

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 from 1.1 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 the 2L 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**

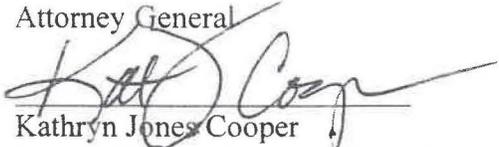
WHEREFORE, the Plaintiff, State of North Carolina, prays that the Court grant to it the following relief:

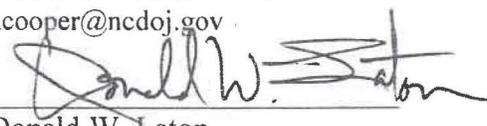
1. That the Court accepts this verified complaint as an affidavit upon which to base all orders of the Court;
2. That the Court preliminarily, and upon final judgment permanently enter a mandatory injunction requiring the Defendant to abate the violations of N.C. Gen. Stat. § 143-215.1, NPDES Permits 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

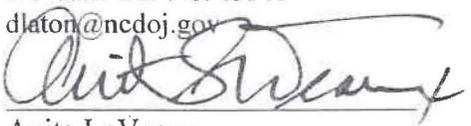
Assessment Needs," which is attached hereto as Plaintiff's Exhibit No. 18, and is incorporated herein by reference;

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 10<sup>th</sup> day of August, 2013.

ROY COOPER  
Attorney General  
By   
Kathryn Jones Cooper  
Special Deputy Attorney General  
NC State Bar No. 12176  
kcooper@ncdoj.gov

By   
Donald W. Laton  
Assistant Attorney General  
NC State Bar No. 13303  
dlaton@ncdoj.gov

By   
Anita LeVeaux  
Assistant Attorney General  
NC State Bar No. 13667  
aleveaux@ncdoj.gov

By   
Jane L. Oliver  
Assistant Attorney General  
NC State Bar No. 16771  
joliver@ncdoj.gov  
N.C. Department of Justice  
Environmental Division  
Post Office Box 629  
Raleigh, NC 27602-0629  
(919) 716-6600 phone  
(919) 716-6750 facsimile

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

OFFICIAL COPY

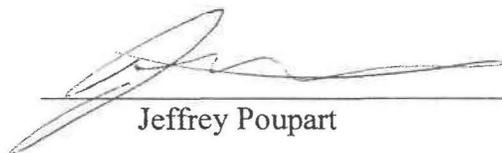
APR 30 2019

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.

Anna V. Smith  
Official Signature of Notary

Anna V. Smith  
Notary's printed or typed name

My Commission Expires: 10/22/16

(Official Seal)



OFFICIAL COPY

Apr 30 2019

I/A

Lucas Exhibit No. 6

No. of 2L and IMAC Standards Exceedances At or Beyond the Compliance Boundary by Constituent

Parameters	Generating Station							Total
	Asheville	Cape Fear	Lee	Mayo	Roxboro	Sutton	Weatherspoon	
Antimony	-	2	-	18	4	4	1	29
Arsenic	1	1	18	-	1	13	-	34
Barium	-	-	1	2	-	-	-	3
Beryllium	1	8	-	-	-	-	3	12
Boron	78	51	26	11	20	248	-	434
Cadmium	6	1	-	1	-	1	2	11
Chloride	11	-	-	-	4	66	-	81
Chromium	5	1	1	19	18	1	4	49
Chromium (VI)	1	-	-	7	4	-	-	12
Cobalt	155	77	179	19	85	156	5	676
Copper	-	-	-	-	-	-	-	-
Iron	201	167	241	152	146	364	129	1,400
Lead	-	-	-	2	1	1	-	4
Manganese	325	261	248	223	218	356	19	1,650
Mercury	-	-	-	-	-	-	-	-
Nickel	-	1	-	-	-	-	3	4
Nitrate	-	-	-	-	-	-	-	-
pH	356	183	258	199	127	700	91	1,914
Selenium	9	15	4	-	8	27	-	63
Sulfate	40	64	-	-	54	3	2	163
Thallium	10	9	2	5	7	54	4	91
Total Dissolved Solids	67	63	-	37	106	111	2	386
Total Radium	17	-	7	13	4	1	10	52
Vanadium	98	153	136	165	274	274	84	1,184
Zinc	1	-	-	-	-	-	-	1
<b>Total</b>	<b>1,382</b>	<b>1,057</b>	<b>1,121</b>	<b>873</b>	<b>1,081</b>	<b>2,380</b>	<b>359</b>	<b>8,253</b>

Notes:

\*Highlighted fields are subject to change due to the provisional background threshold value being greater than the 2L standard or IMAC, which DEQ may determine is naturally occurring and decrease the quantity of exceedances.

\*Data compiled from DEP responses to Public Staff Data Request 20-2, dated October 10, 2017.

OFFICIAL COPY  
OFFICIAL COPY  
Oct 20 2017  
Apr 30 2019

risk impoundments, and establishes outside dates for closure of such impoundments: December 31, 2019 for high-risk impoundments; December 31, 2024 for intermediate-risk impoundments, and December 31, 2029 for low-risk impoundments. The coal combustion residuals surface impoundments at the H.F. Lee, Cape Fear and Weatherspoon are required to be closed in conformity with the requirements of CAMA and the provisions of this Order;

c. CAMA enacted G.S. §130A-309.211 to require the assessment and, where appropriate, corrective action as to groundwater impacted by the coal ash basins at the facilities operated by the Defendant by, among other things, requiring: (1) the preparation and implementation of an approved Groundwater Assessment Plan, (2) the preparation and submission of a Groundwater Assessment Report, and (3) the preparation and implementation of any necessary Groundwater Corrective Action Plan which provides for the restoration of groundwater quality. In addition, N.C.G.S. § 143-215.1(k) was amended to eliminate the distinction between disposal systems that were permitted after 30 December 1983 and those permitted prior to that date. This provision of CAMA was recently held to have rendered moot this Court's declaratory ruling that the 2L Groundwater Rules required immediate action to eliminate the source or sources of groundwater contamination, as requested by the Plaintiff-Intervenors under those rules. The Supreme Court held that that case "has been rendered moot as a matter of both law and fact by virtue of the enactment of the revised version of N.C.G.S. § 143-215.1(k)," Cape Fear River Watch, et al. v. N.C. Env'tl. Mgmt. Comm'n, 368 N.C. 92, 100, 772 S.E.2d 445, 450 (2015), which "eliminates the distinction between facilities that were permitted before 30 December 1983 and facilities that were permitted after that

date by providing that all permitted facilities, 'without regard to the date that the system was first permitted,' are subject to the corrective action requirements of Rule .0106(d)." Id., 368 N.C. at 98, 772 S.E.2d at 449. The Environmental Management Commission has initiated the process of adopting conforming amendments into the 2L Groundwater Rules.

