## UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

**No:** 1:17-cv-707

ROANOKE RIVER BASIN
ASSOCIATION,

Plaintiff,

v.

**COMPLAINT** 

DUKE ENERGY PROGRESS, LLC,

Defendant.

#### **NATURE OF THE CASE**

1. This citizen enforcement action challenges the unlawful closure plan of Defendant Duke Energy Progress, LLC, ("Duke Energy"), to permanently store millions of tons of coal ash and toxic pollutants in unlined, leaking lagoons at its Roxboro Steam Electric Plant coal-fired electricity generating plant ("Roxboro") in Person County, North Carolina. This plan will continue to impound groundwater and other waters within the lagoons and will leave coal ash sitting below the water table, where the coal ash will continue to leach pollutants into public waters of the United States and of North Carolina for hundreds of years, and will leave coal ash in the floodplain, all in violation of the Resource Conservation and Recovery Act ("the Act") and the Coal Combustion Residuals Rule ("the Rule"), 40 C.F.R. § 257.50 et seq., adopted pursuant to the Act. The closure plan is attached as Exhibit 1.

- 2. Duke Energy's closure plan for its unlined coal ash lagoons at its Roxboro Steam Electric Plant is open dumping in violation of the requirements of the Rule and the Act. Duke Energy cannot be allowed to operate an illegal open dump at its Roxboro coal ash site in perpetuity.
- 3. Duke Energy operates two unlined coal ash lagoons, known as the East and West Ash Basins, at its Roxboro Steam Station ("Roxboro") on the banks of Hyco Lake and Sargents River in Person County. Duke Energy stores over 19 million tons of coal ash and other wastes in these unlined coal ash lagoons.
- 4. Measurements of the groundwater table elevation and surveys of the depth of the coal ash in both ash basins at Roxboro reveal that the coal ash sits more than 70 feet deep in groundwater, where it leaches pollutants that contaminate the groundwater and adjacent surface waters.
- 5. In addition, North Carolina and FEMA flood maps as well as Duke Energy's own reports confirm that the West Ash Basin is located in the 100-year floodplain. *See* Comprehensive Site Assessment ("CSA"), App'x I (Natural Resources Technical Report), Fig. 9, attached as Exhibit 2.
- 6. As long as coal ash and other wastes remain in these leaking, unlined lagoons and in the floodplain, the coal ash will continue to discharge pollutants into the groundwater and surface waters. These discharges will continue to place Sargents River, Hyco Lake, adjacent wetlands, groundwater, and the downstream waters of the Dan and

<sup>&</sup>lt;sup>1</sup> Available at http://edocs.deq.nc.gov/WaterResources/0/fol/305358/Row1.aspx.

Roanoke River Basins, as well as the people who use these waters, at risk of groundwater contamination, surface water contamination, and potential catastrophic failure of the coal ash lagoons.

# JURISDICTION, VENUE, AND NOTICE

- 7. The Roanoke River Basin Association ("the Association") brings this enforcement action under the citizens' suit provision of the Act. 42 U.S.C. § 6972(a)(1)(A). This Court has jurisdiction over this action pursuant to 42 U.S.C. § 6972(a) and 28 U.S.C. § 1331, and has jurisdiction over the parties.
- 8. Venue is proper in this court pursuant to 42 U.S.C. § 6972(a). The Roxboro coal ash lagoons that are the subject of Duke Energy's unlawful closure plan are located in Person County, in the Middle District of North Carolina.
- 9. In compliance with 42 U.S.C. § 6972(b) and 40 C.F.R. § 254.2, on May 31, 2017, the Association gave Duke Energy, the United States Environmental Protection Agency ("EPA"), and the North Carolina Department of Environmental Quality ("DEQ") notice of the violations specified in this complaint and of the Association's intent to file suit after sixty days should those violations continue. A copy of the notice letter with documentation of its receipt is attached as Exhibit 3.
- 10. More than sixty days have passed since the notice was served pursuant to law and regulation, and the violations identified in the notice letter are continuing at this time and reasonably likely to continue in the future.

11. EPA and DEQ have not commenced and are not diligently prosecuting a civil or criminal action to redress the violations of the Act and the Rule asserted in this citizen enforcement action.

