



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

MEMORANDUM

TO: Edward Mussler
Division of Waste Management,
Solid Waste Section- Permitting Branch

FROM: Lyn Hardison *Lyn*
Division of Environmental Assistance and Customer Service
Permit Assistance & Project Review Coordinator

RE: Follow-Up Comments - Coal Ash Landfills
Asheville, Sutton and Dan River Plants
Buncombe, New Hanover and Rockingham Counties

Date: May 11, 2015

Please find attached comments from NC Wildlife Resources Commission which was based on the information shared during the Scoping meeting held on April 29, 2015. Please forward these recommendations to the applicant for their consideration and keep a copy for your files.

Thank you for your help.

Attachment

Permit No.	Scan Date	DIN
Duke/Sutton	May 21, 2015	24350

RECEIVED
May 11, 2015
Solid Waste Section
Asheville Regional Office



◇ North Carolina Wildlife Resources Commission ◇

Gordon Myers, Executive Director

MEMORANDUM

TO: Lyn Hardison, Environmental Assistance and SEPA Coordinator
NCDENR Division of Environmental Assistance and Customer Services

FROM: Shari L. Bryant, Western Piedmont Coordinator *Shari L. Bryant*
Habitat Conservation

DATE: 8 May 2015

SUBJECT: Scoping for Coal Combustion Residuals Landfills at Asheville, Sutton, and Dan River Plants, Buncombe, New Hanover, and Rockingham Counties, North Carolina.

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) attended a scoping meeting via conference call for the subject project on April 29, 2015. Our comments are provided in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667e), North Carolina Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25), and North Carolina General Statutes (G.S. 113-131 et seq.).

The proposed project includes construction of coal combustion residuals (CCR) landfills at Asheville, Sutton, and Dan River Plants. The proposed landfills will meet requirements detailed in the EPA's rules regarding CCR disposal and the N.C. Coal Ash Management Act of 2014. A landfill will be constructed on each plant's site and will include an engineered liner and cover including geomembrane, leachate collection and removal, groundwater monitoring, and stormwater management. The applicant is required to remove coal ash from the ponds by August 1, 2019.

The Asheville Plant site drains to the French Broad River. There are records for the federal species of concern and state significantly rare blotched chub (*Erimystax insignis*), the state endangered slippershell mussel (*Alasmidonta viridis*), the state threatened creeper (*Strophitus undulatus*), and the state significantly rare French Broad River crayfish (*Cambarus reburus*) in French Broad River. The federal threatened (S/A) and state threatened bog turtle (*Glyptemys muhlenbergii*) has been documented in a wetland associated with the French Broad River downstream of the site. In addition, priority amphibian species have been documented in a wetland complex within the French Broad River floodplain on the site.

The Sutton Plant site drains to the Cape Fear River and Northeast Cape Fear River. There are records for the federal and state endangered shortnose sturgeon (*Acipenser brevirostrum*) and the state special concern Atlantic sturgeon (*Acipenser oxyrinchus*) in the Cape Fear River watershed. There are records for the federal and state endangered red-cockaded woodpecker (*Picoides borealis*), the federal threatened (S/A) and state threatened American alligator (*Alligator mississippiensis*), the federal species

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of concern and state special concern Rafinesque's big-eared bat (*Corynorhinus rafinesquii macrotis*) and Southern hognose snake (*Heterodon simus*), and the state significantly rare Eastern fox squirrel (*Sciurus niger*), coachwhip (*Masticophis flagellum*), and chicken turtle (*Deirochelys reticularia*) near the site. The Natural Heritage Natural Areas – 421 Sand Ridge, Northeast Cape Fear River Floodplain, and Brunswick River/Cape Fear River Marshes – are located within or adjacent to the site. Lake Sutton is designated as NCWRC Game Lands.

