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Operator Certification Experience Guidance

Drinking Water Operator Certification Program Advisory Committee
Operator Experience Workgroup

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Chapter – 1 Overview

1.1 Objective

The primary objective of the Operator Certification Experience Guidance (OEG) is to protect public health by providing guidance for Water Distribution and Treatment Operators in the certification process. This document builds on [Title 22 Code Of Regulations/Division 4. Environmental Health/Chapter 13. Operator Certification](#). By providing specific examples related to operator experience and certification processing.

1.3 Adoption and Updates

In effort to stay up to date with industry needs as related to operator certification the OEG was developed by the Operator Experience Sub Workgroup and presented to the Operator Certification Advisory Committee for consideration and review. The timeline below provides the status and revisions of the OEG document.

Date	Committee/Organization	Description	Result
3/17/2023	Operator Experience Sub Workgroup	OEG Draft Complete	Forward to Operator Certification Advisory Committee Meeting 04/05/23
4/5/2023	OEG Draft Presented to Operator Certification Advisory Committee Meeting		Forward to Operator Certification Advisory Committee Meeting 06/27/23

1.4 Operator Experience Background

Experience as a Water Treatment or Distribution operator is a requirement for operator certification above the grade 2 level. The amount of experience required increases with the level of certification and is listed in the regulations under Section [63800](#) for water treatment and Section [63805](#) for distribution. Experience substitutions are available for some of the experience requirements, but an operator cannot receive certification beyond the T2 and D2 levels without operator experience.

There are two kinds of experience requirements listed in the regulations, operator experience and additional experience.

Operator experience is earned while being certified at a specific grade working at a specific classification of treatment facility or distribution system (Site and Grade). For example, to qualify for T4 certification the operator must have “At least one year of operator experience working as a shift or chief operator, while holding a valid T3 operator certificate, at a T3 facility or higher.” Experience gained at a lower grade or classification will not meet this requirement.

Additional experience is earned while working at any classification of water treatment facility or distribution system. The operator must be certified as a water treatment operator in order to get water treatment experience credit. Distribution operators can receive general experience credit before becoming a certified D1 or D2 operator if they are working as a distribution operator at a water system that has been classified as a distribution system.

Chapter – 2 Definitions

- **Additional Year of Operator Experience**
 - Treatment – Section **5.1 Treatment**
 - Distribution – Section **5.2 Distribution**
- **Chief Operator [63750.25](#)** - “Chief operator” means the person who has overall responsibility for the day-to-day, hands-on, operation of a water treatment facility or the person who has overall responsibility for the day-to-day, hands-on, operation of a distribution system.
- **One Year of Full-Time Qualifying Experience** - Eighteen hundred (1,800) hours in operations at a classified treatment plant or distribution system counts as one year of full-time qualifying experience. Operator experience is earned while being certified at a specific grade working at a specific classification of treatment facility or distribution system (Site and Grade).
 - Due to increasing technological advancements, individual operators may gain operator experience which exceeds 40 hours per week. Section **4.1 Operator Responsibilities and Experience** includes specific scenarios for operators responsible for Distribution and/or Treatment operations
- **Operates a Water Distribution System ([CA Health & Safety Code § 106876 \(2021\)](#))** – “Operates a water distribution system” means actions or decisions to control the quality or quantity of drinking water in a water distribution system and includes both of the following:
 - (1) Supervision of other persons operating a water distribution system.
 - (2) Any activity designated by the state board, in its regulations to implement this article, as an activity that may only be performed by a person with a water distribution operator certificate.
- **Operates a Water Treatment Plant ([CA Health & Safety Code § 106876 \(2021\)](#))** - “Operates a water treatment plant” means actions or decisions to control the performance of one or more drinking water treatment processes and includes both of the following:
 - (1) Supervision of other persons operating a water treatment plant.
 - (2) Any activity designated by the state board, in its regulations to implement this article, as an activity that may only be performed by a person with a water treatment operator certificate.
- **Operator Experience [63750.65](#)** - “Operator experience” means the daily performance of activities consisting of the control or oversight of any process or operation at a water treatment facility or in a distribution system that may affect the quality or quantity of water.
- **Shift Operator [63750.70](#)** - “Shift operator” means a person in direct charge of the operation of a water treatment facility or distribution system for a specified period of the day.

Chapter – 3 Eligibility Criteria for Certification

Water Treatment

In accordance with [Article 4. Operator Certification Criteria and Applications § 63800. Eligibility Criteria for Water Treatment Operator Certification](#)



Drinking Water Treatment Minimum Qualifications for Examination and Eligibility Criteria for Certification

Grade	Minimum Qualifications for Examination	Eligibility Criteria for Certification
T1	High School Diploma / GED Equivalency*.	Successful completion of the Grade T1 examination within the three years prior to submitting certification application.
T2	High School Diploma / GED Equivalency* AND One 3-unit (or 36-hour) course of specialized training covering the fundamentals of drinking water treatment.	Successful completion of the Grade T2 examination within the three years prior to submitting certification application.
T3	High School Diploma / GED Equivalency* AND Two 3-unit (or 36-hour) courses of specialized training that include at least one course in drinking water treatment and a second course in either drinking water treatment, distribution, or wastewater treatment.	Successful completion of the Grade T3 examination within the three years prior to submitting certification application AND At least one year of operator experience working as a certified T2 operator at a T2 facility or higher. This may be substituted with (3) below. AND At least one additional year of operator experience working as a certified treatment operator. This may be substituted with (1), (2), or (4) below.
T4	Current T3 certification AND Three 3-unit (or 36-hour) courses of specialized training that include at least two courses in the fundamentals of drinking water treatment and a third course in either drinking water treatment, distribution, or wastewater treatment.	Successful completion of the Grade T4 examination within the three years prior to submitting the application for certification AND At least one year of operator experience working as shift or chief operator, while a certified T3 operator at a T3 facility or higher. This may be substituted with (3) below. AND At least three additional years of operator experience working as a certified treatment operator. This may be substituted with (1) or (4) below.
T5	Current T4 certification AND Four 3-unit (or 36-hour) courses of specialized training that include at least two courses in drinking water treatment and two additional courses in either drinking water treatment, distribution, or wastewater treatment.	Successful completion of the Grade T5 examination within the three years prior to submitting the application for certification AND At least two years of operator experience working as a shift or chief operator, while a certified T4 operator at a T4 facility or higher. There are no substitutions. AND At least three additional years of operator experience working as a certified treatment operator. This may be substituted with (1) or (4) below.

*High School Diploma/GED equivalency for **Grades 1 and 2 ONLY** can be fulfilled with either successful completion of **Basic Small Water Systems Operations** course provided by the Department **OR 1 year** as an operator of a facility that required an understanding of a chemical feeds, hydraulic systems, and pumps.

Experience substitutions for certification, as referenced above.

1) A relevant degree earned at an accredited academic institution may be substituted as follows:

- a) Associate's Degree or Certificate in Water or Wastewater Technology that includes at least 15 units of physical, chemical, or biological science may be used to fulfill **1 year of operator experience**.
 - b) Bachelor's Degree in engineering or in physical, chemical, or biological sciences (e.g. Biology, Chemical Engineering, Chemistry, Civil Engineering, Environmental Engineering, Microbiology, Public Health, or Sanitary Engineering) may be used to fulfill **1.5 years of operator experience**.
 - c) Master's Degree in the above mentioned fields in (b) may be used to fulfill **2 years of operator experience**.
- 2) A certified operator may substitute, on a day-for-day basis, experience gained while working with lead responsibility for water quality related projects of research (e.g. pilot plant).
 - 3) If an applicant has a Bachelor's or Master's of Science degree, completion of a comprehensive operator training program, pursuant to Section 63800(h), may be substituted for the required experience.
 - 4) Experience gained as a certified wastewater treatment operator may be used to substitute up to 2 years of the experience requirement. Wastewater treatment operator experience is credited on a two-for-one basis (i.e. 2 months in wastewater=1 month in drinking water).

Revised 6/2020

Water Distribution

In accordance with [Article 4. Operator Certification Criteria and Applications § 63805. Eligibility Criteria for Distribution Operator Certification.](#)



Drinking Water Distribution Minimum Qualifications for Examination and Eligibility Criteria for Certification

Grade	Minimum Qualifications for Examination	Eligibility Criteria for Certification
D1	High School Diploma / GED Equivalency*	Successful completion of the Grade D1 examination within the three years prior to submitting certification application.
D2	High School Diploma / GED Equivalency* AND One 3-unit (or 36-hour) course of specialized training covering the fundamentals of water supply principles.	Successful completion of the Grade D2 examination within the three years prior to submitting certification application.
D3	Current D2 certification AND Two 3-unit (or 36-hour) courses of specialized training that includes at least one course in the fundamentals of water supply principles and a second course in either drinking water distribution, treatment, or wastewater treatment.	Successful completion of the Grade D3 examination within the three years prior to submitting certification application AND At least one year of operator experience working as a certified D2 operator for a D2 system or higher AND At least one additional year of operator experience working as a distribution operator. This may be substituted with (1) or (2) below.
D4	Current D3 certification AND Three 3-unit (or 36-hour) courses of specialized training that includes at least two courses in the fundamentals of water supply principles and a third course in either drinking water distribution, treatment, or wastewater treatment.	Successful completion of the Grade D4 examination within the three years prior to submitting the application for certification AND At least one year of operator experience working as a certified D3 operator for a D3 system or higher AND At least three additional years of operator experience working as a distribution operator. This may be substituted with (1) or (2) below.
D5	Current D4 certification AND Four 3-unit (or 36-hour) courses of specialized training that includes at least two courses in the fundamentals of water supply principles and two additional courses in either drinking water distribution, treatment, or wastewater treatment.	Successful completion of the Grade D5 examination within the three years prior to submitting the application for certification AND At least two years of operator experience working as a certified D4 operator for a D4 or D5 system AND At least three additional years of operator experience working as a distribution operator. This may be substituted with (1) or (2) below.

*High School Diploma/GED equivalency for **Grades 1 and 2 ONLY** can be fulfilled with either successful completion of **Basic Small Water Systems Operations** course provided by the Department **OR 1 year** as an operator of a facility that required an understanding of a piping system that included pumps, valves, and storage tanks.

Experience substitutions for certification, as referenced above.

- 1) A relevant degree earned at an accredited academic institution may be substituted as follows:
 - a) Associate's Degree or Certificate in Water or Wastewater Technology that includes at least 15 units of physical, chemical, or biological science may be used to fulfill **1 year of operator experience**.
 - b) Bachelor's Degree in engineering or in physical, chemical, or biological sciences (e.g. Biology, Chemical Engineering, Chemistry, Civil Engineering, Environmental Engineering, Microbiology, Public Health, or Sanitary Engineering) may be used to fulfill **1.5 years of operator experience**.
 - c) Master's Degree in the above mentioned fields in (b) may be used to fulfill **2 years of operator experience**.
- 2) A certified operator may substitute, on a day-for-day basis, **1 additional year of operator experience** working as a distribution operator with experience gained while working with lead responsibility for water quality or quantity related projects or research.

Revised 6/2020

Chapter – 4 Experience Guidelines

1. The procedure for becoming certified is a two-step process, applying for the exam and applying for certification. The operator has three years to meet the experience requirements and submit an application to become certified. If the requirements cannot be met within three years, the operator would have to retake the exam.
2. "Operator experience" means the daily performance of activities consisting of the control or oversight of any process or operation at a water treatment facility or in a distribution system that may affect the quality or quantity of water. The processes and operations referred to in this definition are those that require a certified operator to perform under the regulations. Such duties may include but are not limited to:
 - a. Distribution/Treatment ([63770](#))
 - i. Water systems shall utilize only certified distribution operators to make decisions addressing the following operational activities:
 1. Install, tap, re-line, disinfect, test and connect water mains and appurtenances.
 2. Shutdown, repair, disinfect and test broken water mains.
 3. Oversee the flushing, cleaning, and pigging of existing water mains.
 4. Pull, reset, rehabilitate, disinfect and test domestic water wells.
 5. Stand-by emergency response duties for after hours distribution system operational emergencies.
 6. Drain, clean, disinfect, and maintain distribution reservoirs.
 - ii. Water systems shall utilize either certified distribution operators or treatment operators that have been trained to make decisions addressing the following operational activities:
 1. Operate pumps and related flow and pressure control and storage facilities manually or by using a system control and data acquisition (SCADA) system.
 2. Maintain and/or adjust system flow and pressure requirements, control flows to meet consumer demands including fire flow demands and minimum pressure requirements.
 - iii. Water systems shall utilize either certified distribution operators or treatment operators to make decisions addressing the following operational activities:
 1. Determine and control proper chemical dosage rates for wellhead disinfection and distribution residual maintenance.
 2. Investigate water quality problems in the distribution system.
3. Experience credit is only given if a certified operator is required to either operate a water distribution system or operate a water treatment plant. Duties or positions that do not require a certified operator will not earn experience credit. Examples of positions that would not earn experience credit include:
 - a. Maintenance mechanics or electrical technicians who solely calibrate and repair equipment and are not required to be certified to perform those duties would not earn experience credit.
 - b. Designer/Engineer of a water treatment facility or distribution system who does not required to be certified to perform those duties would not earn experience credit .
 - c. Meter readers/customer service representatives who only record and convey information and are not required to be certified to perform those duties would not earn experience credit.
 - d. Laboratory/Water Quality technicians that analyze water samples and are not required to be certified to perform those duties would not earn experience credit.
4. Operator certification for positions of responsibility above the "Chief Operator" (i.e.; Water Superintendent or Treatment/Distribution Manager) is required only if the supervisor of the "Chief

Operator" participates in water treatment and/or water distribution decisions that directly affect water quality and/or quantity. Positions higher than the Chief Operator do not qualify as operator experience solely based on supervising a "Chief Operator" or holding a higher position. Operator experience to meet certification requirements for managers or supervisors are the same as other operators and are defined in Section [63750.65. Operator Experience](#); [Section 63750.70. Shift Operator](#); and [Section 63750.25. Chief Operator](#).

