 µg/L) in compliance well MW-7C during four sampling events from March 2012 through March 2013, with a maximum concentration of 458 µg/L); in compliance well MW-12 during four sampling events from March 2012 through March 2013, with a maximum concentration of 281 µg/L; in compliance well MW-19 during three sampling events from October 2011 through March 2013, with a maximum concentration of 508 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 1,460 µg/L; in compliance well MW-22B during one sampling event in October 2012, with a concentration of 116 µg/L; and in compliance wells MW-22C, MW-23B, MW-23C, MW 24B, MW-24C, MW-28C, and MW-31C during two sampling events in October 2012 and March 2013, with maximum concentrations of

798 µg/L, 348 µg/L, 1,150 µg/L, 805 µg/L, 2,360 µg/L, 367 µg/L and 1,800 µg/L, respectively. 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.

186. The Sutton Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in compliance well MW-11 during one sampling event in March 2011 with a concentration of 420 µg/L; in compliance well MW-21C during two sampling events in October 2012 and March 2013, with a maximum concentration of 7,680 µg/L; in compliance well MW-24C during one sampling event in October 2012, with a concentration of 2,860 µg/L; and in compliance well MW-31C during two sampling events in October 2012 and March 2013, with a maximum concentration of 2,820 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 waste water treatment and disposal associated with coal burning activities.

187. The Sutton Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Lead (15 µg/L) in compliance well MW-12 during one sampling event in March 2012, with a concentration of 17.3 µg/L. Although Lead 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.

188. The Sutton Electric Plant Ash Pond Exceedances Chart shows an exceedance from the 2L Groundwater Standard for Arsenic (10 µg/L) in compliance well MW-21C during one sampling event in March 2013, with a concentration of 15 µg/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 waste water treatment and disposal associated with coal burning activities.

189. Defendant's exceedances of the 2L Groundwater Standards for Thallium, Antimony, Boron, Selenium, Total Dissolved Solids, Sulfate, Manganese, Iron, Lead and Arsenic at or beyond the compliance boundary of the Sutton Electric Plant Ash Ponds are violations of the groundwater standards as prohibited by 15A NCAC 2L.0103(d).

Risk Factors Due to Exceedances of the 2L Groundwater Standards at the Sutton Electric Plant

190. Violations above 2L Groundwater Standards have been measured in compliance wells MW-7C, MW-19, MW-21C, MW-22B, MW-22C, MW-23B, MW-23C, and MW-28C which are located upgradient of two water supply wells (PW#3 and PW#4) serving the New Hanover Water System identified as CFPUA/NHC-421 (No. NC0465191). Water supply wells PW#3 and PW#4 are located approximately 2,200 feet from the compliance boundary or approximately 2,700 feet from the edge of the ash ponds.

191. Compliance well MW-7C has shown violations of the 2L Groundwater Standards for Boron, Iron, and Manganese. Compliance well MW-19 has shown pH, Boron, Iron, Manganese, and Thallium violations. Compliance well MW-21C has shown violations Sulfate, Arsenic, Boron, Iron, and Manganese. Compliance well MW-22B has shown pH and Manganese violations. Compliance well MW-22C has shown pH, Boron, Iron, Manganese, and Thallium violations. Compliance well MW-23B has shown pH, Boron, and Manganese violations. Compliance well MW-28C has shown pH, Boron, and Manganese.

Other Exceedances of the 2L Groundwater Standards at the Sutton Electric Plant

192. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Manganese (50 µg/L) in compliance well MW-10 during four sampling events from October 2011 to June 2012, with a maximum concentration of 96.7 µg/L; in compliance well MW-11 during four sampling events from March 2012 through March 2013, with a maximum concentration of 99.6 µg/L; in compliance well MW-27B during two sampling events in October 2012 and March 2013, with a maximum concentration of 229 µg/L; in background well MW-4B during one sampling event in June 2012, with a concentration of 265 µg/L; and in background well MW-5C during four sampling events from March 2012 to March 2013, with a maximum concentration of 447 µg/L.

193. The Sutton Electric Plant Ash Pond Exceedances Chart shows exceedances from the 2L Groundwater Standard for Iron (300 µg/L) in compliance well MW-7C during two sampling events in March 2012 and June 2012, with a maximum concentration of 707 µg/L; in compliance well MW-12 during four sampling events from March 2011 to October 2012, with a maximum concentration of 1,490 µg/L; in compliance well MW-19 during one sampling event in March 2010, with a concentration of 322 µg/L; in compliance well MW22-C during one sampling event in March 2013, with a concentration of 431 µg/L; in background well MW-4B during eight sampling events from March 2010 through March 2013, with a maximum concentration of 1,650 µg/L.

194. The Sutton Electric Plant Ash Pond Exceedances Chart consistently shows exceedances from the 2L Groundwater Standard for pH (6.5-8.5) in compliance wells MW-5C, MW-7C, MW-10, MW-11, MW-12, MW-19, MW-22B, MW-22C, MW-23B, MW-23C, MW-

24B, MW-24C, MW-27B, MW-28C, and MW-31C during eight sampling events from March 2010 through March 2013 with levels ranging from 4.5 to 6.47.

195. 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

196. The allegations contained in paragraphs 1 through 195 are incorporated into these claims for relief as if fully set forth herein.

197. With the exception of the Weatherspoon Steam Electric Plant and the Sutton Electric Plant, which have no unpermitted seeps, Defendant's unpermitted seeps from the 4 of the 6 Facilities (Mayo, Roxboro, Cape Fear and Lee) are violations of N.C. Gen. Stat. §§ 143-215.1(a)(1) and (a)(6).

198. Defendant's exceedances of the groundwater standards for Sulfate at or beyond the compliance boundary of the Roxboro Steam Electric Plant Ash Pond are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

199. Defendant's exceedances of the groundwater standards for Boron, Selenium and Sulfate at or beyond the compliance boundary of the Cape Fear Steam Electric Plant Ash Ponds are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

200. Defendant's exceedances of the groundwater standards for Arsenic, Boron, and Chromium at or beyond the compliance boundary of the Lee Steam Electric Plant Ash Ponds Treatment System are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

201. Defendant's exceedances of the groundwater standards for Iron at or beyond the compliance boundary of the Weatherspoon Steam Electric Plant Ash Pond are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

202. Defendant's exceedances of the groundwater standards for Thallium, Antimony, Boron, Selenium, Total Dissolved Solids, Sulfate, Manganese, Iron, Lead and Arsenic at or beyond the compliance boundary of the Sutton Electric Plant Ash Ponds are violations of the 2L Groundwater Standards as prohibited by 15A NCAC 2L.0103(d).

203. 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.

204. 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, poses 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. 19, 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 16th day of August, 2013.

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