



NORTH CAROLINA
Environmental Quality

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Director

February 7, 2020

FACT SHEET

FACILITY: Duke Energy, Asheville Steam Electric Plant, Industrial Landfill

COUNTY: Buncombe **CITY:** Asheville, North Carolina

FID No.: 1387693

OWNER & OPERATOR: Duke Energy Progress, LLC

DESCRIPTION: On June 17, 2019, Duke Energy Progress, LLC (Duke) submitted an application to construct and operate a new industrial landfill at its Asheville Steam Electric Plant (Facility), which is an electrical power generating facility, located at 200 CP&L Drive in Asheville, Buncombe County, North Carolina. The Facility has a total area of approximately 4,326 acres. The proposed industrial landfill will receive industrial non-hazardous solid wastes from Duke Energy's Asheville Steam Electric Plant, including: coal combustion residuals (CCR) (fly and bottom ash), pyrites and coal mill rejects, boiler slag, waste water treatment sludge, petroleum contaminated soils and other waste soils, small quantities of co-mingled vegetation and CCR, waste limestone, abrasive blast material, inert debris from CCR unit decommissioning activities, vacuum truck waste, and soil that contains any of the above material or is used as cover. Duke's permit application is for one phase of construction, which when finished, will cover approximately 12.5 acres and have a total disposal capacity of approximately 1.1 million cubic yards. Duke's permit application also includes operation of phase one, once constructed and approved by the Division of Waste Management (Division). The operational life of the proposed landfill is estimated to be four years after which time the landfill will be closed and capped. The Division has determined that Duke's application satisfies the siting, design, application and operations requirements of North Carolina Administrative Code 15A NCAC 13B .0503 through .0505.

PERMIT STRUCTURE: The Draft Permit is divided into two parts, a Permit Approval to Construct and a Permit Approval to Operate. The Draft Permit includes a list of approved documents and specific conditions for the construction, operation, monitoring, and closure of the proposed landfill. The Permit Approval to Operate is for life-of-site, which is defined as the time period between the initial receipt of solid waste at the facility and when the facility reaches its final permitted elevations and shall not exceed 60 years.

PUBLIC COMMENT PERIOD: In accordance with the requirements of NCGS 130A-309.203, Coal Ash Management Act of 2014, permit documents containing the applicable design and operating conditions were made available to the public for review and input into the final permit determination. The 60-day comment period began on November 11, 2019 and ended on January 10, 2020, at 5:00 pm. Comments were sent to the Division. Any comments received within the 60-day period were considered while making the final permit determination.



The application and draft permit were available for review by appointment between 9:00 a.m. and 4:00 p.m., Monday through Friday, at the Department of Environment Quality (DEQ), 217 West Jones Street, Raleigh, NC 27603. The administrative record including the application, fact sheet, and draft permit were made available online at <https://deq.nc.gov/about/divisions/waste-management/solid-waste-section#duke-energy-asheville-steam-electric-plant-draft-permit-1119-indus-2020> and <https://deq.nc.gov/news/events/duke-energy-asheville-steam-electric-plant-draft-permit-1119-indus-2020>

PUBLIC HEARING: In accordance with the Coal Ash Management Act, the Division scheduled and held a public hearing on the Draft Permit on December 19, 2019 at 6:00 pm at the Asheville-Buncombe Technical Community College (Conference Room B) located at 340 Victoria Road, Asheville, NC. Interested parties were able to submit oral or written statements and data regarding the Draft Permit. Persons wishing to speak registered at the hearing. Speaking times were allotted per speaker as time allowed. Interested parties were encouraged to submit written statements and data concerning the proposed facility permit to the Division.

ENVIRONMENTAL JUSTICE PROCESS: In 2019, an Environmental Justice (EJ) Snapshot was conducted by the Department of Environmental Quality (DEQ) to determine the demographics and socioeconomics of the Facility's surrounding community. The EJ Snapshot included information determined by DEQ, such as race and poverty from the decennial census year, per-capita income and ability to speak English from most current American Community Survey (ACS) census range, the current North Carolina Department of Commerce county tier, and presence of Native American territory. The EJ Snapshot did not include a reconnaissance of the community. Any comments received from the public were considered in making the final permit determination. The Environmental Justice Assessment documents were available online at <https://files.nc.gov/ncdeq/DWM/SW/coal-ash---asheville/Asheville-EJ-Snapshot-final.pdf>.

RESPONSE TO COMMENTS: The Division of Waste Management received three-hundred and thirty-eight (338) comments via email, written, and/or spoken. The main concerns were landfill siting and landfill safety with 136 and 86 comments, respectively. There were 27 comments that included requests for additions or changes to the draft permit. The purpose of the public comment period and public hearing were to accept comment on the draft permit decision. Duke Energy provided the information necessary for siting a coal ash landfill in its application for an industrial landfill, in accordance with applicable North Carolina General Statutes, applicable North Carolina Administrative Code rules and the requirements of the Environmental Protection Agency's rules for the Disposal of Coal Combustion Residuals from Electric Utilities.



