

April 22, 2014

**Table – Coal Ash Pond, Landfill and Structural Fill Standards in North Carolina:**

<b>Standard</b>	<b>Coal Ash Pond</b>	<b>Municipal Landfill</b>	<b>Industrial Landfill</b>	<b>Combustion Product Landfill</b>	<b>Duke/Progress Landfill – Coal Combustion Waste</b>	<b>Structural Fill****</b>
EIS	No	Yes	Yes	Yes	Yes	No
Surface water and wetland setback	No	200'/100' minimum*	50' minimum**	50' ft minimum**	50 ft minimum**	50 ft
Property line setback	No	300 ft minimum	50 ft minimum	50 ft minimum	50 ft minimum	25 ft
Home setback	No	500 ft minimum	500 ft minimum	500 ft minimum	500 ft minimum	None
Water supply well setback	No	500 ft minimum	500 ft minimum	500 ft minimum	500 ft minimum	100 ft
Prohibited in floodplain?	No	Yes, with public necessity exception (requiring county commission approval)	Yes, with public necessity exception (requiring county commission approval)	No, but cannot obstruct 100-yr flow; reduce water storage capacity; or result in washout of solid waste	No, but cannot obstruct 100-yr flow; reduce water storage capacity; or result in washout of solid waste	No, but cannot obstruct 100-yr flow; significantly impact water storage capacity; or be at risk of inundation
Require cap, liner, and leachate collection system?	No	Yes, but DENR may approve equivalent alternative design	Yes, but DENR may approve alternative design.	Double synthetic liner (w/ leak detection between liners) and over clay layer	Yes, but DENR may approve alternative design. Exempt from 2007 leachate collection standards. DWR may require specific maintenance.	No liner required. Closure requires a cap of 12" compacted soil and 6" of soil to support vegetative cover.
Groundwater Separation	No	4 ft	4 ft	4 ft	4 ft	2 ft above seasonal high water table
Groundwater monitoring	Solid waste rules do not apply; required as condition on NPDES permit	Yes	Yes	No*** But leaks between layers monitored.	Yes	No
Buffer from park land	No	2 miles*	2 miles*	No	No	No
Buffer from gamelands	No	1 mile*	1 mile*	No	No	No

For more information please contact Cassie Gavin, Director of Government Affairs, NC Chapter of the Sierra Club, [cassie.gavin@sierraclub.org](mailto:cassie.gavin@sierraclub.org), (919) 833-8467, ext. 104

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Standard	Coal Ash Pond	Municipal Landfill	Industrial Landfill	Combustion Product Landfill	Duke/Progress Landfill –Coal Combustion Waste	Structural Fill
Buffer from wildlife refuge	No	5 miles*	5 miles*	No	No	No
Financial assurance	No	Yes	Yes	Yes	Yes	No
Consider faults, seismic activity, slopes in approving disposal site?	No	Yes, detailed standards in solid waste rules	No, but DENR reviews engineering plans.	No, but DENR reviews engineering plans.	No, but DENR reviews engineering plans.	Cannot be used on > 3:1 slope

\* These represent the newest standards. These standards do not apply to modifications to landfill permits issued before June 1, 2006; expansions of landfills permitted before June 1, 2006; or to constructions within a facility boundary approved before June 1, 2006.

\*\* Rules require a minimum 50' setback from surface waters. It is our understanding that in practice DWM has generally required a setback of 100'-200' between the disposal area and surface waters.

\*\*\* Division of Waste Management monitors for leakage; if leakage rates are exceeded then action is required by permit.

\*\*\*\* Structural Fill: There are two sets of rules for structural fill; those enforced by DWM and those enforced by DWR.

### **Definitions:**

“Industrial Landfill” means a landfill that receives waste (other than hazardous waste) from industrial processes including electrical generation. Industrial landfills can receive coal combustion waste. Permitting standards for industrial landfills are very similar to standards for municipal solid waste landfills.

“Combustion Product Landfill” means a landfill for coal combustion waste built entirely or partly over an old disposal area, -- which could include a coal ash impoundment. The definition is found in G.S. 130A-295.4. A combustion product landfill has to meet the standards in G.S. 130A-295.4 and solid waste industrial landfill standards (like financial assurance requirements) found in other state laws and rules unless a specific exception applies. The 2007 Solid Waste Act exempted all Duke Energy and Progress Energy landfills from a number of the new, more stringent requirements in that law, including the setback provisions.

“Duke/Progress Energy Landfill” means a landfill for coal combustion products built by either Duke Energy or Progress Energy on land *other than* an old disposal area for combustion waste. The Solid Waste Act of 2007 exempted Duke Energy and Progress Energy landfills from many of the stricter permitting standards adopted in that law, including the setback provisions. To the extent Duke and Progress landfills have been exempted from more stringent standards in the 2007 law, those landfills continue to fall under older, less stringent standards in the solid waste rules.

“Structural Fill” means an engineered fill with a beneficial end use constructed using coal combustion by-products. (The beneficial use is most often as additional fill material for a construction site.)

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