## **PARTIES AND STANDING**

### **The Association and Its Members**

- 12. The Roanoke River Basin Association is a § 501(c)(3) non-profit public interest organization with members in North Carolina and Virginia operating in the Roanoke River Basin watershed. Its mission is to establish and carry out a strategy for the development, use, preservation, and enhancement of the resources of the Roanoke River basin in the best interest of present and future generations. The Association's membership includes local governments, non-profit, civic and community organizations, regional government entities, businesses, and individuals.
- 13. The Association and its members have been harmed by Duke Energy's unpermitted discharges and unlawful activities. They recreate, fish, and own property in the Roanoke River Basin, including in the vicinity of and downstream from Roxboro, including Hyco Lake and the Dan River and the waterways into which Duke Energy discharges and into which their waters and the waters of Sargents River flow.
- 14. The Association and its members fear contamination of drinking water, wildlife, and river water by groundwater contamination, discharges, and pollution from coal ash in groundwater, Sargents River, Hyco Lake, and the Dan River from Duke Energy's Roxboro coal ash lagoons. Duke Energy's continuing storage of coal ash in

groundwater and its contamination, discharges, and pollution from coal ash in groundwater, Sargents River, Hyco Lake, and the Dan River, and its unlawful plan to make this polluting and unsafe storage of coal ash permanent, are reducing the use and enjoyment by the Association and its members of the Roanoke River Basin, Hyco Lake, the waters of Sargents River, the Dan River, and the waterways into which their waters flow. Affidavits showing standing are attached as Exhibit 4.

15. These injuries will not be redressed except by an order from this Court requiring Duke Energy to file and comply with a closure plan for Roxboro that satisfies the requirements of the Act and the Rule; by eliminating infiltration of groundwater and other liquids into Duke Energy's coal ash; precluding the future impoundment of water, sediment, or slurry; eliminating free liquids from the Roxboro coal ash lagoons; removing coal ash from the floodplain; as well as ordering Duke Energy to comply with other relief sought in this action.

#### **Defendant**

- 16. Duke Energy Progress, LLC, is a North Carolina limited liability corporation with its headquarters in Raleigh, North Carolina. It is engaged in the generation, transmission, distribution, and sale of electricity. Duke Energy owns and operates the Roxboro Steam Electric Plant and its coal ash lagoons, which are the subject of the closure plan violations that give rise to this action.
- 17. Duke Energy is a "person" within the meaning of section 1004(15) of the Act, 42 U.S.C. § 6903(15).

#### STATUTORY AND REGULATORY BACKGROUND

- Agency (EPA) published a final rule to regulate the disposal and storage of coal combustion residuals (CCR) as a solid waste under Subtitle D of the Act. U.S. EPA, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule, 80 Fed. Reg. 21,302, 21,312 (Apr. 17, 2015); as amended by Technical Amendments to the Hazardous and Solid Waste Management System, Disposal of Coal Combustion Residuals from Electric Utilities—Correction of the Effective Date, 80 Fed. Reg. 37,988 (July 2, 2015); 40 C.F.R. § 257.50 et seq.
- 19. Under the Act, any violation of the requirements of the Rule constitutes illegal open dumping: "Practices failing to satisfy *any of the criteria* in . . . §§ 257.50 through 257.107 constitute open dumping, which is prohibited under section 4005 of the Act." 40 C.F.R. § 257.1(a)(2) (emphasis added). 40 C.F.R. § 257.2 ("Open dump means a facility for the disposal of solid waste which does not comply with this part.").
- 20. Under the Rule, by no later than October 17, 2016, Duke Energy was required to "prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of [40 C.F.R. § 257.102]" for coal ash lagoons like the ones at Roxboro. 40 C.F.R. § 257.102(b)(2). The Rule contemplates two options for closure, either removal of the ash, also described as clean closure, or leaving the ash in place, sometimes called "cap in place."

