

15A NCAC 18E .1709 WASTEWATER SAMPLING REQUIREMENTS FOR ADVANCED PRETREATMENT SYSTEMS

(a) Wastewater sampling requirements shall vary in accordance with wastewater system classification, designated effluent standard, DDF, and performance history.

- (1) Provisional Systems shall be grab or composite sampled quarterly for all applicable influent and effluent constituents listed in Table XXV of Rule .1201(a) of this Subchapter until the system receives Innovative Approval.
- (2) When the DDF is less than or equal to 1,500 gpd, Innovative Systems shall be grab or composite sampled annually for all applicable influent and effluent constituents from Table XXV of Rule .1201(a) of this Subchapter.
- (3) When the DDF is greater than 1,500 gpd and less than or equal to 3,000 gpd, Innovative Systems shall be grab or composite sampled twice a year for all applicable influent and effluent constituents listed in Table XXV of Rule .1201(a) of this Subchapter.
- (4) Sampling for Fecal Coliforms shall not be required for Innovative Systems at any site that is found to be compliant with all other constituents in Table XXV of Rule .1201(a) of this Subchapter.
- (5) Innovative Systems serving vacation rentals subject to the North Carolina Vacation Rental Act, G.S. 42A, shall be sampled during the seasonal high use period.
- (6) Effluent may be re-sampled within 30 days of receipt of laboratory results indicating non-compliance with Table XXV of Rule .1201(a) of this Subchapter if requested by the owner, manufacturer, or manufacturer's representative, or required in a PIA Approval. Complete data sets from resampling may be substituted to comply with the minimum number of compliant data sets required for PIA Approval. Data sets from resampling may be used by a manufacturer as part of a reduced effluent sampling request in accordance with Paragraph (d) of this Rule.
- (7) The Management Entity may record daily wastewater flow and sample influent to the advanced pretreatment system as needed to determine compliance with Rule .1302(f) of this Subchapter.
- (8) A manufacturer of a Provisional or Innovative System may apply for adjusted sampling requirements in accordance with this Rule.

(b) The manufacturer of a Provisional System may apply to the Department in accordance with Rule .1701 of this Section to request adjusted effluent sampling requirements for Fecal Coliforms. The Department shall approve the request when the documentation submitted to the Department includes the following information:

- (1) data from a minimum of five separate North Carolina sites in operation for a minimum of six months after the Provisional Approval has been issued;
- (2) a minimum of 25 data sets, including results for Fecal Coliforms. No data sets shall be excluded. Data sets may be from the same site if collected a minimum of three months apart; and
- (3) analysis indicating compliant system performance in accordance with Rule .1710 of this Section.

(c) If an effluent sample for a Provisional or Innovative System that is not required to sample for Fecal Coliforms is determined to be non-compliant with Table XXV of Rule .1201(a) of this Subchapter, the effluent may be re-sampled in accordance with Rule .1302(f)(2) of this Subchapter. If re-sampled, the effluent shall also be sampled for Fecal Coliforms in addition to all other applicable constituents. If re-sampling indicates compliance with Table XXV of Rule .1201(a) of this Subchapter, no further Fecal Coliform sampling is required from that site, unless an effluent sample is again determined to be non-compliant for one or more constituents.

(d) The manufacturer of an Innovative System may apply to the Department in accordance with Rule .1701 of this Section to request an adjustment in sampling requirements for constituents or frequency, including reducing to field parameters only. The Department shall approve the request when one of the following conditions are met:

- (1) documentation submitted to the Department includes the following information:
 - (A) data from a minimum of 25 separate North Carolina sites in operation for a minimum of six months after the Innovative Approval has been issued;
 - (B) written reports summarizing results of the VIP inspections for all North Carolina sites submitted as part of this Rule;
 - (C) a minimum of 50 complete data sets, with no data excluded. Data sets may be from the same site if collected a minimum of three months apart;
 - (D) analysis indicating compliant system performance in accordance with Rule .1710 of this Section; and
 - (E) identification of the constituents for which the manufacturer requests a reduced sampling frequency;

- (2) the proprietary advanced pretreatment system is also certified and listed by a nationally recognized certification body and is in compliance with the ongoing verification program of such body, and the manufacturer is requesting a reduction in data set requirements set forth in Rule .1705 of this Section by up to 50 percent only; or
- (3) the manufacturer has demonstrated compliant system performance in accordance with Rule .1710 of this Section and is only requesting to replace the requirement for routine effluent sampling as set forth in Rule .1705 of this Section for all individual sites with routine field constituent testing that is included as part of the VIP.

(e) Systems approved for field parameters shall only be required to sample the field parameters listed in Table XXXIII at the site during a VIP Management Entity inspection. The PIA Approval may specify other field parameters or alternative field parameter effluent criteria. The results shall be recorded in the written report. If the field parameters fall outside the range specified in the PIA Approval, an effluent sample shall be collected and analyzed for all parameters as necessary to demonstrate system compliance with the site's applicable effluent standard specified in Table XXV of Rule .1201(a) of this Subchapter.

TABLE XXXIII. Field parameters advanced pretreatment systems

Field Parameter	Effluent Criteria
pH	5 - 9
Turbidity	≤ 10
DO	≥ 2

(f) While routine sampling of individual sites may no longer be required in accordance with Paragraph (d) of this Rule, effluent sampling may still be determined to be necessary during the visual inspection of the system in accordance with Rule .1302(d) of this Subchapter or if required as part of an enforcement action by the LHD or the Department.

(g) Alternative sampling requirements may be proposed by the manufacturer for a Provisional or Innovative System and approved by the Department when determined to provide an equal or more reliable indication of system compliance with effluent standards.

History Note: Authority G.S. 130A-335(e) and (f); 130A-343;
Eff. January 1, 2024.