



**Water Apprentice Program
Guidelines
2018**

OVERVIEW

Apprenticeship is one of the oldest forms of training. It involves learning on the job under the direction of a master or senior worker. In the U.S., registered apprenticeship has a defined meaning and a long, rich history. The registered apprenticeship system dates back to 1937 with the passage of the Fitzgerald Act—national legislation that lays the foundation for the federal-state system that exists today.

Apprenticeship is limited to skilled occupations and trades that meet basic criteria. Apprenticeship occupations are: 1) customarily learned in a practical way through a structured, systematic program of on-the-job supervised training supplemented by related technical instruction; 2) clearly identified and commonly recognized throughout an industry; and 3) involve the acquisition of manual or technical skills and knowledge. There are close to 1,000 occupations nationally that have been recognized as apprenticeships.

Apprenticeship programs are operated by both the public and private sectors and the training programs in apprenticeship occupations must meet basic standards to be registered by a federal or state apprenticeship agency. These standards relate to:

- The type of occupations and the duration of training
- The methods of training and the contents of the training agreement between the apprentice and program sponsor/employer
- Employment and supervision of apprentices, including requirements for wage progression
- Registration, record maintenance, reporting and certification
- Compliance with equal employment opportunity requirements

Apprenticeship is a system of learning while earning, and "learning by doing." It combines training on the job with related and supplemental instruction at school. Each program operates under apprenticeship training standards in accordance with State and Federal laws, under which a person works with a skilled worker and gains on the job skills and "know-how" and in turn becomes an important part of the occupation and industry. While the Three Valleys Municipal Water District (TVMWD) does not seek to establish its apprentice program under the registered federal/state guidelines, it does strive to encompass several of the standards promoted therein.

QUALIFICATIONS

To be successful in the TVMWD apprentice program, individuals must have perseverance, ambition, and initiative. Similar to a college education, success in an apprenticeship does not come easily, but is the result of hard work on the part of the apprentice.

In practically every skilled occupation, the ability to read, write and speak well is beneficial, but in some apprenticeship occupations it is more important than in others. In the TVMWD apprentice program, individuals seeking an opportunity will be at a decided advantage if they have taken water

treatment/distribution courses, have some basic knowledge of mechanical, electrical and transmission systems, chemistry, biology, mathematics, record-keeping and reporting techniques, etc. Physical fitness, a good sense of balance, eye-hand coordination, color sense, agility, strength, ability to lift up to 55 pounds and work at heights all with a mechanical aptitude are desirable qualifications. Some level of interest and experience in Supervisory Control and Data Acquisition (SCADA) analysis is a plus. Ability to work with others, a good personality and neat appearance are necessary as there is occasional contact with the public.

A high school diploma supplemented by applicable, specialized training is preferred. Prospective skilled workers usually like to work with their hands, solve practical problems and use various tools to build and repair things. They like to finish things they've started and don't care how dirty or greasy the job is, as long as they get it done.

See the TVMWD *Water Apprentice Program* job classification for complete qualification requirements.

PROGRAM SUMMARY

Hiring Process - Applicants are required to submit a completed TVMWD job application and participate in an interview with supervisory staff. All applicants will be ranked (Pass/Fail) based on interview, certification & experience and placed in a queue for prospective hiring as apprentice positions become available.

Length of Program - The period of training is designed to run up to six months, but can extend longer depending on current work/project needs and whether higher-level positions are available for promotion. TVMWD intends to concurrently maintain up to three (3) apprentices, each at up to 24 hours per week.

Wage & Benefits- The Apprentices serve in a volunteer capacity and thus, no wages or benefits are earned.

Continuing Education - Apprentices should maintain a minimum T1/D1 certification level and are encouraged to attend classes of related technical instruction, usually at a local community college. This instruction, supplementing the training on the job, gives apprentices a comprehensive understanding of the theoretical aspects of their work. Related instruction a fundamental feature and has been accepted as standard practice for the TVMWD apprentice program.

Utilizing District Property - Apprentices are provided with ample opportunity to learn the theories of their trade. Each day on the job they learn, under the supervision of skilled workers, instruction in the use of the tools of the trade. With proper instruction and oversight, apprentices are allowed to use power-driven machinery as part of their training. Apprentices are not required to furnish their own hand tools; all tools and equipment are provided by the district and are to remain on district property at the end of each work day.