- 21. The Rule requires that a closure plan in which ash will be left in an unlined lagoon must describe "how the final cover system will achieve the performance standards specified in paragraph (d) of this section." *Id.* § 257.102(b)(1)(iii).
- 22. In particular, the closure plan must demonstrate that if the ash is left in place, it will achieve the following performance standard requirements to:
  - a. "Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters." *Id.*§ 257.102(d)(1)(i);
  - b. "Preclude the probability of future impoundment of water, sediment, or slurry." *Id.* § 257.102(d)(1)(ii); and the requirement that
  - c. "Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues." *Id.* § 257.102(d)(2)(i).
- 23. Thus, if an owner proposes to close a coal ash lagoon by leaving the ash in place with a cover on top, the closure plan must demonstrate that groundwater and other waters will not continue to flow through the coal ash, in order to satisfy the requirement to "[c]ontrol, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters."
- 24. For the same reason, for a basin located in the floodplain, the plan must demonstrate that floodwaters will not inundate the basin, infiltrate the waste, and cause

further releases of coal ash and pollutants.

- 25. The closure plan must also "[p]reclude the probability of future impoundment of water, sediment, or slurry." "[I]mpoundment means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR." 40 C.F.R. § 257.53. If groundwater will remain in the coal ash basin, the basin remains an impoundment that stores an accumulation of CCR and liquids. Further, if the closure plan retains the coal ash impoundment's dam, in whole or in part, then the closure plan fails to preclude the impoundment of water. Similarly, such a closure plan that leaves coal ash saturated in groundwater within the impoundment leaves the wet coal ash impounded behind the dam of the coal ash lagoon, and thus fails to prevent the impoundment of coal ash sediments and slurry.
- 26. Finally, if groundwater will continue to saturate coal ash within the proposed "cap in place" storage area, then the closure plan cannot satisfy the requirement that "[f]ree liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues." "Free liquids" are defined under RCRA as "liquids that readily separate from the solid portion of a waste under ambient temperature and pressure." 40 C.F.R. § 257.53. Groundwater and stream water that saturate coal ash in an unlined impoundment are free liquids that readily separate from the solid portion of the waste. Utilities regularly separate the water that saturates their impoundment coal ash by "stacking" the ash, *i.e.*, piling up the ash on dry land to let the water drain out. In

addition, groundwater and stream water readily separate from coal ash because they flow *through* the coal ash, as shown by the movement of pollutants out of unlined coal ash basins into the surrounding groundwater; these waters do not remain in the coal ash indefinitely, but rather flow out of the ash and are replaced by new groundwater infiltrating into the basin and stream water flowing in. For this reason, a closure plan that fails to stop the ongoing flow of water into an unlined basin will violate this provision of the CCR rule because it does not eliminate free liquids and also because it fails to solidify the wastes in the basin.

- 27. By the same token, capping an unlined coal ash basin located in a floodplain cannot ensure that free liquids are eliminated under flood conditions.
- 28. The EPA has confirmed the plain language of the Rule. It has explained that a coal ash lagoon may not be closed by leaving coal ash submerged in groundwater. Instead, the operator of the unit must comply with the rule by "clean closing' [excavating] the submerged portion" of the coal ash. EPA Response to "What are options and the performance standards for closure of units under the CCR Rule?" (Attached as Exhibit 5, at 6).
- 29. In addition to these requirements of the Rule, the Act also requires that "[f]acilities or practices in floodplains shall not restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste, so as to pose a hazard to human life, wildlife, or land or water resources." 40 C.F.R. § 257.3-1(a). "Base flood" means a 100-year flood and "floodplain" means "the

lowland and relatively flat areas adjoining inland and coastal waters . . . which are inundated by the base flood." *Id.* § 257.3-1(b)(1)-(2). This provision of the Act applies to coal ash impoundments under the Rule. *See* 80 Fed. Reg. 21,302, 21,339 (April 17, 2015). Just as with the requirements set forth above, facilities failing to satisfy this requirement of the Act are considered open dumps and practices failing to satisfy it are considered open dumping. 40 C.F.R. § 257.1(a)(1)-(2).

