

15A NCAC 13B .0536 SITE STUDY FOR C&DLF FACILITIES

(a) Purpose. As required under Rule .0535 of this Section, the owner or operator must prepare a site study which meets the requirements of this Rule. The Division shall review the site study for a proposed new facility prior to consideration of an application for a permit to construct. Following review of the site study, the Division shall notify the applicant that either:

- (1) the site is deemed suitable and the applicant is authorized to prepare an application for a permit to construct in accordance with Rule .0535 of this Section; or
- (2) the site is deemed unsuitable for establishing a C&DLF unit(s) and shall specify the reasons that would prevent the C&DLF unit(s) from being operated in accordance with G.S. 130A Article 9, or this Subchapter, and any applicable federal laws and regulations.

(b) Scope. The site is the land which is proposed for the landfill facility. The site study presents a characterization of the land, incorporating various investigations and requirements pertinent to suitability of a C&DLF facility. The scope of the site study includes criteria associated with the public health and welfare, and the environment. The economic feasibility of a proposed site is not within the scope of this study. The information in the site study must accurately represent site characteristics and must be prepared by qualified environmental professionals as set forth in Subparagraph (a)(3) of Rule .0202 of this Subchapter. New C&DLF unit(s) and lateral expansions must comply with the siting criteria set forth in Paragraph (c) of this Rule, Subparagraphs (4) through (10). In order to demonstrate compliance with specific criteria for each of the respective location restrictions, documentation or approval by agencies other than the Division of Waste Management, Solid Waste Section may be required. The scope of demonstrations including design and construction performance must be addressed in the site study.

(c) The site study prepared for a C&DLF facility must include the information required by this Paragraph.

- (1) Characterization study. The site characterization study area includes the landfill facility and a 2000-foot perimeter measured from the proposed boundary of the landfill facility. The study must include an aerial photograph taken within one year of the original submittal date, a report, and a local map. The map and photograph must be at a scale of at least one inch equals 400 feet. The study must identify the following:
 - (A) the entire property proposed for the disposal site and any on-site easements;
 - (B) existing land use and zoning;
 - (C) the location of residential structures and schools;
 - (D) the location of commercial and industrial buildings, and other potential sources of contamination;
 - (E) the location of potable wells and public water supplies;
 - (F) historic sites;
 - (G) state nature and historic preserves;
 - (H) the existing topography and features of the disposal site including: general surface water drainage patterns and watersheds, 100-year floodplains, perennial and intermittent streams, rivers, and lakes; and
 - (I) the classification of the surface water drainage from landfill site in accordance with 15A NCAC 02B .0300.
- (2) Proposed Facility Plan. A conceptual plan for the development of the facility including drawings and a report must be prepared which includes the drawings and reports described in Subparagraphs (d)(1), (e)(1), (e)(2), and (e)(3) of Rule .0537 of this Section.
- (3) Site Hydrogeologic Report. The study must be prepared in accordance with the requirements set forth in Paragraph (a) of Rule .0538 of this Section.
- (4) Floodplain Location Restrictions;
 - (A) C&DLF units or constructed embankments used to construct a C&DLF unit must not be located in a 100-year floodplain unless a variance for the facility has been issued in accordance with G.S. 143-215.54A.
 - (B) C&DLF units must not be located in floodplains unless the owners or operators demonstrate that the unit will not restrict the flow of the flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.
- (5) Wetlands Location Restriction. New C&DLF units and lateral expansions must not be located in wetlands, unless the owner or operator can make the following demonstrations to the Division:

