STATE OF NORTH CAROLINA  
COUNTY OF MECKLENBURG  

DUKE ENERGY CAROLINAS, LLC,  

    Petitioner,  

v.  

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

    Respondent.  

PETITION FOR CONTESTED CASE HEARING  
(HEARING REQUESTED)  

Pursuant to N.C. Gen. Stat. §§ 150B-23 and 130A-24, Petitioner Duke Energy Carolinas, LLC submits this petition for a contested case hearing challenging the North Carolina Department of Environmental Quality’s (“DEQ”) April 1, 2019 impoundment closure determination and order related to the Allen Steam Station (“Allen”). For the reasons set forth below, Duke Energy Carolinas, LLC requests that this tribunal vacate the determination and order in its entirety.

INTRODUCTION  

This contested case arises from a final determination and order that constitutes a final agency action with respect to the coal ash basin closure method for the Allen Steam Station. Through its administrative process, issues considered, conclusions, determinations, and related order DEQ failed to follow proper procedures, violated Duke Energy’s due process rights, including due process rights guaranteed by the North Carolina Constitution and United States Constitution,
exceeded its authority or jurisdiction, acted erroneously including, without limitation, by applying erroneous standards, failed to act as required by law, and acted arbitrarily and capriciously. Procedurally, they resulted from a process specified nowhere in the Coal Ash Management Act (“CAMA”) and that circumvented or otherwise failed to comply with the procedures established by the legislature in CAMA to ensure the safe, timely and efficient closure of ash basins. Substantively, DEQ’s order is not supported by the evidence (including scientific evidence) and imposes significant and unjustified expense on Duke Energy and its customers without measurable environmental benefits.

SUMMARY

On April 1, 2019, DEQ issued a final agency decision ordering Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (“collectively Duke Energy”) to excavate nearly 100 million tons of coal ash from basins at six Duke Energy facilities. Although DEQ purported to issue each order (including the order at issue in this petition) under CAMA, DEQ did not follow the mandatory process and procedure outlined in CAMA before ordering excavation.
CAMA was passed by the North Carolina legislature and signed into law on September 20, 2014.\(^1\) When the legislature enacted CAMA, it reviewed the Duke Energy impoundments in North Carolina and explicitly included in the legislation that impoundments at four sites were “high-priority” and were required to be closed by excavation. For the remaining sites, the legislature directed DEQ to classify the risk posed by the impoundments.

The impoundment at Allen was designated by DEQ as a “low risk” impoundment. For impoundments classified as “low risk,” CAMA contemplates three potential closure methods. These include cap-in-place and excavation. CAMA does not require excavation for low-risk impoundments and establishes a rigorous process for Duke Energy’s submittal and DEQ’s consideration of a proposed closure plan.

A closure plan is required to contain voluminous technical information including, among many other things, (1) groundwater data from monitoring wells, (2) groundwater modeling based upon the data, (3) proposed corrective actions for...

\(^1\) It has been amended two times, in 2015 and again in 2016. The 2015 amendment was intended to extend the deadline for closure of the impoundment at Duke Energy’s Asheville Plant. The 2016 amendment was intended to remove references to the Coal Ash Management Commission, following *McCrory v. Berger*, 368 N.C. 633 (2015), and added provisions that provided for the designation of impoundments as “low risk” if Duke Energy completed all necessary dam safety repairs and provided permanent alternate drinking water supplies for neighbors. N.C. Gen. Stat. § 130A-309.211(c1), -213(d). Duke Energy has complied with these requirements for dam safety repairs and the provision of alternate drinking water supplies and obtained a low risk designation for the site at issue here. The 2016 amendment also added a provision to allow for the option of closure pursuant to requirements established by the United States Environmental Protection Agency in 40 CFR Parts 257 and 261 (the “CCR Rule”).
groundwater exceedances, and (4) the costs of closure. DEQ is then required to evaluate each site’s proposed closure plan across a number of criteria, including protection of public health, safety, and welfare, and the environment. At that point, DEQ is to approve or disapprove the proposed closure plan for a given basin based upon this full and complete record.

DEQ did not do this. Rather, on April 1, DEQ directed and ordered that a single closure method—excavation—must be used at every basin and ordered proposed closure plans based upon this method. By making a determination as to the method of closure before proposed closure and corrective action plans were submitted, DEQ deviated from the statutory process and engaged in an improper process, that is not contemplated in CAMA or elsewhere, and that did not include any analysis of proposed corrective actions, among other required information.

In addition to failing to follow the CAMA-mandated process that was designed to provide a full and complete record, DEQ further failed to consider or apply the scientific and engineering evidence submitted and available to it in reaching its decision. DEQ’s order requires the most expensive closure method available despite scientific and engineering evidence that is less expensive and more rapid closure options would continue to fully protect human health and the environment. In addition, the order for Allen collectively with the remaining low-risk coal ash impoundments will result in approximately $4 to $5 billion in

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2 Under North Carolina’s groundwater rules, an exceedance is an increase in concentration of a substance above background levels and in excess of the groundwater standards at or beyond a compliance boundary. 15 N.C. Admin. Code 02L .0106(e).
additional and unnecessary costs and could increase rather than mitigate environmental harm.

As a consequence of these omissions and errors, and the other issues set forth in this Petition, DEQ's determinations must be vacated because:

- DEQ failed to use proper procedure;
- DEQ exceeded its authority and jurisdiction;
- DEQ failed to act as required by law and rule;
- DEQ acted erroneously; and,
- DEQ acted arbitrarily and capriciously.

**PARTIES AND JURISDICTION**

1. Duke Energy Carolinas, LLC is a North Carolina limited liability company located in Mecklenburg County. It owns and operates the Allen Steam Station.