The Dan River Plant site drains to the Dan River in the Roanoke River basin. There are records for the federal and state endangered Roanoke logperch (*Percina rex*), the federal species of concern and state endangered green floater (*Lasmigona subviridis*), the federal species of concern and state significantly rare Roanoke bass (*Ambloplites cavifrons*), the state threatened bigeye jumprock (*Moxostoma ariommum*), and the state significantly rare Roanoke hogsucker (*Hypentelium roanokense*) and quillback (*Carpoides cyprinus*) in the Dan River. The Natural Heritage Natural Area – ROA/Dan River Aquatic Habitat – is located adjacent to the site.

The U.S. Fish and Wildlife Service recently listed the Northern long-eared bat (*Myotis septentrionalis*) as threatened under the Endangered Species Act. The Northern long-eared bat may be present on or within the vicinity of the sites. Therefore, the project may impact this species and consultation with the U.S. Fish and Wildlife Service may be required. For more information, please see <http://www.fws.gov/midwest/endangered/mammals/nleb/Interim4dRuleKeyNLEB.html> or contact the U.S. Fish and Wildlife Service at (828) 258-3939 for the Asheville Plant and (919) 856-4520 for the Dan River and Sutton Plants to ensure that any issues related to this species and other federally listed species are addressed.

The Environmental Assessment (EA) should include a detailed alternatives analysis and a discussion of the environmental impacts from construction, operation, and maintenance of the proposed landfills and the potential environmental impacts of the other alternatives evaluated. More specifically, we request the following information is included in the EA:

- Figures showing the proposed landfill's footprint in relation to floodplains, streams, or wetlands located within or adjacent to the site. Measures to avoid, minimize or mitigate impacts to these natural resources should be discussed. Based on information provided in the scoping meeting, landfill construction is not anticipated to directly impact any floodplains, streams, or wetlands except at the Sutton Plant where 6.57 acres of isolated wetlands will be impacted. If any wetlands will be impacted at the Asheville Plant, then a survey may be needed for bog turtle and other priority wildlife species.

Generally, we recommend maintaining a minimum 100-foot undisturbed native, forested buffer along perennial streams, and a minimum 50-foot buffer along intermittent streams and wetlands (NCWRC 2002). For the Dan River Plant, we recommend maintaining a minimum 200-foot undisturbed native, forested buffer along perennial streams, and a minimum 100-foot buffer along intermittent streams and wetlands due to the presence of Roanoke logperch in the Dan River.

- If the existing coal ash ponds will be drained prior to removing the ash, then the following information should be included:
 - How the ash ponds will be drained.
 - What time of year the ash ponds will be drained, if known.
 - Any proposed water quality monitoring that will be performed on the ash pond water as well as downstream where the water is discharged.

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- Details regarding the design of the landfill (e.g., liners) including leachate and stormwater management, and the expected life span of each of the facilities.
- According to information provided in the scoping meeting, groundwater monitoring will be performed. We recommend downstream water quality monitoring as well. The N.C. Coal Ash Management Act of 2014 indicates constituents in Appendix I will be measured. In addition to monitoring for the constituents in Appendix I (i.e., Appendix I to 40 C.F.R. Part 258), aluminum, boron and mercury should be added since these are not included in Appendix I and have the potential to adversely impact aquatic and terrestrial wildlife resources (RTI 2000).
- Details regarding post-closure care for each of the landfills. The N.C. Coal Ash Management Act of 2014 indicates post-closure care shall be conducted for 30 years, but may be increased or decreased. We support post-closure care of at least 30 years. Also, we recommend downstream water quality monitoring for constituents (i.e., Appendix I and aluminum, boron, and mercury) should continue during post-closure; however, at a minimum, monitoring of downstream water quality should be performed if constituents (i.e., Appendix I and aluminum, boron and mercury) are found during groundwater monitoring.
- Describe any measures to minimize aerial deposition of coal ash into surface waters and terrestrial landscapes for landfill disposal or for other alternatives (e.g., rail haul to off-site to existing landfills). If chemical dust suppressants are used, the product should be non-toxic to plants and animals, and should be applied to minimize environmental impact.
- Based on information provided in the scoping meeting, temporary storage of coal ash may be required. If coal ash will require temporary storage provide details on how and where the ash will be stored and any measures that will be used to minimize erosion or stormwater runoff from the temporary storage area.
- Describe any impacts or potential impacts to the Sutton Lake fishery, or to boating and/or angler access to Sutton Lake.