30. Violations of the Act and the Rule are enforceable by citizen suit. 42 U.S.C. § 6972.

## **FACTS**

## **Duke Energy's Coal Ash Storage and Pollution at Roxboro**

- 31. At its Roxboro Steam Station ("Roxboro"), Duke Energy stores over 19 million tons of coal ash and other wastes in two unlined coal ash lagoons, known as the East and West Ash Basins, on the banks of Hyco Lake and Sargents River in Person County.
- 32. The West Ash Basin is over 40 years old and the East Ash Basin is over 50 years old; their waters are held back only by dams made of earth that leak. The coal ash lagoons leak pollution into the groundwater and into Hyco Lake, Sargents River, and tributary streams to the east of the East Ash Basin.
- 33. Sargents River originates south of the Roxboro property, and historically it flowed north through the now-impounded stream valley of the West Ash Basin to join the Hyco River. Since Hyco Lake was created in 1965, Sargents River has flowed into Hyco

Lake. Sargents River (also called "Sargents Creek") is classified by the state as Class C waters, a designation that protects state waters for uses including secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. This state water quality classification extends along the entire length of Sargents River, from the "source to Hyco Lake, Hyco River."

- 34. Hyco Lake is managed as a public recreation lake, and the fish and wildlife of Hyco Lake are managed as a public resource by the North Carolina Wildlife Resources Commission. The lake is an important regional recreation resource, and fishing tournaments are held on the lake frequently. Members of the Association own property on Hyco Lake and use the lake for swimming, fishing, boating, and waterskiing, among other uses. Hyco Lake also provides habitat for bald eagles, which forage at the Roxboro coal ash site and are frequently observed in the vicinity. *See* Duke Energy CSA, App'x I at 9, 11.
- 35. Hyco Lake has been seriously affected by Duke Energy's Roxboro coal ash pollution. In past decades, coal ash pollution from the Roxboro plant has devastated the fish population, requiring long-term fish consumption advisories and leading EPA to identify the site as a proven ecological damage case. In recent years, sampling of Hyco Lake's surface water, sediments, and fish tissue has continued to show elevated levels of

<sup>&</sup>lt;sup>2</sup> DEQ, NC Surface Water Classifications, https://ncdenr.maps.arcgis.com/apps/webappviewer/index.html?id=6e125ad7628f494694e259c80dd64265 (search "Sargents Creek").

coal ash contaminants including arsenic, boron, selenium, aluminum, copper, barium, strontium, and others. Sampling of Hyco Lake has also revealed elevated levels of bromide, a pollutant from Duke Energy's coal waste operations that causes the formation of dangerous brominated trihalomethanes in drinking water systems. These substances are known human carcinogens. Downstream water systems in North Carolina and Virginia have had problems with elevated levels of trihalomethanes for years. In addition, Duke Energy's Human Health Risk Assessment for the Roxboro coal ash site concluded that exposure to fish tissue caught from Hyco Reservoir and consumed under recreational and subsistence fishing scenarios resulted in potentially unacceptable health risks. Duke Energy Corrective Action Plan ("CAP") Pt. 2, App'x D, at p. 5-16.

- Hyco Lake and Sargents River are part of the Roanoke River Basin and are 36. waters of the United States and of North Carolina.
- 37. The coal ash at Roxboro sits deep in the groundwater. The ground surface elevation below the East Ash Basin dam is between 390 and 400 feet above mean sea level (msl) (Duke Energy, Corrective Action Plan Part 1 (December 1, 2015) ("CAP Pt. 1"), 4 App'x E, at 3), while the groundwater elevations in the East Ash Basin monitoring wells have been measured to be between 464 and 469 ft msl. CSA Fig. 6-5. Beneath the West Ash Basin, the ground surface elevation was reported to be between 390 and 410 feet msl (CAP Pt. 1, App'x E, at 4), while the groundwater elevations in the West Ash Basin monitoring wells have been measured to be between 448 and 463 ft msl. CSA Fig.

<sup>&</sup>lt;sup>3</sup> Available at http://edocs.deq.nc.gov/WaterResources/0/fol/366752/Row1.aspx. <sup>4</sup> Available at http://edocs.deq.nc.gov/WaterResources/0/fol/321571/Row1.aspx.