APPLICATION PROCESS

To receive an application and more information about the apprentice program, contact:

Three Valleys Municipal Water District, 1021 E. Miramar Ave, Claremont, Ca 91711

Kirk Howie, Chief Administrative Officer

khowie@tvmwd.com 909-621-5568



Three Valleys Municipal Water District Job Classification

Title: WATER APPRENTICE
Exempt: NO – Part Time Volunteer Status

Summary

To perform a variety of skilled technical duties and semi-skilled labor in the operation and maintenance of the District's water system including water treatment plants, pipeline transmission systems, hydroelectric facilities, water quality laboratory and related facilities and equipment. An emphasis on maintenance related work assignments will be required, as summarized in the *Essential Functions* below.

Supervision Received And Exercised

- Reports to the Operations Supervisors.
- More experienced apprentices may exercise functional and technical supervision over less experienced apprentice staff.

Essential Functions

Maintenance (Under Direct Supervision):

- Operates valves, gates, pumps, motors and generators in controlling treatment processes
- Performs preventative maintenance, including cleaning and lubricating plant equipment, pump stations and hydroelectric stations
- Assists with emergency repairs to plant equipment; records failures of and problems with equipment and writes repair work orders
- Performs a variety of cleaning duties inside and outside district water facilities, primarily inside the Control Building
- Drains, inspects and cleans plant structures
- Performs other related duties as required

Plant & Treatment (Under Direct Supervision):

- Makes daily rounds of the plant performing a variety of duties pertaining to water treatment and plant maintenance; inspects treatment facilities to ensure proper plant operation
- Responds to and informs supervisor and co-workers of present and potential problems and hazards

- Maintains logs and worksheets of plant operations; compiles equipment readings and test results into hourly, daily, and monthly reports
- Collects water samples and conduct chemical tests
- May operate forklift, tractor, etc.; performs safety inspections and reports safety and other priority repair work to supervisor
- Keeps abreast of new trends and innovations in the water treatment field
- Calculates flow rates and calibrates valves and feeder systems
- Responds to water facility alarms and takes corrective action as required during normal hours
- Performs a wide variety of duties as assigned by the Operations Supervisors and Water Operations Manager
- Inspects, maintains and repairs chemical feed and delivery systems; able to wear protective safety equipment and work in hazardous work environments
- Operate and maintain sludge collection and processing systems
- Performs related duties as assigned

Qualification Requirements

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

Knowledge of: Materials, methods, equipment and procedures for the operation and maintenance of water treatment facilities, transmission systems, hydroelectric facilities and water quality laboratory; functions and purposes of water purification systems; standard principles of biology, chemistry and mathematics as related to water purification treatment; experience with or the ability to learn basic electrical and SCADA operation; mechanical and electrical systems as applied to water treatment and hydroelectric facilities; principles and practices of chemical and biological testing and analysis; principles and procedures of record keeping and basic report preparation techniques; safe work practices; common Microsoft business computer applications such as Word, Excel, Outlook and the Internet.

Ability to: Operate machinery and equipment utilized in the water treatment facilities, transmission systems, and hydroelectric stations; make routine adjustments to telemetry equipment, motors, pumps and other equipment; maintain and operate laboratory equipment and

conduct chemical and biological tests; read meters and gauges correctly, make necessary documentation and act quickly and competently; maintain records and compile data into written logs and reports; recognize and react to treatment process changes and demands; recognize and troubleshoot mechanical problems; communicate clearly and concisely, both orally and in writing; work effectively with a diversity of individuals, personalities, and organizations; demonstrate initiative, task-orientation and follow-through in the approach to and completion of assignments; comply with District policies and safety requirements.

Education And Experience

The Water Apprentice will possess a combination of education and experience equivalent to:

- Completion of the twelfth grade, supplemented by specialized training in biology, chemistry, or a related field

Physical Demands And Working Conditions

Requires ability to receive, understand, and act upon verbal and written communication from others, and to communicate to others. Requires ability to distinguish between colors. Requires ability to use hands and fingers to handle or feel objects, tools, or controls; to reach with hands and arms; to sit, stand and climb (e.g., a ladder); and to talk and hear. The work may regularly require lifting supplies and/or equipment weighing up to 25 pounds and occasionally lifting approximately 55 pounds. Requires working with and handling hazardous chemicals; the manual operation of heavy equipment.

Certificates, Licenses and Registrations

- Possession of a Grade I water treatment certificate (T1) issued by the California Department of Public Health.
- Possession of a Grade I water distribution certificate (D1) issued by the California Department of Public Health.
- Must have and maintain a current California driver's license.