



# Monterey Regional Waste Management District

## Job Description

Position:	Power Systems Senior Technician (LFG)	Department:	LFG
Position Status:	Full Time/Non-exempt	Bargaining Unit:	Operations Unit
Reports to:	Power Systems Supervisor	Revised:	August 2017

### DEFINITION

Under supervision of the Power Systems Supervisor, plan, organize, operate, and maintain the District's landfill gas (LFG) Control Facility consisting of LFG fired engines/generators and associated equipment, LFG blowers and associated equipment, enclosed LFG flare and associated equipment, the 4160V distribution system, and the operation of the associated Landfill Gas Collection and Control System (GCCS); perform skilled mechanical work in the maintenance and repair of LFG/methane/natural gas fueled power generation and control systems and related equipment; and perform other job related duties as required.

### DISTINGUISHING CHARACTERISTICS

This is an experienced, journey level, specialist class for the operation, maintenance, and repair of District LFG/methane/natural gas fueled power generation and control systems, and GCCS. Duties include on-going operations, as well as performing specialized, skilled mechanical and electrical maintenance and repair work as directed. Incumbent is expected to work unusual shifts, weekends, evenings, holidays, and 24-hour on call status when required.

Good time management skills to ensure assigned responsibilities are completed in an efficient and safe manner. Good communication skills; able to effectively communicate operating issues to management. Good follow through ability; adheres to work schedules and follows through on challenges as they arise. Ability to adhere to permit requirements, District policies and rules set forth; promotes the District's safety standards; works with a sense of honesty and trustworthiness. Maintains a feeling of pride in work; strives to achieve all goals.

### ESSENTIAL FUNCTIONS

*The following duties are typical of this classification and are intended only to describe the various types of work that may be performed, the level of technical complexity of the assignment(s), and are not intended to be an all-inclusive list of duties. The omission of a specific duty statement does not exclude it from the position if the work is consistent with the concept of the classification, or is similar or closely related to another duty statement to address business needs and changing business practices.*

- Regularly inspect power generation and distribution systems for safe operations and required maintenance and repairs.
- Troubleshoot and diagnose mechanical and/or electrical system issues of assigned equipment, including electrical controls (both programmable and non-programmable) and switchgears, and carry out necessary repairs under supervision, as assigned.
- Prepare records and documentation of maintenance activities.
- Perform maintenance and operation functions on LFG field wells and associated equipment.
- Verbal communication; use of mechanical and electrical maintenance and repair equipment.
- Work with established preventive maintenance programs.
- Share 24-hour "on-call" assignment and duties with other staff. Makes field and emergency repairs as necessary.
- Assists the Power Systems Supervisor with planning, organizing, and performing tasks at the Electric Power Generation Facility of the District

- Helps evaluate the overall daily operating efficiency of the facility.
- As directed, researches, and insures the proper compliance of electrical systems and the landfill gas building.
- Prepares and maintains reports about facility operations.
- Monitors compliance with air pollution regulations and standards.
- Assists with inventory of parts and supplies.
- Prepares materials estimates for maintenance and repair projects.
- May overhaul large bore internal combustion engines.
- Inspects and maintains auxiliary equipment.
- Performs housekeeping duties and general plant maintenance.
- Adhere to an assigned work schedule and meet District attendance standards.
- All District positions require the employee to provide good customer service to both internal and external customers, maintain positive and effective working relationships with other District employees. Must show cooperation and respect to fellow employees and supervisors at all times.

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles, methods, materials, equipment, procedures, and practices used in operation, maintenance, and repair of a LFG/methane/natural gas fueled electrical generation facility and GCCS.
- Fundamentals of electricity, both AC and DC, and Arc Flash Hazards.
- Operation, care, and maintenance of gasoline and diesel engines and components, and GCCS.
- Environmental and Permit requirements for operation of power generation facilities and GCCS on a landfill site.
- Principles and methods of preventive maintenance.
- Maintenance of wells, pumps, and collection systems.
- Use of electrical and electronic testing equipment.
- Basic computer and programmable logic controllers (PLC).
- Safe work practices and procedures.

### **Ability to:**

- Maintain day-to-day responsibility for the operation, maintenance, and repair of LFG/methane/natural gas fueled electrical generation facility.
- Perform specialized, skilled work in the inspection, location, diagnosis, and correction of operating problems, mechanical problems, and electrical problems at an electrical generation plant and associated facilities.
- Ensure safe and optimum electrical generation facility operations.
- Analyze the layout, instrumentation requirements, and functions of an electrical generation/transmission facility.
- Prepare and maintain a variety of reports.
- Understand and follow oral/written instructions and accept constructive criticism.
- Work independently and apply sound judgment and critical thinking skills in a variety of circumstances to make effective decisions.
- Provide advice and consultation on electrical generation facility operations, maintenance, and repair.
- Establish and maintain cooperative working relationships.
- Adhere to an assigned work schedule including the availability to be on-call up to 24 hours/7 days a week as assigned by supervisor.
- Pass District post-offer physical examination, which includes drug testing and assessment of safe work capacity in relation to the essential job functions of the position.

### **Training and Experience:**

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

Four (4) years of increasingly responsible journey-level work experience in the operation, maintenance, and repair of Engine Systems, particularly a methane gas fueled facility. Basic engine/diesel fundamentals. Basic electrical fundamentals. Minimum of two (2) years of experience working at sites regulated by OSHA and experience working with landfill gas extraction and/or leachate systems, and LFG well field O&M.

College Technical Certificate or similar trade training. Completion of advanced educational training in methane fueled generators and electrical power transmission systems is highly desirable. High school diploma or General Education Diploma required. Associates Degree or relevant certification desired.

**Special Requirements:**

Possession of a current California Driver's License issued by the State Department of Motor Vehicles. Continued possession of a valid California Driver's license and compliance with established District vehicle operation standards, including on-going insurability to drive District vehicles, are conditions of employment.

**PHYSICAL AND SENSORY REQUIREMENTS**

The physical and mental demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**Physical Demands** - Frequently stand and walk on flat and uneven surfaces, steps and ladders; bend at waist and reach over mechanical equipment for extended periods of time, lay under equipment for extended periods of time; ability to frequently lift and/or move up to 50 pounds; vision sufficient to read printed material and/or manuals, acute vision, depth perception and peripheral visions, visual color discrimination; hearing sufficient to conduct in person and telephone conversations; physical agility to push/pull, squat, crouch, kneel, twist, turn, bend at waist, stoop and reach overhead; physical mobility sufficient to move about the maintenance shop and District grounds during inspections; manual dexterity and hand-eye coordination sufficient to use hand tools and shop equipment; write, use telephone, computer, business machines and related equipment.

**Mental Demands** - While performing the duties of this class, employees are regularly required to use oral communication skills; read and interpret data, information and documents; learn and apply new information or skills; perform detailed work on multiple, concurrent tasks with constant interruptions; work under deadlines and interact with all levels of District management and personnel, and the public.

**Work Environment** - Normally work is performed in both indoor and outdoor environments; regular exposure to dust; some exposure to fumes, grease, and oil; often works around moving vehicles and equipment; exposure to electrical current and energy; exposure to landfill gasses; exposure to the landfill surface and well systems; exposure to loud and constant noise, requiring the use of hearing protection at all times, while working in engine room, regular contact with other staff and occasional contact with the public.