

15A NCAC 18E .1102 PUMP DOSING

(a) The effluent pump shall be:

- (1) capable of handling a minimum of one-half inch solids or be a screened, high head pump designed for effluent;
- (2) designed to meet the pump operating flow rate and total dynamic head specified for the effluent distribution system;
- (3) removable without requiring entrance into the tank; and
- (4) listed by a third-party electrical testing and listing agency, such as Underwriter's Laboratory. A PE may propose a pump model not listed by a third-party electrical testing and listing agency. The Department shall approve the pump when review of documentation provided by the PE demonstrates that the pump model meets the performance requirements for the dispersal field design.

(b) A vent or anti-siphon hole of a 3/16-inch minimum diameter shall be used to prevent air locking of the pump and siphoning from the pump tank when pumping downhill. When a check valve is provided, the anti-siphon hole or vent shall be located between the pump and the check valve. Additional venting may be required at the high point in the pump force main to prevent siphoning.

(c) Each pump discharge line in a pump tank shall have a disconnect device, such as a pressure-rated threaded union, flange, or camlock.

(d) Check valves or other type valves shall prevent drainback from the dispersal field or supply line into the pump tank. A system may be designed and approved for the supply line to drain back to the pump tank based on site-specific considerations, such as freeze protection.

(e) An isolation valve shall be provided on the field side of the disconnect device when pumping uphill.

(f) The pump discharge piping shall be accessible within the tank or riser from finished grade.

(g) Fittings and valves shall be of compatible non-corrodible material. Isolation valves and disconnects shall be located within 18 inches of the top of the access riser opening.

(h) All submersible pumps shall be provided with a non-corrodible rope or chain attached to each pump enabling pump removal from the ground surface without requiring dewatering or entrance into the tank.

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