5. All water treatment operators are required to be certified, ([Section 63765 \(b\)](#)), so no experience credit is given for work performed as an uncertified operator.
6. Uncertified distribution operators can earn experience while working on a distribution system. [Section 63770](#) requires distribution operators to be certified only if they make decisions regarding operational activities that may affect the quality or quantity of water. Uncertified operators may gain distribution experience while performing tasks necessary to carry out these decisions if these duties are directly related to the operation of a distribution system.

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4.1 Operator Responsibilities and Experience

Due to increasing technological advancements, individual operators may gain operator experience which exceeds 40 hours per week. This section includes specific scenarios for operators responsible for Distribution and/or Treatment operations

An operator can earn experience credit for both water treatment and distribution according to the following table.

	Water Treatment Only (A)	Water Treatment and Distribution (B)	Distribution Only (C)	Distribution and Water Treatment (D)	Distribution and Water Treatment (E)
Responsibilities	Only has responsibility for water treatment. Even though performs some duties listed in (c) and (d) all of these duties are performed within the treatment facility. Does not perform duties listed in Section 63770 , (b).	Primary responsibility is water treatment but also has some distribution responsibility according to Section 63770 , (b)	Only responsibility is distribution. Duties do not require a treatment certification	Primary responsibility is distribution according to Section 63770 , (b) but also has some water treatment responsibility.	Primarily responsible for water treatment and distribution. Duties performed require both a water treatment and distribution certificate.
Maximum Weekly Hours	40 Hours Treatment 0 Hours Distribution	40 Hours Treatment 20 Hours Distribution	0 Hours Treatment 40 Hours Distribution	20 Hours Treatment 40 Hours Distribution	40 Hours Treatment 40 Hours Distribution

4.2 Criteria for Operator A

- Operator is certified as a water treatment operator,
- Job description identifies position as a water treatment operator,
- Duties or responsibilities listed are those of a water treatment operator,
- Operator could perform all the duties listed on the job description without requiring a distribution certificate

4.3 Criteria for Operator B

- Operator is certified as a water treatment and distribution operator,
- Job description identifies position as a water treatment operator,
- Job description identifies position as having responsibility for both water treatment and distribution.
- Position is a Shift or Chief operator that requires certification in both water treatment and distribution.
- Duties or responsibilities listed are those of a water treatment operator and distribution operator. Some duties under Section [63770](#)(b) are included such that the operator must be certified as a distribution operator in order to perform those duties.

4.4 Criteria for Operator C

- Job description identifies position as a distribution operator,
- Operators' position does not require a certified water treatment operator based on the duties or responsibilities listed in the job description.

4.5 Criteria for Operator D

- Operator is certified as a water treatment and distribution operator,
- Job description identifies position as a water distribution operator
- Job description identifies position as having responsibility for both water treatment and distribution.

- Position is a Shift or Chief operator that requires certification in both water treatment and distribution.
- Some duties under Section [63770\(b\)](#) are included such that the operator must be certified as a distribution operator in order to perform those duties.

4.6 Criteria for Operator E

- Operator is certified as a water treatment and distribution operator,
- Job description identifies position as having equal responsibility for both water treatment and distribution.
- Position is a Shift or Chief operator in both water treatment and distribution.
- Duties or responsibilities listed are those of a water treatment operator and distribution operator. Some duties under Section [63770\(b\)](#) are included such that the operator must be certified as both a distribution and treatment operator in order to perform those duties.

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Chapter – 5 Experience Substitutions

5.1 Treatment

In accordance with [Article 4. Operator Certification Criteria and Applications § 63800. Eligibility Criteria for Water Treatment Operator Certification](#)

- A degree earned at an accredited academic institution may be used to fulfill experience requirements in [63800](#) (c)(2), (d)(2), and (e)(2) as follows:
 - An Associate degree or certificate in water or wastewater technology that includes at least 15 units of physical, chemical, or biological science may be used to fulfill 1 year of operator experience.
 - A Bachelors degree in engineering or in physical, chemical, or biological sciences may be used to fulfill 1.5 years of operator experience.
 - A Masters degree in engineering or in physical, chemical, or biological sciences may be used to fulfill 2 years of operator experience.
- A certified operator may substitute on a day-for-day basis the experience requirements in [63800](#) (c)(2) with experience gained while working with lead responsibility for water quality related projects or research.
- If the applicant has a bachelor of science or a master of science degree, completion of a comprehensive operator training program may be used to fulfill the operator experience requirements in [63800](#) (c)(1) and [63800](#) (d)(1). Completion of the training shall be verified in writing by the chief operator. The comprehensive operator training program shall be at least 6 months in duration and shall cover the following elements:
 1. California Safe Drinking Water Act and regulations promulgated pursuant thereto.
 2. Water treatment calculations.
 3. SCADA operation.
 4. Handling of laboratory chemicals used for drinking water analyses.
 5. Laboratory analyses conducted by operators.
 6. Safety training.
 7. Distribution system operation.
 8. Treatment chemical dosing and monitoring.
 9. Disinfectant dosing and monitoring.
 10. Treatment processes and controls.
- Experience gained as a certified waste water treatment plant operator, pursuant to California Water Code sections 13625 through 13633, may be used to fulfill up to two years of the operator experience requirements in (c)(2), (d)(2), and (e)(2). Each two months of experience as a waste water treatment plant operator shall be considered equivalent to one month of water treatment facility operator experience.

5.2 Distribution

In accordance with [63805. Eligibility Criteria for Distribution Operator Certification](#)

- A degree earned at an accredited academic institution may be used to fulfill experience requirements in [63805](#) (c)(2), (d)(2), and (e)(2) as follows:
 - An Associate degree, or certificate, in water or wastewater technology or distribution that includes at least 15 units of physical, chemical, or biological science may be used to fulfill 1 year of operator experience.
 - A Bachelors degree in engineering or in physical, chemical, or biological sciences may be used to fulfill 1.5 years of operator experience.

- A Masters degree in engineering or in physical, chemical, or biological sciences may be used to fulfill 2 years of operator experience.
- A certified operator may substitute on a day-for-day basis the experience requirements in (c)(2) with experience gained while working with lead responsibility for water quality or quantity related projects or research.

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Chapter – 6 Operator Certification Applications/Examples

In accordance with section [63830. Certification Application Content and Submittal](#).

- a) A complete application for operator certification shall contain the following:
1. The applicant's full name, social security number (pursuant to the authority found in sections 100275 and 106910 of the Health and Safety Code and as required by section [17520](#) of the Family Code, providing the social security number is mandatory. The social security number will be used for purposes of identification), date of birth, certificate number of any operator certificates ever held, mailing address, work telephone number, and home telephone number.
 2. Payment of certification fee pursuant to section [63850](#).
 3. For any experience being claimed to meet the experience requirements in sections [63800](#) or [63805](#), the name, address, and phone number of each employer, the length of time employed, and the nature of the work performed.
 4. Employer verification of the experience being claimed in paragraph (3) with the signature of the chief operator or supervisor of each employer.
 5. Copies of college transcripts if claiming any of the credits pursuant to sections [63800](#) (f), [63800](#) (h) and [63805](#) (f).
 6. Copies of transcripts or certificates of completion of specialized training courses claimed to meet minimum requirements.

6.1 Water Treatment Operator Certification Application

- [Treatment Operator Certification – a Step-By-Step Process](#)
- [Treatment Certification Application](#)
- [Sample Supervisor Letter](#)

6.2 Water Distribution Operator Certification Application

- [Distribution Operator Certification – a Step-By-Step Process](#)
- [Distribution Certification Application](#)
- [Sample Supervisor Letter](#)

References

California Water Boards

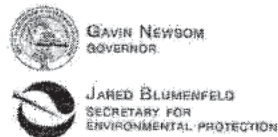
- [Drinking Water Treatment & Distribution System Operators Home Page](#)
- Treatment
 - Examination Information
 - [Treatment Examination Application Form](#)
 - [Minimum Qualifications for Treatment Examination](#)
 - [Specialized Training Providers and Courses](#)
 - [Expected Range of Knowledge](#)
 - [Study Material](#)
 - [Examination Fees](#)
 - [Treatment Operator Examination - a Step-By-Step Process](#)
 - [Exam Formula Conversion Sheet](#)
 - [Prior Treatment Exam Results](#)
 - Certification Information
 - [Eligibility Criteria for Certification](#)
 - [Certification Fees](#)
 - [Treatment Operator Certification - A Step-by-Step Process](#)
 - [Treatment Certification Application](#)
 - [Sample Supervisor Letter](#)
- Distribution
 - Examination Information
 - [Distribution Examination Application Form](#)
 - [Minimum Qualifications for Distribution Examination](#)
 - [Specialized Training Providers and Courses](#)
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 - [Certification Fees](#)
 - [Distribution Operator Certification - A Step-by-Step Process](#)
 - [Distribution Certification Application](#)
 - [Sample Supervisor Letter](#)

[Title 22 Code Of Regulations/Division 4. Environmental Health/Chapter 13. Operator Certification](#)

[Operator-In-Training \(OIT\) Information Brochure](#)

Water Treatment Operator 4 Certification Application - Example

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State Water Resources Control Board

11/8/2021



Congratulations! You passed the Water Treatment Operator Certification – **Grade T4** examination. You have attained or exceeded 70% of the total points available in the examination.

This letter contains important information regarding your certification, so please read it carefully.

In order to obtain your certification, you must meet the experience requirements necessary for the grade exam you passed. When you have met those requirements, you may apply for certification by submitting a completed certification application, support documentation, and the appropriate certification fee. You must complete the experience requirements and obtain certification within three (3) years from the date of the exam. Certification applications may be accessed on the Drinking Water Operator Certification Program's homepage: https://www.waterboards.ca.gov/drinking_water/certlic/occupations/DWopcert.html

To ensure that any correspondence reaches you on time, you must notify this office in writing if your address changes.

Again, congratulations on passing the examination. Your knowledge of water distribution will help ensure that safe and potable water is served by California's public water systems.

Drinking Water Operator Certification Program

Enclosure

Grade Passed: **T4** Exam Date: **11/8/2021**
Experience requirements must be fulfilled by three years from the date of your exam to obtain certification

State Water Resources Control Board
Drinking Water Operator Certification Program
P O Box 944212, Sacramento, CA 94244-2120
(916) 449-5611 / Fax (916) 449-5454

Internet Address: http://www.waterboards.ca.gov/drinking_water/certlic/occupations/DWopcert.shtml



**State Water Resources Control Board
APPLICATION FOR T3 – T5 WATER TREATMENT OPERATOR CERTIFICATION**

OPERATOR NO.		COMMENTS	DATE RECEIVED:
APPROVED FOR: T3 T4 T5	APPROVED BY:		
CERT DATED:	CERT SENT:		

DO NOT WRITE ABOVE THIS LINE

PLEASE TYPE OR PRINT LEGIBLY IN BLUE INK.

1. Personal Information

LAST [REDACTED]	FIRST [REDACTED]	MI S	SUFFIX	Date of Birth (m dd/yr) [REDACTED]	Last 4-digits of SSN [REDACTED]
MAILING ADDRESS (number and street) [REDACTED]			CITY [REDACTED]	STATE [REDACTED]	ZIP CODE [REDACTED]
WORK TELEPHONE NO. EXT.	HOME/CELL TELEPHONE NO. [REDACTED]	E-MAIL ADDRESS [REDACTED]			

2. Certification Information

This application is for:	T3	T4	T5	Examination passed month/yr	October 2021
Evaluation/certificate fee of	<input type="checkbox"/> \$120	<input type="checkbox"/> \$140	<input type="checkbox"/> \$140	Are you certified by the State of California as a water treatment operator?	Operator # [REDACTED]
OR				Are you certified by the State of California as a water distribution operator?	Operator # [REDACTED]
Dual-certified fee (if currently certified in Water Distribution or Wastewater)	<input type="checkbox"/> \$90	<input checked="" type="checkbox"/> \$105	<input type="checkbox"/> \$105	Are you certified by the State of California as a wastewater operator?	Certificate # [REDACTED]

3. Education – IF used as substitution for operator experience (Certificate/Degree must be in a relevant major and verified with a photograph of an OFFICIAL TRANSCRIPT – see (1) (a), (b), or (c) on back of page)

CERTIFICATE/DEGREE HOLDER <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CERTIFICATE/DEGREE MAJOR Water Supply Technology	DATE AWARDED [REDACTED]	OFFICIAL TRANSCRIPT INCLUDED? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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4. Experience -- To qualify in evaluation of your application, the following documents MUST BE submitted for each time frame of employment claimed for experience credit. Please see the back page for minimum qualifications.

Please initial (in space provided below) verifying requested attachments are included:

- A letter written, signed and dated by your supervisor (on company letterhead) verifying: (1) timeframe of employment (mo/yr to mo/yr), (2) a detailed description of the specific water treatment operator duties you perform(ed), (3) number of hours a week spent performing operator duties (Distribution/Treatment/ Wastewater), (4) classification of the treatment plant(s) where you perform(ed) these duties, and (5) IF applicable, your designation as a shift or chief operator. See sample letter attached.

