



**APPROVED BY: THE CHIEF  
ADMINISTRATIVE OFFICER**

**EFFECTIVE: March 2005**

## **CORROSION CONTROL TECHNICIAN I/II**

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are not intended to reflect all duties performed within the job.*

### **DEFINITION**

To perform technical duties in all phases of the District's corrosion control program including office, field, laboratory and site duties; to inspect and repair cathodic protection systems; and to perform a variety of technical tasks relative to assigned areas of responsibility.

### **DISTINGUISHING CHARACTERISTICS**

#### **Corrosion Control Technician I**

This is the entry level class in the Corrosion Control Technician series. This class is distinguished from the Corrosion Control Technician by the performance of the more routine tasks and duties assigned to positions within the series under immediate supervision while learning to perform the full range of journey level duties. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Advancement to the "II" level is based on demonstrated proficiency in performing the assigned functions, and is at the discretion of higher level supervisory or management staff.

#### **Corrosion Control Technician II**

This is the journey level class within the Corrosion Control Technician series. Employees within this class are distinguished from the Corrosion Control Technician I by the performance of the full range of duties as assigned under little or no supervision.

Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Positions in this class are flexibly staffed and are normally filled by advancement from the "I" level, or when filled from the outside, have prior experience.

## **SUPERVISION RECEIVED AND EXERCISED**

### **Corrosion Control Technician I**

Receives immediate supervision from assigned supervisory or management personnel.

### **Corrosion Control Technician II**

Receives general supervision from assigned supervisory or management personnel.

## **ESSENTIAL FUNCTION STATEMENTS**

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

1. Perform technical duties in all phases of the District's corrosion control program including office, field, laboratory and site work.
2. Install, maintain and adjust cathodic protection systems to ensure proper level of operations; troubleshoot, maintain, operate, adjust and repair cathode protection systems; install and maintain corrosion test stations.
3. Perform surveys on District structures including tanks and pipelines; analyze data; evaluate corrosion control problems and make recommendations on protective or mitigating measures.
4. Design and install anodes; determine location; measure anode sizes; determine quantities required; prepare installation plan and perform installation work.
5. Perform field and laboratory surveys for soil resistivity, current requirements, interference, disbandments and physical characteristics for determining environmental corrosion levels or interference with other buried structures.
6. Determine adequacy of electrical insulators and connections during construction and electrical continuity after construction.

7. Ensure proper documentation of all survey and inspection activities, findings and recommendations including changes, repairs, work performed, damage and vandalism to District property, pipelines and structures.
8. Maintain logs, records and drawings of corrosion control and test data; maintain computer databases; prepare various reports; prepare maps, charts, graphs, photographs and other documentation.
9. Maintain effective relations with other District staff, property owners, representatives of business and governmental organizations.
10. May assist maintenance and other staff during emergency flooding or similar situations.
11. Perform related duties and responsibilities as required.

## **QUALIFICATIONS**

### **Corrosion Control Technician I**

#### *Knowledge of:*

Operations, services and activities of a corrosion control program.  
Principles and practices of corrosion control, including electrical measurements, alternating and direct current circuits.  
Operational characteristics of a variety of instruments used to measure small electrical quantities.  
Methods and techniques of documenting field and laboratory testing results.  
Methods and techniques of testing conductivity and resistivity of soil.  
Pertinent federal, state and local laws, codes and ordinances.

#### *Ability to:*

Learn operational characteristics of cathodic protection systems.  
Learn methods and techniques of applying and inspecting protective coating systems.  
Learn principles and practices of designing and installing anodes.  
Learn principles and procedures of evaluating cathodic protection requirements.  
Learn to perform technical duties in support of the District's corrosion control program.  
Learn to inspect and repair cathodic protection systems.  
Learn to read and interpret maps, charts and graphs.  
Safely and efficiently utilize laboratory and field equipment and materials.  
Conduct chemical analyses and electrical measurements.

Operate a variety of specialized computer programs.  
Prepare legible, accurate and concise field notes and technical reports.  
Establish and maintain effective working relationships with those contacted in the course of work.  
Understand and follow oral and written instructions.  
Communicate clearly and concisely, both orally and in writing.

### *Experience and Training Guidelines*

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

#### Experience

One year of experience in corrosion control.

#### Training

Equivalent to the completion of the twelfth grade supplemented by college level course work in a related technical field.

### **License or Certificate**

Possession of, or ability to obtain, an appropriate, valid California driver's license may be required with determinations made on a case-by-case basis at the time of job posting.

## **Corrosion Control Technician II**

In addition to the qualifications for Corrosion Control Technician I:

### *Knowledge of:*

Operational characteristics of cathodic protection systems.  
Methods and techniques of applying and inspecting protective coating systems.  
Principles and practices of designing and installing anodes.  
Principles and procedures of evaluating cathodic protection requirements.

### *Ability to:*

Perform technical duties in support of the District's corrosion control program.  
Inspect and repair cathodic protection systems.

Read and interpret maps, charts and graphs.

### *Experience and Training Guidelines*

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

#### Experience

Three years of responsible experience in corrosion control or related experience.

#### Training

Equivalent to the completion of the twelfth grade supplemented by college level course work in a related technical field.

### **License or Certificate**

Possession of, or ability to obtain, an appropriate, valid California driver's license may be required with determinations made on a case-by-case basis at the time of job posting.

Must take the NACE (National Association of Corrosion Engineers) Basic Corrosion Course and examination within six months of hire date.

## **WORKING CONDITIONS**

### **Environmental Conditions**

Office and field environments; travel from site to site; exposure to inclement weather; work on ladders and scaffolds and at great heights; work around traffic.

### **Physical Conditions**

Essential functions may require maintaining physical condition necessary for sitting, walking and standing for extended periods of time; occasional climbing.