2. DEQ is an agency of the State of North Carolina.

3. The Office of Administrative Hearings has jurisdiction over the parties and subject matter herein.

4. As Duke Energy is a resident of Mecklenburg County, the venue for this contested case is and should be Mecklenburg County. N.C. Gen. Stat. § 150B-24(a).

5. The final agency action being challenged by this petition was issued on April 1, 2019. A copy of DEQ's closure determination for Allen is attached hereto as
Exhibit A. A copy of DEQ’s accompanying press release is attached hereto as Exhibit B. Contested cases challenging DEQ action must be initiated within 30 days. This contested case has been initiated by timely filing this Petition and payment of all related fees within 30 days of April 1, 2019.

6. N.C. Gen. Stat. § 150B-23 provides that a contested case may be brought by a “person aggrieved,” defined as “any person or group of persons of common interest directly or indirectly affected substantially in his or its person, property, or employment by an administrative decision.” N.C. Gen. Stat. § 150B-2(6). As further discussed below, Duke Energy is a “person aggrieved” by DEQ’s April 1, 2019 closure determination for Allen.

FACTUAL BACKGROUND

7. For decades, Duke Energy has operated coal-fired power plants in North Carolina that have provided safe, reliable and affordable power to millions of customers throughout the state, including individuals, businesses, manufacturers, schools and government entities. As part of these operations, DEQ expressly authorized Duke Energy to store and treat coal ash (a byproduct of coal combustion) in unlined impoundments located at the plants and to discharge water (treated through settlement of ash particles) from those impoundments in a manner that is protective of human health and the environment. This coal ash storage process has

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3 In preparing this petition, Duke Energy relied on records reasonably available to it. Duke Energy reserves the right to supplement or amend this petition should new or different information become available.
been implemented by utilities at hundreds of impoundments nationally and is heavily regulated under federal law and the laws of many states.

**The Coal Ash Management Act**

8. In 2014, the General Assembly enacted CAMA to address “the effect of the operation of coal ash lagoons on the ground and surface waters in North Carolina.” *Cape Fear River Watch v. N.C. Envtl. Mgmt. Comm’n*, 368 N.C. 92, 100 (2015). CAMA mandates a specific administrative process that addresses any impact on groundwater and surface water, determines the allowable methods of ash basin closure based on a risk-classification system, and ensures that the ultimate method of closure implemented meets certain statutory requirements. N.C. Gen. Stat. §§ 130A-309.211 (groundwater assessment and corrective action), -309.213 (prioritization for risk ranking), and -309.214 (closure). DEQ is required to adhere to the CAMA process. It is intended to ensure that DEQ’s decisions are premised upon proper consideration of complete scientific and other relevant information, after notice and opportunity for input by an edified public. *Id.*

9. CAMA does not require the excavation of ash from the impoundment at issue here and, to the contrary, explicitly contemplates closure in place as a potentially safe and appropriate closure method. In fact, both CAMA and federal law allow Duke Energy to close certain ash basins by draining the water from the impoundments and safely closing them in place, with at least 30 years of long-term monitoring to ensure the protection of groundwater. *See, e.g.*, N.C. Gen. Stat. § 130A-309.214; 40 C.F.R. § 257.102. The United States Environmental Protection
Agency ("EPA") has acknowledged that most coal ash facilities likely will not be closed through removal “given the expense and difficulty of such an operation” and that closure in place and closure by removal “can be equally protective, provided they are conducted properly.” 80 Fed. Reg. at 21,302, 21,412 (Apr. 17, 2015).

10. CAMA specifies the procedures for determining the appropriate closure method and provides three optional means by which a low-risk impoundment, such as the impoundment at Allen, could be safely and cost-effectively closed in-place. CAMA allows Duke Energy to submit a proposed closure plan using any closure method as long as the closure plan demonstrates it is protective4 of public health, safety, and welfare; the environment; and natural resources and otherwise complies with CAMA. DEQ’s action in prematurely selecting a closure method, without the benefit of complete information provided in a proposed closure plan, is inconsistent with CAMA’s procedural requirements and violates CAMA.

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4 Whether a proposed closure plan “is protective” under CAMA necessarily requires DEQ to evaluate whether that plan (as well any proposed corrective actions included within that plan) would result in unreasonable risk to “public health, safety, and welfare; the environment, and natural resources.” N.C. Gen. Stat. § 130A-309.214(b). For example, as part of its review of proposed closure plans, DEQ must consider several risk-based factors, including impacts to “potential receptors,” the “future use of the site,” and the “necessity for the implementation of institutional controls” such as “property use restrictions” or “recordation of notices documenting the presence of contamination.” Id. at § 130A-309.214(a)(4). The issue of whether a closure plan is protective is one of sufficiency, not superlative (i.e. Does the plan achieve sufficient protection under all applicable laws, regulations and standards and not whether a more protective plan can be conceived.)"
11. On November 13, 2018, in accordance with N.C. Gen. Stat. § 130A-309.213, DEQ found the impoundment at Allen to be “low risk,” meaning that Allen represented relatively low risks to public health, safety, and welfare; the environment; and natural resources. See Letter from S. Holman (DEQ) to P. Draovitch (Duke Energy) (dated Nov. 13, 2018) (attached as Exhibit C). This determination was for the purpose of closure and remediation and preserved all available closure options for consideration.