- (A) Where applicable under Section 404 of the Clean Water Act or applicable State wetlands laws, the presumption that a practicable alternative to the proposed landfill facility is available which does not involve wetlands is clearly rebutted.
- (B) The construction and operation of the C&DLF unit(s) will not cause or contribute to violations of any applicable State water quality standards and will not violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act.
- (C) The construction and operation of the C&DLF unit(s) will 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. The construction and operation of the C&DLF unit(s) will not 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 C&DLF unit(s) will not cause or contribute to significant degradation of wetlands.
- (E) The owner or operator must demonstrate the integrity of the C&DLF unit(s) and its ability to protect ecological resources by addressing the following factors: (1) erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the C&DLF unit; (2) erosion, stability, and migration potential of dredged and fill materials used to support the C&DLF unit; the volume and chemical nature of the waste managed in the C&DLF unit; (3) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste; (4) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and (5) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected to the extent required under Section 404 of the Clean Water Act or applicable State wetlands laws.
- (F) The owner or operator must demonstrate that steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by Part (c)(5)(A) – (D) of this Rule, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands).
- (G) The owner or operator must also demonstrate that sufficient information is available to make a reasonable determination with respect to each of the demonstrations required by this Rule.
- (H) For purposes of this Rule, wetlands means those areas that are defined in 40 CFR 232.2(r).
- (6) Unstable Area Location Restrictions. Owners and operators of new C&DLF unit(s) and lateral expansions proposed for location in an unstable area must demonstrate that engineering measures have been incorporated in the C&DLF unit's design to ensure that the integrity of any structural components of the C&DLF unit will not be disrupted. The owner and operator must consider the following factors, at a minimum, when determining whether an area is unstable:
 - (A) On-site or local soil conditions that may result in significant 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 Location Restrictions. A new C&DLF unit or lateral expansion must not damage or destroy a property of archaeological or historical significance which has been listed or determined eligible for a listing in the National Register of Historic Places. To aid in making a determination as to whether the property is of archeological or historical significance, the State's Historic Preservation Office in the Department of Cultural Resources may request the owner and operator to perform a site-specific survey which must be included in the Site Study.
- (8) State Nature and Historic Preserve Location Restrictions. A new C&DLF unit or lateral expansion must not have an adverse impact, considering the purposes for designation of the Preserve lands and the location, access, size and operation of the landfill, on any lands included in the State Nature and Historic Preserve.
- (9) Water Supply Watersheds Location Restrictions;

- (A) A new C&DLF unit or lateral expansion must 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 the rules codified at 15A NCAC 02B Section .0200 entitled "Classifications and Water Quality Standards Applicable To Surface Waters Of North Carolina."
 - (B) Any new C&DLF unit or lateral expansion, which proposes to discharge leachate to surface waters and must obtain a National Pollution Discharge Elimination System (NPDES) Permit from the Division of Environmental Management pursuant to Section 402 of the United States Clean Water Act, must 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 the rules codified at 15A NCAC 02B Section .0200.
- (10) Endangered and Threatened Species Location Restrictions. A new C&DLF unit or lateral expansion must 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.
- (11) Local government approvals for C&DLFs.
- (A) If the permit applicant is a unit of local government in which jurisdiction the proposed C&DLF site is located, the approval of the governing board shall be required. Approval may be in the form of either a resolution or a vote on a motion. A copy of the resolution or the minutes of the meeting where the vote was taken must be submitted to the Division as part of the site study.
 - (B) A permit applicant other than the unit of local government with jurisdiction over the proposed landfill site must obtain a franchise in accordance with G.S 130A-294(b1)(3) from each unit of local government in whose jurisdiction the site is located. A copy of the franchise must be submitted to the Division as part of the site study.
 - (C) Prior to issuance of approval or a franchise, the jurisdictional local government(s) where the landfill is to be located shall hold at least one public meeting to inform the community of the proposed waste management activities as described in the proposed facility plan prepared in accordance with Subparagraph (2) of this Paragraph. The local government where the landfill is to be located shall provide a public notice of the meeting at least 30 days prior to the meeting. For purposes of this Part, public notice must include a legal advertisement placed in a newspaper or newspapers serving the county and provision of a news release to at least one newspaper serving the county. Public notice must include time, place, and purpose of the meetings required by this Part. The application for a franchise or other documentation as required by the appropriate local government(s), must be placed at a location that is accessible by the public. This location must be noted in the public notice. The permit applicant must notify the property owners of all property that shares a common border with the proposed facility by means of a U.S. Postal Service registered letter, return receipt requested. The notice must give the date, time and place of the public meeting, and must describe the facility plan for the landfill, including the areal location and final elevation of all waste disposal units, the type and amount of waste to be disposed at the landfill, any other waste management activities to be conducted at the facility, and the proposed location of the entrance to the facility. Mailings must be postmarked a minimum of 30 days prior to the public meeting which is being noticed. The applicant must provide documentation of the content and mailing of the notices in the site study.
 - (D) Public notice of the meeting must be documented in the site study. A tape recording or a written transcript of the meeting, all written material submitted representing community concerns, and all other relevant written material distributed or used at the meeting must be submitted as part of the site study.
 - (E) A letter from the unit of local government(s) having zoning jurisdiction over the site which states that the proposal meets all the requirements of the local zoning ordinance, or that the site is not zoned, must be submitted to the Division as part of the site study.
- (d) Site suitability applications for a new C&DLF facility or unit submitted in accordance with Rule .0504(1) of this Section must be submitted to the Division prior to December 31, 2006.

*History Note: Authority G.S. 130A-294;
Eff. January 1, 2007.*