- 6-5. The difference between the reported ash basin groundwater elevations and the natural ground surface elevations underlying the basins reveals that the coal ash currently extends as much as 79 feet below the water table in the East Ash Basin and as much as 73 feet below the water table in the West Ash Basin.
- 38. Duke Energy has for years been illegally polluting waters of North Carolina and the United States with pollutants from its Roxboro coal ash pits. The coal ash has contaminated the groundwater with elevated levels of numerous pollutants, including aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium (both total and hexavalent chromium), cobalt, copper, iron, lead, manganese, nickel, nitrate, pH, selenium, strontium, sulfate, thallium, total dissolved solids, vanadium, and zinc. *E.g.*, CAP Pt. 1; CSA Supplement 1 (August 1, 2016).<sup>5</sup>
- 39. This contaminated groundwater flows into Sargents River and Hyco Lake, as well as a tributary stream on the east side of the East Ash Basin. *E.g.*, CSA at 27; Figs. ES-1, 6-5, 6-8; CAP Pt. 1 at p. 3-8. There is also some radial flow outward from the coal ash basins (CSA at 27), which may be contaminating neighboring drinking wells on McGhees Mill Road and Dunnaway Road.
- 40. In 2015, the owners of at least five drinking wells near Roxboro were told by the State of North Carolina not to use their water for drinking or cooking due to elevated levels of hexavalent chromium and vanadium, among other pollutants.

 $<sup>^5\,</sup>Available~at~http://edocs.deq.nc.gov/WaterResources/0/fol/398016/Row1.aspx.$ 

- 41. This pollution is currently contaminating the waters of the Roanoke River Basin, including a major drinking water supply, Kerr Lake. Coal ash and other wastes from the burning of coal contain bromides, which interact with chlorine in water treatment plants to form brominated trihalomethanes, which are dangerous carcinogenic pollutants. Elevated levels of bromides have been found in Hyco Lake near the Roxboro plant. Downstream of the Roxboro site, numerous water systems that withdraw water from Kerr Lake including the Clarksville water system in Virginia and the Kerr Lake Regional Water System, which serves Henderson, Oxford, and other North Carolina communities have experienced problems with elevated levels of trihalomethanes in their drinking water.
- Association and other community organizations in North Carolina to force it to address its primitive, unlined, and leaking coal ash storage in North Carolina. In May of 2015, Duke Energy operating companies, including the owner of the Roxboro coal ash lagoons, pleaded guilty 18 times to 9 Clean Water Act coal ash crimes across North Carolina. Duke Energy operating companies paid a \$102 million fine, and they are under nationwide criminal probation. Under court orders, the criminal plea agreement, statutes, regulatory requirements, and settlement agreements with conservation groups, Duke Energy is now required to excavate all the coal ash from unlined coal ash pits at 8 of its 14 coal ash storage sites in North Carolina, and all its sites in South Carolina.

- 43. Duke Energy is required to excavate and remove the coal ash from all of its North Carolina coal ash basins that are located in floodplains, except at Roxboro. Duke Energy has stated publicly that its other ash basins located in floodplains, such as those at its H.F. Lee facility in Goldsboro, N.C., "are not suited for long-term storage of coal ash." Exhibit 6. The same is true at Roxboro, yet Duke Energy is proposing to leave the West Basin ash in the floodplain forever.
- 44. At Roxboro and five other coal ash storage sites in North Carolina, Duke Energy has refused to commit itself to remove the ash from its unlined, leaking, polluting, dangerous, and primitive coal ash pits. Instead, Duke Energy hopes to pump coal ash polluted water out of its leaking lagoons into nearby lakes and rivers and then leave its polluting coal ash in the groundwater, in unlined pits near water bodies, where the coal ash will continue to pollute North Carolina's waters forever. In the case of Roxboro, Duke Energy also plans to leave its coal ash in the floodplain forever.

# <u>Duke Energy's Plan to Leave Coal Ash in Groundwater and in the Floodplain at Roxboro</u>

- 45. On November 11, 2016, as required by the Rule, 40 C.F.R. § 257.102(b), Duke Energy published a closure plan for Roxboro. Exhibit 1.
- 46. The closure plan leaves the coal ash in place in the Roxboro coal ash lagoons, with "dewatering" of the basins and placing a cap on top. Likewise, under the North Carolina Coal Ash Management Act, N.C. Gen. Stat. § 130A-309.200 *et seq.*, Duke Energy was required to submit a Corrective Action Plan (CAP) setting out its plan

for closure of the Roxboro coal ash lagoons. The CAP recommends the same "cap in place" closure method.