12. Under CAMA, Duke Energy is not required to submit its proposed closure plan for a low-risk impoundment, such as the impoundment at Allen, to DEQ until December 31, 2019. N.C. Gen. Stat. § 130A-309.214(a)(3). For Allen, corrective action to restore groundwater under N.C. Gen. Stat. § 130A-309.211(b) will not be completed by December 31, 2019. As a result, any proposed closure plan must “include provisions for completion of activities to restore groundwater in conformance with the requirements of Subchapter L of Chapter 2 of Title 15A of the North Carolina Code,” referred to herein as “the 2L Rules.” Id. at § 130A-309.214(a) (emphasis added).

13. CAMA thus requires that Duke Energy’s proposed groundwater corrective actions at Allen be included in its proposed closure plan and those corrective actions must be considered by DEQ in its evaluation of whether the plan complies “with the ... requirements set forth in subsection (a) of this section,” and whether it is “protective of public health, safety, and welfare; the environment; and natural resources and otherwise compl[y] with the requirements of [CAMA].” Id. at
§ 130A-309.214(b), (c) (emphasis added). Put another way, CAMA requires that Duke Energy have the opportunity to demonstrate that groundwater corrective action plans can address any groundwater concerns with whatever method of closure Duke Energy chooses to use in its closure plans.

14. CAMA also requires that the proposed closure plan must include 35 different categories of highly technical information, including among other things:

a. the final results of the hydrogeologic, geologic, and geotechnical investigation of the site;

b. the final results of groundwater modeling at the site;

c. predictions on post-closure groundwater elevations and groundwater flow directions and velocities, including the effects on and from the potential receptors;

d. predictions at the compliance boundary for substances with concentrations determined to be in excess of the 2L Rules;

e. a description of the trend analysis methods used to demonstrate compliance with the 2L standards and requirements for corrective action under the 2L Rules;

f. a description of the plan for post-closure monitoring and care for an impoundment for a minimum of 30 years;

g. a demonstration of the long-term control of all leachate, affected groundwater, and stormwater;

h. a description of anticipated future use of the site and the necessity of institutional controls following closure, including property use restrictions, and requirements for recordation of notices documenting the presence of contamination, if applicable, or historical site use; and

i. projected costs of assessment, corrective action, closure, and post-closure care for each coal combustions residuals surface impoundment.
Id. at § 130A-309.214(a)(4).

15. After receipt of the proposed closure plan and “[p]rior to issuing a decision on a proposed Closure Plan,” CAMA specifies that DEQ must “provide for public participation on the proposed Closure Plan” by (1) making copies of the proposed closure plan available to the public; (2) providing notice and a summary of the proposed closure plan for three weeks in a newspaper having circulation in the county where the site is located; (3) conducting a public meeting within 60 days after receipt of the proposed closure plan; and, (4) allowing for written comments for at least 20 days. N.C. Gen. Stat. § 130A-309.214(b). Public meetings under CAMA cannot be held until after Duke Energy has submitted its proposed closure plan (including the proposed groundwater corrective actions included in each plan), ensuring that the agency and public have complete information and are fully informed about actual conditions at the plant, Duke Energy's proposals for closure, and the proposed corrective actions to achieve compliance with the 2L Rules and CAMA. Id.

16. Once these steps are completed, then (and only then) may DEQ approve or disapprove a closure plan or corrective action plan under CAMA. DEQ may not approve a proposed closure plan unless the plan is “protective of public health, safety, and welfare; the environment; and natural resources and otherwise complies with the requirements” of CAMA. N.C. Gen. Stat. § 130A-309.214(c). DEQ is required to make those determinations based on its evaluation of the proposed groundwater corrective action plan and based on the “plan’s full
implementation”—which requires DEQ to evaluate the efficacy of the design measures and assumptions to see if they meet CAMA’s requirements after they have been completely constructed, fully implemented, and allowed to operate as contemplated until completion of the corrective action, a process often taking years to finish. DEQ must “provide specific findings to support its decision to approve or disapprove a proposed closure plan.” *Id.* “If the Department disapproves a proposed closure plan, the person who submitted the closure plan may seek review as provided in Article 3 of Chapter 150B of the General Statutes.” *Id.* The agency must provide written notice of the “agency action,” and inform “the persons of the right, the procedure, and the time limit to file a contested case petition.” N.C. Gen. Stat. § 150B-23(f); see N.C. Gen. Stat. § 130A-24. DEQ’s actions in selecting a closure methodology without following this process deprive both Duke Energy and the public of these opportunities for public review and comment on the appropriate documents, based on proper and complete information.

17. Pursuant to CAMA, the closure method is approved or disapproved after review of a fulsome proposed closure plan and the proposed groundwater corrective actions included within that plan, all of which is informed by edified public participation and comment. Under CAMA, the closure method cannot be determined in isolation, without consideration of both a complete closure plan and a corrective action plan for any groundwater impacts. CAMA requires that they be considered as a unit. The 2016 CAMA amendment’s addition to N.C. Gen. Stat. § 130A-214(a)(3) of the phrase “at the election of the Department” granted DEQ no
authority or additional power to make an “election” on closure method that otherwise disregarded and failed to comply with the CAMA procedures and standards, effectively replacing it with a different one created by the agency. Such an action was contrary to the wording and intent of the General Assembly in passing and later amending CAMA’s closure provisions.

**Duke Energy’s Compliance with CAMA**

18. Since 2014, Duke Energy has worked collaboratively and cooperatively with DEQ to comply with CAMA’s requirements. Duke Energy has provided all information requested by DEQ on a timely basis and met all applicable CAMA deadlines.