d. CAMA enacted G.S. § 130A-309.212 to require the identification and assessment of all discharges from CCR impoundments, the implementation of corrective action to prevent unpermitted discharges from CCR impoundments, and preparation of a plan for the identification of new discharges.

e. CAMA enacted G.S. § 130A-309.214 to require the submission of Closure Plans which must include provisions for completion of activities to restore groundwater in conformance with the requirements of the 2L Groundwater Rules. The due date for these Closure Plans will depend on the prioritization classification established under CAMA for each facility. See G.S. § 130A-309.214.

6. The Defendant has submitted groundwater assessment plans for each of the three facilities addressed in this Order. DEQ conditionally approved the plans, requiring that certain changes be addressed in the groundwater assessment reports. The Defendant has now submitted the groundwater assessment reports to DEQ, and they are currently under review.

7. In addition, during 2014, new NPDES permit applications were submitted to DEQ for the coal ash basins at these plants. As part of this process, the Defendant has submitted analyses of all seeps associated with the coal ash basins that the Defendant has identified, sampled and tested the seeps, and provided a

characterization of the chemicals found in the seeps (as sought by the relief requested by the Plaintiff-Intervenors).

8. The Defendant, in preparation for and as required by the CAMA process, conducted engineering and scientific analyses of H.F. Lee, Cape Fear and Weatherspoon and concluded that the coal combustion residuals surface impoundments at these plants should be dewatered, excavated and their contents removed to appropriate lined storage facilities or reused beneficially, as described with greater specificity below. The Defendant publicly announced these findings and conclusions on June 23, 2015. The Defendant will be seeking necessary DEQ review of the closure plans and the permits from DEQ needed to implement them.

9. As a result of these actions and statutory changes requiring further action, the Court finds that an Order on relief as to these facilities is appropriate, and the actions already taken together with those required by this Order (including dewatering, excavating and removing the contents of the coal ash basins) have remedied, or will remedy, the violations alleged in the Complaints.

10. This Court further finds that the issues alleged in the various Complaints with regard to unpermitted discharges, and with regard to violations of NPDES permits and groundwater standards at these facilities will be remedied by compliance with the provisions of this Order and the provisions of CAMA applicable to the three plants included in this Order. This Order does not resolve any issue with regard to: (1) any claims that may be pursued by DEQ pursuant to a joint enforcement agreement between DEQ and the United States Environmental Protection Agency, (2) any seeps

that are determined to be waters of the United States, or (3) whether any seeps can be addressed through NPDES permitting.

**Order on Relief**

11. This Court has jurisdiction over the subject matter and the parties to these actions pursuant to G.S. 7A-245 and 143-215.6C. DEQ brought the Action based on its reasonable cause to believe that Duke Energy Progress had violated or might violate provisions of G.S. 143-215.1 and the 2L Groundwater Rules.

12. Venue is proper in Wake County under G.S. 1-79 and 143-215.6C.

**Specific Facility Terms**

*H.F. Lee Steam Station*

13. Duke Energy Progress owns the H.F. Lee Steam Station, located in Wayne County, which has been retired, in that it is no longer used for the production of electricity.

14. H.F. Lee has four coal ash settling Impoundments, which are referred to in **Exhibit A** as the Active Basin, Inactive Basin 1, Inactive Basin 2, and Inactive Basin 3. Collectively, the Active Basin, Inactive Basin 1, Inactive Basin 2, and Inactive Basin 3 are referred to as "H.F. Lee Impoundments." The Active Basin no longer receives sluice water, which was water that was used to transport to the H.F. Lee Impoundments the coal ash produced when the H.F. Lee Steam Station was generating electricity. Coal ash is also stored in the Former Ash Disposal Area ("H.F. Lee Inactive Ash Area") as further identified on **Exhibit A**.

15. The H.F. Lee Impoundments are Coal Combustion Residual ("CCR") Surface Impoundments as defined in G.S. 130A-309.201(6). Upon evaluation by DEQ and full adjudication of any challenges to DEQ's evaluation, to the extent provided by

I/A

Doc. Ex. 3000

OFFICIAL COPY

Apr 30 2019

STATE OF NORTH CAROLINA  
COUNTY OF MECKLENBURG

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION

*Civil Action No. 13-CVS-9352*

STATE OF NORTH CAROLINA ex rel.  
NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENTAL QUALITY, DIVISION  
OF WATER RESOURCES,  
*Plaintiff,*

v.

CATAWBA RIVERKEEPER  
FOUNDATION, INC.,  
*Plaintiff-Intervenor,*

v.

DUKE ENERGY CAROLINAS, LLC,  
*Defendant.*

*Civil Action No. 13-CVS-14661*

STATE OF NORTH CAROLINA ex rel.  
NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENTAL QUALITY,  
*Plaintiff,*

v.

DAN RIVER BASIN ASSOCIATION,  
ROANOKE RIVER BASIN ASSOCIATION,  
SOUTHERN ALLIANCE FOR CLEAN  
ENERGY, and WATERKEEPER  
ALLIANCE,  
*Plaintiff-Intervenors,*

v.

DUKE ENERGY CAROLINAS, LLC,  
*Defendant.*

STATE OF NORTH CAROLINA  
COUNTY OF WAKE

IN THE GENERAL COURT OF JUSTICE  
SUPERIOR COURT DIVISION

*Civil Action No. 13-CVS-4061*

STATE OF NORTH CAROLINA ex rel.  
NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENTAL QUALITY, DIVISION  
OF WATER RESOURCES,  
*Plaintiff,*

v.

SIERRA CLUB, MOUNTAINTRUE, and  
WATERKEEPER ALLIANCE,  
*Plaintiff-Intervenors,*

v.

DUKE ENERGY PROGRESS, LLC,  
*Defendant.*

*Civil Action No. 13-CVS-11032*

STATE OF NORTH CAROLINA ex rel.  
NORTH CAROLINA DEPARTMENT OF  
ENVIRONMENTAL QUALITY,  
*Plaintiff,*

v.

