



NCDEQ Coal Ash Impoundment Closure Plan Decision

Allen Steam Station

Attachment 1: Hearing Officer's Report and Public Comments

October 27, 2020



Hearing Officer's Report – Proposed Closure Plan for the Coal Ash Impoundment at Allen Steam Station

Date: October 27, 2020

Facility: Allen Steam Station
County: Gaston
Owner & Operator: Duke Energy Carolinas, LLC

Purpose

The purpose of this document is to provide an administrative record of the public input process on the proposed Closure Plan for the subject facility as required by G.S. 130A-309.214(b) of Session Law 2016-95 (referred to as the Coal Ash Management Act or CAMA).

Regulatory Background Summary

CAMA required that the North Carolina Department of Environmental Quality (NCDEQ) develop proposed classifications for all coal combustion residuals surface impoundments, including active and retired sites, for the purpose of closure and remediation based on these sites' risks to public health and the environment.

On November 13, 2018, NCDEQ issued a final low-risk classification for the Allen Steam Station based on the determination that Duke Energy met the requirements of G.S. 130A-309.213(d)(1). On April 1, 2019, NCDEQ further determined that Duke Energy was required to close the coal combustion residuals (CCR) impoundments at the Allen Steam Station via excavation per G.S. 130A-309.214(a)(3)(a). On April 26, 2019, Duke Energy appealed the determination that the impoundments must be excavated.

On December 31, 2019, NCDEQ received the proposed Closure Plan for the Allen Steam Station per the CAMA deadline. Duke Energy submitted an amendment to the Allen closure plan on January 30, 2020. Staff from the NCDEQ's Division of Waste Management; Division of Energy, Mineral, and Land Resources; and Division of Water Resources have reviewed the Closure Plan for completeness and the requirements of G.S. 130A-309.214(a)(4). Duke Energy submitted an updated Closure Plan to reflect the three proposed landfills on August 5, 2020. NCDEQ also received the proposed Corrective Action Plan for groundwater remediation for the Allen Steam Station. The Division of Water Resources staff also reviewed the Corrective Action Plan as some of its components are also components of the Closure Plan.

On December 31, 2019, NCDEQ entered into a Settlement Agreement with Duke Energy and the Community Groups represented by the Southern Environmental Law Center regarding the closure of the CCR impoundments at Allen Steam Station. Duke Energy agreed to excavate the coal ash in the impoundments at Allen. The Settlement Agreement added further requirements to the closure efforts and corrective action activities at the site and established some milestone dates for reporting, corrective action, and closure goals.

On January 31, 2020, the parties to the Settlement Agreement filed a proposed Consent Order with the Wake County Superior Court. The Consent Order was subsequently signed by Wake County Superior Court Judge Paul Ridgeway on February 5, 2020.

Site History/Background Summary

The Allen Steam Station is owned and operated by Duke Energy Carolinas, LLC and is located in Gaston County along the west shore of Lake Wylie (Catawba River), near the town of Belmont, North Carolina. Allen Steam Station began operations in 1957 as a coal-fired electric generating station and is currently in active operation. The Retired Ash Basin (RAB) was operational from 1957 until 1973 when it reached capacity and was retired. The RAB is estimated to contain approximately 8.88 million tons of CCR (or an estimated 7.59 million cubic yards) that are subject to this Closure Plan. The RAB includes two embankment structures functioning as dams – RAB-North Dike and East Dike (regulated by DEQ as Gasto-016). The Active Ash Basin (AAB) was commissioned in 1973 to divert wet sluiced CCR from the RAB after it was retired and operated as a wet sluiced impoundment until flows were discontinued in February 2019. Based on topographic and bathymetric surveys performed in July 2014 and February 2015, the AAB is estimated to contain approximately 10.48 million tons of CCR (an estimated 8.73 million cubic yards). The AAB includes two embankment structures functioning as dams – AAB-East Dike and AAB-North Dike (regulated by DEQ as Gasto-061). Based on CCR inventory data provided by Duke Energy as of July 31, 2019, the RAB and AAB are estimated to contain a total of approximately 19.36 million tons of CCR (an estimated 16.33 million cubic yards). This approximate total includes all historically sluiced CCR as well as the CCR contained within the RAB Landfill footprint (both above and below the RAB Landfill's bottom liner system). This also includes the unlined Distribution of Residual Solids (DORS) facilities located to the west that were constructed over the RAB.

Closure Plan Summary

Under this plan, all CCR except for a small amount necessary for transmission tower stability will be removed to new lined landfills within the plant property, located partially or totally within the prior footprint of the Basins. Closure activities for the Basins have already begun with the initiation of decanting under the Special Order by Consent effective on April 1, 2018. Upon approval of a closure plan by NCDEQ, additional actions will commence, including finalization of detailed designs, dewatering and removal of interstitial water, contracting and detailed planning for the closure work, development of the new lined landfills in conjunction with excavation of the CCR, final grading of the site and landfills, and development of stormwater features and vegetative covers.