In addition to addressing the concerns outlined above, the EA should include a detailed assessment of existing natural resources within the project area and should discuss the potential of mitigating impacts to wetlands, waters, and high quality upland habitat. We encourage the applicant to consult the Department of Environment and Natural Resources' *Guidance for Preparing SEPA Documents and Addressing Secondary and Cumulative Impacts* in preparing the environmental document. This document is available at <http://portal.ncdenr.org/web/deao/sepa>. To facilitate our review of proposed project impacts on aquatic and terrestrial wildlife resources, we request the following information is included in the EA. Although some of the information, requests and comments may not be applicable to this project, these should facilitate preparation of an EA that addresses impacts to aquatic and terrestrial wildlife resources.

1. Include descriptions of aquatic and terrestrial wildlife resources within the project area, and a listing of federally or state designated threatened, endangered or special concern species. A listing of designated species can be found on the N.C. Natural Heritage Program's website at <http://www.ncnhp.org>.
2. Any surveys should be conducted by biologists with both state and federal endangered species permits.
3. Include descriptions of any streams or wetlands affected by the project.
4. Include project maps identifying wetland areas. Identification of wetlands may be accomplished through coordination with the U.S. Army Corps of Engineers (USACE). If the USACE is not consulted, the person delineating wetlands should be identified and criteria listed.

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5. Provide information on existing, planned, and projected sewer and water infrastructure service throughout the service area. A map showing the location of the existing and projected lines and areas containing special resources should be included.
6. Define the service area for the project, including any ETJs (extra-territorial jurisdiction), and provide a map of the service area.
7. Provide a description of project activities that will occur within wetlands, such as fill or channel alteration. Acreage of wetlands impacted by alternative project designs should be listed.
8. Provide a description and a cover type map showing acreage of upland wildlife habitat impacted by the project.
9. Discuss the extent to which the project will result in loss, degradation or fragmentation of wildlife habitat (wetlands and uplands).
10. Discuss any measures proposed to avoid or reduce impacts of the project or to mitigate unavoidable habitat losses.
11. Discuss the cumulative impacts of secondary development facilitated by the proposed project. Such discussion should weigh the economic benefits of such growth against the costs of associated environmental impact.
 - (a) Include specific measures (e.g., local ordinances) that will be used to address stormwater and sedimentation at the source. Include specific requirements for both residential and industrial developments and Best Management Practices (BMPs) that will be required.
 - (b) Include specific measures (e.g., local ordinances) that will be used to protect stream corridors, riparian habitat, and a minimum of the 100-year floodplain from filling and development. Commitments by the project sponsors to protect area streams with riparian buffers through purchase or conservation easement are of particular interest.
12. Include a list of document preparers that shows each individual's professional background and qualifications.

At this time, the information provided is not sufficient for our staff to make definitive recommendations or conclusions concerning this project. Thank you for the opportunity to provide input in the early planning stages for this project. If we can be of further assistance, please contact our office at (336) 449-7625 or shari.bryant@ncwildlife.org.

Literature Cited:

- N.C. Wildlife Resource Commission (NCWRC). 2002. *Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality* (August 2002; http://www.ncwildlife.org/Portals/0/Conserving/documents/2002_GuidanceMemorandumforSecondaryandCumulativeImpacts.pdf).
- RTI. 2002. Constituent screening for coal combustion wastes. October 2002. (<https://www.rti.org/pubs/epa-hq-rcra-2006-0796-04701.pdf>)

cc: Maria Dunn, NCWRC
Andrea Leslie, NCWRC
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John Ellis, USFWS
Allen Ratzlaff, USFWS