SIERRA CLUB, WATERKEEPER  
ALLIANCE, and CAPE FEAR RIVER  
WATCH, INC.,  
*Plaintiff-Intervenors,*

v.

DUKE ENERGY PROGRESS, LLC,  
*Defendant.*

**ORDER GRANTING MOTION FOR PARTIAL SUMMARY JUDGMENT**

THIS CAUSE came on before the Hon. Paul Ridgeway, Superior Court Judge presiding pursuant to designation under Rule 2.1 of the General Rules of Practice, on Motion of the Defendants for Partial Summary Judgment. After reviewing the Motion, the Responses, the materials attached, and the pleadings in this matter, this Court is of the opinion that the Motion for Partial Summary Judgment should be GRANTED as set forth in this Order.

**Findings of Undisputed Fact and Conclusions of Law**

1. These are civil enforcement actions brought by the State of North Carolina and joined in by Plaintiff-Intervenors against the Defendants for injunctive relief. The Plaintiff and Plaintiff-Intervenors submitted separate Complaints which, together, seek injunctive relief under G.S. §143-215.6C for alleged violations of G.S. §§143-215.1(a)(1) and (a)(6), alleged violations of the National Pollutant Discharge Elimination System (“NPDES”) permits, alleged violations of the groundwater standards established (at the time of the Complaint) by 15A N.C. Admin. Code Subchapter 2L (“2L Groundwater Rules”), and, in the case of Plaintiff-Intervenors’ Complaints, alleged violations of various provisions of the Clean Water Act, 33 U.S.C. §§1311(a), 1342(a), and 1365(f) as set forth in those Complaints.

2. As to the plants that are the subject of this Motion (Riverbend Steam Station, Dan River Steam Station, Sutton Plant, and Asheville Electric Generating Plant), the State of North Carolina sought the identical injunctive relief as set forth in the various Complaints: (1) abatement of the violations of G.S. § 143-215.1, the NPDES permits and 2L Groundwater Rules, (2)

assessment of the ash basins and specifically assessment of whether exceedances in groundwater constituents beyond the compliance boundary were naturally occurring or a result of the coal ash basins, and (3) corrective action to restore groundwater quality.

3. As to these same plants, the various Plaintiff-Intervenors requested separate relief from the State of North Carolina, but relief that was substantively identical across Plaintiff-Intervenors Complaints in Intervention for each of the facilities. The Plaintiff-Intervenors sought injunctive relief under the 2L Groundwater Rules for exceedances of any constituents that were not naturally occurring and were caused by the coal ash basins, sought an assessment of those exceedances as specified in the 2L Groundwater Rules, sought implementation of any corrective actions required by the 2L Groundwater Rules, asked that the Defendants conduct sampling and testing of seeps for purposes of characterizing their constituents, and requested abatement of alleged unpermitted discharges from the coal ash basins under the Clean Water Act and the coordinate provisions of North Carolina law.

4. On August 20, 2014, the General Assembly ratified Session Law 2014-122, which includes the Coal Ash Management Act of 2014, portions of which are codified as Part 21 of Article 9 of Chapter 130A of the General Statutes (collectively "CAMA 2014"); this was permitted to become law by the Governor without signature on September 20, 2014. On June 15, 2015, the General Assembly enacted the Mountain Energy Act of 2015, which was ratified as Session Law 2015-110 and which became effective on June 24, 2015 ("2015

Mountain Energy Act”), which, among other things, amended CAMA 2014. As used herein, “CAMA” shall refer to CAMA 2014, as amended by the 2015 Mountain Energy Act.

5. CAMA amended and enacted a number of North Carolina Statutes relevant to the relief sought by the State of North Carolina and the Plaintiff-Intervenors.

a. G.S. §130A-309.210 was enacted to prohibit the construction of new coal combustion residuals surface impoundments<sup>1</sup> or the expansion of such existing impoundments after October 1, 2014;

b. The coal combustion residuals surface impoundments at the Riverbend Steam Station, at the Dan River Steam Station, at the Sutton Plant, and at the Asheville Electric Generating Plant were classified as “high priority”

---

<sup>1</sup> CAMA enacts G.S. §130A-309.201 to define a “coal combustion residuals surface impoundment” as a “topographic depression, excavation or diked area that is (i) primarily formed from earthen materials; (ii) without a base liner approved for use by Article 9 of Chapter 130A of the General Statutes or rules adopted thereunder for a combustion products landfill or coal combustion residuals landfill, industrial landfill, or municipal solid waste landfill; and (iii) designed to hold accumulated coal combustion residuals in the form of liquid wastes, wastes containing free liquids, or sludges, and that is not backfilled or otherwise covered during period of deposition. ‘Coal combustion residuals surface impoundment’ shall only include impoundments owned by a public utility, as defined in G.S. 62-3. ‘Coal combustion residuals surface impoundment’ includes all of the following: (a) An impoundment that is dry due to the deposited liquid having evaporated, volatilized, or leached. (b) An impoundment that is wet with exposed liquid. (c) Lagoons, ponds, aeration pits, settling ponds, tailing ponds, and sludge pits, when these structures are designed to hold accumulated coal combustion residuals. (d) A coal combustion residuals surface impoundment that has been covered with soil or other material after the final deposition of coal combustion residuals at the impoundment.”

and required to be closed in conformity with the closure and permitting provisions of CAMA by no later than August 1, 2019;<sup>2</sup>

c. CAMA enacted G.S. §130A-309.211 to require the assessment and, where appropriate, corrective action as to groundwater impacted by the coal ash basins at the facilities operated by the Defendants by, among other things, requiring: (1) the preparation and implementation of an approved Groundwater Assessment Plan, (2) the preparation and submission of a Groundwater Assessment Report, and (3) the preparation and implementation of any necessary Groundwater Corrective Action Plan which provides for the restoration of groundwater quality. In addition, N.C.G.S. § 143-215.1(k) was amended to eliminate the distinction between disposal systems that were permitted after 30 December 1983 and those permitted prior to that date. This provision of CAMA was recently held to have rendered moot this Court's declaratory ruling that the 2L Groundwater Rules required immediate action to eliminate the source or sources of groundwater contamination, as requested by the Plaintiff-Intervenors under those rules. The Supreme Court held that that case "ha[d] been rendered moot as a matter of both law and fact by virtue of the enactment of the revised version of N.C.G.S. § 143-215.1(k)," Cape Fear River Watch, et al. v. N.C. Env'tl. Mgmt. Comm'n, 368 N.C. 92, 100, 772 S.E.2d 445,

---

<sup>2</sup> On June 24, 2015, the Governor signed the "Mountain Energy Act of 2015," Session Law 2015-110, which amended this section as to the Asheville Steam Generating Plant. It provides that if Duke Progress receives a certificate of public convenience and necessity for the construction of a new natural-gas fired generating facility, and if Duke Progress issues a notice that it will permanently cease operation of the coal fired units at Asheville no later than January 31, 2020, then the closing date for the coal ash basins at Asheville will be no later than August 1, 2022.