Originally the Active Ash and Retired Ash basins' CCR was to be removed to two new lined landfills located within plant property – the AAB Landfill (larger) and the Initial Landfill (smaller). Duke Energy informed NCDEQ of the change to construct three onsite landfills, instead of the original two outlined in the amended January 30, 2020 Closure Plan, during a meeting on March 19, 2020 to discuss the details of construction and operation of the onsite landfills. NCDEQ received a conceptual drawing of the three new proposed landfills on March 27, 2020. Duke Energy submitted an updated Closure Plan to reflect the three proposed landfills on August 5, 2020.

The AAB and RAB CCR will be removed to three new lined landfills located within plant property—the Ash Basin Landfill (ABLF), the North Starter Landfill (NSLF), and the South Starter Landfill (SSLF). The ABLF will be located within the prior footprint of the AAB. The ABLF would rise approximately 110 feet above South Point Road, which has an approximate elevation of 690 feet. The smaller NSLF will be located partially within the prior footprint of the RAB, rising approximately 50 feet above South Point Road. The smaller SSLF will be located partially within the prior footprint of the AAB, rising approximately 40 feet above South Point Road. For reference, the existing RAB Landfill (Phase 1) is currently at an elevation of 680 feet and is permitted to a maximum elevation of 816 feet at the final buildout of Phase 2, or approximately 126 feet above South Point Road.

Post-excavation, the AAB and RAB sites will restore some of the land's valley shape before the Basins were created. Soil will be graded to restore contours for stormwater flows, then planted with native grasses for erosion control. Portions of the existing basin dams will be removed, pursuant to a NCDEQ Dam Safety permit approval, allowing stormwater flows to Lake Wylie.

Public Input Summary

In accordance with the requirements of G.S. 130A-309.214(b)(1), the Closure Plan was made available to the public for review and input on January 23, 2020. A copy of the proposed closure plan was available to be reviewed at the Gaston County Health Department, Gaston County Public Library, and at the DEQ Mooresville Regional Office. The Closure Plan was also made available online at:

<https://deq.nc.gov/news/key-issues/coal-ash-excavation/allen-steam-station-coal-ash-closure-plan>

Per G.S. 130A-309.214(b)(2)(a), a notice and summary of the proposed Closure Plan was published in the Gaston Gazette newspaper for three consecutive weeks beginning on January 28, 2020. Copies of the Notice were provided as required by G.S. 130A-309.214(b)(2)(b) and (c). Per G.S. 130A-309.214(b)(4), the 60-day comment period began on January 28, 2020 and ended on March 19, 2020. Comments could be sent to NCDEQ via email, mail, and oral and/or written comments submitted during the public hearing.

Public Hearing and Oral Comments Summary

In accordance with the requirements of G.S. 130A-309.214(b)(3), a Public Hearing was held on February 27, 2020 at 6:00 pm in the Stuart Cramer High School located at 101 Lakewood Road, Belmont, North Carolina. The purpose of the public hearing was to allow the public to comment on the Allen Steam Station Closure Plan. Interested parties were able to submit oral or written statements regarding the proposed Closure Plan. Persons wishing to speak registered at the hearing. Speaking times were allotted per speaker as time allowed.

Approximately 45 people attended the public hearing, including 10 staff members from the Division of Waste Management; Division of Energy, Mineral, and Land Resources; Division of Water Resources, and Division of Air Quality, as well as Public Information Officers and the Hearing Officer. A total of 35 individuals signed the attendance sign-in sheets at the hearing. The Hearing Officer provided opening comments, and Larry Frost of the Division of Waste

Management gave a brief overview of the Closure Plan. Three individuals registered in advance of the hearing to make comments and one additional individual made comments after the three that registered spoke. Speakers had three minutes for initial presentations and additional time was provided after everyone who registered to speak was finished.

Response to Comments

NCDEQ received 6 comments via email, written, and/or verbal communication. The main concerns were worker safety, removal of all saturated ash, and proper oversight by NCDEQ over the closure process. A discussion of the substantive concerns raised in these comments follows. All written comments are included as Attachment 2.

Comment: The Southern Environmental Law Center (“SELC”) submitted a March 17, 2020 comment letter in support of the Allen site closure plan. In that letter, SELC makes the following two requests:

A. “Each of Duke Energy’s coal ash sites contain millions of tons that are saturated in groundwater, and DEQ must ensure Duke Energy removes all of this ash. Appendix E of the closure plan states that if Duke encounters ash saturated in groundwater, “[a] plan will be submitted to NC DEQ by Duke Energy pertaining to the removal of ash if these conditions or other restricting factors occur.” Closure Plan, Appendix E, Section 4.3. Because we already know that millions of tons of ash are saturated in groundwater at every one of these sites, DEQ should require Duke Energy to submit its plan for fully removing saturated ash now, to ensure the plan is adequate and all saturated ash will be removed.”

Response: NCDEQ has determined that the excavation of all coal ash at the site, including coal ash that may be later discovered in saturated groundwater, must be excavated and removed to an onsite landfill or for utilization in approved beneficial reuse activities. It is not known at this time to what extent, if any, fully saturated ash will be present at the site during excavation. Should this condition occur, Duke will need to submit an additional coal ash removal plan to NCDEQ.

