

Lift Station Standard Operating Procedures

Job Purpose:

To insure proper and maximum transfer of raw sewer to the treatment plants for sanitary treatment.

Job Description:

1. To support the Operations and Maintenance (O&M) of the sewer department by means of daily inspections of all CANTEX, buildings, fencing, piping and instrumentation.
2. To replace and/or repair any component necessary to maintain proper operation of the lift stations.
3. To maintain support equipment and to comply with any job directed by the supervisor deemed necessary.

Daily Check:

1. CANTEX, building, fencing, gates, piping, pumps, motors, motor control, panel box housing and any other component required for proper lift station operation.
2. Check condition of wet wells and components within the wet well including transducers, float balls.
3. Check isolation valve and check valve operation and condition.
4. Check sump pump and dehumidifier for proper operation.

****NOTE:** In CANTEX and building units, ensure ventilation fan is operating at all times. This reduces the amount of H₂S and other gases generated by sewer, and increases personnel safety.

Weekly Check:

1. Clean area around station of trash and debris.
2. Sweep and wash down floor levels in buildings and CANTEX units.
3. Wash down piping and pumps that require packing and deodorize as required.
4. Check and cut grease from wet well as required.

Monthly Check:

1. Clean filter and transducers on lift stations equipped with that equipment. If necessary, clean more often.
****NOTE:** Ensure control power is OFF before cleaning transducers
2. exercise all suction and discharge valves.
3. Lubricate all drive shaft universal joints as required.

Semi Annual Check:

1. Exercise all isolation valves
2. Lubricate electric drive motor and pump with two (2) shots of grease on each bearing. Seal bearings may have replaced open faced bearing in some units. (No grease required)

Control panel Checks:

1. Check all operations and warning lights, replace as required.
2. Check switches for proper operation.
3. Check pump alternation sequence by using the following techniques:
 - a. Transducers: Using the transducer signal input switch, run the wet well level up until each pump comes on. Hold switch until high water level is reached.

Release switch and allow each pump to drop out of operation. Repeat this procedure, until all pumps have been cycled through one alternation cycle.

4. Check meters for operation, if there is no power, trouble shoot as follows:
 - a. Check the power companies main line fuse (leg).
 - b. Check panel box breakers. Prior to resetting a circuit breaker, contact the electrician. To reset the breaker, push to the off position completely, then back to the on position.
 - c. Check heaters on motor starters to eliminate tripped heaters. To reset a heater, push reset button.
5. Older panel or controller units: (without integrated circuits)
Check pump operation by using the on/off switches. Check alternation sequence by cycling pumps.
6. All panels will be secured with all latches to prevent tampering and rain/moisture damage.
7. Electric and control panels will be secured with a padlock
8. **DO NOT** attempt to check fuses or other components inside the panel box. Call the Electrician.

Route:

1. There are three (3) routes the City of Gulfport/**SWWC** is responsible for maintaining. The North route (Orange Grove), the East route, and the West Route
2. The operators will run the route in the specified order unless prior permission and/or emergency situations dictate a variance.
3. Operators running the routes will call in at specified intervals and as required by the lift station supervisor.
4. Enclosed spaces (CANTEX) shall NOT be entered if the operator is alone. Entering a CANTEX or other enclosed spaces requires 2 operators. One operator will remain outside the space at all times. Should an operator have to enter a CANTEX alone, the lift station supervisor or his assistant will be contacted.

Above all. Safety first. It is YOUR responsibility to understand and follow all City of Gulfport and **SWWC** safety rules and regulations. Should you feel at any time you are in an unsafe situation, contact the lift station supervisor or the assistant supervisor.

Lift Station Superintendent

Lift Station Operator