SOUTHERN ENVIRONMENTAL LAW CENTER

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Via Email and U.S. Mail

Ms. Amy Axon, Hydrogeologist
N.C. Department of Environment and Natural Resources
Division of Waste Management
1646 Mail Service Center
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Dear Ms. Axon:

On behalf of Friends of Bolin Creek, the Southern Environmental Law Center submits the following comments to the N.C. Department of Environmental Quality (DEQ) regarding the July 22, 2016 Draft Phase II Remedial Investigation Work Plan (the "Draft Work Plan") submitted by the Town of Chapel Hill for its Police Station property coal ash dump site (the "Site").

Overall, the Draft Work Plan appears to be an improved approach to evaluating the coal ash contamination at the Site, but several significant modifications must be made to ensure the Work Plan is adequate. The following comments refer to page numbers and section headings within the Draft Work Plan:

5-6 – North Carolina Coal Combustion Product Regulations – The Town's new environmental consultant, Hart & Hickman, misstates the legal requirements in its preliminary discussion of the Site.

The Draft Work Plan (p. 6) cites the state's Coal Ash Management Act (CAMA), claiming that CAMA allows coal ash fills of up to 80,000 tons per acre and citing the limited closure requirements that apply to such fills, as if to imply those limited requirements would apply to this Site. They do not. The structural fill provisions of CAMA require an encapsulating liner for projects "involving placement of *8,000 or more tons of coal combustion products per acre or* 80,000 or more tons of coal combustion products in total per project," N.C.G.S. § 130A-309.220(b) (emphasis added). The Draft Work Plan estimates at least 55,000-60,000 tons of coal ash have been dumped in an area of approximately 4 acres at the Site. That is 13,750 to 15,000 tons of coal ash *per acre*, far above the level exempted by CAMA. Thus, CAMA would require any number of basic, common-sense protections that are manifestly lacking at the Site, including synthetic liners and leachate collection systems. *Id.* Indeed, the coal ash could never have been dumped at the Site in the first place, since CAMA prohibits large coal ash fill

projects within 50 feet of any property boundary, within 300 feet of a private dwelling or well, and within 4 feet of the seasonal high groundwater table. *Id.*

The Draft Work Plan also cites state regulations for uses of coal ash defined as wastewater treatment residuals. However, these regulations contained in Subsection 2T specify that they do not apply to "CCPs that are not generated from a wastewater treatment facility." 15A N.C.A.C. 2T.1201. Plainly, these regulations do not apply to the Site. Moreover, the specific provision cited in the Draft Work Plan regarding permitting by rule applies only "provided the activity does not result in any violations of water quality standards," *Id.* at .1203(a). Numerous water quality standards have been violated at the Site.

Invoking these regulatory requirements merely emphasizes the folly of storing such a large quantity of coal ash in an unlined pit in the center of Chapel Hill. The coal ash needs to be removed to recycling for concrete or dry, lined storage or lined structural fill away from public waters.

17 - CCP Cover Evaluation – Documenting the extent of the coal ash at the Site is critical to the site investigation. The Draft Work Plan proposes to rely only on visual inspection during hand augur boring to try to distinguish coal ash from soil at the site. Visually characterizing soils as either ash, soil, or a mixture of both may not be possible and the results are unlikely to be accurate. Instead, soil collected from each boring should be placed in plastic bags and questionable materials should be inspected by microscope in the lab. Coal ash typically contains glass spheres and rods, as well as particles of unburned coal, all of which are more accurately identified through a microscope.

17 - Elevated Area Soil Borings - The Draft Work Plan proposes collecting samples from zero to one foot below the surface of the elevated area to characterize where human exposure would occur. These samples should be collected where the cover evaluation indicates that there is suspected ash at or very near the surface. If the samples are collected in areas where the cover evaluation suggests that one or more feet of soil has been placed over the ash, the sample results would be of limited value.

18 - Elevated Area Soil Borings - The Draft Work Plan proposes to test soil borings in the elevated area of the Site using the Synthetic Precipitation Leaching Procedure (SPLP). However, SPLP does not provide a clear indication of the parameters or concentration that may leach from ash, because there is insufficient contact time during the test for the extraction fluid and ash to come to equilibrium. Instead, the ongoing groundwater analyses provide the best indication of what has leached and will continue to leach from the coal ash materials at this Site.

We believe the proposed leachate test is neither necessary nor appropriate, as explained above. However, if such testing is conducted, hexavalent chromium must be added to the list of parameters to be analyzed.

18 – Lower Area Soil Borings – The borings at or adjacent to locations SS-2 and SS-5 should be tested for the full suite of contaminants being tested at other soil borings, in order to provide a complete picture of the soil contamination at the time of the new sampling and ensure the Town and the public have the most complete information available regarding this public greenway area.

21 - Groundwater Analysis - The list of groundwater analytical parameters must include hexavalent chromium, since this parameter has been previously detected on this site, is highly carcinogenic at very low concentrations, and is the subject of ongoing public concern in North Carolina. Strontium and aluminum should also be added.

All existing monitoring wells must be sampled in addition to the proposed new wells.

Thank you for your consideration of these comments.

Sincerely,

Nicholas S. Torrey
Staff Attorney

cc (via email):
Mayor Pam Hemminger
Chapel Hill Town Council
Lance Norris, Public Works Director