B. “In addition, DEQ must continue to protect North Carolinians by ensuring the safety of the workers who are cleaning up the coal ash. DEQ should require Duke Energy to protect its workers and contractors by creating a safe work environment with protective equipment.”

Response: Duke Energy will be required to meet all applicable legal statutes and regulations addressing worker safety at Marshall. Generally, the statutory authority to regulate worker safety is vested in state and federal agencies other than NCDEQ.

Comment: One commenter submitted an e-mail acknowledging the plan to “move the coal ash to a lined coal ash pond and monitor it for 30 years,” but disagreed that Duke Energy should only monitor the site for just 30 years. Instead, the commenter stated that Duke should monitor the site forever if they want to take the “low” cost solution, and when the plan “fails” Duke should be required to remove the coal ash from the site. The commenter concluded by stating that Duke must protect the environment and the community forever not just 30-years.

Response: The Coal Ash Management Act (CAMA) requires submission of a plan which includes 30 years minimum of post-closure monitoring. That section CAMA provides for that period to be extended at the end of the 30-year monitoring period if sampling reveals that groundwater contamination levels are increasing, or if otherwise necessary in order to fully protect public health and the environment.

Comment: One commenter from the Catawba River Keeper Foundation indicated he had been working to protect the Catawba River and all who depend upon her from the threat of coal ash. He remarked that the Allen [site] has been a priority due to its proximity to residents. He greatly appreciated the members of the public who came out to hearings like this, and NCDEQ for listening. He acknowledged that there is much work to be done, but he was optimistic and approves the settlement, and over the next 14 years, almost 20 million tons of ash will be moved to lined storage. Finally, he stated that the Catawba River Keeper Foundation will continue to advocate for their water and looks forward to the day when the groundwater remediation is completed, the landfills are closed and the property stabilized.

Response: NCDEQ appreciates comments from concerned individuals from the public and stakeholder groups like the Catawba River Keeper Foundation who support the Department's efforts to close this site. NCDEQ agrees with this comment and has determined that excavation of the CCR impoundment at Allen, followed by placement in an approved onsite landfill or utilization for approved beneficial reuse activities, is the best closure method to protect the environment and surrounding communities.

Comment: Another commenter at the February 2020 hearing, a senior attorney from SELC, stated his organization been working with the Catawba Riverkeeper Foundation and local communities to clean up the unlined coal ash storage at four sites in the Catawba River basin. He expressed his appreciation that a settlement had been reached to be entered as a court order requiring that all the unlined impoundment coal ash at the Allen site be completely excavated and moved to dry lined storage. He thanked community members, stakeholders, and NCDEQ for ordering the excavation of the site and putting together the consent order that will require court supervision and the requirement that the site be excavated. He acknowledged the plan is the largest cleanup, and this site, Allen, is the second largest in the United States.

Response: Again, NCDEQ appreciates comments from concerned individuals from the public and stakeholder groups like SELC who support the Department's efforts to close this site. Further, NCDEQ agrees with this comment and has determined that excavation of the CCR impoundments at Allen, followed by placement in an approved onsite landfill or utilization for approved beneficial reuse activities, is the best closure method to protect the environment and surrounding communities.

Comment: Another commenter at the February 2020 hearing stated that she was there to represent the victims of a cancer cluster. She stated she thought that "Duke Energy is nothing more than a spoiled child, and DEQ are the parents that allowed them to do it; DEQ is in bed with Duke." She stated "we are building an army against DEQ; DEQ has a chance for redemption."

Response: If the commenter is referring to coal ash structural fills, this is outside the scope of the closure plans for the coal ash impoundments. By securing a comprehensive resolution of all Duke Energy coal ash sites, NCDEQ has successfully carried out its mission to protect the people of North Carolina and the environment. NCDEQ achieved this result by maintaining its independence from Duke Energy. The Consent Order is enforceable not only by NCDEQ, but also by Wake County Superior Court.

Comment: Another commenter at the February 2020 hearing stated she had "a few concerns." She stated that at a meeting last year "the coal ash national report" was released and there was no way "a decision NOT to remove the ash could be made." The commenter supported NCDEQ's announcement. She stated she had concerns of how something so large like the 110-foot height of the landfill gets monitored, meaning "underneath, middle and top." She also said she would

like a tour of the Allen site without any cameras or reporters to help her better understand how such a large mound is going to be monitored and managed.

Response: NCDEQ is confident it can employ its technical resources in a manner to provide oversight and monitor compliance of the landfill at its present planned height. A Duke Energy representative in attendance at the public hearing indicated he would arrange a site visit with the commenter.

Hearing Officer Recommendations

Based on my review of the record and in consultation with subject matter experts in NCDEQ, I recommend approval of the submitted Closure Plan for the coal ash impoundment located at Duke Energy Carolina's Allen Steam Station located in Gaston County. I conclude that the Closure Plan is protective of public health, safety and welfare, the environment and natural resources and otherwise complies with the requirements of CAMA.



Patrick Ballard, Hearing Officer

10/28/2020

Date