19. In 2015, Duke Energy timely submitted the Groundwater Assessment Report for Allen as required by § 130A-309.211(a)(4). This report and other similar site assessment reports for the low-risk impoundments required thousands of hours of work, drawing upon data gathered by installing approximately over 1,100 new monitoring wells and taking over 15,000 soil and groundwater samples at this and the other plants. In total, Duke Energy has completed 25 rounds of groundwater sampling per site and 13-17 rounds of surface water sampling at each site. Across all of its low-risk impoundments, it has over 750,000 constituent results and has conducted more than 650 hydraulic conductivity tests, 388 groundwater flow and transport simulations, approximately 700 geochemical model simulations, and over 500 ash leaching tests and geochemical sample collections. All of this information has been provided to DEQ.

21. In June 2017, DEQ requested that Duke Energy provide updated Site Assessments and updated Corrective Action Plans for the six remaining plants. DEQ directed that these updated plans include a “range of source control options, including cap-in-place, complete excavation and hybrid(s) that include partial excavation,” as well as an evaluation of any additional remedial actions “including but not limited to grout curtains, slurry walls, pump-and-treat” and any other measures needed to ensure compliance with CAMA and the 2L Rules. Letter from J. Zimmerman (DEQ) to P. Draovitch (Duke Energy) (June 2, 2017) (attached hereto as Exhibit D).

22. The updated Comprehensive Site Assessment for Allen was timely provided to DEQ on January 31, 2018. (Available at 2018 Comprehensive Site Assessment Update)

**DEQ’s New “Strategy” for Evaluating Closure**

23. On October 8, 2018, DEQ sent Duke Energy a letter announcing a “strategy adopted by [DEQ] regarding evaluation of closure” that would delay consideration of corrective action until after DEQ’s “evaluation of closure options.”
Letter from Holman (DEQ) to Draovitch (Duke) (Oct. 8, 2018) (attached hereto as Exhibit E). The “strategy” was not supported by CAMA and, as implemented, has proven to be contrary to CAMA’s unambiguous requirements. CAMA contains no provisions that contemplate such a “strategy,” which is contrary to the wording and intent of the statute. Instead of following CAMA, DEQ established new deadlines—contrary to CAMA—that required the submittal of proposed closure plans on August 1, 2019 and the submittal of corrective action plans on December 1, 2019. The “strategy” contained no explicit or specific notice to Duke Energy or the public that DEQ might issue final closure determinations on April 1, 2019.

24. DEQ’s issuance of final closure determinations on April 1, 2019, was also inconsistent with its statement on January 28, 2019, that “[b]y year’s end, Duke will have to submit final closure proposals for the remaining coal ash impoundments and DEQ will hold public comment periods and public meetings on each of those proposals before decisions on closure options are selected.” CAROLINA PUBLIC PRESS, Meaning of “closure” debated as DEQ hosts sessions on NC coal ash (Jan. 28, 2019) (quoting DEQ spokesperson) (emphasis added).

25. Duke Energy worked diligently in good faith to comply with DEQ’s deadlines for its new strategy, having been given no basis for assuming that DEQ would arbitrarily decide not to follow the process mandated by CAMA. DEQ’s new strategy deprived Duke Energy, the public, and the Agency itself from the benefit of the analysis that would have been provided and made available for review, had DEQ simply followed the CAMA procedures.
26. On November 15, 2018, for example, Duke Energy submitted to DEQ preliminary closure options analysis plans for Allen supported by updated groundwater flow and transporting modeling reports and files. That same day, Duke Energy submitted to DEQ community impact analyses for each plant, including Allen, preliminarily analyzing the net environmental benefits of each closure option.

27. The preliminary closure options for Allen indicated that groundwater response patterns are similar in all three closure options modeled and the Closure-in-Place design simulation indicates compliance with the 2L standard for boron will be achieved faster than the other closure options. Allen Closure Options Analysis Summary Report at 7. It also found that Closure-by-Removal on-site is three times the estimated cost of Closure-in-Place. Id.

28. On February 18, 2019, Duke Energy submitted to DEQ an analysis of air emissions associated with closure at each of the remaining plants. Technical Memorandum, Estimated Air Emissions Associated with Ash Basin Closure Options for the Allen, Belews Creek, Cliffside, Marshall, Mayo and Roxboro Steam Stations (Feb. 11, 2019). These analyses showed that air emissions associated with closure by removal far exceeded air emissions associated with closure by capping-in-place. Id. at Table 1.

29. On January 29, 2019, DEQ hosted a public information session in Belmont, NC for Allen. The notice for this meeting provided:
The strategies discussed in [Duke Energy’s] Closure Options evaluation are representative of the range of possible approaches for basin closure, and do not constitute final closure plans as described in N.C. Gen. Stat. sec. 130A-309.214(a)(4). Final closure plans will be submitted in 2019, as required by law, supported by detailed engineering designs and any necessary updates to groundwater modeling and related analysis.

(attached hereto as Exhibit F) (emphasis added). DEQ also noted that “the predictive [groundwater flow] simulations” provided by Duke Energy “are not intended to represent a detailed closure design,” but “conceptual designs that are subject to change as the closure plans are finalized.” Id. Duke Energy’s “preliminary model report [was] intended to provide basic model development information and simulations of conceptual basin closure designs,” and that a “more detailed report is planned for inclusion in the groundwater corrective action plan ... scheduled for completion in December 2019.” Id. Statements by DEQ clearly implied that Duke Energy would be given the opportunity—and, indeed, have the obligation—to submit final closure plans “as required by law, supported by detailed engineering designs and any necessary updates to groundwater modeling and related analysis.”

