## 15A NCAC 13B .1622 LOCATION RESTRICTIONS FOR MSWLF FACILITY SITING

MSWLF units shall comply with the siting criteria set forth in this Rule. Documentation of approval by agencies other than the Division of Waste Management may be required to demonstrate compliance with specific criteria. The scope of demonstrations including design and construction performance shall be discussed in a site study and completed in the permit application.

- (1) An MSWLF unit shall comply with 40 CFR 258.10.
- (2) Floodplains. An MSWLF unit shall meet the floodplain requirements of G.S. 130A-295.6(c)(1) in accordance with the effective date and applicability requirements of S.L. 2007-550, s. 9.(b). MSWLF units that are not subject to the requirements of G.S. 130A-295.6(c)(1) shall not be located in 100-year floodplains unless the owners or operators demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in the carrying away of solid waste by flood waters.
- (3) Wetlands. For purposes of this Rule, "wetland" or "wetlands" mean those areas that are defined in 40 CFR 232.2(r). MSWLF units shall meet the requirements of G.S. 130A-295.6(c)(2) in accordance with the effective date and applicability requirements of S.L. 2007-550, s. 9.(b). MSWLF units that are not subject to G.S. 130A-295.6(c)(2) shall not be located in wetlands, unless the owner or operator demonstrates the following for Division approval.
  - (a) Where applicable under Section 404 of the Clean Water Act or G.S. 113A, 130A, or 143, the presumption that a practicable alternative to the proposed landfill facility is available which does not involve wetlands is rebutted.
  - (b) The construction and operation of the MSWLF unit shall not cause or contribute to violations of any applicable State water quality standard, or violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act.
  - (c) The construction and operation of the MSWLF unit shall not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Federal Endangered Species Act of 1973, or violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary.
  - (d) The construction and operation of the MSWLF unit shall not cause or contribute to degradation of wetlands.
  - (e) The owner or operator shall demonstrate the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:
    - (i) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the MSWLF unit;
    - (ii) erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;
    - (iii) the volume and chemical nature of the waste managed in the MSWLF unit;
    - (iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;
    - (v) the potential effects of release of waste to the wetland and the resulting impacts on the environment; and
    - (vi) any additional factors to demonstrate that ecological resources in the wetland are protected to the extent required under Section 404 of the Clean Water Act and G.S. 113A, 130A, and 143.
  - (f) The owner or operator shall demonstrate that steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by avoiding impacts to wetlands as required by Subitems (a) through (d) of this Item, and offsetting remaining unavoidable wetland impacts through compensatory mitigation actions such as restoration of existing degraded wetlands or creation of man-made wetlands.
  - (g) The Division may request additional information if it is necessary to determine compliance with this Item.
- (4) Fault Areas.
  - (a) MSWLF units shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Division that an alternative setback distance of less than 200 feet (60 meters) will prevent damage

to the structural integrity of the MSWLF unit and will be protective of human health and the environment.

- (b) For the purposes of this Item:
  - (i) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.
  - (ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction.
  - (iii) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.
- (5) Seismic Impact Zones.
  - (a) MSWLF units shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Division that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.
  - (b) For the purposes of this Item:
    - (i) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.
    - (ii) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.
    - (iii) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.
- (6) Unstable Areas. Owners or operators of MSWLF units proposed for location in an unstable area shall demonstrate that the MSWLF unit's design ensures that the integrity of the structural components of the MSWLF unit will not be disrupted. The owner or operator shall consider the following factors when determining whether an area is unstable:
  - (a) on-site or local soil conditions that may result in differential settling;
  - (b) on-site or local geologic or geomorphologic features; and
  - (c) on-site or local human-made features or events, both surface and subsurface.
- (7) Cultural Resources. A MSWLF unit shall not damage or destroy property of natural or historical significance that has been listed on the National Register of Historic Places or included on the Study List for the Register pursuant to 07 NCAC 04R .0206 and .0300, which are incorporated by reference including subsequent amendments and editions. A letter from the State Historic Preservation Office within the Department of Natural and Cultural Resources stating whether the proposed use of the property will impact properties of archaeological or historical significance shall be included in the site study.
- (8) State Nature and Historic Preserve. The location, access, size, and operation of the MSWLF unit shall not damage, destroy, or degrade any lands included in the State Nature and Historic Preserve pursuant to G.S. 143-260.10. A letter from the Natural Heritage Program Office within the Department of Natural and Cultural Resources stating whether the proposed use of the property will damage, destroy, or degrade state nature and historic preserve locations shall be included in the site study.
- (9) Water Supply Watersheds.
  - (a) At the time that an MSWLF unit receives the first permit approval to construct, an MSWLF unit shall not be located in the critical area of a water supply watershed or in the watershed for a stream segment classified as WS-I, or in watersheds of other water bodies which indicate that no new landfills are allowed in accordance with 15A NCAC 02B .0200.

- (b) An MSWLF unit that proposes to discharge leachate to surface waters shall obtain a National Pollution Discharge Elimination System (NPDES) Permit from the Department pursuant to Section 402 of the United States Clean Water Act.
- (c) At the time that an MSWLF unit receives the first permit approval to construct, an MSWLF unit that proposes to discharge leachate to surface waters shall not be located within watersheds classified as WS-II or WS-III, or in watersheds of other water bodies which indicate that no new discharging landfills are allowed, in accordance with 15A NCAC 02B .0200.
- (10) Endangered and Threatened Species. A MSWLF unit shall not jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Federal Endangered Species Act of 1973, Public Law 93-205, as amended.

History Note: Authority G.S. 130A-294; Eff. October 9, 1993; Readopted Eff. September 16, 2021.