Attachments to this letter MUST INCLUDE:

- A copy of the utility organization chart which notes the employees' names and position titles
- A copy of the utility's official job description (for the position you hold/held) outlining the duties performed _____ A copy of the letter (or permit) from your regulatory field office that classifies your treatment plant (T1-T5)

5. Signature of applicant: I, the undersigned, certify that all statements made on this application and accompanying attachments are true and correct; that I understand that any misrepresentations may result in revocation of any certificate granted, pursuant to Section 106876 of the Health and Safety Code.

Original Signature (No Black Ink) _____
Date

State Water Resources Control Board

MINIMUM QUALIFICATIONS FOR CERTIFICATION FOR T3 TO T5

T3

- * Successful completion of the T3 exam (within the past 3 years) **AND**
- ** **1 year of site and grade specific WT operator experience** = 1 year of operator experience working as a certified T2 operator in a T2 facility or higher (may be substituted for (3) below) **AND**
- *** **1 year of general WT operator experience** = 1 additional year of operator experience working as a certified water treatment operator performing water treatment duties at a treatment rated facility (may be substituted with (1), (2), or (4) below).

T4

- * Successful completion of the T4 exam (within the past 3 years) **AND**
- ** **1 year of site and grade specific WT operator experience** = 1 year of operator experience working as either a shift or chief operator while holding a valid T3 certificate working in a T3 facility or higher (may be substituted for (3) below) **AND**
- *** **3 years of general WT operator experience** = 3 additional years of operator experience working as a certified water treatment operator performing water treatment duties at a treatment rated facility (may be substituted with (1), (2), or (4) below).

T5

- * Successful completion of the T5 exam (within the past 3 years) **AND**
- ** **2 years of site and grade specific WT operator experience** = 2 years of operator experience working as either a shift or chief operator while holding a valid T4 certificate working in a T4 higher water treatment plant. **AND**
- *** **3 years of general WT operator experience** = 3 additional years of operator experience working as a certified water treatment operator performing water treatment duties at a treatment rated facility (may be substituted with (1), (2), or (4) below).

Experience substitutions for certification as referenced above:

- (1) a degree earned at an accredited academic institution may be substituted as follows:
 - (a) Associate Degree or Certificate in water or wastewater technology that includes at least 15 units of physical, chemical, or biological science may be used to fulfill **1 year of general operator experience**.
 - (b) Bachelor's Degree in biology, chemical engineering, chemistry, civil engineering, environmental engineering, microbiology, public health or sanitary engineering may be used to fulfill **1.5 years of general operator experience**.
 - (c) Master's Degree in any of the majors listed in (b) may be used to fulfill **2 years of general operator experience**.
- (2) A certified operator may substitute, on a day-for-day basis, experience gained while working with lead responsibility for water quality related projects (i.e., pilot plant)
- (3) If an applicant has a Bachelor's Degree or Master of Science Degree, in conjunction with completion of a comprehensive operator training program, pursuant to Section 63800 (h), may be substituted for the required experience. (Prior approval of the Program must be obtained from SWRCB)
- (4) Experience gained as a certified wastewater treatment operator may be used to substitute up to 2 years of the general operator experience requirement. Wastewater treatment operator experience is credited on a two-for-one basis. A photocopy of a wastewater operator certificate along with a complete package of attachments verifying experience, covering the timeframe being claimed for experience credit, must be submitted with the application.

Mail completed application and fee, including all requested attachments to:

State Water Resources Control Board
Drinking Water Operator Certification Program
P.O. Box 944212
Sacramento, CA 94244-2120
(916) 449-5611

- (A) A check or money order made out to **SWRCB-DWOCF**.
- (B) If you are not sure of the requirements for a particular grade, contact this office for clarification before submitting your application as **FEES ARE NON-REFUNDABLE**.

07/29/19

San Bernardino Valley Official

Page 1



ID Number: [Redacted]
Birth Date: [Redacted]

Course	Title	Grd R	Hrs Att	Hrs Cmpt	Grade Points	Course Dates
--------	-------	-------	---------	----------	--------------	--------------

----- SBVC Program Awards -----

- **Certificate
Major: Water Supply Technology
Date Granted: 05/24/2012
- **Certificate
Major: Electric Power Technology
Date Granted: 05/24/2018
- **Certificate
Major: Electronics Technology
Date Granted: 05/24/2018
- **Certificate
Major: Computer Engineering Technology
Date Granted: 05/24/2018

----- Spring 2000 -----

Term 2000SP	Totals:	3.50	3.50	7.00	GPA = 2.0000
Cumulative Totals:		3.50	3.50	7.00	GPA = 2.0000

----- Fall 2004 -----

WSE	140	Water Utilities Di A	3.00	3.00	12.00	08/30/04-12/13/04
-----	-----	----------------------	------	------	-------	-------------------

Term 2004FA	Totals:	3.00	3.00	12.00	GPA = 4.0000
Cumulative Totals:		6.50	6.50	19.00	GPA = 2.9231

----- Spring 2005 -----

WSE	146	Waste Treat Operat A	3.00	3.00	12.00	01/10/05-05/18/05
-----	-----	----------------------	------	------	-------	-------------------

Term 2005SP	Totals:	3.00	3.00	12.00	GPA = 4.0000
Cumulative Totals:		9.50	9.50	31.00	GPA = 3.2632

----- Fall 2005 -----

WSE	142	Water Qual & Bas D A	3.00	3.00	12.00	08/15/05-12/17/05
-----	-----	----------------------	------	------	-------	-------------------

Term 2005FA	Totals:	3.00	3.00	12.00	GPA = 4.0000
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Patent 5,636,874

San Bernardino Valley College
 Office of Admissions and Records
 701 S. Mt. Vernon Avenue
 San Bernardino, CA 92410

Opal Dale Cook
 Date-Carter

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07/29/19

San Bernardino Valley Official

Page 2



ID Number: [Redacted]
Birth Date: [Redacted]

Course	Title	Grd R	Hrs Att	Hrs Cmpt	Grade Points	Course Dates
Cumulative Totals:			12.50	12.50	43.00	GPA = 3.4400
----- Spring 2006 -----						
WSE	141	Water Utilities Di A	3.00	3.00	12.00	01/09/06-05/16/06
Term 2006SP Totals:			3.00	3.00	12.00	GPA = 4.0000
Cumulative Totals:			15.50	15.50	55.00	GPA = 3.5484
----- Spring 2009 -----						
WST	145	Backflow Preventio A	3.00	3.00	12.00	01/12/09-05/20/09
Term 2009SP Totals:			3.00	3.00	12.00	GPA = 4.0000
Cumulative Totals:			18.50	18.50	67.00	GPA = 3.6216
----- Fall 2009 -----						
WST	144	Cross Connection C A	3.00	3.00	12.00	08/17/09-12/19/09
Term 2009FA Totals:			3.00	3.00	12.00	GPA = 4.0000
Cumulative Totals:			21.50	21.50	79.00	GPA = 3.6744
----- Spring 2015 -----						



----- Spring 2016 -----

Patent 5,636,874

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Office of Admissions and Records
701 S. Mt. Vernon Avenue
San Bernardino, CA 92410

April Dale Carter

April Dale Carter
Admissions and Records

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San Bernardino Valley Official

Page 3



ID Number:
Birth Date:



Course	Title	Grd R	Hrs Att	Hrs Cmpt	Grade Points	Course Dates
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Sample

TOTALS: CRED.ATT = 71.50 CRED.CPT = 71.50 GRADE.PTS = 268.00 GPA = 3.7483

Patent 5,636,874

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 Office of Admissions and Records
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April Dale Carter
 April Dale Carter

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San Bernardino Valley College

Certificate of Achievement

This Certifies that



has satisfactorily met the certificate requirements for

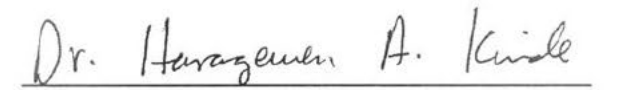
Water Supply Technology

and is awarded this

Certificate of Achievement

Given this twenty-fourth day of May, two thousand twelve


President (Interim)


Vice President of Instruction (Interim)




Department Chairperson

Date

State Water Resources Control Board
Office of Operator Certification
P.O. Box 944212 1001 I Street, 17th Floor
Sacramento, CA 94244-2120

Regarding: Drinking Water Certification for _____ Treatment Grade Level 4.

_____ has been employed with _____ from January of 2006 to present. During his employment he has held the following positions:

Position/Title	Start Date	End Date	Specific Duties Performed	Treatment Hours	Distribution Hours	Wastewater Hours	Certified T3 Operator for a T2 Facility or Higher	Job Description
Water Production Supervisor (Shift Operator)	07/01/21	6/16/2022	1-13	1400	600	0	Yes	Attached
Water Production and Controls Supervisor (Shift Operator)	10/2/2017	07/01/21	1-13	5472	2345	0	Yes	Attached
Instrumentation/Electrician II	04/28/17	10/2/2017	1, 2, 4-11, 13	224	673	0	Yes	Attached
Interim Water Production and Control Supervisor (Interim Shift Operator)	04/03/17	04/28/17	1-13	100	43	0		Attached
Instrumentation/Electrician II	03/07/16	04/03/17	1, 2, 4-11, 13	560	1680	0		Attached
Water System Operator II (Shift Operator)	06/01/15	03/07/16	1-13	1321	480	0		Attached
Water Maintenance Worker III	12/31/14	06/01/15	4, 5, 9, 11, 12	0	869	0		NA
Water System Operator (Cross Training)	07/01/14	12/31/14	1-13	771	314	0		Attached
Water Maintenance Worker III	10/26/09	12/31/14	4, 5, 9, 11, 12	0	10811	0		NA
Water Maintenance Worker II	01/05/09	10/26/09	4, 5, 9, 11, 12	0	1680	0		NA
Water Maintenance Worker I	01/30/06	01/05/09	4, 5, 9, 11, 12	0	6120	0		NA

Operator Duties

- | | | | |
|---|---|----|--|
| 1 | Water treatment calculations | 8 | Chemical feeder calibration and adjustment |
| 2 | SCADA operation | 9 | Flow rate calculations |
| 3 | Handling of laboratory chemicals used for drinking water analyses | 10 | Operation of on-line analyzers |
| 4 | Distribution system operation | 11 | Organize information and follow written procedures |
| 5 | Disinfectant dosing and monitoring | 12 | On-Call Stand-by |
| 6 | Treatment processes and controls | 13 | Operates groundwater treatment facilities |
| 7 | Chemical solution concentration calculations | | |

System Number: _____

As the undersigned supervisor of the above referenced operator, I hereby certify that all facts and statements set forth are true and correct to the best of my knowledge and belief. I understand that any omissions or misrepresentations may result in discipline as per the Health and Safety Code Section 106877.

Respectfully,

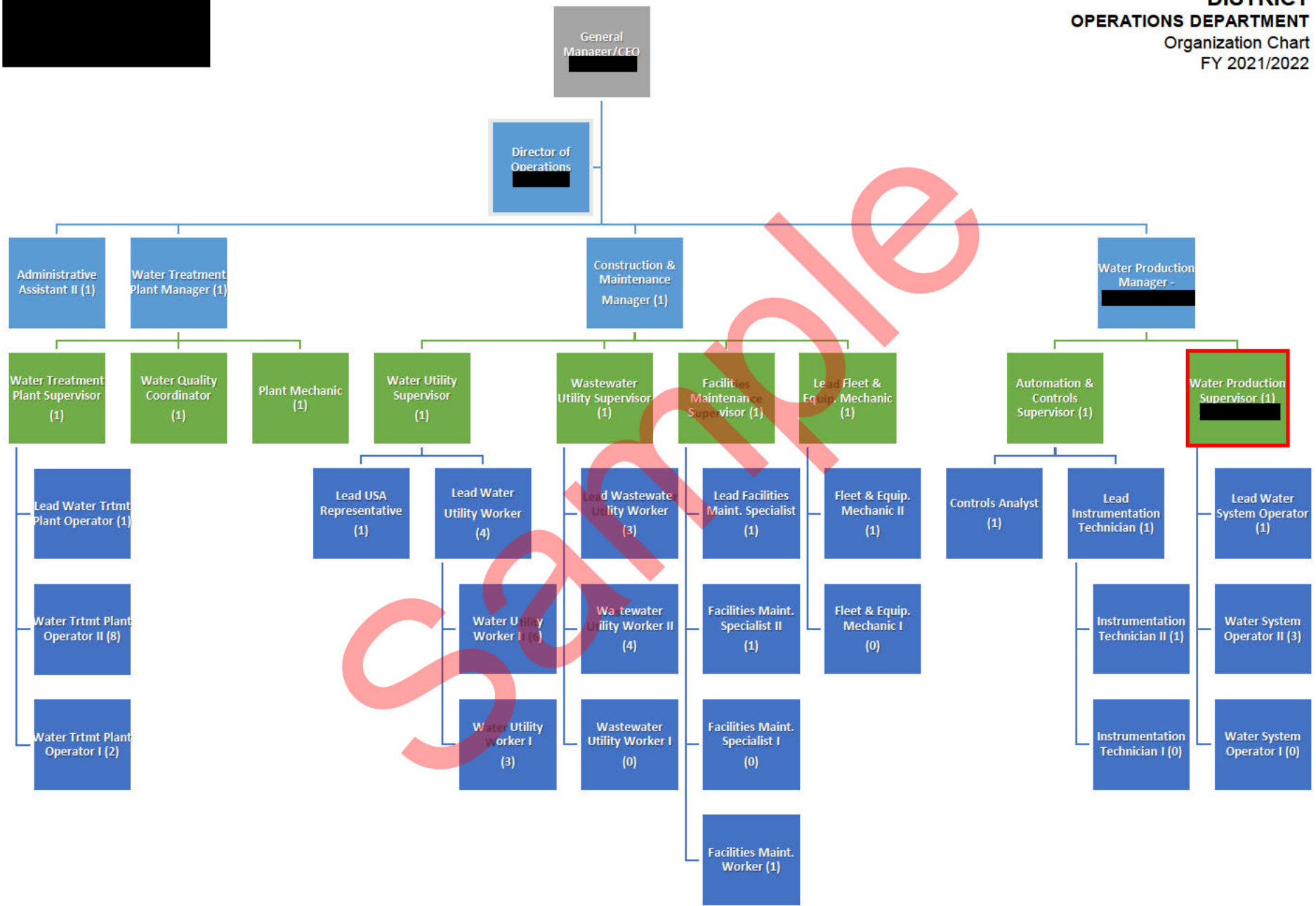
_____, Chief Operator T_ #_____, D_ #_____

Title
Email
Phone Number

Attachments:

- Official job description for each position held
- Current organizational chart with names and titles of supervisor and employee
- Classification letter or permit classifying system

WATER DISTRICT OPERATIONS DEPARTMENT
Organization Chart
 FY 2021/2022





WATER PRODUCTION SUPERVISOR

*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

Under general direction, supervises, assigns, reviews, and participates in the work of staff responsible for the operation, monitoring, and maintenance of the District's water production systems, facilities, and related appurtenances in compliance with state and federal requirements. Assists in developing and operating on-going programs in water production optimization; ensures work quality and adherence to established policies and procedures; and performs the more technical and complex tasks relative to assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the first-line supervisor level classification in the Water Production Department. Incumbents provide supervision to journey-level staff and may independently perform highly technical and specialized duties at a level beyond that found at a journey level. Supervisory duties include assigning specific duties, ensuring completion and compliance with applicable standards, policies, and procedures, as well as providing technical assistance, training, writing, and conducting performance appraisals.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Water Production Manager.

