15A NCAC 18E .0802 PUMP TANK CAPACITY REQUIREMENTS

(a) The minimum pump tank liquid capacity shall be greater than or equal to the required septic tank liquid capacity as set forth in Rule .0801 of this Section.

(b) For a flow equalization system, the minimum pump tank capacity shall be based upon the sum of the volumes of the following parameters:

(1) volume is sufficient to ensure pump submergence or as recommended by the pump manufacturer;
(2) minimum dose volume in accordance with Rule .1101(d) of this Subchapter;
(3) flow equalization storage; and
(4) emergency storage capacity in accordance with Paragraph (e) of this Rule.

(c) An alternate minimum pump tank liquid capacity may be proposed by the authorized designer or PE to the LHD based upon the sum of the volumes of the following parameters:

(1) volume is sufficient to ensure pump submergence or as recommended by the pump manufacturer;
(2) minimum dose volume in accordance with Rule .1101(d) of this Subchapter;
(3) flow equalization storage, if applicable; and
(4) emergency storage capacity in accordance with Paragraph (e) of this Rule.

(d) A PE may propose an alternative design to the LHD to calculate the minimum pump tank liquid capacity required. The alternative method shall provide documentation of pump submergence, dose volume capacity, emergency storage capacity, and flow equalization storage, as applicable. The LHD shall approve the alternative design upon a showing that all required storage capacity is accounted for in the wastewater system without reducing the required septic tank or grease tank capacities specified in Rules .0801 and .0803 of this Section.

(e) The pump tank emergency storage capacity requirement shall be determined based on the following criteria and Table XVI:

(1) type of facility served;
(2) classification of surface waters that would be impacted by a pump tank failure; and
(3) availability of standby power devices and emergency maintenance personnel.

TABLE XVI. Pump tank emergency storage capacity requirements

Facility Type	Surface Water Classification of Watershed	Standby Power and Emergency Maintenance Personnel Provisions	Emergency Storage Capacity Period Requirement
Residential systems and other systems in full time use	WS-I, WS-II, WS-III, SA, SB, and B waters	No standby power	24 hours
		Manually activated standby power and telemetry contacting a 24-hour maintenance service	12 hours
		Automatically activated standby power and telemetry contacting a 24-hour maintenance service	4 hours
	All other surface waters or no surface waters	No standby power	12 hours
		Manually activated standby power and telemetry contacting a 24-hour maintenance service	8 hours
		Automatically activated standby power and telemetry contacting a 24-hour maintenance service	4 hours
Non-residential systems not in full-time use and all other systems	All surface waters	No standby power	12 hours
		Manually activated standby power and telemetry contacting a 24-hour maintenance service	8 hours
		Automatically activated standby power and telemetry contacting a 24-hour maintenance service	4 hours

(f) Telemetry shall be demonstrated to be operational to the authorized agent and the Management Entity prior to issuance of the OP.

History Note: *Authority G.S. 130A-335(e), (f), and (f1);*
Eff. January 1, 2024.