30. At no point prior to April 1, 2019, did DEQ notify the public that this public information session was intended to support a final, pre-closure plan and pre-corrective action plan decision by DEQ as to the method of closure that DEQ intended to order.
DEQ's April 1, 2019 Closure Determinations

31. On April 1, 2019, DEQ issued the final closure determination for Allen, ordering that the impoundment at the site must be closed by removal. DEQ did so without notice to Duke Energy, without notice to the public, and without the required benefit of proposed closure plans and the proposed corrective actions included in those plans. DEQ based its selection and determination on its conclusion that “removing the coal ash … is more protective than leaving the material in place.” (Ex. A. at 11)

32. In making this determination for Allen, DEQ admitted that it did not consider any corrective action. (Ex. A at 11) DEQ also did not compare the groundwater modeling for cap-in-place or hybrid closure versus excavation. For Allen, the groundwater sampling data and modeling showed that groundwater standard compliance would be achieved faster through closure in place, rather than through the other closure options. Prelim. Updated Groundwater Flow and Transport Modeling Report at 49.

33. Nevertheless, DEQ ordered that Duke Energy’s “Closure Plan[s] must conform to this election by DEQ,” and required Duke Energy to submit those plans by August 1, 2019.
GROUND FOR CHALLENGE

34. Duke Energy challenges DEQ’s April 1, 2019 closure determination for Allen on the following non-exclusive grounds set forth below.⁵

35. **DEQ Failed to Follow Proper Procedures.⁶** DEQ failed to follow proper procedures under CAMA by determining closure (1) before its receipt and consideration of a proposed closure plan and compliance with the statute’s public participation requirements; (2) without receiving or considering proposed corrective action measures and; (3) without consideration of public comment on that plan. Under CAMA, these steps must occur before DEQ is authorized to make final closure determinations. N.C. Gen. Stat. § 130A-309.214.

36. DEQ also violated CAMA by determining closure without consideration of proposed corrective action measures. As noted, Duke Energy’s proposed closure plan must include corrective action measures that “shall” be considered by DEQ in its evaluation of whether the proposed closure plans comply

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⁵ Duke Energy reserves the right to seek independent adjudication of all federal questions, including but not limited to any federal claims for taking of property and due process violations, for adjudication before a federal district court. See England v. Louisiana State Bd. of Medical Examiners, 375 U.S. 411, 419-22 (1964). Likewise, Duke Energy reserves the right to assert additional claims in any appeal of this matter to North Carolina Superior Court, including but not limited to claims based on the U.S. and North Carolina Constitutions and violations of Duke Energy’s procedural and due process rights under North Carolina law.

⁶ These headings are included to be descriptive, but are not restrictive, in that errors described under one heading could likely also be added under one or more of the headings in this petition.
“with the . . . requirements set forth in subsection (a) of this section,” and whether they are “protective of public health, safety, and welfare; the environment; and natural resources and otherwise compl[y] with the requirements of [CAMA].” Id. at § 130A-309.214(b), (c) (emphasis added). As a result, under CAMA, proposed corrective actions are included in the proposed closure plan and must be submitted to and considered by DEQ in its evaluation of that plan. Id. at § 130A-309.214(a), (b). DEQ’s closure determination for “low-risk” impoundments must be based on an evaluation of the efficacy of the proposed closure plan and corrective action plan, based “upon the plan’s full implementation.” This necessarily entails that DEQ must consider modeling and other information that CAMA contemplates before determining a closure method.

37. **DEQ Applied the Wrong Standards.** DEQ’s closure determination resulted from a conclusion by DEQ that excavation would be “more protective than leaving the material in place.” (Ex. A at 1) (emphasis added). Here, DEQ acted both arbitrarily and applied the wrong standard. DEQ’s authority to evaluate a proposed closure plan under CAMA is limited to an evaluation of whether that plan “is protective of public health, safety, and welfare; the environment; and natural resources and otherwise complies with the requirements of [CAMA],” N.C. Gen. Stat. § 130A-309.214(b) (emphasis added). See also supra note 4. CAMA does not authorize DEQ to select a closure methodology based on which closure option it believes is most protective; rather, DEQ’s authority is limited to determining whether the proposed closure plan submitted by Duke Energy is protective. The
standard is one of sufficiency. It is not an exercise in divining the most protective plan imaginable. Because DEQ used the wrong procedure and then applied the wrong standard, its April 1, 2019 determination must be vacated.

38. DEQ also applied the wrong standards by inappropriately conflating closure with North Carolina's deliberate corrective action process. DEQ did this by mandating that closure by removal is essentially the corrective action process for impoundments with contaminated groundwater and ignoring groundwater modeling that showed otherwise. To the contrary, CAMA intends that any groundwater contamination that remains after closure in place be addressed through CAMA's corrective action requirements, applied in specific contemplation of the closure methods used, and based on specific statutorily required data regarding site geology, stratigraphy, and hydrogeology; hydraulic conductivity; geotechnical properties; contaminant chemistry; and groundwater modeling of the site. See, e.g., N.C. Gen. Stat. § 130A-309.214(a)(4)c. and -309.214(a)(4)d.

39. **DEQ Failed to Act as Required by Law.** DEQ explicitly refused to consider cost in connection with its closure determination and final agency action.
with respect to method of closure. CAMA requires that a proposed closure plan include the “[p]rojected costs of assessment, corrective action, closure, and post-closure care for each coal combustion residuals surface impoundment,” N.C. Gen. Stat. § 130A-309.214, confirming that such costs must be considered by DEQ. Furthermore, in evaluating a proposed closure plan, DEQ is required to consider whether the plan is “protective of public … welfare,” a term that plainly includes cost. Cost is a relevant consideration under CAMA, and thus DEQ was required to consider it in making its closure determinations. DEQ’s failure to consider costs violated CAMA.

40. **DEQ Acted Erroneously.** DEQ also acted erroneously by (1) failing to consider corrective action in evaluating whether Duke Energy could meet the protection criteria for closure in place; and (2) changing the deadline for submittal of the proposed closure plan.