Direct supervision is provided to Water System Operators.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Assign, evaluate and supervise the work of the Water Production Operators who are responsible for performing a variety of tasks associated with the operation of the District's extensive water treatment and distribution system and water quality duties; ensure completion of assigned duties for appropriate quality and timeliness.
2. Maintains records concerning operations and programs; prepares reports on operations and activities; performs the more technical and complex tasks of the work unit including identifying, planning, organizing and scheduling the daily and long-term water production activities.

Water Production Supervisor

3. Write and conduct formal performance appraisals; participate in a variety of personnel actions including hiring, counseling, training, promotion, discipline, and termination.
4. Operates water distribution and production treatment facilities.
5. Interrelates effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District's goals and objectives while exercising the highest degree of confidentiality.
6. Attends and participates in professional group meetings; stays abreast of new trends and innovations in water treatment and distribution; directs the incorporation of new developments into program areas, as appropriate.
7. Responds to and resolves difficult and sensitive citizen inquiries and complaints.
8. Assists and participates in the development and administration of the Operations Division's annual budget.
9. Reads, understands, and ensures compliance with the CVWD Safety Manual; attends safety meetings as required; reports all accidents, violations, or infractions to supervisor.
10. Assists in the administration of reactive and preventative maintenance activities for the water treatment and distribution system.
11. Maintains and implements a preventative maintenance programs; repairs and services plant operations machinery and equipment including pumps, valves, motors, meters, tanks and reservoirs.
12. Evaluates job sites and determines personnel, equipment and material needs; requisitions needed materials and supplies; communicates with appropriate personnel regarding field conditions while work is in progress.
13. Participates in the development and implementation of goals, objectives, and priorities; recommends and participates in the implementation of resulting policies and procedures; monitors work activities to ensure compliance with established policies and procedures.
14. Plans, directs, oversees and may inspect and participate with subordinate division staff and contractors in the development of systems and equipment used in water production.
15. Regular attendance at the work site.

Marginal Functions:

1. Participates in planning and evaluation of the activities and operations related to the construction, maintenance and repair of DCS, SCADA, telemetry, instrumentation, motor control centers, process control systems and numerous other types of electronic and electrical equipment and machinery associated with pumping, storage and distribution of potable, and municipal water treatment plants.
2. Performs related duties and responsibilities as required.

Water Production Supervisor

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Practices and procedures related to the water treatment and distribution equipment and processes.
Organizational methods used to meet changing priorities and deadlines.
Operational characteristics of mechanical equipment and tools.
District service area and locations of water facilities and equipment.
Relevant local, state, and federal laws, regulations, and guidelines.
Principles and practices of effective leadership and employee supervision, including training and performance evaluation.
Principles and methods of business correspondence, report writing, recordkeeping and filing.
Principles and practices of sound business communications.
Safety methods and regulations pertaining to all facets of utility work.
Modern office equipment, software programs, and computerized recordkeeping and filing methods.
Industry mathematics and calculations.
Water distribution hydraulics.

Ability to:

Read and interpret complex technical information and manuals.
Schedule and plan various repair and maintenance projects.
Supervise, assign, inspect and evaluate the work of others.
Communicate effectively, both verbally and in written formats.
Motivate and evaluate staff and provide for their training and development.
Analyze complex water distribution system maintenance problems, evaluate alternatives, recommend the most effective course of action and implement that action.
Develop and implement work standards.
Prepares concise records, reports and other written materials.
Exercise independent judgment and initiative within established guidelines.
Positively and constructively interact with crew members and others encountered in the course of work.
Establish and prioritize action items and multitask effectively.
Use creative thought to problem solve including the use of new and innovative technologies and techniques.
Participate in groups and committees that affect District operations, policies and procedures.
Use Microsoft Outlook including accessing forms within Public Folders, send and receive email and use the calendar and scheduling functions effectively.
Properly and safely operate a variety of light-, medium- and heavy-duty construction equipment.
Perform all related tasks with advanced journey-level skill.

Water Production Supervisor

REQUIRED QUALIFICATIONS

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:

Five (5) years of progressive experience performing the operations in water production, distribution and treatment systems in a governmental agency or utility, including a minimum of two (2) years experience in a lead or supervisor capacity; or an equivalent combination of training and experience .

Education/Training:

Equivalent to the completion of the twelfth grade; supplemented by college level course work or trade school training in electrical technology or related field.

Certificate:

Possession of a valid D4 Water Distribution Operator Certificate issued by the State Water Resources Control Board (SWRCB), and the ability to obtain a D5 Distribution Operator Certificate issued by the SWRCB within one year of appointment.

Possession of a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB), and the ability to obtain a T3 Water Treatment Operator Certificate issued by the SWRCB within one year of appointment.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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 job functions.

Environmental Conditions

Standard office setting and outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekends.

Physical Demands

Incumbent requires sufficient mobility to work in an office setting and field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb,

Water Production Supervisor

reach, and twist; push, pull, lift, and/or carry light to moderate amounts of weights; operate office equipment including use of a computer keyboard; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

Mental Demands

While performing the duties of this class, the employee is regularly required to use written and oral communication skills; read and interpret complex data, information and documents; analyze and solve problems; observe and interpret people and situations; use math and mathematical reasoning; learn and apply new information or skills; perform highly detailed work on multiple, concurrent tasks with constant interruptions; work under intensive and constantly changing deadlines and interact with those encountered in the course of work, some of whom may be demanding, dissatisfied, and or upset.

Vision

See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

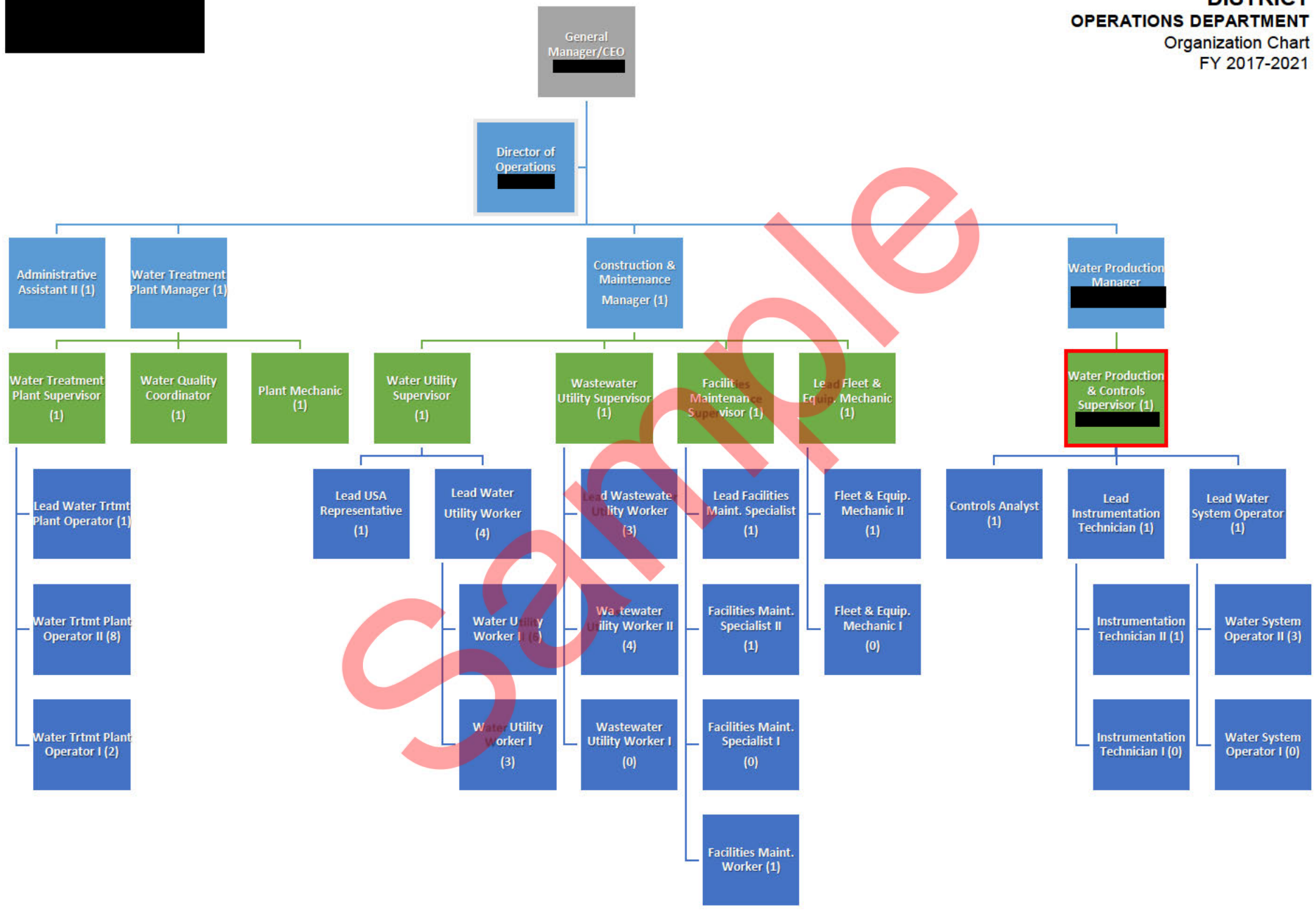
Hearing

Hear in normal audio range with or without correction.

JOB STATUS: Exempt
DATE ADOPTED: July 2021

Safety Sensitive Position

WATER DISTRICT OPERATIONS DEPARTMENT
Organization Chart
 FY 2017-2021





JOB DESCRIPTION

Water Production and Controls Supervisor

*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

Under general direction, supervises, assigns, reviews, and participates in the work of staff responsible for the operation, monitoring, and maintenance of the District's water production systems, facilities, and related appurtenances in compliance with state and federal requirements. Assists in developing and operating on-going programs in water production evaluation optimization; ensures work quality and adherence to established policies and procedures; and performs the more technical and complex tasks relative assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This is the first-line supervisor level classification in the Water Production Department. Incumbents provide supervision to journey level staff and may independently perform high technical and specialized duties at a level beyond that found at a journey level. Supervisory duties include assigning specific duties, ensuring completion and compliance with applicable standards, policies and procedures as well as providing technical assistance, training, writing and conducting performance appraisals

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Water Production Manager. Exercises supervision over Water Production Operators.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Assign, evaluate and supervise the work of the Water Production Operators who are responsible for performing a variety of tasks associated with the operation of the District's extensive water treatment and distribution system and water quality duties; ensure completion of assigned duties for appropriate quality and timeliness.
2. Maintains records concerning operations and programs; prepares reports on operations and activities; performs the more technical and complex tasks of the work unit including identifying, planning, organizing and scheduling the daily and long-term water production activities.
3. Write and conduct formal performance appraisals; participate in a variety of personnel actions including hiring, counseling, training, promotion, discipline, and termination.
4. Operates water distribution and production treatment facilities.
5. Interrelates effectively and diplomatically in all areas of employee relations, always projecting a professional image in keeping with the District's goals and objectives while exercising the highest degree

[REDACTED]
[REDACTED]
[REDACTED]

of confidentiality.

