

Policy for Meeting the Reliability Requirements of 15A NCAC 2T .305(h)(1)(D) for Pressure Sewers Utilizing Simplex Pump Stations

Modification 12/11

These rules require that multiple pumps be provided with the capacity to pump peak flow with the largest pump out of service and to provide power reliability respectively. Simplex pump stations will only be approved for single family residences, all other pump stations shall be required to meet these rules. To help ensure protection from overflows for simplex pump stations, the following policy will be implemented in lieu of requiring dual pumps and power reliability.

The first option for meeting reliability requirements is to provide 24 hours storage in the wet well above the pump-on elevation as requested in the permit application. However, since this may add to the cost and make installation difficult in certain areas, another option may be pursued.

Alternatively, the applicant may provide documentation regarding both power reliability and response times for pump replacement.

In the case of power reliability, 3 years of power history data in the area from the power company must be provided. The amount of storage required shall be equal to the duration of the longest power outage (minus catastrophic events such hurricanes). Storage shall be provided above the pump-on elevation.

For response times, the applicant shall provide an estimate of the response time to replace a failed pump. The estimate shall include time for answering after hours calls, travel time to maintenance shop, preparing equipment to respond, travel time to site, and time to replace the pump. For existing systems, the Permittee should indicate if they currently maintains a supply of pumps on hand at this time (a permit condition). Also, personnel must be on-call 24 hours a day, 7 days a week as well as a phone number with 24-hour answering service clearly posted on the pump station. Storage shall be provided above the high water alarm.

These storage requirement are not cumulative, rather, the storage which provides the largest wet well shall be specified.