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7 See, e.g., CHARLOTTE OBSERVER, **NC orders Duke Energy to dig up millions of tons of coal ash at six power plants** (Apr. 1, 2019) (“DEQ spokeswoman Megan Thorpe said cost estimates are beyond the scope of what state law instructs the department to consider in making ash pond closure decisions.”); Blue Ridge Public Radio, **North Carolina Orders Duke Energy to Excavate All Coal Ash** (Apr. 1, 2019) (available at https://www.bpr.org/post/north-carolina-orders- duke-energy-excavate-all-coal-ash#stream/0 (“We did a thorough analysis of the six sites and it wasn’t a decision that was made by other reasons than the science”) (quoting Secretary Regan); CHARLOTTE BUSINESS JOURNAL, **Duke Energy to appeal state’s coal ash order** (April 11, 2019) (“[Secretary] Regan said protection of the environment and public health were the only considerations. DEQ did not consider cost in its decision.”).

8 Likewise, CAMA’s incorporation of the 2L rules, which expressly require consideration of costs, demonstrates DEQ’s error in ignoring the costs of closure.
41. The requirement for a proposed cap-in-place closure plan to avoid “post-closure exceedances of groundwater standards beyond the compliance boundary” is triggered upon “the plan’s full implementation,” which would necessarily include the full and complete implementation to their conclusion of any corrective action measures proposed under that plan. Id. at § 130A-309.214(a)(3)b (emphasis added); see also id. at § 130A-309.214(a) (requiring the “proposed closure plan to include … activities to restore groundwater in conformance with [the 2L Rules]”). In its April 1, 2019 determinations, however, DEQ determined that the criteria in § 130A-309.214(a)(3)b could not be satisfied based upon “the current state of groundwater contamination” and “the results of groundwater modeling submitted by Duke Energy,” which DEQ itself admitted did not include proposed corrective actions. See Ex. A at 11 (“DEQ recognizes that there are no groundwater remediation corrective actions included in the groundwater modeling simulations submitted to DEQ as part of Duke Energy’s closure options analysis documentation.”) (emphasis added). By basing its determinations on current conditions and failing to consider future corrective actions in evaluating whether the closure in place criteria under CAMA (i.e., § 130A-309.214(a)(3)b) could be met, DEQ acted erroneously. The General Assembly was well aware of the likelihood of groundwater contamination around the impoundments, id. § 130A-309.214(a)(3) (“impoundments located in whole or in part beneath the seasonal high groundwater table”), so DEQ’s actions are contrary to the General Assembly’s intent, as well as
its carefully crafted procedures and criteria for proper and safe closure of low-risk impoundments, such as this one.

42. DEQ also acted erroneously by shortening the deadline for submittal of the proposed closure plan from December 31, 2019 to August 1, 2019. CAMA provides no authority to DEQ to make such a change and, in fact, only authorizes DEQ to “extend” deadlines, subject to CAMA’s detailed variance provisions. N.C. Gen. Stat. § 130A-309.215(a). For the same reason, DEQ acted erroneously in requiring Duke Energy to submit “corrective action plans” by December 1, 2019. As noted, CAMA requires that Duke Energy *include* its proposed corrective actions in its proposed closure plan, which is not due under CAMA until December 31, 2019. North Carolina Gen. Stat. § 130A-309.214(a) (“the proposed closure plan *shall* include provisions for completion of activities to restore groundwater in conformance with the [2L Rules]”) (emphasis added). DEQ thus acted erroneously in shortening these deadlines and in requiring closure plans apart from corrective action plans.

43. **DEQ’s Closure Determinations Are Arbitrary and Capricious.** DEQ’s closure determinations are arbitrary and capricious because they lack fair and careful consideration or any course of reasoning and the exercise of judgment and also because the determinations rely on inappropriate and inapplicable factors.

44. The fundamental basis for DEQ’s closure determinations is its opinion that closure by removal is “more protective” than any other closure option. Apart
from the fact that this standard improper (supra at ¶ 37), DEQ’s conclusion is arbitrary and capricious.

45. DEQ fails to include or cite any pertinent evidence to support its conclusion about the relative protectiveness of one method over another, and acted in a fashion whereby it deprived itself of the information needed to make such a determination, assuming it were a relevant one under CAMA.

46. DEQ’s determination that closure by removal is “more protective” was made without any consideration of corrective actions. This violates CAMA, which makes no mention of choosing an option because it “more protective.” To properly evaluate whether a closure plan under CAMA “is protective of public health, safety and welfare; the environment; and natural resources,” DEQ must consider both closure and corrective action. N.C. Gen. Stat. § 130A-309.214(a).

47. DEQ’s determination that closure by removal is “more protective” is also inconsistent with the evidence submitted to DEQ showing that groundwater quality at all sites is predicted to be virtually the same under all closure options, including the removal option chosen. See, e.g., Letter from E. Sullivan (Duke Energy) to E. Mussler (DEQ) (March 21, 2019) (enclosing reports for each site). All options predict some exceedances of 2L standards beyond the compliance boundary, resulting in the need to implement corrective action measures regardless of the closure method.
48. In its April 1, 2019 determination, there is no indication that DEQ considered the extensive studies analyzing the substantial impacts that closure by removal will have on local communities when compared to other options, even though they are clearly relevant to determining whether the closure method “is protective of public health, safety and welfare; the environment; and natural resources.” N.C. Gen. Stat. § 130A-309.214(a). When these concerns were raised by the public, DEQ either dismissed them or failed to respond.