450 (2015), which “eliminate[d] the distinction between facilities that were permitted before 30 December 1983 and facilities that were permitted after that date by providing that all permitted facilities, ‘without regard to the date that the system was first permitted,’ are subject to the corrective action requirements of Rule .0106(d).” Id. at 98, 772 S.E.2d at 449. The Environmental Management Commission has initiated the process of adopting conforming amendments into the 2L Groundwater Rules.

d. CAMA enacted G.S. § 130A-309.212 to require the identification and assessment of all discharges from CCR impoundments, the implementation of corrective action to prevent unpermitted discharges from CCR impoundments, and preparation of a plan for the identification of new discharges.

e. Defendants agree to submit by December 31, 2016, Site Analysis and Removal Plans for the four facilities that are the subject of this Order. For purposes of this Order, such Site Analysis and Removal Plans shall include the following topics or documents: (1) a description of the facility and its history, including a description of all on-site CCR surface impoundments; (2) a site map showing the CCR surface impoundments, topography, potential receptors within 2,640 feet of the compliance boundary, and monitoring locations; (3) hydrogeologic, geologic, and geotechnical investigation results; (4) groundwater modeling; (5) any planned beneficial use of CCR on-site; (6) drawings, schematics, and specifications; (7) construction quality assurance and quality control programs; (8) management of stormwater and wastewater; (9) final disposition of CCR from the site, including information on any CCR disposed

of or beneficially used offsite; (10) necessary permits; (11) post-closure monitoring and care for the CCR surface impoundments; and (12) closure project milestones<sup>3</sup>.

6. Defendants have submitted groundwater assessment plans for each of the four facilities addressed in this Order. DEQ conditionally approved the plans, requiring that certain changes be addressed in the groundwater assessment reports. Defendants have now submitted the groundwater assessment reports to DEQ, and they are currently under review.

7. In addition, during 2014, new NPDES permit applications were submitted to the DEQ for the coal ash basins at these plants. As part of this process, the Defendants have submitted analyses of all seeps associated with the coal ash basins that the Defendants have identified, sampled and tested the seeps, and provided a characterization of the chemicals found in the seeps (as sought by the relief requested by the Plaintiff-Intervenors).

8. As a result of these actions and statutory changes requiring further action, the Court finds that an Order on relief as to these facilities is appropriate, and the actions already taken together with those required by this Order (including dewatering, excavating and removing the contents of the coal ash basins) have remedied, or will remedy, the violations alleged in the Complaints.

9. This Court further finds that the issues alleged in the various Complaints with regard to unpermitted discharges, and with regard to violations

---

<sup>3</sup> This Order does not make a determination regarding whether Defendants are required under CAMA to submit Closure Plans for these four facilities, nor does this Order attempt to select from among the elements listed by the legislature in G.S. §130A-309.214(a)(4) to be included in a Closure Plan.

of NPDES permits and groundwater standards at these facilities will be remedied by compliance with the provisions of this Order and the provisions of CAMA applicable to the four plants included in this Order. This Order does not resolve any issue with regard to: (1) any claims that may be pursued by DEQ pursuant to a joint enforcement agreement between DEQ and the United States Environmental Protection Agency, (2) any seeps that are determined to be waters of the United States, or (3) whether any seeps can be addressed through NPDES permitting.

**Order on Relief**

10. This Court has jurisdiction over the subject matter and the parties to these actions pursuant to G.S. 7A-245 and 143-215.6C. DEQ brought the Actions based on its reasonable cause to believe that Duke Energy Carolinas, LLC (“Duke Energy Carolinas”) and Duke Energy Progress, LLC. (“Duke Energy Progress”) have violated or might violate provisions of G.S. 143-215.1 and the 2L Groundwater Rules.

11. Venue in the Riverbend Action and the Dan River Action is proper in Mecklenburg County under G.S. 1-79 and 143-215.6C. Venue in the Asheville Action and the Sutton Action is proper in Wake County under G.S. 1-79 and 143-215.6C.

**Specific Facility Terms**

*Riverbend Steam Station*

12. Duke Energy Carolinas owns the Riverbend Station, located in Gaston County, which has been retired, in that it is no longer used for the production of electricity.

Doc. Ex. 2031

North Carolina Public Staff  
Data Request No. 27  
DEP Docket No. E-2 Sub 1142  
Item No. 27-24  
Page 1 of 2

NCPS 27-24

**Request:**

Data Requests on the rebuttal testimony of DEP witness James Wells:24. Page 22, lines 9-11, states in part, "Certain of DE Progress' CCR impoundments feature engineered toe drains within the dam structures to collect seepage." Please list all engineered seeps, segregated by plant location, that have not yet been authorized in NPDES permits.

**Response:**

Asheville 64EO-01  
Asheville 64EO-02  
Asheville 82EO-01  
Asheville 82EO-02  
Mayo S-01  
Mayo S-02  
Roxboro S-01  
Roxboro S-02  
Roxboro S-03  
Roxboro S-04  
Roxboro S-05  
Roxboro S-06  
Roxboro S-07  
Weatherspoon S-11  
Weatherspoon S-12  
Weatherspoon S-13  
Weatherspoon S-14

IAA

OFFICIAL COPY

Apr 30 2019

### SETTLEMENT AGREEMENT

This is an AGREEMENT TO SETTLE AND FOR RELEASE OF CLAIMS (the "Agreement") made and entered by and among North Carolina Department of Environmental Quality ("DEQ") (formerly known as the North Carolina Department of Environment and Natural Resources) on the one hand, and Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (formerly known as Duke Energy Progress, Inc.) (together, "Duke Energy") on the other. DEQ and Duke Energy (collectively, the "Parties") agree to the following terms as a basis upon which to resolve the issues between them relating to alleged exceedances of state groundwater standards associated with coal ash facilities at sites operated by Duke Energy and its predecessors. By this Agreement, the undersigned settling Parties mutually agree to compromise, settle, and forgo all current, prior, and future claims related to exceedances of groundwater standards associated with coal ash facilities at Duke Energy's North Carolina facilities.