6. Attends and participates in professional group meetings; stays abreast of new trends and innovations in water treatment and distribution; directs the incorporation of new developments into program areas, as appropriate.
7. Responds to and resolves difficult and sensitive citizen inquiries and complaints.
8. Assists and participates in the development and administration of the Operations Division's annual budget.
9. Reads, understands, and ensures compliance with the CVWD Safety Manual; attends safety meetings as required; reports all accidents, violations, or infractions to supervisor.
10. Assists in the administration of reactive and preventative maintenance activities for the water treatment and distribution system.
11. Maintains and implements a preventative maintenance program; repairs and services plant operations machinery and equipment including pumps, valves, motors, meters, tanks and reservoirs.
12. Evaluates job sites and determines personnel, equipment and material needs; requisitions needed materials and supplies; communicates with appropriate personnel regarding field conditions while work is in progress.
13. Participates in the development and implementation of goals, objectives, and priorities; recommends and participates in the implementation of result-oriented policies and procedures; monitors work activities to ensure compliance with established policies and procedures.
14. Plans, directs and manages and inspect and participate with subordinate division staff and contractors in the development of systems and equipment used in water production.
15. Regularly attends at the work site.

Marginal Functions:

1. Participates in the design, construction, integration, modification and maintenance of DCS, SCADA, and telecommunication system equipment, telemetry based controllers, PLC's and related systems, equipment and facilities.
2. Participates in planning and evaluation of the activities and operations related to the construction, maintenance and repair of DCS, SCADA, telemetry, instrumentation, motor control centers, process control systems and numerous other types of electronic and electrical equipment and machinery associated with pumping, storage and distribution of potable, and municipal water treatment plants.
3. Performs related duties and responsibilities as required.

████████████████████
████████████████████
██████████

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Practices and procedures related to the water treatment and distribution equipment and processes.
Organizational methods used to meet changing priorities and deadlines.
Operational characteristics of mechanical equipment and tools.
District service area and locations of water facilities and equipment.
Relevant local, state, and federal laws, regulations, and guidelines.
Principles and practices of effective leadership and employee supervision, including training and performance evaluation.
Principles and methods of business correspondence, report writing, recordkeeping and filing.
Principles and practices of sound business communications.
Safety methods and regulations pertaining to all facets of utility work.
Modern office equipment, software programs, and computerized recordkeeping and filing methods.
Industry mathematics and calculations.
Water distribution hydraulics.

Ability to:

Read and interpret complex technical information and manuals.
Schedule and plan various repair and maintenance projects.
Supervise, assign, inspect and evaluate the work of other employees.
Communicate effectively, both verbally and in written form.
Motivate and evaluate staff and provide for their training and development.
Analyze complex water distribution system maintenance problems, evaluate alternatives, recommend the most effective course of action and implement that action.
Develop and implement work standards.
Prepares concise records, reports and other written materials.
Exercise independent judgment and initiative with established guidelines.
Positively and constructively interact with coworkers and others encountered in the course of work.
Establish and prioritize action items and execute them effectively.
Use creative thought to problem solve including the use of new and innovative technologies and techniques.
Participate in groups and committees that affect District operations, policies and procedures.
Use Microsoft Outlook including accessing forms within Public Folders, send and receive email and use the calendar and scheduling functions effectively.
Properly and safely operate a variety of light-, medium- and heavy-duty construction equipment.
Perform all related tasks with advanced journey-level skill.

REQUIRED QUALIFICATIONS

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:

Education/Training:

Equivalent to the completion of the twelfth grade supplemented by college level course work or trade school training in electrical technology or related field.
Equivalent to completion of the twelfth grade.

████████████████████
████████████████████
████████████████████

Experience:

Five (5) years of progressive experience performing the operations in water production, distribution and treatment systems in a governmental agency or utility, including two (2) years of lead supervisory or administrative responsibility.

Certificate:

Possession of a valid D4 Water Distribution Operator Certificate issued by the State Water Resources Control Board (SWRCB), and the ability to obtain a D5 Distribution Operator Certificate issued by the SWRCB within one year of appointment.

Possession of a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB), and the ability to obtain a T3 Water Treatment Operator Certificate issued by the SWRCB within one year of appointment.

License:

Possession of, or ability to obtain within one (1) year of appointment a valid Class A California Commercial driver's license with a Hazardous Materials endorsement required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

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.

Environmental Conditions:

Standard office setting and outdoor field environment; travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, vibrations, and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in and around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain; incumbents may be required to work extended hours including evenings and weekend.

Physical Demands:

Incumbent requires sufficient mobility to work in an office setting and field environment; walk, stand, and sit for prolonged periods of time; frequently stoop, bend, kneel, crouch, crawl, climb, reach, and twist; push, pull, lift, and/or carry light to moderate amounts of weights; operate office equipment including use of a computer keyboard; operate assigned equipment and vehicles; ability to verbally communicate to exchange information.

Vision:

See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

Hearing:

Hear in normal audio range with or without correction.

JOB STATUS: Exempt

DATE ADOPTED: November 2012

MODIFIED: August 2016

Safety Sensitive Position

WATER DISTRICT OPERATIONS DEPARTMENT
 Organization Chart
 FY 2016-2017



INSTRUMENTATION/ELECTRICAL 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

Under general supervision, performs a variety of skilled duties including but not limited to: design, construction, installation, modification, maintenance and repair of electrical and electronic circuits including machinery, motors, instrumentation, plant control system components and related devices. Monitors electrical equipment and system for operating condition and performance, including predictive and advanced diagnostic testing; preventive and corrective electrical maintenance used in collection, transmission, and treatment of water in a variety of facilities found in a water system and performs related duties as assigned.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and levels of work performed in the Instrumentation Technician job series.

Instrumentation/Electrical Technician I is the entry level in the Instrumentation/Electrical Technician series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision, with less latitude for independent action.

Instrumentation/Electrical Technician II is the experience journey level in the Instrumentation/Electrical Technician series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Water Production & Controls Supervisor and/or Water Production Manager. Technical and/or functional work direction may occasionally be provided to Instrumentation/Electrical Technician I/II by Lead Instrumentation/Electrical Technician.

ESSENTIAL AND MINOR FUNCTION STATEMENTS

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

Essential Functions:

1. Designs, modifies and changes control systems; programs equipment used for water blending, changes set points and other system parameters, and performs PLC programming to change control logic on a permanent or temporary basis.
2. Tests, troubleshoots, calibrates, repairs and performs preventive maintenance on a variety of industrial electrical and electronic systems, components and devices
3. Performs daily electrical/electronic preventative maintenance, repair of the District's water systems; motor controls, programmable logic controllers, industrial networking hardware, turbidity meters, electronic flow meters, pH meters, chlorine analyzers, automatic chemical and chlorination equipment.
4. Installs conduits, wire, pull boxes, switchboards, controllers and switches required in making

Instrumentation/Electrical Technician I/II (Continued)

additions, extensions or alterations in industrial electrical systems.

5. Estimates time, materials and equipment needed for jobs assigned; requisitions materials, and works with outside contractors and vendors used to provide instrumentation services or materials.
6. Reads and interprets a variety of technical manuals, charts, schematics, blueprints and gauges to troubleshoot instrumentation equipment.
7. Uses, operates and maintains electronic test equipment, computer hardware and software associated with the testing and adjusting of equipment.
8. Participates in discussions and research relating to the acquisition, upgrading and installation of new or modified telemetry and electronic control systems and equipment.
9. Provides technical assistance and advice to other District staff concerning the operation of computerized telemetry equipment and other electrical or electronic systems.
10. Works safely with a variety of voltages from 24VDC to 480VAC.
11. Observes safe work methods and safety practices related to work; maintains current electrical safety standards and practices.
12. Regular attendance at the work site.

Marginal Functions:

1. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

- Theory, principles, hardware, testing equipment and procedures common to the repair and maintenance of electronic devices and electrical systems.
- Operational characteristics of telemetry equipment, meters, controls, treatment plant instruments, and other electrical/electronic equipment.
- Methods and techniques used to diagnose operational defects in telemetry systems.
- Principles of preventive maintenance governing electrical/electronic systems.
- Pertinent Federal, State and local laws and regulations, including electrical codes.
- Instrumentation calibration and adjustment procedures.
- Occupational hazards, standard safety practices.

Skill in:

- Use of electrical and electronic test equipment, hand and power tools, and equipment.
- Operating a personal computer and related software.
- Ability to operate and work from an aerial man-lift.

Ability to:

- Install, modify, design and repair equipment related to electronics, instrumentation control and telemetry.
- Calibrate, align, and test a variety of systems designed to monitor treatment plant and water system processes and activity.
- Design, update and fabricate new equipment, control systems and software.

Instrumentation/Electrical Technician I/II (Continued)

- Read and interpret a variety of technical manuals, charts, schematics, blueprints and gauges.
- Operate equipment and processes related to water conveyance and treatment.
- Understand and carry out oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
- Maintain mental capacity which allows the capability of making safe, sound decisions and demonstrating intellectual capabilities.
- Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.

REQUIRED QUALIFICATIONS

Experience and Training Guidelines

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

Instrumentation/Electrical Technician I

Education/Training:

Completion of either a formal course of instruction at an accredited college or university, State or Federal sponsored Electrical Apprenticeship Program, Certificate of Completion of a Trade School Electrical Program, proof of completion of a military service electrical program.

Experience:

One year of experience in the installation, maintenance, repair, and alteration of electrical and electronic equipment, preferably at a water or wastewater facility.

Certificate:

Possession or ability to obtain within 1 year a valid T1 Water Treatment Operator Certificate and a valid D1 Distribution Operator Certificate issued by the State Water Resources Control Board (SWRCB).

Licensing:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

Instrumentation/Electrical Technician II

Education/Training:

Completion of either a formal course of instruction at an accredited college or university, State or Federal sponsored Electrical Apprenticeship Program, Certificate of Completion of a Trade School Electrical Program, proof of completion of a military service electrical program.

Experience:

Two years of journey level experience in the installation, maintenance, repair, and alteration of electrical and electronic equipment, preferably at a water or wastewater facility.

Instrumentation/Electrical Technician I/II (Continued)

Certificate:

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid D1 Distribution Operator Certificate issued by the State Water Resources Control Board (SWRCB) are required.

Possession of, or ability to obtain within one (1) year a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid D2 Distribution Operator Certificate issued by the State Water Resources Control Board (SWRCB), and

Either (1) Possession of, or ability to obtain with one year of appointment, a valid Certificate as a Control Systems Technician from the Instrumentation, Systems and Automation Society, or (2) completion of an equivalent program of instruction acceptable to the District.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class C California Commercial driver's license with a Hazardous Materials endorsement is required together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment

Outdoor field environment; exposure to dust, driving on a daily basis; frequent exposure to electrical hazards, high or low temperatures, noise limited exposure to confined work spaces, dirt, high work places, poor lighting, wetness and humidity. Water treatment plant environment; exposure to electrical energy; work in and around water.

Physical

Incumbent require sufficient mobility to work in a field environment; balancing, climbing, crawling, driving, heavy physical labor, kneeling or crouching, lifting or carrying objects weighing up to 50 pounds or more, reaching, grasping and manipulating small objects, seeing, sitting, speaking, standing, walking, stooping, bending using manual and power hand tools, using heavy equipment, working outside and underground, climbing reservoir and building ladders, and working in elevated outdoor locations.

Vision

See in the normal visual range with or without correction; vision sufficient to read printed documents and to operate assigned equipment.

Hearing

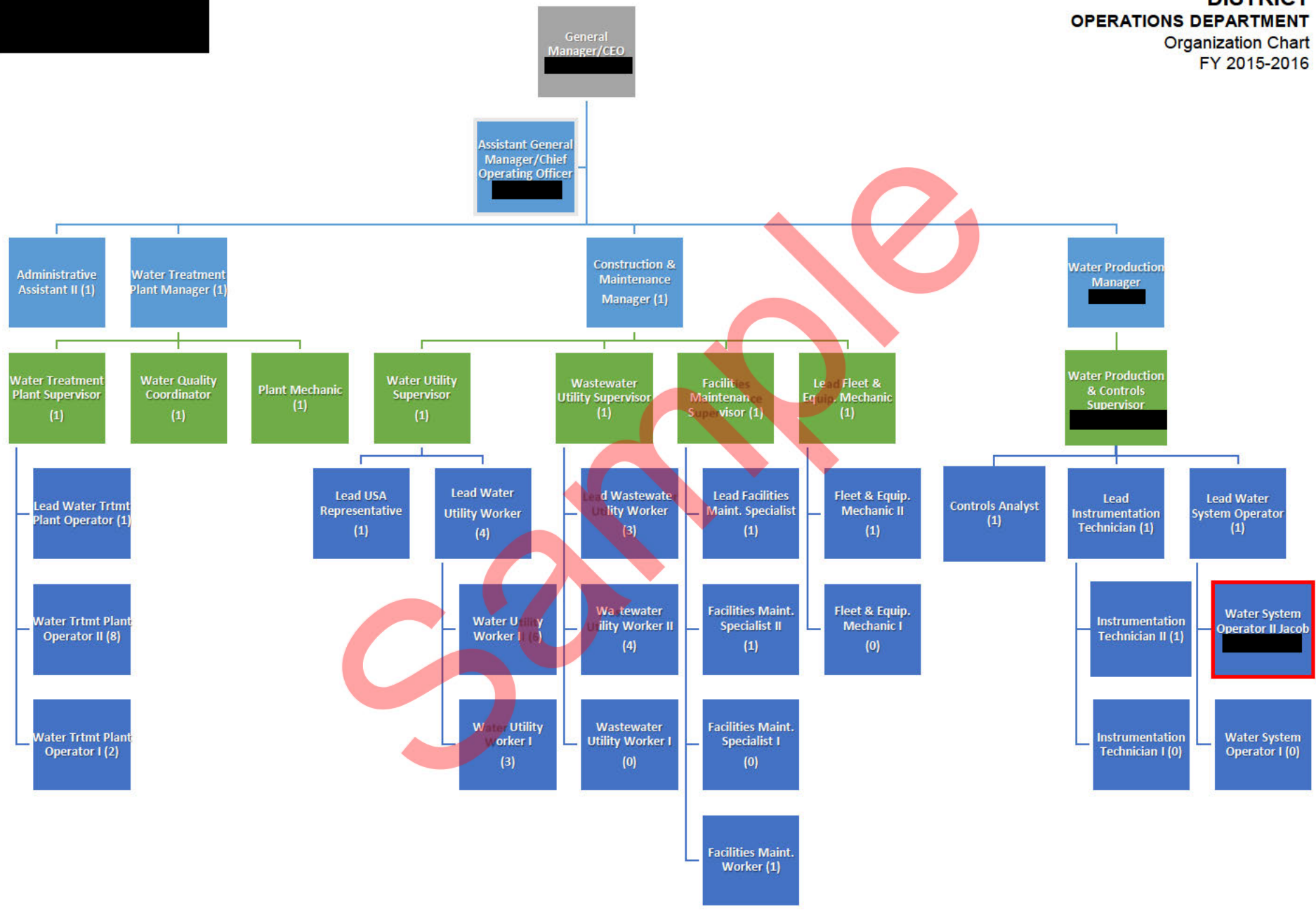
Hear in the normal audio range with or without correction.