49. DEQ also failed to consider impacts to those who may live near any off-site landfill that receives coal ash. Removal of coal ash to off-site locations has been strongly opposed by many in North Carolina and elsewhere.

50. DEQ also acted arbitrarily and capriciously in implementing CAMA in a manner that made compliance with CAMA impossible. In particular, DEQ’s closure determination requires that Duke Energy close all of its impoundments within the next 10 years. N.C. Gen. Stat. § 130A-309.214(a)(3) (“Low-risk impoundments shall be closed … no later than December 31, 2029.”). As DEQ knows, however, closure by removal at Allen is expected to take over 19 years. Community Impact Analysis of Ash Basin Closure Options at Allen at 12 (Nov. 15, 2018). By implementing CAMA in way that rendered compliance with CAMA impossible, DEQ acted arbitrarily and capriciously. Cf. Fed. Reg. at 21,240 (EPA cannot regulate impoundments in a manner that “compel[s] actions that are physically impossible”).
51. DEQ’s April 1, 2019 determination requiring closure by removal at Allen is also barred by the doctrine of conflict preemption. In particular, Duke Energy cannot meet the 15-year deadline under the federal CCR Rule for closing the impoundment at Allen by removal. 40 C.F.R. § 257.102(f)(1)(ii), (2)(i)-(ii). Rather, as Duke Energy has explained but DEQ apparently ignored, closure by removal at Allen is projected to take over 19 years. Nevertheless, that is precisely what DEQ ordered, rendering compliance with its April 1 determination and the CCR Rule physically impossible. DEQ’s April 1 determination is thus barred by the doctrine of conflict preemption. See, e.g., Mutual Pharm. Co., Inc. v. Bartlett, 570 U.S. 472, 480 (2013) (“Conflict preemption occurs when it is impossible for a private party to comply with both state and federal requirements.”) (citations and quotations omitted).

52. DEQ’s determination that the impoundments at Allen must be closed by removal was also arbitrary and capricious to the extent it was based on concerns that portions of the ash ponds may sit below the water table. See, e.g., Ex. A at 6-7. In particular, CAMA specifically authorizes closure in place when an ash pond sits below the water table. Under N.C. Gen. Stat. § 130A-309.214(a), impoundments “located in whole or in part beneath the seasonal high groundwater table” may be closed in place if they are “dewatered to the maximum extent practicable” and “include[] design measures to prevent, upon the [proposed closure] plan’s full implementation, post-closure exceedances of groundwater standards beyond the compliance boundary.” N.C. Gen. Stat. 130A-309.214(a)(3). Duke Energy
submitted information to DEQ showing that dewatering and corrective action would meet CAMA’s protectiveness standards, even when part of the impoundment may sit below the water table. Under CAMA, DEQ must consider this information before making a decision on closure. N.C. Gen. Stat. 130A-309.214(a)(3), (4). DEQ’s decision to disregard the information provided by Duke Energy and those mandated procedures, and find that no impoundment that sits partially below the water table could be closed in place under CAMA without any consideration of dewatering or corrective action, was arbitrary and capricious.

53. DEQ also improperly relies on the fact that after cap-in-place or hybrid closure the “groundwater plume still extends beyond the compliance boundary above the 2L groundwater standard and the area of the plume requiring remediation is immense.” (Ex. A at 11) Such reliance is misplaced because the groundwater models provided by Duke Energy to DEQ unambiguously show that the same exceedances remain after closure by removal and DEQ is required to evaluate the sufficiency of groundwater corrective action “upon the plan’s full implementation.” Thus, DEQ’s reliance on this fact as a basis for its decision is therefore erroneous as well as arbitrary and capricious.

54. Indeed, “[t]he Final Cover (Cap-in-place or Closure-in-place) design simulation indicates compliance with 2L standard for boron will be achieved faster than other options, followed by the Hybrid design and then Excavation.”
55. These and many other errors (which Duke Energy will establish during the hearing) further demonstrate the arbitrary and capricious nature of DEQ’s April 1, 2019 closure determinations.

56. DEQ’s April 1, 2019 determinations are also arbitrary and capricious to the extent they are based on flawed determinations regarding compliance boundaries and background concentrations.\(^9\)

57. On August 25, 2017, DEQ issued a determination that the Allen Inactive Ash Basin does not have compliance boundaries under the 2L Rules. As grounds for this determination, DEQ determined that (1) compliance boundaries are only “associated with waste disposal areas that have an active, individual permit”; (2) compliance boundaries “cease to exist” when any permits at these facilities “expire and there is no permit application”; and (3) an impoundment is “not eligible to receive a compliance boundary” if the “impoundment was retired or became

\(^9\) Duke Energy’s challenge to these decisions are timely because DEQ’s April 1, 2019 closure determinations relies on these decisions, depriving Duke Energy “of property” and “substantially prejudice[ing]” Duke Energy’s rights. N.C. Gen. Stat. § 150B-23(a). Even if those decisions may have been appealable in isolation, their application in DEQ’s closure determinations creates new prejudice and a right to appeal. In any event, DEQ’s original compliance boundary and background determinations did not include the required information in N.C. Gen. Stat. § 150B-23(f). As a result, the time limitations for appealing the determinations has not started to run. See, e.g., Jordan v. N.C. Dep’t of Transp., 140 N.C. App. 771, 774 (2000) (“The 30-day limitation period ... does not begin to run until notice is provided in accordance with the[] requirements [of N.C. Gen. Stat. § 150B-23(f)].”), disc. review denied, 353 N.C. 376 (2001); Early v. County of Durham Soc. Servs., 172 N.C. App. 344, 356 (2005) (affirming ALJ’s refusal to dismiss on timeliness grounds where agency action failed to include information regarding “the right, the procedure, and the time limit to file a contested case petition”).
inactive” before the facility’s receipt of its initial wastewater permit. DEQ is mistaken on all counts.