#### I. RECITALS

WHEREAS, Duke Energy owns and operates the following facilities that are the subject of this Agreement (collectively, the "Duke Energy Sites"):

- (1) the Allen Steam Station, located in Gaston County;
- (2) the Asheville Steam Electric Generating Plant, located in Buncombe County (the "Asheville Plant");
- (3) the Belews Creek Steam Station ("Belews Creek Plant"), located in Stokes County;
- (4) the Buck Steam Station, located in Rowan County, which has been retired and is no longer used for the production of electricity;

- (5) the Cape Fear Steam Electric Generating Plant, located in Chatham County, which has been retired and is no longer used for the production of electricity;
- (6) the Dan River Steam Station, located in Rockingham County, which has been retired and is no longer used for the production of electricity;;
- (7) the H.F. Lee Steam Electric Generating Plant (“H.F. Lee Plant”), located in Wayne County, which has been retired and is no longer used for the production of electricity;
- (8) the Marshall Steam Station, located in Catawba County;
- (9) the Mayo Steam Electric Generating Plant, located in Person County;
- (10) the Riverbend Steam Station, located in Gaston County, which has been retired and is no longer used for the production of electricity;
- (11) the Rogers Energy Complex (formerly Cliffside Steam Station), located in Cleveland and Rutherford Counties;
- (12) the Roxboro Steam Electric Generating Plant in Person County;
- (13) the L.V. Sutton Electric Plant, located in New Hanover County (the “Sutton Plant”), which has been retired and is no longer used for the production of electricity; and,
- (14) the Weatherspoon Steam Electric Plant, located in Robeson County, which has been retired and is no longer used for the production of electricity.

WHEREAS, the National Pollutant Discharge Elimination System (“NPDES”) Permits associated with the Duke Energy Sites contain requirements for Duke Energy to monitor groundwater at the Duke Energy Sites and to report the results to DEQ.

WHEREAS, Duke Energy has at all times complied with its groundwater monitoring and reporting requirements of its NPDES Permits for each of the Duke Energy Sites.

WHEREAS, on June 17, 2011, DEQ issued its "Policy for Compliance Evaluations of Long-Term Permitted Facilities with No Prior Groundwater Monitoring Requirement" (hereinafter, the "2011 Policy for Compliance Evaluations"). The 2011 Policy for Compliance Evaluations attempts to address the situation where groundwater monitoring indicates that a "long-term permitted facility" is out of compliance with the 2L standards, including the conditions under which DENR might issue a NOV to the affected facility.

WHEREAS, the 2011 Policy for Compliance Evaluations includes a detailed flow chart dictating the steps to be taken by DEQ should Duke Energy report any exceedance of North Carolina's groundwater standards as established pursuant to N.C.G.S. Chapter 143 and 15A N.C.A.C. Subchapter 2L at the Duke Energy Sites. Those steps include, but are not limited to: (1) verify the accuracy and significance of the results of the groundwater testing; (2) determine whether and to what extent the identified substance could be naturally occurring; and, (3) evaluate other possible sources of the identified substance.

WHEREAS, on August 26, 2014, DEQ sent Duke Energy a Notice of Violation based upon the exceedances of the State's groundwater standards reported to DEQ for the Sutton Plant (the "Sutton NOV").

WHEREAS, on September 20, 2014, the North Carolina Coal Ash Management Act ("CAMA") became effective. CAMA requires, among other actions, closure and dewatering of all ash ponds at the Duke Energy Sites and dictates, in detail, a procedure for assessing, monitoring and where appropriate, remediating groundwater quality in areas around coal ash

impoundments in North Carolina that follows closely the procedures outlined in DEQ's 2011 Policy for Compliance Evaluations.

WHEREAS, Duke Energy submitted monitoring that showed exceedances of the State's groundwater standards at or beyond the compliance boundary at the Asheville Plant.

WHEREAS, on February 25, 2015, DEQ sent Duke Energy a Notice of Violation, this one based upon groundwater monitoring results reported to DEQ for the Asheville Plant (the "Asheville NOV").

WHEREAS, on March 10, 2015, DEQ assessed a \$25.1 million civil penalty (the "Penalty Assessment") against Duke Energy based upon groundwater monitoring results reported to DEQ for the Sutton Plant.

WHEREAS, on April 9, 2015, Duke Energy filed a Petition for Contested Case at the North Carolina Office of Administrative Hearings, challenging the Penalty Assessment on multiple legal and factual grounds (the "Sutton Petition").

WHEREAS, the Parties have engaged in extensive discovery regarding the arguments raised in the Sutton Petition, during which the Parties have concluded that:

- (1) The 2011 Policy for Compliance Evaluations is a current DEQ policy that was in effect at the time DEQ issued the Sutton NOV, the Asheville NOV and Penalty Assessment against Duke Energy;
- (2) The 2011 Policy for Compliance Evaluations applies to each of the Duke Energy Sites listed above;
- (3) The 2011 Policy for Compliance Evaluations states that as "long as the permittee is cooperative with the Division in taking the necessary steps to bring the facility into compliance, a notice of violation may not be necessary."
- (4) During the discovery process internal e-mails and testimony by former DENR management demonstrate that, although not expressly stated in the 2011 Policy for Compliance Evaluations, the intent at the time the 2011 Policy for Compliance Evaluations

was that corrective action would precede any enforcement and would be in lieu of monetary penalties.

WHEREAS, DEQ further acknowledges that the procedures outlined in CAMA are specifically designed to address, and will address, the assessment and corrective action of alleged groundwater contamination associated with coal ash facilities at the Duke Energy Sites. In combination with the specific requirements of CAMA, DEQ further acknowledges that this Agreement fully addresses and resolves all issues related to groundwater contamination associated with coal ash facilities at the Duke Energy Sites, including all groundwater violations alleged in the state enforcement actions currently pending in Superior Court in Wake and Mecklenburg Counties.

