

# **CITY OF TERRELL**

## **PLANT OPERATOR**

### **DEFINITION**

To perform a variety of technical tasks in the operation and maintenance of assigned utility plants involving water distribution or wastewater treatment; to perform regular checks on the operation of assigned plants and equipment; to conduct laboratory testing, analysis, and reporting procedures; and to provide responsible staff assistance to assigned senior management personnel.

### **SUPERVISION RECEIVED AND EXERCISED**

Receives general supervision from assigned senior management personnel.

Exercises no supervision.

**ESSENTIAL FUNCTION STATEMENTS**—*Essential responsibilities and duties may include, but are not limited to, the following:*

#### **Essential Functions:**

1. Perform routine checks of plant operations; monitor gauges, meters, valves and charts to maintain proper plant operation; record readings.
2. Collect samples; perform tests of water quality at various stages of water and wastewater production through standardized laboratory testing analyses; review data from completed analyses; record and report results accurately and in accordance with established procedures.
3. Adjust chemical dosages; collect and record data on materials and chemicals used in the operation of the assigned plant.
4. Monitor pumps, valves, motors and other equipment for proper maintenance and operation; clean and maintain various processing units; perform repair, replacement and maintenance of filters, valves, motors, pumps, chemical feeders and related equipment and tools.
5. Regulate feed rate of chemicals into the system; inventory chemicals for the plant; purchase chemicals and other items for plant facilities as needed.
6. Enter and maintain a journal of activities during an assigned shift; enter plant operations information into the computer as necessary; prepare analysis reports; prepare reports for State and local agencies as required.
7. Perform minor construction, maintenance and repair activities on equipment and facilities including painting, dry walling, carpentry, plumbing and welding.
8. Operate assigned equipment, tools and machinery.

9. Check plant grounds and equipment on a regular basis to ensure safe and normal operation; perform inside and outside cleaning and maintenance activities of the plant including dusting, sweeping, mopping, mowing and weed eating.
10. Respond to public inquiries; provide information within the area of assignment; provide courteous and efficient customer service to citizens.

*When assigned to Water Distribution:*

1. Monitor water pressure levels and adjust as needed; make flow changes to maintain adequate quantities of water in towers and clear wells; change to different pumps as needed to be pumped into the water distribution system.
2. Monitor and maintain proper operation of water distribution equipment including monitors, recorders, transmitters and filters.
3. Answer the telephone; monitor two-way radio; dispatch calls for service; dispatch work orders for distribution and collection.
4. Inspect water quality complaints with customers.
5. May be required to perform duties of Lab Technicians and other plant staff in their absence.
6. May be required to supervise other plant staff as assigned.

*When assigned to Wastewater Treatment:*

1. Monitor pressure levels and adjust as needed; make flow changes to maintain adequate quantities of water throughout the plant; monitor and maintain lift stations.
2. Transfer raw sludge from the plant; collect core samples for Sludge Management Program.
3. Clean and maintain equipment on clarifiers; clean distribution arms on trickling filters; wash all units with fire hoses; back flush sludge recirculation pumps; unstop various sludge and collection lines throughout the plant with high pressure jet machines.
4. Fill water seals on sludge digestion mixers.
5. Monitor temperature of motors, seals and packing throughout the plant and lift stations.
6. Replace chemical cylinders as needed.

**Marginal Functions:**

1. Perform related duties and responsibilities as required.

## **QUALIFICATIONS**

### **Knowledge of:**

Sampling and laboratory testing procedures and methods.  
Standard chemical bacteriological tests and procedures.  
Complex methods, procedures, and techniques of chemical and bacteriology analysis.  
Principles of chemistry, biology, bacteriology and related fields.  
Basic mathematical and algebraic calculations.  
Compliance standards and testing procedures for water and wastewater systems.  
Pertinent federal, state and local laws, codes, and regulations.  
Purchasing policies and procedures.  
Modern office procedures including computers and computer applications.  
Standard scientific laboratory methods and equipment.  
Adjustment and operation of standard equipment or instrumentation use in chemical and laboratory tests.

### **Ability to:**

Perform laboratory examinations according to prescribed procedures and regulations.  
Analyze test results and report conclusions.  
Interpret readings from gauges, valves and other measuring devices.  
Properly handle toxic and hazardous wastes.  
Operate assigned equipment and tools in a safe and effective manner.  
Prepare documents for developing testing and analytical requirements.  
Interpret and explain policies and procedures related to assigned area of responsibility.  
Prepare clear and concise reports.  
Communicate clearly and concisely, both orally and in writing.  
Use computer workstations and software for laboratory instrumentation, sample tracking and report preparation.  
Establish and maintain effective working relationships with those contacted in the course of work.  
Maintain mental capacity which permits:

- *making sound decisions and using good judgment*
- *analyzing and interpreting laboratory results*
- *demonstrating intellectual capabilities*

Maintain effective audio-visual discrimination and perception needed for:

- *making observations*
- *communicating with others*
- *reading and writing*
- *operating assigned equipment*

Maintain physical condition appropriate to the performance of assigned duties and responsibilities which may include the following:

- *sitting or standing for extended periods of time*
- *lifting or carrying light to moderate objects*
- *operating assigned equipment*
- *squatting, stooping*
- *bending, stretching*
- *walking, climbing*

## **Experience and Training Guidelines**

Any combination of experience that would likely provide the required knowledge is qualifying. A typical way to obtain the knowledge and abilities would be:

### **Experience:**

Three years of responsible water or wastewater plant operation experience.

### **Training:**

High School Diploma or GED required. Specialized training in water or wastewater operations preferred.

### **License or Certification**

Valid Texas Class C Driver's License and acceptable driving record required.

For water, possession of or ability obtain Class D water license within six (6) months from date of hire from the Texas Commission on Environmental Quality (TCEQ). Possession of or ability to obtain Class C water license within 18 months from date of hire is required.

## **WORKING CONDITIONS**

### **Environmental Conditions:**

Water and wastewater treatment plants, laboratory, and field site environments; exposure to various hazardous and toxic chemicals, acids, fumes, and solvents; work around grease and oils; possible exposure to inclement weather conditions; working with water and wastewater; work on ladders and/or scaffolds; exposure to disease, viruses and bacteria; work around slippery and/or uneven surfaces; subject to disagreeable odors and hazards associated with chemicals, burns, and acids; work closely with other and work alone; work with machinery; work around moving equipment and vehicles.

### **Physical Conditions:**

Essential and marginal functions may require maintaining physical condition necessary for sitting, standing or walking for extended periods of time; moderate to heavy lifting and carrying of objects; pulling, reaching, kneeling, climbing and repeated bending; visual acuity and ability to distinguish colors; use of both arms and legs; general manual dexterity; adequate eyesight, hearing and speech required; must be able to operate assigned equipment.