

## SOUTH COAST WATER DISTRICT

Providing Quality Water and Wastewater Services to the Coastal Communities

## LIFT STATION

## DAILY/WEEKLY MAINTENANCE PROCEDURES

- 1) Enter the station through Ritz Cove. To open gate, push key symbol twice then enter the security code.\* Drive down to the station.
- 2) Open the double gate with the Schlage key and park next to the lift Station.
- 3) Check the outer perimeter of the lift station for security breaches.
- 4) Notify West Street office (control). Inform them that you will be entering the lift station and will call back after you have completed your work. They will then know that you have tripped any entry alarms they receive.
- 5) Unlock the door with the key stamped "LS #6" or Main Office" and enter the lift station.
- 6) Flip the switch on the right to turn on the lights.
- 7) Take immediate note of any generator, pump or fan running, alarms, open doors, unusual noises or odors.
- 8) Lift the handset to check the phone line. If there is no dial tone, contact the support services communication technician.
- 9) Check the HAND/OFF/AUTO switch on all pumps. They <u>must</u> be set to AUTO.
- 10) Enter pump readings from the hour meters in the "Monthly Pump Run Time Log".
- 11) Check the wet well level and enter it in the "Monthly Pump Run Time Log". Average level should be about 3.5'. High level (~4.5') will automatically activate a second pump.
- 12) Alternate the lead pump selection. (Every Monday)
- 13) Push the PURGE button to purge the TESCO panel manually. The system is set to purge every 8 hours automatically. Manual purge verifies that the system is working.
- One at a time, run test each pump by setting the HAND/OFF/AUTO switch to the OFF position. Then switch from the VFD setting to constant speed and let the pump run at full speed for 20 seconds. Observe the wet well level dropping to verify that the pump is working and return the VFD switch to the AUTO setting.
- 15) Note any alarms on the TESCO panel.
- 16) Wipe down the TESCO panel.

- 17) Check the lower and upper motor temperature by holding a temperature gun approximately 12" away from the heat source. (Every Monday) Record the temperature on the daily checklist. The motor temperature will normally be from 10°F to 60°F above the surrounding air. A higher temperature may indicate incorrect pump alignment, over-greasing or bearing failure.
- 18) Note any unusual vibrations that might indicate a balance problem.
- 19) Check emergency generator (Every Monday):
  - Check diesel fuel level in both tanks. (Note: at 500 gal. notify fleet mechanic to purchase diesel fuel.)
  - Check oil level.
  - Check water level.
  - Check battery cell level.
  - Check power ready mode.
  - Check day tank.
- 20) Invert the float to start the small dry well sump pump and verify that it is operating.
- 21) Visually inspect all pumps. Look for signs of leaks around valves and piping that might indicate wear, failure or excessive vibration.
- 22) Remove the packing shield. Adjust the packing to a slight drip as needed. Overtightening may cause excessive wear or over-heat the stuffing box. Change the packing if necessary. After the packing is removed, check the shaft sleeve for wear before placing the new packing.
- 23) Hose down the packing area with potable water if necessary.
- 24) Inspect the valve positions. The suction and discharge valves should be completely open and the bleeder valves should be completely closed.
- 25) Hose down the floor of the lift station.
- 26) Notify West Street office (control) that you have completed your work and are leaving the station. They will then know that they should return to normal response for alarm calls.