



Madera Irrigation District Job Description

JOB TITLE: ENGINEERING TECHNICIAN I
DEPARTMENT: MAINTENANCE & OPERATIONS
SUPERVISOR: ENGINEERING TECHNICIAN III
FLSA STATUS: [] Exempt [X] Non-Exempt [X] At-Will
SALARY: JOURNEY

PURPOSE

Under general direction, serves as Engineering Technician I for the measurement of water flow and storage in the District's canals, reservoirs, streams and pipelines; maintains local and CIMIS weather stations and records data; performs a variety of hydrographic studies; and performs other related duties as required. Assists the Meter Technician and fills in when Meter Technician is absent. Assists the Maintenance and Operations Department in other related departmental duties and activities.

DISTINGUISHING CHARACTERISTICS

This is a single position classification under the supervision of the Engineer Technician III.

ESSENTIAL FUNCTIONS *(Duties may include, but are not limited to, the following):*

- Performs water measurements relating to reservoirs, open channels and pipelines;
- Maintains flow measurement stations, gauges, and sensors on canals and basins
- Maintains weir charts, water delivery and flow records;
- Performs routine maintenance of SCADA gates/meters and radios;
- Recommends water measurement methods and equipment, and develops maintenance requirements;
- Measure canal inflow and outflow for seepage records;
- Assists with flow measurements for the Fresno River Riparians;
- Setting and maintaining diversions at mountain gauging stations;
- Maintains records and file reports for Statements of Water Diversion and Use.
- Exchanges water related data with other agencies;
- Performs groundwater measurements and database entry;
- Maintains weather stations;
- Performs related engineering duties including USA's, GPSing facilities, assisting with topographic surveys, and sensor installations;
- Various other duties as needed

ESSENTIAL RESPONSIBILITIES

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. **General Knowledge** – Basic math; English grammar, spelling and punctuation, reading and writing, general science and chemistry.
2. **Specialized Knowledge** – Geometry, algebra, and trigonometry; hydraulic, hydrologic, and hydrographic principles, procedures and techniques; water measurement principles, procedures and techniques; field and office procedures related to hydrography. Knowledge of engineering principles, basic computer skills.
3. **Resources** – District's supplies and equipment used or available for use during employment such as: MID vehicle, cellphone, keys, gas card, and reports. Meters; gauges; weather stations; and pumps.
4. **Communication** – Ability to communicate clearly with all District personnel, customers, general public, clients, and stakeholders of the District. Channels of communication may include: mobile radio, phone, literary instructions, computer, and may also include the use of oral, written, auditory, and visual senses. Employee will display the ability to communicate with respect even in times of difficult matters.
5. **Safety** – Ability to work safely, following all District safety procedures and rules. Identify potential hazards and communicate them to authorized District safety representative. Pay close attention to working conditions and make every attempt to mitigate risk. Safety of other crewmembers, working with irate growers and encountering illegal activity. Working around moving heavy equipment; road hazards; dense fog and rough or slippery canal banks.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Exposure to the sun: 50% to 100% work time spent outside a building and exposed to the sun.
- Work below floor level: Some work done in small confined spaces.
- High Temp: Some outdoor work time in temperatures between approximately 80 to 110 + degrees.
- Humidity: Work in areas with unusually high humidity.
- Noise: Occasionally there are unusually loud sounds.
- Slippery surfaces: Occasional work on unusually slippery surfaces, water hazards in canals, rivers and streams, electric shock.
- Driving on rural roads, highways, unpaved mountain roads, and canal banks.

- Oil: Some parts of the body in contact with oil or grease occasionally.
- Dust: Works in or around areas with minor amounts of dust.
- Irregular or extended work hours: As an exempt employee, may work additional hours as necessary.

PHYSICAL REQUIREMENTS

To perform this job effectively, there are physical demands that are required of the employee. The following items are examples of physical abilities that will be necessary to perform the essential functions of this position:

- Walking on uneven ground, snow and steep terrain; water hazards in
- Operates District vehicles and equipment in collection system, construction, maintenance, and repair work.
- Must be able to carry, push, pull, reach, and lift equipment and parts weighing up to 95 pounds.
- Stands and walks for extended time periods.
- Regularly uses a telephone for communication.
- Use office equipment such as computers, copiers, and FAX machines.
- Sits for extended time periods.
- Hearing and vision within normal ranges with or without correction.
- Stoops, kneels, crouches, crawls, and climbs during field maintenance and repair work.
- Works in an environment with exposure to dust, dirt, and significant temperature changes between cold and heat.

QUALIFICATIONS

Any combination of applicable 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:

Education – Graduation from high school

Experience – Two years of experience in gathering and analyzing hydrologic and meteorological data using computerized field and office systems, on-the-job or external training, **OR** equivalent to completion of the twelfth grade supplemented by college level course work in engineering, geology, hydrology, or a related field. Computer skills including Excel, Access, GIS/GPS a plus.

Licenses, Registrations, Accreditation, etc.: Possession of a valid California Class C Driver License may be required at the time of appointment. Failure to obtain or maintain such required license(s) may be cause for disciplinary action. Individuals who do not meet this requirement due to a physical disability will be considered for accommodation on a case-by-case basis. Possession and proof of a driving record free of multiple or serious traffic violations or accidents for two (2) consecutive years.

I have reviewed this Job Description and agree with its contents.

Employee Signature

Date

Supervisor Signature

Date

This job description may be changed to include new responsibilities and tasks or change existing ones as management deems necessary.”