58. Compliance boundaries are governed under 15A NCAC 02L .0107 of the 2L Rules. Under those provisions, the compliance boundary applies to “disposal systems” that have been permitted by DEQ. 15A NCAC 02L .0107. For “disposal systems” permitted before December 30, 1983, for example, “the compliance boundary is established at a horizontal distance of 500 feet from the waste boundary or at the property boundary, whichever is closer to the source.” 15A NCAC 02L .0107(a). Here, there is no dispute that the facilities at issue were permitted before December 30, 1983. As a result, the compliance boundaries were “established” at these facilities at the time they were originally permitted and continue in effect thereafter without regard to whether that disposal system remains active or continues to be permitted.

59. In claiming that these impoundments no longer have compliance boundaries, DEQ misreads the 2L Rules. A compliance boundary “is established” for a “disposal system” that was “permitted” before December 30, 1983,” without regard to whether that disposal system remains active or continues to be permitted. 15A NCAC 02L .0107(a) (emphasis added). This interpretation is consistent with the definition of “disposal system,” which includes “any plant [or] lagoon ... installed for the purpose of treating ... or disposing of waste.” N.C. Gen. Stat. § 143-213(10), (17) (emphasis added). By using the word “installed” in the definition (as opposed to “used,” for example), compliance boundaries clearly apply to “disposal systems” that
are no longer active or no longer permitted. In particular, so long as the “plant” or
“lagoon” was originally “installed” for purposes of treating or disposing waste and
was part of the facility that was originally permitted (as is the case here), it is a
“disposal system” that has an “established” compliance boundary under the 2L
Rules. The Allen Inactive Ash Basin therefore has compliance boundaries. To
the extent the Closure Determination relied upon DEQ’s erroneous conclusion that
the Allen ash basin had no compliance boundaries, the Closure Determination is
was in error.

60. With respect to its determinations regarding background
concentrations, Duke Energy understands, upon information and belief, that DEQ’s
methodology would result in the establishment of artificially low background
concentrations. Through the introduction of expert testimony and other evidence,
Duke Energy will show that DEQ’s methodology was flawed and that many of its
background concentrations are arbitrary and capricious. To the extent the closure
determination relied upon incorrect background determinations to determine the
extent of groundwater impacts, the closure determination was made in error.

10 Until DEQ’s announced its new position in August 2017, this reading of the
the 2L Rules was consistent with DEQ’s. As according to one DEQ employee with
permitting responsibilities, the 2L Rules do not distinguish between “active” and
“inactive” disposal sites when determining a compliance boundary. Duke Energy’s
reading is also consistent with the General Assembly’s 2013 amendments to N.C.
Gen. Stat. § 143-215.1, which confirmed that “a compliance boundary ... may be
established by rule” as opposed to only by permit. See 2014 N.C. Sess. Law 122 §
12.(a) (amending N.C. Gen. Stat. § 143-215.1(i)). As DEQ has explained, the
compliance boundary is “established by virtue of the fact that a permit is issued and
there’s a rule establishing what that compliance boundary is.”
CONCLUSION

61. By failing to follow the procedures mandated by CAMA, DEQ deprived Duke Energy of any opportunity to demonstrate to DEQ (or a reviewing court, if necessary) that its proposed closure plans and the corrective actions included in those plans fully satisfy CAMA’s protectiveness standards.

62. DEQ’s final agency action aggrieves and substantially prejudices Duke Energy and unlawfully deprives it of property. DEQ failed to follow proper procedures, violated Duke Energy’s due process rights, including due process rights guaranteed by the North Carolina Constitution and United States Constitution, exceeded its authority or jurisdiction, acted erroneously including, without limitation, by applying erroneous standards, failed to act as required by law, and acted arbitrarily and capriciously. As a result, DEQ’s April 1, 2019 closure determinations must be vacated in its entirety. See also N.C. Gen. Stat. § 7A-750 (OAH was “established to ensure that administrative decisions are made in a fair and impartial manner to protect the due process rights of citizens who challenge administrative action . . .”).

63. Additionally, certain determinations within DEQ’s final agency action including, without limitation, both the ordered closure method and required deadlines do not appropriately contemplate, and are preempted by, applicable federal law. As such, with respect to such determinations, DEQ has exceeded its authority and jurisdiction.
64. Based on the foregoing, Duke Energy requests a contested case hearing on this Petition because (a) the actions challenged herein violate statutory and constitutional standards, and (b) Duke Energy has been aggrieved by the actions referenced above.

65. As a result of the foregoing, DEQ’s April 1, 2019 final agency action must be vacated, and DEQ should be ordered to comply with the procedures set out in CAMA and with the laws of North Carolina and the United States in arriving at a closure determination, closure plan, and corrective action plan for Allen.

66. Duke Energy expressly reserves the right in any hearing to rely on facts, issues, grounds, arguments and theories not raised at this time.
Respectfully submitted this 26th day of April 2019.

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Counsel for Petitioners
CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing PETITION FOR CONTESTED CASE HEARING was served on the following by U.S. Mail, postage pre-paid:

N.C. Department of Environmental Quality Administration
1601 Mail Service Center
Raleigh, NC 27699

I further certify that a copy of the foregoing PETITION FOR CONTESTED CASE HEARING was served on the following by hand delivery:

N.C Department of Environmental Quality
217 West Jones Street
Raleigh, NC 27603

This the 26th day of April, 2019.

/s/ Christopher W. Jones
Christopher W. Jones
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