WHEREAS, DEQ and Duke Energy have determined that it is in the best interest of the Parties, the environment, as well as the citizens of North Carolina, that they enter into a compromise settlement to avoid the time and expense of prolonged litigation so that the Parties may focus the same on the assessment and, if necessary, corrective action of alleged groundwater standard exceedances at the Duke Energy Sites.

WHEREAS, DEQ and Duke Energy have determined that the actions provided for in this Agreement and the provisions of CAMA represent the best course for prompt assessment and remediation of any alleged groundwater standard exceedances at the Duke Energy Sites.

NOW, THEREFORE, in consideration of the promises and covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, DEQ and Duke Energy agree to compromise, settle, and dismiss with prejudice all claims and causes of action related to alleged groundwater standard exceedances associated with coal ash facilities at the Duke Energy Sites upon fulfillment of the terms and conditions set forth below:

**II. DUKE ENERGY'S OBLIGATIONS**

A. Consistent with 15A NCAC 2L .0106 Duke Energy shall implement accelerated remediation at the Sutton Plant on the following terms and conditions:

- (1) Duke Energy will commence installation of extraction wells on the eastern portion of the Sutton Plant property where data show constituents associated with the ash basins at concentrations over the 2L standards ("Constituents of Interest") have migrated off site.
- (2) Extraction wells will be used to pump the groundwater to arrest the off-site extent of the migration. The pumped groundwater will be treated as needed to meet standards and returned either to the ash basin or the discharge canal.
- (3) This extraction and treatment system will be installed as soon as practicable following receipt of all permits and approvals from DEQ, the issuance of which will occur as soon as practicable. This accelerated groundwater remediation is in addition to and shall be performed concurrent with the coal ash impoundment closure obligations set forth in CAMA.
- (4) The extraction wells shall remain operational until such time as Duke Energy demonstrates through sampling, analysis, and appropriate modeling, and subject to DEQ's written concurrence, that off-property constituents of interest have been remediated to 2L Standards and there is no reasonable potential for future off-site migration.
- (5) As part of accelerated remediation, DEQ agrees that dry ash can be removed from the head of the ash basins under a construction storm water permit and shall expedite such construction storm water permit in order for Duke Energy to commence the removal of ash which is the source of the constituents of interest from the Sutton Plant. DEQ will issue construction storm water permits for Sutton plant within 10 days of receiving Duke Energy's complete application. Only dry ash from the head of the ash basins will be removed with no impact to wastewater treatment or water levels in the basins. DEQ shall use its best efforts to complete the process of the issuance of the NPDES permit modification at the Sutton Plant to allow for the removal of water and ash beyond the areas covered under the construction storm water permit from the Sutton Plant.

B. Consistent with 15A NCAC 2L .0106 Duke Energy shall implement accelerated remediation at the Asheville Plant, Belews Creek Plant, and H.F. Lee Plant, which are the only three other Duke Energy facilities that demonstrated offsite groundwater impacts in isolated areas that are not impacting private wells in the Comprehensive Site Assessments conducted

pursuant to CAMA. Such accelerated remediation shall be tailored to each facility's unique characteristics.

C. Petitioner agrees to pay to Respondent the sum of seven million dollars (\$7,000,000.00) (the "Payment") in full settlement of all current, prior, and future claims related to exceedances of groundwater standards associated with coal ash facilities at Duke Energy's North Carolina facilities. The Payment shall be made by check and made payable to the North Carolina Department of Environmental Quality and delivered to the following address:

North Carolina Department of Environmental Quality

Sam M. Hayes

217 West Jones Street

Raleigh, North Carolina 27603

The Payment shall be made within thirty (30) days of the receipt by Duke Energy of the acknowledgment described in part III.A. below. The Payment shall be accepted and acknowledged in writing by DEQ as "Payment In Full" in this matter within thirty-five (35) days of the execution of this Agreement.

D. Within fifteen (15) days of the receipt by Duke Energy of the acknowledgment described in part III.A. below, Duke Energy shall file and serve a Voluntary Withdrawal with Prejudice of the Sutton Petition, Case No. 15-EHR-02581, the Petition for Contested Case Hearing filed by Duke Energy related to the Notice of Regulatory Requirements dated July 9, 2014, Case No. 14-EHR-09631, and the Petition for Contested Case Hearing filed by Duke Energy related to the determination that Sutton Lake is waters of state, Case No. 15-EHR-04922.

**III. DEQ'S OBLIGATIONS**

A. Within five (5) days of the execution of this Agreement, DEQ shall communicate to Duke Energy, in writing, its withdrawal and rescission, with prejudice, of the Sutton NOV, the Sutton NORR, the Asheville NOV, and the Penalty Assessment.

B. DEQ shall not issue any further Notices of Violation, Notices of Regulatory Requirements, other similar notices, unilateral orders or civil penalty assessments to, file any judicial action against, or take any administrative, regulatory, or other enforcement actions against Duke Energy based on or in any way related to any previous or future groundwater monitoring results or alleged groundwater conditions at any of the coal ash facilities at any of the Duke Energy Sites, as long as Duke Energy continues to be in substantial compliance with CAMA requirements as they relate to groundwater assessment and remediation and closure of ash basins, including corrective action plans. DEQ also shall not issue Notices of Violation, Notices of Regulatory Requirements, other similar notices, unilateral orders or civil penalty assessments to, file any judicial action against, or take any administrative, regulatory, or other enforcement actions against Duke Energy based on or in any way related to the classification of Sutton Lake as waters of the State as set forth in paragraph II.D. above.

C. Except as necessary under CAMA or unless ordered or required to change, alter, modify, or amend by a court of competent jurisdiction or by the enactment or amendment of any applicable federal or state statute, rule, or regulation, or in response to an immediate threat to public health, DEQ agrees to not materially modify the groundwater monitoring terms in the existing NPDES Permits and in issuing future NPDES Permits for the Duke Energy Sites. For purposes of this provision "immediate threat to public health" shall mean circumstances beyond exceedances of the applicable provisions of 15A N.C.A.C. Subchapter 2L (the "2L Standards"). Except as provided in part III.B above, DEQ further agrees to limit the

use of the results of any groundwater monitoring required by NPDES permits or CAMA for the determination of prioritizing the coal ash impoundments and approving closure plans. This provision shall not modify the rights, duties and obligations of DEQ or Duke Energy pursuant to CAMA.