DATE ADOPTED: November 2001

DATE MODIFIED: August 2015

Safety Sensitive Position

WATER DISTRICT OPERATIONS DEPARTMENT
 Organization Chart
 FY 2015-2016



WATER SYSTEM OPERATOR 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

Under supervision, performs a wide variety of manual and semi-skilled tasks involving the installation, construction, maintenance, and repair associated booster pumps, pumping stations, reservoirs, and domestic water wells; performs preventative and predictive maintenance on assigned equipment; removes, disassembles, cleans reinstalls and performs repair of pump/motor assemblies, equipment and components; assists in the diagnosis and performance analysis of water wells and booster stations.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and level of work performed in the Water System Operator job series.

Water System Operator I is the entry level in the Water System Operator series. At this level, incumbents learn and perform a limited range of the less complex or specialized tasks under closer supervision, with less latitude for independent action.

Water System Operator II is the experienced, journey-level in the Water System Operator series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Water Production & Controls Supervisor and/or the Water Production Manager.

Technical and/or functional work direction may occasionally be provided Water System Operator I/II by the Lead Water System Operator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important possibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Operates distribution system to meet goals associated with water supply, water quality, and energy efficiency.
2. Reviews water quality results and calculates blending for Nitrate, DBCP and other constituents in the water as needed to comply with state and federal water quality standards.
3. Operates groundwater treatment facilities.
4. Utilizes automated, remote, and local controls for system operation.
5. Drives from site to site completing daily rounds of wells, booster stations, reservoir and water storage locations; monitors safety and security of sites and reports or corrects illegal use of water.

Water System Operator I/II (Continued)

6. Inspects pumps, motors and other equipment; fills salt storage containers and well oilers; calculates pump run times and pumping rates and enters data into computer.
7. Maintains records of chlorine consumption; reads and interprets various chart recorders, gauges, and water meters; makes associated arithmetic calculations and records results.
8. Calibrates and performs preventive maintenance on water quality monitoring equipment and chemical feed systems.
9. Performs preventive maintenance of pumps, motors, regulators, valves and water meters; repair and replace various defective or worn parts and equipment as needed.
10. Inspects, adjusts and performs preventive maintenance on electrical and telemetry equipment at sites; checks connections and measures equipment output.
11. Collects grab samples at remote sites; performs various types of field water testing including chlorine residual; adjusts chemical dosage accordingly.
12. Operates a 10-ton crane to pick up and replace industrial motors; operates other pieces of construction equipment and/or hand and power tools needed for the work.
13. Performs miscellaneous maintenance tasks including periodic basis such as weed abatement, debris removal, dirt road repair, and painting of motors, pump lines and other equipment.
14. Participates in mandatory standby rotation.
15. Regular attendance at the work site.

Marginal Functions:

1. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge

Operation and maintenance of water pumping and distribution systems.
Mechanical and electrical maintenance principles and practices.
Basic chemistry, electricity and hydraulics.
Water quality monitoring and sampling techniques and methods.
Pertinent laws, codes and regulations.

Skill in:

Operating a personal computer and related software.
Using hand and power tools.
Operating various pieces of commercial construction equipment.

Ability to:

Operate pumps, motors and other water storage and distribution facilities and equipment.
Calculate flow, volume, detention time, chemical dosage, and pressure.

Water System Operator I/II (Continued)

- Evaluate operational changes such as pressure fluctuations, system demands and production capacities.
- Troubleshoot operational deficiencies of mechanical equipment.
- Read gauges and meters and correct record results.
- Work independently without direct supervision.
- Understand and carry out oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
- Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
- Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.

REQUIRED QUALIFICATIONS

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:

Water System Operator I

Experience:

One (1) year of experience in water distribution system operation and maintenance.

Education/Training:

Equivalent to graduation from twelfth (12th) grade.

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid T2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

Water System Operator II

Experience:

Two (2) years of experience in water distribution system operation and maintenance.

Water System Operator I/II (Continued)

Education/Training:

Equivalent to graduation from the twelfth (12th) grade.

Certificate:

Possession of a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB).

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

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 job functions.

Physical

While performing the duties of this class, the employee is regularly required to walk; talk or hear in person; sit; climb or balance; stoop, kneel, crouch or crawl; use hands to finger, handle, feel or operate objects, tools or controls; and reach with hands or arms. Employees are frequently required to stand. Employees regularly lift and/or move up to 50 pounds and frequently up to 100 pounds.

Mental Demands

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use mathematical and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Environment

While performing the duties of the job the employee frequently works in extreme outside weather conditions in or near traffic; near moving mechanical parts and in high or precarious places. The employee frequently is exposed to wet and/or humid conditions, vibration, fumes, airborne particles, toxic or caustic chemicals, and the risk of electrical shock. The noise level is frequently loud.

Vision

Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception and the ability to adjust focus.

Hearing

Hear in the normal audio range with or without correction.

DATE ADOPTED: November 2001

DATE MODIFIED: May 2014

DATE MODIFIED: December 2014

DATE MODIFIED: January 2015

DATE MODIFIED: April 2015

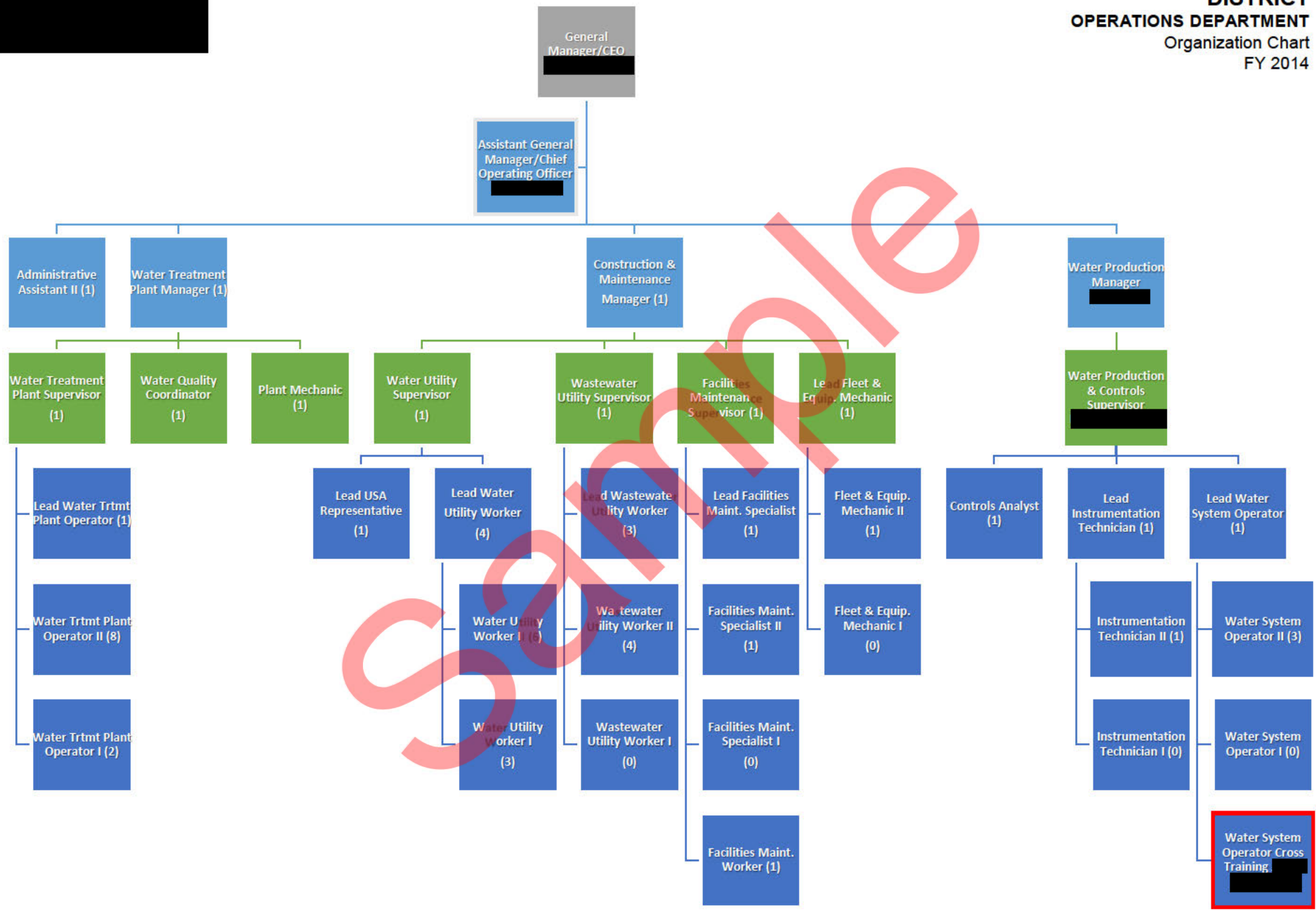
DATE MODIFIED: February 2016

Water System Operator I/II (Continued)

Safety Sensitive Position

Sample

WATER DISTRICT OPERATIONS DEPARTMENT
Organization Chart
 FY 2014



WATER SYSTEM OPERATOR 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

Under supervision, performs a wide variety of manual and semi-skilled tasks involving the installation, construction, maintenance, and repair associated booster pumps, pumping stations, reservoirs, and domestic water wells; performs preventative and predictive maintenance on assigned equipment; removes, disassembles, cleans reinstalls and performs repair of pump/motor assemblies, equipment and components; assists in the diagnosis and performance analysis of water wells and booster stations.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and level of work performed in the Water System Operator job series.

Water System Operator I is the entry level in the Water System Operator series. At this level, incumbents learn and perform a limited range of the less complex or specialized tasks under closer supervision, with less latitude for independent action.

Water System Operator II is the experienced, journey-level in the Water System Operator series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Water Production & Controls Supervisor and/or the Water Production Manager.

Technical and/or functional work direction may occasionally be provided Water System Operator I/II by the Lead Water System Operator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

Essential and other important possibilities and duties may include, but are not limited to, the following:

Essential Functions:

1. Operates distribution system to meet goals associated with water supply, water quality, and energy efficiency.
2. Reviews water quality results and calculates blending for Nitrate, DBCP and other constituents in the water as needed to comply with state and federal water quality standards.
3. Operates groundwater treatment facilities.
4. Utilizes automated, remote, and local controls for system operation.
5. Drives from site to site completing daily rounds of wells, booster stations, reservoir and water storage locations; monitors safety and security of sites and reports or corrects illegal use of water.

Water System Operator I/II (Continued)

6. Inspects pumps, motors and other equipment; fills salt storage containers and well oilers; calculates pump run times and pumping rates and enters data into computer.
7. Maintains records of chlorine consumption; reads and interprets various chart recorders, gauges, and water meters; makes associated arithmetic calculations and records results.
8. Calibrates and performs preventive maintenance on water quality monitoring equipment and chemical feed systems.
9. Performs preventive maintenance of pumps, motors, regulators, valves and water meters; repair and replace various defective or worn parts and equipment as needed.
10. Inspects, adjusts and performs preventive maintenance on electrical and telemetry equipment at sites; checks connections and measures equipment output.
11. Collects grab samples at remote sites; performs various types of field water testing including chlorine residual; adjusts chemical dosage accordingly.
12. Operates a 10-ton crane to pick up and replace industrial motors; operates other pieces of construction equipment and/or hand and power tools needed for the work.
13. Performs miscellaneous maintenance tasks including periodic basis such as weed abatement, debris removal, dirt road repair, and painting of motors, pump lines and other equipment.
14. Participates in mandatory standby rotation.
15. Regular attendance at the work site.

Marginal Functions:

1. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge

Operation and maintenance of water pumping and distribution systems.
Mechanical and electrical maintenance principles and practices.
Basic chemistry, electricity and hydraulics.
Water quality monitoring and sampling techniques and methods.
Pertinent laws, codes and regulations.

Skill in:

Operating a personal computer and related software.
Using hand and power tools.
Operating various pieces of commercial construction equipment.

Ability to:

Operate pumps, motors and other water storage and distribution facilities and equipment.
Calculate flow, volume, detention time, chemical dosage, and pressure.

Water System Operator I/II (Continued)

- Evaluate operational changes such as pressure fluctuations, system demands and production capacities.
- Troubleshoot operational deficiencies of mechanical equipment.
- Read gauges and meters and correct record results.
- Work independently without direct supervision.
- Understand and carry out oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
- Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
- Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.

