# FAUQUIER COUNTY WATER AND SANITATION AUTHORITY 7172 KENNEDY ROAD • WARRENTON, VA 20187 PHONE (540) 349-2092 • FAX (540) 347-7689 WEBSITE: fcwsa.org

SELECTION TO SELEC

#### **UTILITY STANDARDS MANUAL AMENDMENT FORM**

The Authority's Utility Standards Manual is hereby amended as follows:

Section Being Amended: 8.16 Startup

From: N/A – This is an addition.

To:

### 8.16 Startup

### A. Five Day Reliability Test

- 1. The purpose of the 5-day reliability test is to operate the pumping station in an operational mode for 5 continuous days (24 hours per day). The intent is to test all the major pieces of equipment, the control systems, the SCADA system, other pumping station components, and alarm modes (including confirmed call-outs to the SCADA system or external phone lines) under conditions as close as possible to normal operating conditions.
- 2. Following completion of the equipment start-up and performance testing, the Contractor shall schedule a 5-day reliability test for the sewage pumping station.
- i. The test shall be scheduled after the major equipment has been installed, tested, and individually started up.
  - ii. The 5-day reliability test shall not be scheduled to take place during any of the manufacturer training events.
- iii. All 5-day reliability tests shall commence on Monday during weekdays with no holidays observed by the Authority.
  - iv. A successful 5-day reliability test shall be performed by the Contractor, certified by the Engineer, and accepted by the Owner prior to Substantial Completion of the project.

- 3. Major pieces of equipment shall include comminutor, pumps, flow meter, surge tank, check valves, generator, automatic transfer switch, control system, and SCADA system.
- 4. The Owner operated wastewater pump-and-haul operation shall remain in operation for the duration of the 5-day reliability testing.
- 5. The Owner's representatives shall witness the 5-day reliability test. The Contractor shall schedule the 5-day reliability test with the Owner and the Owner's representative.
- 6. Submit a detailed plan for the 5-day reliability test. Obtain approval of the detailed plan prior to scheduling the 5-day reliability test.
- 7. The cost for the 5-day reliability test shall be included in the Contractor's services, including, but not limited to equipment, personnel, piping, valves, storage tank, test water, and disposal.
- 8. A successful 5-day reliability test shall be a requirement for substantial completion.

#### B. Successful test shall include confirmation that:

Cyriner prior to Substantial Completion of the project.

- 1. All the major equipment worked, as specified, for the duration of the 5-day reliability test.
  - 2. The control systems worked, as specified, for the duration of the 5-day reliability test.
  - 3. The SCADA systems worked, as specified, for the duration of the 5-day reliability test.
- 4. Adjustments of control settings within the normal operating parameters are allowed as long as the pumping station remains operational and no unplanned alarm signals are generated.

## C. Substantial Completion

1. All successful 5-day reliability tests shall be performed by the Contractor, certified by the Engineer, and accepted by the Owner prior to the Certificate of Substantial Completion.

2. Developer may have to make arrangement for temporary pump and haul until sufficient wastewater flows to the pumping station, so that pumps and force mains operate properly.

Approved:

Benjamin R. Shoemaker Executive Director 04/04/2019 Date Developer may have to make arrangement for teleporary geno and he of drift sufficient waste, rater lows to me compling station, so had pumps and force make aperate proper.

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