D. DEQ agrees that applicable, enforceable groundwater quality standards and naturally occurring (also known as “background”) concentrations shall only be those established pursuant to applicable provisions of the “2L Standards.”

E. Duke Energy and DEQ acknowledge that Duke Energy has been receiving and may in the future continue to receive concerns from individuals or local governments regarding alleged adverse impacts to groundwater from beneficial re-use activities conducted under Distribution of Residual Solids Permits, Ash Reuse Permits or similar permits issued by DEQ or its predecessors authorizing ash reuse programs. Except as otherwise provided by CAMA and the Distribution of Residual Solids permits, Ash Reuse Permits, or similar permits issued by DEQ, DEQ shall be responsible for investigating (including, when necessary, collecting and analyzing groundwater samples) and respond to all such concerns and shall notify Duke Energy of all such responses.

F. DEQ will issue construction storm water permits for Sutton plant within 10 days of receiving Duke Energy’s complete application. Only dry ash from the head of the ash basins will be removed with no impact to wastewater treatment or water levels in the basins. DEQ shall use its best efforts to complete the process of the issuance of the NPDES permit modification at the Sutton Plant to allow for the removal of water and ash beyond the areas covered under the construction storm water permit from the Sutton Plant.

IV. LEGAL PROVISIONS

A. Binding Nature of Agreement. The Parties represent and agree that the persons executing this Agreement have full and sufficient authority to sign and agree to be bound by the Agreement, and that this Agreement shall be binding upon DEQ and Duke Energy, and their successors and assigns, upon its execution by all Parties.

B. No Admissions. By entering into this Agreement, the Parties to this Agreement make no admission of liability, violation, or wrongdoing whatsoever, by itself, any of its affiliated companies, or any or its or their present or former officers, directors, employees, or agents.

C. Attorney's Fees, Costs, and Expenses. The Parties agree to bear their own respective attorney's fees, costs, and other expenses that have been incurred in connection with any stage of the state enforcement actions or Duke Energy's Petition for Contested Case related to the Penalty Assessment.

D. Governing Law and Interpretation. This Agreement shall be governed and interpreted in accordance with the laws of the State of North Carolina without regard to the conflict of laws provisions of North Carolina or any other state, and any provision herein that violates a statute or rule shall be void and unenforceable.

E. Enforceability and Remedies for Breach. The Parties stipulate and agree that this Agreement may be enforced in any court of competent jurisdiction in North Carolina, and that venue is appropriate in either Wake or Mecklenburg County. The Parties' sole and exclusive remedy for breach of this Agreement shall be an action for specific performance or injunction. In no event shall any Party be entitled to monetary damages for breach of this Agreement. In addition, no legal action for specific performance or injunction shall be brought or maintained

until: (a) the non-breaching Party provides written notice to the allegedly breaching Party which explains with particularity the nature of the claimed breach, and (b) within thirty (30) days after receipt of said notice, the allegedly breaching Party fails to cure the claimed breach or, in the case of a claimed breach which cannot be reasonably remedied within a thirty (30) day period, the allegedly breaching Party fails to commence to cure the claimed breach within such thirty (30) day period, and thereafter diligently completes the activities reasonably necessary to remedy the claimed breach. This Agreement may be introduced as evidence in any action involving either or both Parties for the purpose of implementing its terms.

F. Severability. The invalidity or unenforceability of any provision of this Agreement shall in no way affect the validity or enforceability of any other provision; the invalid or unenforceable provision shall be stricken, without assessing damages or imposing penalties to either Party arising out of said provisions by any court of competent jurisdiction.

G. Headings. The headings used in this Agreement are for convenience of reference only and shall in no way define, limit, expand or otherwise affect the meaning of any provision of this Agreement.

H. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

I. Amendment. This Agreement may not be modified, altered or changed except in a written document that is signed by all Parties and that makes specific reference to this Agreement.

J. Entire Agreement. This Agreement sets forth the entire agreement between the Parties, and fully supersedes any prior agreements or understandings between the Parties related

to the subject matter of this Agreement, including but not limited to alleged groundwater standard exceedances associated with coal ash ponds at the Duke Energy Sites.

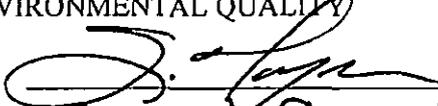
K. Review and Signing. Each Party and counsel for each Party has reviewed this Agreement. Accordingly, this Agreement shall be construed without regard to any presumption or other rule of construction requiring resolution of ambiguities against the drafting Party.

L. The Parties agree that this Agreement does not affect in any way the Joint Enforcement Agreement between DEQ and U.S. EPA, the subject of which does not involve any alleged groundwater standard exceedances associated with coal ash facilities at the Duke Energy Sites.

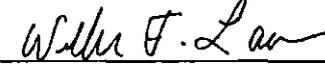
[Signature page follows]

IN WITNESS WHEREOF, DEQ and Duke Energy, and their respective counsel have executed this Agreement as of September 29, 2015.

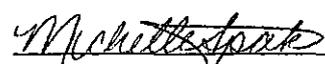
NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

By:   
Its: General Counsel  
Date: 9/29/15

KILPATRICK TOWNSEND & STOCKTON LLP

By:   
Its: \_\_\_\_\_  
Date: 9/29/2015

DUKE ENERGY CAROLINAS, LLC

By:   
Its: Associate General Counsel  
Date: 9/29/2015

DUKE ENERGY PROGRESS, LLC

By:   
Its: Associate General Counsel  
Date: 9/29/2015

McGUIREWOODS LLP

By:   
Date: 9/29/15

OFFICIAL COPY  
Apr 30 2019

IIA

**15A NCAC 02L**

**Lucas Exhibit No. 2**

The following excerpts from the present 15A NCAC 02L are applicable to DEP's generating station sites and to the Public Staff's position as to the accounting treatment of the associated costs to remediate alleged groundwater exceedances:

15A NCAC 02L .0102 Definitions

(3) "Compliance boundary" means any substance occurring in groundwater in concentrations which exceed the groundwater quality standards specified in Rule .0202 of this Subchapter.