- 47. However, Duke Energy's closure plan leaves coal ash in the groundwater within the unlined coal ash basins at Roxboro, where they will remain impounded behind the ash pond dams. The difference between the lowest measured groundwater elevation in wells located just outside the ash basins and the highest natural ground surface elevations underlying the basins indicates that if cap in place is implemented, in the future the coal ash would remain at least 62 feet below the water table in the East Ash Basin and at least 42 feet below the water table in the West Ash Basin.
- 48. Duke Energy's own hydrogeology expert has testified under oath that ash in the Roxboro basins will remain saturated after capping in place. The closure plan contains no mechanism to stop the flow of groundwater into the basins or separate the ash from the groundwater. Another corporate witness for Duke Energy has confirmed under oath that no such measures are part of the closure plan at Roxboro and also does not dispute that ash will remain in the groundwater after the Roxboro ash basins are capped in place.
- 49. Groundwater that infiltrates the ash will continue to leach metals from the ash and transport those metals down-gradient before discharging into Hyco Lake, Sargents River, and their tributaries. From there, these pollutants will be flushed across the state line to Virginia, including Kerr Lake a major regional drinking water supply reservoir before flowing back into North Carolina.

- 50. Additionally, Duke Energy's closure plan makes clear that it does not intend to completely and permanently remove interstitial and pore water, which is the water saturating the ash and which has the highest concentrations of contaminants. Duke Energy's plan states that it "may" remove this water "as needed" only "to provide a workable surface for final cover system installation." Ex. 1, at 5. The closure plan will "partial[ly] breach[]" but not completely breach or remove the ash pond dams. *Id.* at 2.
- 51. An evaluation of the hydrogeology of the Roxboro site prepared by Duke Energy's predecessor noted that "the ash pond dam severely restricts ground water movement and effectively traps both surface water runoff and ground water flowing from the higher elevation southeast of the site. The effect is to create an artificially high water table within the ash and adjacent sediments." Duke Energy's closure plan does not remove the ash pond dams, and groundwater will continue to be impounded within the basins under the closure plan.
- 52. Thus, under Duke Energy's closure plan set out in its CCR Rule filing, the coal ash will sit in groundwater and will continue to leach pollutants into the groundwater and into Hyco Lake, Sargents River, and other adjacent surface waters. This coal ash will remain saturated, allowing pollutants to leach out indefinitely, and will remain impounded behind the unlined ash pond dams under the closure plan.
- 53. In addition, the ash in the West Ash Basin will remain in an unlined basin within the 100-year floodplain, where it will be subject to inundation in perpetuity.

- 54. This plan does not and cannot meet the CCR rule performance standards at 40 C.F.R. § 257.102(d).
- Energy was required to submit a Comprehensive Site Assessment for Roxboro. That Assessment confirms that the Roxboro coal ash is in the groundwater and is polluting groundwater and surface water: "CCR [i.e., coal ash] accumulated in the ash basins are sources of groundwater impact by COI [i.e., pollutants] . . . . The cause of impact is leaching of constituents from the CCR into the ash pore water and its migration to underlying groundwater and to seeps." CSA at 115. This pollution will continue if Duke is allowed to leave the ash in tens of feet of groundwater and in these unlined pits, where pollutants have been flowing into groundwater, Hyco Lake, Sargents River, and adjacent waters for decades.
- 56. The West Ash Basin at Roxboro is located in the 100-year floodplain, as Duke Energy's own studies confirm. Capping the West Ash Basin in place will leave the West Basin ash in the floodplain in perpetuity, where it will restrict the flow of the base flood and reduce the temporary water storage capacity of the floodplain, as well as being subject to washout of coal ash and other solid wastes from the unlined basin so as to pose a hazard to humans, wildlife, and land and water resources.

