
(a) The definitions set out in G.S. 130A-290(a) apply to this section.

(b) The Department may permit a combustion products landfill to be constructed partially or entirely within areas that have been formerly used for the storage or disposal of combustion products at the same facility as the coal-fired generating unit that generates the combustion products, provided the landfill is constructed with a bottom liner system consisting of three components in accordance with this section. Of the required three components, the upper two components shall consist of two separate flexible membrane liners, with a leak detection system between the two liners. The third component shall consist of a minimum of two feet of soil underneath the bottom of those liners, with the soil having a maximum permeability of $1 \times 10^{-7}$ centimeters per second. The flexible membrane liners shall have a minimum thickness of thirty one-thousandths of an inch (0.030"), except that liners consisting of high-density polyethylene shall be at least sixty one-thousandths of an inch (0.060") thick. The lower flexible membrane liner shall be installed in direct and uniform contact with the compacted soil layer. The Department may approve an alternative to the soil component of the composite liner system if the Department finds, based on modeling, that the alternative liner system will provide an equivalent or greater degree of impermeability.

(c) An applicant for a permit for a combustion products landfill shall develop and provide to the Department a response plan, which shall describe the circumstances under which corrective measures are to be taken at the landfill in the event of the detection of leaks in the leak detection system between the upper two liner components at amounts exceeding an amount specified in the response plan (as expressed in average gallons per day per acre of landfill, defined as an Action Leakage Rate). The response plan shall also describe the remedial actions that the landfill is required to undertake in response to detection of leakage in amounts in excess of the Action Leakage Rate. The Department shall review the response plan as a part of the permit application for the landfill. Compliance with performance of the landfill to prevent releases of waste to the environment may be determined based on leakage rate rather than monitoring well data. (2007-550, s. 7(b).)