REQUIRED QUALIFICATIONS

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:

Water System Operator I

Experience:

One (1) year of experience in water distribution system operation and maintenance.

Education/Training:

Equivalent to graduation from twelfth (12th) grade.

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid T2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

Water System Operator II

Experience:

Two (2) years of experience in water distribution system operation and maintenance.

Water System Operator I/II (Continued)

Education/Training:

Equivalent to graduation from the twelfth (12th) grade.

Certificate:

Possession of a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB).

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

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 job functions.

Physical

While performing the duties of this class, the employee is regularly required to walk; talk or hear in person; sit; climb or balance; stoop, kneel, crouch or crawl; use hands to finger, handle, feel or operate objects, tools or controls; and reach with hands or arms. Employees are frequently required to stand. Employees regularly lift and/or move up to 50 pounds and frequently up to 100 pounds.

Mental Demands

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use mathematical and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Environment

While performing the duties of the job the employee frequently works in extreme outside weather conditions in or near traffic; near moving mechanical parts and in high or precarious places. The employee frequently is exposed to wet and/or humid conditions, vibration, fumes, airborne particles, toxic or caustic chemicals, and the risk of electrical shock. The noise level is frequently loud.

Vision

Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception and the ability to adjust focus.

Hearing

Hear in the normal audio range with or without correction.

DATE ADOPTED: November 2001

DATE MODIFIED: May 2014

DATE MODIFIED: December 2014

DATE MODIFIED: January 2015

DATE MODIFIED: April 2015

DATE MODIFIED: February 2016

Water Distribution Operator 5 Certification Application - Example

DRAFT

TREATMENT PLANT AND OPERATOR CLASSIFICATION

System Name: _____
 System No.: _____
 Reviewing Engineer: _____
 Date of Inspection: _____
 Last A.I. Date: _____
 Facility Name: _____

Section 64413.1. Water Treatment Facilities Classification
 Table 64413.1-A

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	T3
60 through 79	T4
80 or more	T5

Total Points: 119
 Treatment Facility Class: T5
 Minimum Chief Operator Grade: T5
 Minimum Shift Operator Grade: T3

	Points	Value	Calculation
1) Type of source water used by the facility			
Groundwater and/or purchased treated water meeting primary and secondary drinking water standards, as defined in section 116275 of the Health and Safety Code	2	1	2
Water that includes any surface water or groundwater under the direct influence of surface water	5	1	5
2) Median Coliform Density Most Probable Number Index			
less than 1 per 100 mL	0		0
1 through 100 per 100 mL	2		0
greater than 100 through 1,000 per 100 mL	4	1	4
greater than 1,000 through 10,000 per 100 mL	6		0
greater than 10,000 per 100 mL	8		0
3) Maximum Influent Turbidity Level Nephelometric Turbidity Units (NTU)			
Less than 15	0	1	0
15 through 100	2		0
Greater than 100	5		0
4) Nitrate and Nitrite Data Average			
Less than or equal to the maximum contaminant level (MCL), as	0		0
Greater than the MCL	5	1	5
5) Contaminant Data Average (Primary Standards Only)			
Less than or equal to the MCL	0		0
for each contaminant greater than the MCL	2	1	2
for each contaminant 5 times the MCL or greater	5		0
6) Surface Water Filtration Treatment			
Conventional, direct, or inline	15	1	15
Diatomaceous earth	12		0
Slow sand, membrane, cartridge, or bag filter	8	1	8
Backwash recycled as part of process	5	1	5
7) Other Treatment Process for Primary MCL Reduction			
each treatment process utilized not included in No. 6 used to reduce the concentration of one or more contaminants with a primary MCL (including blending)	10	1	10
8) Other Treatment Process for Secondary MCL Reduction			
	Points	Value	Calculation

TREATMENT PLANT AND OPERATOR CLASSIFICATION

System Name: [REDACTED]
 System No.: [REDACTED]
 Reviewing Engineer: [REDACTED]
 Date: [REDACTED]
 Facility Name: [REDACTED]

22 CCR Section 64413.1. Water Treatment Facilities Classification
 Table 64413.1-A

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	T3
60 through 79	T4
80 or more	T5

Total Points: 51
 Treatment Facility Class: T3
 Minimum Chief Operator Grade: T3
 Minimum Shift Operator Grade: T2

	Points	Value	Calculation
1) Type of source water used by the facility			
Groundwater and/or purchased treated water meeting primary and secondary drinking water standards, as defined in section 116275 of the Health and Safety Code	2	0	0
Water that includes any surface water or groundwater under the direct influence of surface water	5	1	5
2) Median Coliform Density Most Probable Number Index (MPN)			
less than 1 per 100 mL	0	1	0
1 through 100 per 100 mL	2	0	0
greater than 100 through 1,000 per 100 mL	4	0	0
greater than 1,000 through 10,000 per 100 mL	6	0	0
greater than 10,000 per 100 mL	8	0	0
3) Maximum Influent Turbidity Level Nephelometric Turbidity Units (NTU)			
Less than 15	0	1	0
15 through 100	2	0	0
Greater than 100	5	0	0
4) Nitrate and Nitrite Data Average			
Less than or equal to the maximum contaminant level (MCL), as	0	0	0
Greater than the MCL	5	1	5
5) Contaminant Data Average			
Less than or equal to the MCL	0	0	0
for each contaminant greater than the MCL	2	1	2
for each contaminant 5 times the MCL or greater	5	0	0
6) Surface Water Filtration Treatment			
Conventional, direct, or inline	15	0	0
Diatomaceous earth	12	0	0
Slow sand, membrane, cartridge, or bag filter	8	0	0
Backwash recycled as part of process	5	0	0
7) Other Treatment Process for Primary MCL Reduction			
each treatment process utilized not included in No. 6 used to reduce the concentration of one or more contaminants with a primary MCL (including blending)	10	1	10
8) Other Treatment Process for Secondary MCL Reduction			
each treatment process utilized not included in No. 6 or No. 7 used to reduce the concentration of one or more contaminants with a secondary MCL (including blending)	3	0	0

TREATMENT PLANT AND OPERATOR CLASSIFICATION

9) Corrosion Control or Fluoridation	Points	Value	Calculation
each treatment process utilized not included in No. 6, No. 7, or No. 8 used for corrosion control or fluoridation	3	0	0
10) Disinfection Treatment Process with Inactivation Credit	Points	Value	Calculation
Ozone	10	0	0
Chlorine and/or chloramine	10	0	0
Chlorine dioxide	10	0	0
Ultra violet (UV)	7	0	0
11) Disinfection/Oxidation Treatment Process without Inactivation Credit	Points	Value	Calculation
		0	0
Ozone	5	0	0
Chlorine and/or chloramine	5	1	5
Chlorine dioxide	5	0	0
Ultra violet (UV)	3	0	0
Other oxidants	5	0	0
12) any other treatment process that alters the physical or chemical characteristics of drinking water not included in Nos. 6, 7, 8, 9, 10, or 11	Points	Value	Calculation
	3	0	0
13) Facility Flow	Points	Value	Calculation
2 per MGD or fraction of maximum permitted treatment facility capacity, maximum of 50 points (Capacity = 7,984 gpm = 11.5 MGD)	2	12	24
TOTAL POINTS			51
TREATMENT FACILITY CLASSIFICATION			T3

TREATMENT PLANT AND OPERATOR CLASSIFICATION

System Name: _____
 System No.: _____
 Reviewing Engineer: _____
 Date: _____
 Facility Name: _____

22 CCR Section 64413.1. Water Treatment Facilities Classification
 Table 64413.1-A

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	T3
60 through 79	T4
80 or more	T5

Total Points: 16
 Treatment Facility Class: T1
 Minimum Chief Operator Grade: T1
 Minimum Shift Operator Grade: T1

1) Type of source water used by the facility	Points	Value	Calculation
Groundwater and/or purchased treated water meeting primary and secondary drinking water standards, as defined in section 116275 of the Health and Safety Code	2	1	2
Water that includes any surface water or groundwater under the direct influence of surface water	5	0	0
2) Median Coliform Density Most Probable Number Index (MPN)	Points	Value	Calculation
less than 1 per 100 mL	0	1	0
1 through 100 per 100 mL	2	0	0
greater than 100 through 1,000 per 100 mL	4	0	0
greater than 1,000 through 10,000 per 100 mL	6	0	0
greater than 10,000 per 100 mL	8	0	0
3) Maximum Influent Turbidity Level Nephelometric Turbidity Units (NTU)	Points	Value	Calculation
Less than 15	0	1	0
15 through 100	2	0	0
Greater than 100	5	0	0
4) Nitrate and Nitrite Data Average	Points	Value	Calculation
Less than or equal to the maximum contaminant level (MCL), as	0	1	0
Greater than the MCL	5	0	0
5) Contaminant Data Average	Points	Value	Calculation
Less than or equal to the MCL	0	1	0
for each contaminant greater than the MCL	2	0	0
for each contaminant 5 times the MCL or greater	5	0	0
6) Surface Water Filtration Treatment	Points	Value	Calculation
Conventional, direct, or inline	15	0	0
Diatomaceous earth	12	0	0
Slow sand, membrane, cartridge, or bag filter	8	0	0
Backwash recycled as part of process	5	0	0
7) Other Treatment Process for Primary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 used to reduce the concentration of one or more contaminants with a primary MCL (including blending)	10	1	10
8) Other Treatment Process for Secondary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 or No. 7 used to reduce the concentration of one or more contaminants with a secondary MCL (including blending)	3	0	0

TREATMENT PLANT AND OPERATOR CLASSIFICATION

9) Corrosion Control or Fluoridation	Points	Value	Calculation
each treatment process utilized not included in No. 6, No. 7, or No. 8 used for corrosion control or fluoridation	3	0	0
10) Disinfection Treatment Process with Inactivation Credit	Points	Value	Calculation
Ozone	10	0	0
Chlorine and/or chloramine	10	0	0
Chlorine dioxide	10	0	0
Ultra violet (UV)	7	0	0
11) Disinfection/Oxidation Treatment Process without Inactivation Credit	Points	Value	Calculation
		0	0
Ozone	5	0	0
Chlorine and/or chloramine	5	0	0
Chlorine dioxide	5	0	0
Ultra violet (UV)	3	0	0
Other oxidants	5	0	0
12) any other treatment process that alters the physical or chemical characteristics of drinking water not included in Nos. 6, 7, 8, 9, 10, or 11	Points	Value	Calculation
	3	0	0
13) Facility Flow	Points	Value	Calculation
2 per MGD or fraction of maximum permitted treatment facility capacity, maximum of 50 points (Capacity = 1,100 gpm, 1.58 MGD)	2	2	4
TOTAL POINTS			16
TREATMENT FACILITY CLASSIFICATION			T1

Water Distribution Operator 5 Certification Application - Example

DRAFT



State Water Resources Control Board

6/8/2022

Congratulations! You passed the Water Distribution Operator Certification – **Grade D5** examination. You have attained or exceeded 70% of the total points available in the examination.

This letter contains important information regarding your certification, so please read it carefully.

In order to obtain your certification, you must meet the experience requirements necessary for the grade exam you passed. When you have met those requirements, you may apply for certification by submitting a completed certification application, support documentation, and the appropriate certification fee. You must complete the experience requirements and obtain certification within three (3) years from the date of the exam. Certification applications may be accessed on the Drinking Water Operator Certification Program's homepage:
https://www.waterboards.ca.gov/drinking_water/certlic/occupations/DWopcert.html

To ensure that any correspondence reaches you on time, you must notify this office in writing if your address changes.

Again, congratulations on passing the examination. Your knowledge of water distribution will help ensure that safe and potable water is served by California's public water systems.

Drinking Water Operator Certification Program

Grade Passed: **D5** Exam Date: **6/8/2022**

Experience requirements must be fulfilled by three years from the date of your exam to obtain certification



State Water Resources Control Board

APPLICATION FOR D3 – D5 DISTRIBUTION OPERATOR CERTIFICATION

OPERATOR NO.		COMMENTS	DATE RECEIVED:
APPROVED FOR: D3 D4 D5	APPROVED BY:		
CERT DATED:	CERT SENT:		

DO NOT WRITE ABOVE THIS LINE

PLEASE TYPE OR PRINT LEGIBLY IN BLUE INK.

1. Personal Information

Last	First	M	Suffix	Date of Birth (mm/dd/yr)	
MAILING ADDRESS (number and street)			CITY	STATE	ZIP CODE
WORK TELEPHONE NO.	EXT	HOME/CELL TELEPHONE NO.	E-MAIL ADDRESS		

2. Certification Information

This application is for:	D3	D4	D5	Examination passed: month/year
Evaluation/certificate fee of: OR Dual-certified fee (if currently certified in Water Treatment or Wastewater)	<input type="checkbox"/> \$120	<input type="checkbox"/> \$140	<input type="checkbox"/> \$140	Are you certified by the State of California as a water distribution operator? <input type="checkbox"/> Yes <input type="checkbox"/> No Operator #
	<input type="checkbox"/> \$90	<input type="checkbox"/> \$105	<input type="checkbox"/> \$105	Are you certified by the State of California as a water treatment operator? <input type="checkbox"/> Yes <input type="checkbox"/> No Operator #
				Are you certified by the State of California as a wastewater operator? <input type="checkbox"/> Yes <input type="checkbox"/> No Operator #

3. Education – IF used as substitution for operator experience (Certificate/Degree must be in a relevant major and verified with a photocopy of an OFFICIAL TRANSCRIPT - see (1) (a), (b), or (c) on back of page)

CERTIFICATE/DEGREE HOLDER <input type="checkbox"/> Yes <input type="checkbox"/> No	CERTIFICATE/DEGREE MAJOR	OFFICIAL TRANSCRIPT INCLUDED? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	--------------------------	---

4. Experience -- to avoid delays in evaluation of your application the following documents MUST BE submitted for each time frame of employment claimed for experience credit. Please see the back page for minimum qualifications.

