

15A NCAC 02T .0604 APPLICATION SUBMITTAL

(a) The requirements in this Rule shall apply to all new and expanding facilities.

(b) Soils report. A soil evaluation of the disposal site shall be provided to the Division by the applicant in a report that includes the following. If required by G.S. 89F, a soil scientist shall prepare this evaluation:

- (1) a field description of the soil profile, based on examinations of excavation pits and auger borings, within seven feet of land surface or to bedrock, describing the following parameters by individual diagnostic horizons:
 - (A) the thickness of the horizon;
 - (B) the texture;
 - (C) the color and other diagnostic features;
 - (D) the structure;
 - (E) the internal drainage;
 - (F) the depth, thickness, and type of restrictive horizon; and
 - (G) the presence or absence and depth of evidence of any seasonal high water table.Applicants may be required to dig pits when necessary for proper evaluation of the soils at the site.
- (2) recommendations concerning loading rates of liquids, solids, other wastewater constituents, and amendments. Annual hydraulic loading rates shall be based on in-situ measurement of saturated hydraulic conductivity in the most restrictive horizon for each soil mapping unit. Maximum irrigation precipitation rates shall be provided for each soil mapping unit.
- (3) a field-delineated soil map delineating soil mapping units within each land application site and showing all physical features, location of pits and auger borings, legends, scale, and a north arrow. The legends shall also include dominant soil series name and family or higher taxonomic class for each soil mapping unit; and
- (4) a Standard Soil Fertility Analysis conducted on each land application site. The Standard Soil Fertility Analysis shall include the following parameters:
 - (A) acidity;
 - (B) base saturation (by calculation);
 - (C) calcium;
 - (D) cation exchange capacity;
 - (E) copper;
 - (F) exchangeable sodium percentage (by calculation);
 - (G) magnesium;
 - (H) manganese;
 - (I) percent humic matter;
 - (J) pH;
 - (K) phosphorus;
 - (L) potassium;
 - (M) sodium; and
 - (N) zinc.

[Note: The North Carolina Board for Licensing of Soil Scientists has determined, via letter dated December 1, 2005, that preparation of soils reports pursuant to this Paragraph constitutes practicing soil science pursuant to G.S. 89F.]

(c) Engineering design documents. If required by G.S. 89C, a professional engineer shall prepare these documents. The following documents shall be provided to the Division by the applicant:

- (1) engineering plans for the entire system, including treatment, storage, application, and disposal facilities and equipment except those previously permitted unless those previously permitted are directly tied into the new units or are necessary to understanding the complete process;
- (2) specifications describing materials to be used, methods of construction, and means for ensuring quality and integrity of the finished product, including leakage testing; and
- (3) engineering calculations, including hydraulic and pollutant loading for each treatment unit, treatment unit sizing criteria, hydraulic profile of the treatment system, total dynamic head, and system curve analysis for each pump, buoyancy calculations, and irrigation design.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that preparation of engineering design documents pursuant to this Paragraph constitutes practicing engineering pursuant to G.S. 89C.]

(d) Site plans. If required by G.S. 89C, a professional land surveyor shall provide location information on boundaries and physical features not under the purview of other licensed professions. Site plans or maps shall be

provided to the Division by the applicant depicting the location, orientation, and relationship of facility components including:

- (1) a scaled map of the site, with topographic contour intervals not exceeding 10 feet or 25 percent of total site relief, showing:
 - (A) all facility-related structures and fences within the treatment, storage, and disposal areas; and
 - (B) soil mapping units on all disposal sites;
- (2) the location of each of the following that are located within 500 feet of a waste treatment, storage, or disposal site, including a delineation of their review and compliance boundaries:
 - (A) wells, including usage and construction details if available;
 - (B) ephemeral, intermittent, and perennial streams;
 - (C) springs;
 - (D) lakes;
 - (E) ponds; and
 - (F) other surface drainage features;
- (3) setbacks as required by Rule .0606 of this Section; and
- (4) site property boundaries within 500 feet of all waste treatment, storage, and disposal sites.

[Note: The North Carolina Board of Examiners for Engineers and Surveyors has determined, via letter dated December 1, 2005, that locating boundaries and physical features, not under the purview of other licensed professions, on maps pursuant to this Paragraph constitutes practicing surveying pursuant to G.S. 89C.]

(e) Property Ownership Documentation shall be provided to the Division consisting of:

- (1) legal documentation of ownership, such as a contract, deed, or article of incorporation;
- (2) an agreement of an intent to purchase the property that is written, notarized, and signed by both parties, accompanied by a plat or survey map; or
- (3) an agreement to lease the property that is written, notarized, and signed by both parties, indicating the intended use of the property, accompanied by a plat or survey map. Lease agreements shall adhere to the requirements of 15A NCAC 02L .0107.

(f) An Operation and Maintenance Plan addressing routine inspections, maintenance schedules, troubleshooting, and a layman's explanation about the wastewater treatment and irrigation disposal systems shall be submitted to the Division by the applicant.

(g) A letter from the local county health department denying the site for all subsurface systems shall be submitted to the Division by the applicant.

(h) A properly executed Operation and Maintenance Agreement shall be submitted to the Division by the applicant.

*History Note: Authority G.S. 143-215.1; 143-215.3(a);
Eff. September 1, 2006;
Readopted Eff. September 1, 2018.*