15A NCAC 02L .0106 Corrective Action

(d) Any person conducting or controlling an activity that is conducted under the authority of a permit initially issued by the Department on or after December 30, 1983 pursuant to G.S. 143-215.1 or G.S. 130A-294 and that results in an increase in concentration of a substance in excess of the standards:

(1) at or beyond a review boundary: the person shall demonstrate, through predictive calculations or modeling, that natural site conditions, facility design and operational controls will prevent a violation of standards at the compliance boundary. Alternately, the person may submit a plan for alteration of existing site conditions, facility design, or operational controls that will prevent a violation at the compliance boundary, and implement that plan upon its approval by the Secretary.

(2) at or beyond a compliance boundary: the person shall respond in accordance with Paragraph (f) of this Rule, assess the cause, significance and extent of the violation of standards and submit the results of the investigation, and a plan and proposed schedule for corrective action to the Secretary. The permittee shall implement the plan as approved by and in accordance with a schedule established by the Secretary. In establishing a schedule the Secretary shall consider any schedule proposed by the permittee, the scope of the project, the extent of contamination, and the corrective action being proposed.

(e) Any person conducting or controlling an activity that is conducted under the authority of a permit initially issued by the Department prior to December 30, 1983 pursuant to G.S. 143-215.1 or G.S. 130A-294, and that results in an increase in concentration of a substance in excess of the standards at or beyond the compliance boundary specified in the permit, shall:

- (1) within 24 hours of discovery of the violation, notify the Department of the activity that has resulted in the increase and the contaminant concentration levels;
- (2) respond in accordance with Paragraph (f) of this Rule;
- (3) submit a report to the Secretary assessing the cause, significance and extent of the violation; and
- (4) implement an approved corrective action plan for restoration of groundwater quality at or beyond the compliance boundary, in

Doc. Ex. 1106

accordance with a schedule established by the Secretary. In establishing a schedule the Secretary shall consider any schedule proposed by the person submitting the plan. A report shall be made to the Health Director of the county or counties where the contamination occurs in accordance with the requirements of Rule .0114(a) in this Section.

(f) Initial response required to be conducted prior to or concurrent with the assessment required in Paragraphs (c), (d), or (e) of this Rule shall include:

- (1) Prevention of fire, explosion, or the spread of noxious fumes;
- (2) Abatement, containment, or control of the migration of contaminants;
- (3) Removal, treatment, or control of any primary pollution source such as buried waste, waste stockpiles, or surficial accumulations of free products;
- (4) Removal, treatment, or control of secondary pollution sources that would be potential continuing sources of pollutants to the groundwaters, such as contaminated soils and non-aqueous phase liquids. Contaminated soils that threaten the quality of groundwaters shall be treated, contained, or disposed of in accordance with rules in this Chapter and in 15A NCAC 13 applicable to such activities. The treatment or disposal of contaminated soils shall be conducted in a manner that will not result in a violation of standards or North Carolina Hazardous Waste Management rules.

(g) The site assessment conducted pursuant to the requirements of Paragraphs (c), (d), or (e) of this Rule, shall include:

- (1) The source and cause of contamination;
- (2) Any imminent hazards to public health and safety, as defined in G.S. 130A-2, and any actions taken to mitigate them in accordance with Paragraph (f) of this Rule;
- (3) All receptors and significant exposure pathways;
- (4) The horizontal and vertical extent of soil and groundwater contamination and all significant factors affecting contaminant transport; and
- (5) Geological and hydrogeological features influencing the movement, chemical, and physical character of the contaminants.

Reports of site assessments shall be submitted to the Department as soon as practicable or in accordance with a schedule established by the Secretary. In establishing a schedule the Secretary shall consider a proposal by the person submitting the report.

of or beneficially used offsite; (10) necessary permits; (11) post-closure monitoring and care for the CCR surface impoundments; and (12) closure project milestones<sup>3</sup>.

6. Defendants have submitted groundwater assessment plans for each of the four facilities addressed in this Order. DEQ conditionally approved the plans, requiring that certain changes be addressed in the groundwater assessment reports. Defendants have now submitted the groundwater assessment reports to DEQ, and they are currently under review.

7. In addition, during 2014, new NPDES permit applications were submitted to the DEQ for the coal ash basins at these plants. As part of this process, the Defendants have submitted analyses of all seeps associated with the coal ash basins that the Defendants have identified, sampled and tested the seeps, and provided a characterization of the chemicals found in the seeps (as sought by the relief requested by the Plaintiff-Intervenors).

8. As a result of these actions and statutory changes requiring further action, the Court finds that an Order on relief as to these facilities is appropriate, and the actions already taken together with those required by this Order (including dewatering, excavating and removing the contents of the coal ash basins) have remedied, or will remedy, the violations alleged in the Complaints.

9. This Court further finds that the issues alleged in the various Complaints with regard to unpermitted discharges, and with regard to violations

---

<sup>3</sup> This Order does not make a determination regarding whether Defendants are required under CAMA to submit Closure Plans for these four facilities, nor does this Order attempt to select from among the elements listed by the legislature in G.S. §130A-309.214(a)(4) to be included in a Closure Plan.

of NPDES permits and groundwater standards at these facilities will be remedied by compliance with the provisions of this Order and the provisions of CAMA applicable to the four plants included in this Order. This Order does not resolve any issue with regard to: (1) any claims that may be pursued by DEQ pursuant to a joint enforcement agreement between DEQ and the United States Environmental Protection Agency, (2) any seeps that are determined to be waters of the United States, or (3) whether any seeps can be addressed through NPDES permitting.

#### **Order on Relief**

10. This Court has jurisdiction over the subject matter and the parties to these actions pursuant to G.S. 7A-245 and 143-215.6C. DEQ brought the Actions based on its reasonable cause to believe that Duke Energy Carolinas, LLC ("Duke Energy Carolinas") and Duke Energy Progress, LLC. ("Duke Energy Progress") have violated or might violate provisions of G.S. 143-215.1 and the 2L Groundwater Rules.

11. Venue in the Riverbend Action and the Dan River Action is proper in Mecklenburg County under G.S. 1-79 and 143-215.6C. Venue in the Asheville Action and the Sutton Action is proper in Wake County under G.S. 1-79 and 143-215.6C.

#### **Specific Facility Terms**

##### *Riverbend Steam Station*

12. Duke Energy Carolinas owns the Riverbend Station, located in Gaston County, which has been retired, in that it is no longer used for the production of electricity.