Landfill Siting concerns consisted of:

Comments	Responses
The proposed landfill is near a highly populated area	General Statutes and Rules currently applicable to coal ash landfills do not contain siting restriction criteria relevant to population density. Please note NCDEQ requested and received an environmental justice snapshot prior to issuing the draft permit. The results of the environmental justice snapshot indicated no siting concerns. The landfill is sited within the 4,000 acres of the facility property. The location meets the appropriate buffers to property lines and surface waters in the General Statutes that are intended to protect human health.
Within one or two miles of several stores, schools, residential areas and public parks	General Statutes and Rules currently applicable to coal ash landfills do not contain siting restriction criteria relevant to the proximity of coal ash landfills to schools, parks, churches, businesses and recreational areas. The landfill is sited within the 4,000 acres of the facility property. The location meets the appropriate buffers in the general statutes that are intended to protect human health.
Too close to the French Broad River	Duke Energy's site suitability request and permit to construct application demonstrate the appropriate buffers to surface waters. Additionally, monitoring requirements and protective measures required under the General Statutes and groundwater rules and standards are protective of the river and water quality.



Safety concerns consisted of:

Comments	Responses
Can the technology keep toxins from entering the environment?	The required landfill design, monitoring systems, and operation and maintenance plan(s) meet the requirements of the General Statutes and Rules currently in place to protect human health and the environment. The double liner system is designed to prevent toxins from entering the environment and includes an Electronic Leak Location of the secondary liner.
Concerns about leaking	The landfill design presented in Duke Energy's application meets the existing design requirements, established by General Statutes and Rules, for coal ash landfills intended to protect human health and the environment. The double liner system is designed to prevent toxins from entering the environment.
Facility security and longevity	Duke Energy is required by the General Statutes and Rules to provide the State with financial assurance to ensure sufficient funds for closure, post-closure maintenance and monitoring, and any potential corrective action. Financial assurance must be maintained throughout the life of the landfill. While the coal plant is ceasing operation, the investment in the combined cycle units indicates that the facility is part of the utility's long term plan for producing electricity.



Requests for the site consisted of:

Comments	Responses
More than 30 years of maintenance and monitoring, as well as liability	Duke Energy is required by General Statutes and Rules to provide financial assurance for post-closure care for the duration of at least 30 years. However, the post-closure care period can be increased as necessary as approved by the Division to protect human health and the environment.
Increase frequency of monitoring to more than twice a year, and publicly provide electronic data.	The current semi-annual monitoring frequency meets the requirements of the General Statutes and Rules and amply protects public health and the environment. All environmental monitoring will be performed by a 3 rd party and the samples sent to NCDEQ certified labs for analysis. All monitoring reports will be placed in the Division's Laserfiche database that is publicly accessible on the Division's website. Should normal detection monitoring indicate that further testing is necessary, provisions exist to increase the frequency of monitoring.
The Construction Quality Assurance (CQA) Plan should include Electrical Leak Location (ELL) for both primary and secondary liners.	The liner system in this case includes, from bottom to top: compacted soil, a geosynthetic clay liner, a secondary 60-mil HDPE liner and a primary 60-mil HDPE liner. The submitted CQA Plan meets the requirements for installation of industrial landfill liner systems and includes Electronic Leak Location of the secondary liner.
The need for special liner longevity assessment measures.	The proposed landfill liner system materials, construction plan, and CQA plan meet the requirements for liner system installation; therefore, the need for special liner longevity assessment measures are not deemed necessary at this site. For other sites that use new and/or innovative closure cap systems DEQ has determined that special liner longevity assessment measures are appropriate and will be instituted prior to closure. Note: a test pad for the product "Closure-Turf" has been installed at Sutton.



<p>Handling of landfill leachate on site with a new NPDES discharge permit.</p>	<p>Metropolitan Sewage District of Buncombe County has years of experience in collecting and treating coal ash leachate from the Asheville Airport and has the appropriate NPDES permits from the department. NCDEQ requires the landfill to obtain the proper permission from the treatment plant for treatment of leachate prior to approval to operate the landfill.</p>
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NOTIFICATION OF FINAL PERMIT ACTION: On February 7, 2020, the Division of Waste Management issued Solid Waste Permit No. 1119-INDUS-2020, Permit to Construct and Permit to Operate (FID 1360595) for the Duke Energy, Asheville Steam Electric Plant, Industrial Landfill. The Division determined the application did not meet any of the reasons for denial found in the Solid Waste Management Statutes [NCGS 130A-294(h)]. In addition, the proposed operations plan and documentation of the public hearing satisfied the requirements of North Carolina General Statute (NCGS) 130A309.203 Coal Ash Management Act of 2014.