#### **CLAIMS FOR RELIEF**

57. The allegations of the preceding paragraphs are incorporated by reference as if repeated and set forth herein.

### **Duke Energy's Violations of the CCR Rule**

- 58. Duke Energy is violating 40 C.F.R. §§ 257.102(b) and (d). Duke Energy has prepared and published a CCR Rule closure plan that fails to meet the minimum requirements for closure plans and violates the CCR Rule by leaving Roxboro coal ash in groundwater, impounded behind earthen dams, and in the floodplain.
- 59. The plan does not "control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters." As Duke Energy's own modeling shows, the coal ash in the basins will remain saturated in groundwater.
- 60. Further, the closure plan does not "preclude the probability of future impoundment of water, sediment, or slurry," because the closure plan will only "partial[ly] breach[]" but not remove the ash pond dam (Ex. 1, at 3), and thus this saturated coal ash will remain impounded by the ash basin dams.
- 61. And capping in place and leaving the coal ash in groundwater at Roxboro neither removes contaminated liquid wastewater, nor solidifies the ash in the basins. As a result, the plan fails to "eliminate" "free liquids . . . by removing liquid wastes or solidifying the remaining wastes."
- 62. These requirements are also all violated because the closure plan leaves the West Basin ash in an unlined basin within the floodplain.
- 63. And the West Ash Basin's location in the floodplain also means the closure plan violates the Act by leaving the basin and partial impoundment in a location

where it will restrict the flow of the base flood, reduce the temporary water storage capacity of the floodplain, and result in washout of solid waste so as to pose a hazard to human life, wildlife, or land or water resources, all in violation of 40 C.F.R. § 257.3-1(a).

- 64. Duke Energy was required to prepare and publish a CCR Rule closure plan that complies with the Rule and the Act. Under the CCR Rule, Duke Energy's Roxboro closure plan must not leave coal ash in groundwater or leave wet ash and water impounded in the basins yet it does all of these things. Similarly, the Act prohibits Duke Energy from leaving a coal ash basin and partial impoundment in the 100-year floodplain, yet that is what the cap in place closure plan does.
- 65. Duke Energy thus violated and continues to violate the CCR Rule and RCRA.
- 66. To comply with the CCR Rule and RCRA, Duke Energy must prepare and publish a CCR Rule closure plan for the Roxboro coal ash lagoons that does not leave any coal ash in the groundwater or floodplain, and that is not an impoundment. This violation occurred on October 12, 2016, on November 11, 2016, and is ongoing.

#### PRAYER FOR RELIEF

WHEREFORE, the Association respectfully requests that this Court:

A. Issue a declaratory judgment stating that Duke Energy is violating the Coal Combustion Residuals Rule and the Resource Conservation and Recovery Act by failing to comply with the closure plan requirements and the floodplain requirements of the Rule and the Act, and that Duke Energy is violating the open dumping prohibition of the Act;

- B. Enter appropriate preliminary and permanent injunctive relief to ensure that Duke Energy files a closure plan for its Roxboro coal ash lagoons that satisfies the requirements of the Act and the Rule by eliminating infiltration of groundwater and other liquids into Duke Energy's coal ash; precluding the possibility of future impoundment of water, sediment, or slurry; and by eliminating free liquids from the Roxboro coal ash lagoon;
- C. Enter appropriate preliminary and permanent injunctive relief to ensure that Duke Energy files a closure plan for its Roxboro coal ash lagoons that satisfies the requirements of the Act and the Rule by removing and separating the coal ash from groundwater and by eliminating the dam and any other impoundment of water, sediment, or slurry, and by eliminating groundwater and other free liquids from the Roxboro coal ash lagoons;
- D. Enter appropriate preliminary and permanent injunctive relief to ensure that Duke Energy files a closure plan for its Roxboro coal ash lagoons that satisfies the requirements of the Act and the Rule by removing its coal ash from the floodplain;
- E. Award the Association the costs of this action, including reasonable attorney and expert fees, as authorized by 42 U.S.C. § 6972(e); and
- F. Grant the Association such further and additional relief as the Court deems just and proper.

# This 2nd day of August, 2017.

#### /s/ Frank S. Holleman III

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