15A NCAC 13B .0843 SAMPLING AND ANALYSIS

(a) Monitoring or sample collection, handling, and analysis required by this Section and all costs involved shall be the responsibility of the septage management firm permit holder.

(b) The permit holder of a septage land application site shall obtain representative soil samples once every two years from each field, as designated in permit, during the last quarter of the calendar year.

(c) Soil samples shall be analyzed for cation exchange capacity, pH, phosphorus, potassium, calcium, manganese, magnesium, zinc, and copper. If the results for zinc analysis are equal to or above 30 pounds per acre or the results for copper analysis are equal to or above 35 pounds per acre, analysis for the metals listed in Rule .0840(c)(10)(B) of this Section shall be required. Sites permitted to receive septage other than domestic septage shall be analyzed for cadmium to determine compliance with 40 CFR 257.3-5.

(d) Domestic septage and grease septage shall be monitored in accordance with 40 CFR 503.16(b).

(e) Domestic treatment plant septage proposed to be land applied at a permitted septage land application site shall be sampled before the initial application, and annually thereafter, prior to being removed from a treatment facility. Samples shall be analyzed for:

- (1) Metals listed in 40 CFR 503.13; and
- (2) Total solids, pH, ammonia, nitrates, total kjeldahl nitrogen (TKN), biochemical oxygen demand (BOD), chemical oxygen demand (COD), total phosphorus, potassium, sodium, and magnesium.

(f) Industrial or commercial septage proposed to be land applied at a permitted septage land application site shall be sampled prior to being removed from a wastewater system. Analytical results shall be submitted to the Division prior to the issuance of a permit or approval to land apply the septage. Samples shall be analyzed for:

- (1) Metals listed in 40 CFR 503.13;
- (2) Total solids, pH, ammonia, nitrates, TKN, BOD, COD, total phosphorus, potassium, sodium, and magnesium; and
- (3) Organic chemicals, using a complete EPA Test Method 1311 Toxicity Characteristic Leaching Procedure or other appropriate analysis, such as EPA Test Method 8260 Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry or 8270 Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry, unless an examination of the industrial process and the material used indicates less extensive analysis is acceptable.

(g) Sample analysis required by this Section shall be performed either by the North Carolina Department of Agriculture and Consumer Services laboratory or by a laboratory certified by the North Carolina Division of Water Resources for waste analysis. Analysis for inorganic constituents shall be conducted in accordance with 40 CFR 503.8.

History Note: Authority G.S. 130A-291.1; Eff. October 1, 2009; Amended Eff. May 1, 2017; Readopted Eff. February 1, 2019 (Recodified from 15A NCAC 13B .0840).