Please initial (in space provided below) verifying requested attachments are included:

A letter written, signed, and dated by your supervisor (on company letterhead) verifying: (1) **timeframe of employment** (mo/yr to mo/yr), (2) a detailed description of the specific **distribution operator duties performed**, (3) **number of hours** a week spent performing operator duties (Distribution/Treatment/Wastewater), (4) **classification of the system** where duties were performed, (5) **IF applicable**, your **designation** as either a **shift or chief operator** (see sample letter attached)

Attachments to this letter MUST INCLUDE:

- A **copy of the letter** (or permit) from your regulatory field office that **classifies your distribution system** (D1-D5)
- A copy of the **utility organization chart** which notes the employees' **names and position titles**
- A copy of the **utility's official job description** (for the position you hold/held) outlining duties performed

5. Signature of applicant: I, the undersigned, certify that all statements made on this application and accompanying attachments are true and correct; that I understand that any misrepresentations may result in revocation of any certificate

§ _____ 06878 of the Health and Safety Code.

 Original Signature (No Black Ink) _____
 Date



State Water Resources Control Board

MINIMUM QUALIFICATIONS FOR CERTIFICATION FOR D3 TO D5

D3

- ★ Successful completion of the D3 exam within the past three years.
 - ★ 1 year of operator experience working as a certified D2 operator in a D2 system or higher **AND**
 - ★ 1 additional year of operator experience working as a distribution operator (may be substituted with (1) or (2) below)
-

D4

- ★ Successful completion of the D4 exam within the past three years.
 - ★ 1 year of operator experience working as a certified D3 operator at a D3 system or higher **AND**
 - ★ 3 additional years of operator experience working as a distribution operator (may be substituted with (1) below)
-

D5

- ★ Successful completion of the D5 exam within the past three years.
- ★ 2 years of operator experience working as a certified D4 operator at a D4 system or higher **AND**
- ★ 3 additional years of operator experience working as a distribution operator (may be substituted with (1) below)

Experience substitutions for certification:

- (1) a degree earned at an accredited academic institution may be substituted as follows:
 - (a) Associate Degree or Certificate in Water or Wastewater Technology or Distribution that includes at least 15 units of physical, chemical, or biological science may be used to fulfill **1 year of general operator experience**.
 - (b) Bachelor's Degree in engineering or in physical, chemical, or biological sciences may be used to fulfill **1.5 years of general operator experience**.
 - (c) Master's Degree in any of the majors listed in (b) may be used to fulfill **2 years of general operator experience**.
- (2) A certified operator may substitute, on a day-for-day basis, experience gained while working with lead responsibility for water quality or quantity related projects.

Mail **completed application and filing fee**, including **all requested attachments** to:

**State Water Resources Control Board
Drinking Water Operator Certification Program
P.O. Box 944212
Sacramento, CA 94244-2120**

- (A) A check or money order made out to **SWRCB-DWOCP**.
- (B) If you are not sure of the requirements for a particular grade, contact this office for clarification before submitting your application as **FILING FEES ARE NON-REFUNDABLE**.

02/01/12

San Bernardino Valley Official

Page 1



ID Number: [Redacted]
Birth Date: [Redacted]

Course	Title	Grd R	Hrs Att	Hrs Cmpt	Grade Points	Course Dates
----- Fall 2002 -----						
WSE 141	Water Utilities Di A		3.00	3.00	12.00	08/19/02-12/21/02
	Term 2002FA Totals:		3.00	3.00	12.00	GPA = 4.0000
	Cumulative Totals:		3.00	3.00	12.00	GPA = 4.0000
----- Spring 2006 -----						
WSE 142	Water Qual & Bas D A		3.00	3.00	12.00	01/09/06-05/16/06
	Term 2006SP Totals:		3.00	3.00	12.00	GPA = 4.0000
	Cumulative Totals:		6.00	6.00	24.00	GPA = 4.0000

TOTALS: CRED. ATT = 6.00 CRED. CPT = 6.00 GRADE. PTS = 24.00 GPA = 4.0000						

TOUCH OR BREATHE ON TOUCHSAFE® FINGERPRINT TO VALIDATE TRANSCRIPT

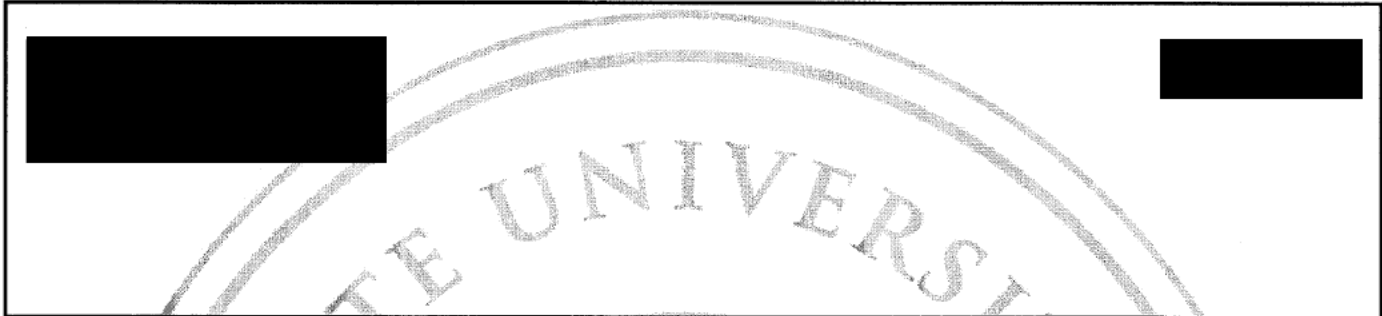
KEY TO TRANSCRIPT PRINTING APPEARS ON THE REVERSE SIDE

Patent: 5,636,874

San Bernardino Valley College
Office of Admissions and Records
701 S. Mt. Vernon Avenue
San Bernardino, CA 92410

Dan Angelo
Vice Dean of Enrollment Management
Signature is white on a blue background

TouchSafe®



Completed Courses:

Title/Subtitle	Schd#	Term	Section	Complete Date	Grade	CE Units	CE Hours
CE29 - Drinking Water Specialist: Small Water System Operation and Maintenance, Ed 5	CE295F2	F2016	CE 29-5 1	12/28/2015	A	0.00	90.00
CE28B - Drinking Water Specialist: Water Treatment Plant Operation, Vol II, Ed 6	CE28B6F	F2016	CE 28B-6 1	11/27/2015	A	0.00	90.00
CE28A - Drinking Water Specialist: Water Treatment Plant Operation, Vol I, Ed 6	CE28A6F	F2016	CE 28A-6 1	8/17/2015	A	0.00	90.00
702A - Small Water System: Water Sources and Treatment, Ed 4	702A1F2	F2006	WAT 702A-1 1	10/14/2005	B	1.50	15.00
Total Continuing Education Units/Hours:						1.50	285.00



Ramzi J. Mahmood, Ph.D., P.E.
 Director

Date: February 2, 2016

One CEU is defined as ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction and qualified instruction. Units are computed in tenths, e.g. 5 contact hours equals .5 CEUs and are awarded on a credit / no credit basis.

CALIFORNIA STATE UNIVERSITY, SACRAMENTO

*College of Engineering and Computer Science,
College of Continuing Education and the
Office of Water Programs*

CERTIFY THAT



HAS SUCCESSFULLY COMPLETED ALL REQUIREMENTS FOR
**WATER TREATMENT PLANT
OPERATION SPECIALIST**

December 2015

DIRECTOR, OFFICE OF WATER PROGRAMS

DEAN, COLLEGE OF CONTINUING EDUCATION



Date

State Water Resources Control Board
Office of Operator Certification
P.O. Box 944212 1001 I Street, 17th Floor
Sacramento, CA 94244-2120

Regarding: Drinking Water Certification for _____ Distribution Grade Level 5.

_____ has been employed with _____ from December of 2006 to present. During his employment he has held the following positions:

Position/Title	Start Date	End Date	Specific Duties Performed	Treatment Hours	Distribution Hours	Wastewater Hours	Certified D4 Operator for a D5 Facility or Higher	Job Description
Water System Operator II (Shift Operator)	03/01/20	07/12/22	1-10	3699	3699	0	Yes	Attached
Water System Operator II (Shift Operator)	04/02/18	03/01/20	1-10	2996	3048	0	No	Attached
Field Service Rep II	07/01/08	04/02/18	10	0	6216	0	No	Attached
Field Service Rep I	12/26/06	07/01/08	10	0	948	0	No	Attached

Operator Duties

1	Install, tap, re-line, disinfect, test and connect water mains and appurtenances	6	Drain, clean, disinfect, and maintain distribution reservoirs.
2	Shutdown, repair, disinfect and test broken water mains.	7	Operate pumps and related flow and pressure control and storage facilities manually or by using a system control and data acquisition (SCADA) system.
3	Oversee the flushing, cleaning, and pigging of existing water mains.	8	Maintain and/or adjust system flow and pressure requirements, control flows to meet consumer demands including fire flow demands and minimum pressure requirements.
4	Pull, reset, rehabilitate, disinfect and test domestic water wells.	9	Determine and control proper chemical dosage rates for wellhead disinfection and distribution residual maintenance.
5	Stand-by emergency response duties for after-hours distribution system operational emergencies.	10	Investigate water quality problems in the distribution system.

System Number: _____

As the undersigned supervisor of the above referenced operator, I hereby certify that all facts and statements set forth are true and correct to the best of my knowledge and belief. I understand that any omissions or misrepresentations may result in discipline as per the Health and Safety Code Section 106877.

Respectfully,

_____, Chief Operator T_ #_____, D_ #_____

Title
Email
Phone Number

Attachments:

- Official job description for each position held
- Current organizational chart with names and titles of supervisor and employee
- Classification letter or permit classifying system

WATER SYSTEM OPERATOR 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

Under supervision, performs a wide variety of manual and semi-skilled tasks involving the installation, construction, maintenance, and repair associated booster pumps, pumping stations, reservoirs, and domestic water wells; performs preventative and predictive maintenance on assigned equipment; removes, disassembles, cleans reinstalls and performs repair of pump/motor assemblies, equipment and components; assists in the diagnosis and performance analysis of water wells and booster stations.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and levels of work performed in the Water System Operator job series.

Water System Operator I is the entry level in the Water System Operator series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision, with less latitude for independent action.

Water System Operator II is the experienced, journey-level in the Water System Operator series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Water Production & Controls Supervisor and/or the Water Production Manager.

Technical and/or functional work direction may occasionally be provided Water System Operator I/II by the Lead Water System Operator.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Operates distribution system to meet goals associated with water supply, water quality, and energy efficiency.
2. Reviews water quality results and calculates blending for Nitrate, DBCP and other constituents in the water as needed to comply with state and federal water quality standards.
3. Operates groundwater treatment facilities.
4. Utilizes automated, remote, and local controls for system operation.
5. Drives from site to site completing daily rounds of wells, booster stations, reservoir and water storage locations; monitors safety and security of sites and reports or corrects illegal use of water.

VALLEY WATER DISTRICT
Water System Operator I/II (Continued)

6. Inspects pumps, motors and other equipment; fills salt storage containers and well oilers; calculates pump run times and pumping rates and enters data into computer.
7. Maintains records of chlorine consumption; reads and interprets various chart recorders, gauges, and water meters; makes associated arithmetic calculations and records results.
8. Calibrates and performs preventive maintenance on water quality monitoring equipment and chemical feed systems.
9. Performs preventive maintenance of pumps, motors, regulators, valves and water meters; repair and replace various defective or worn parts and equipment as needed.
10. Inspects, adjusts and performs preventive maintenance on electrical and telemetry equipment at sites; checks connections and measures equipment output.
11. Collects grab samples at remote sites; performs various types of field water testing including chlorine residual; adjusts chemical dosage accordingly.
12. Operates a 10-ton crane to pick up and replace industrial motors; operates other pieces of construction equipment and/or hand and power tools needed for the work.
13. Performs miscellaneous maintenance tasks on periodic basis, such as weed abatement, debris removal, dirt road repair, and painting of motors, pump lines and other equipment.
14. Participates in mandatory standby rotation.
15. Regular attendance at the work site.

Marginal Functions:

1. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

Operation and maintenance of water pumping and distribution systems.
Mechanical and electrical maintenance principles and practices.
Basic chemistry, electricity and hydraulics.
Water quality monitoring and sampling techniques and methods.
Pertinent laws, codes and regulations.

Skill in:

Operating a personal computer and related software.
Using hand and power tools.
Operating various pieces of commercial construction equipment.

Ability to:

Operate pumps, motors and other water storage and distribution facilities and equipment.
Calculate flow, volume, detention time, chemical dosage, and pressure.

VALLEY WATER DISTRICT
Water System Operator I/II (Continued)

- Evaluate operational changes such as pressure fluctuations, system demands and production capacities.
- Troubleshoot operational deficiencies of mechanical equipment.
- Read gauges and meters and correct record results.
- Work independently without direct supervision.
- Understand and carry out oral and written instructions.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work.
- Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
- Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
- Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.

REQUIRED QUALIFICATIONS

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:

Water System Operator I

Experience:

One (1) year of experience in water distribution system operation and maintenance.

Education/Training:

Equivalent to graduation from the twelfth (12th) grade.

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB) and the ability to obtain within one (1) year of appointment, a valid T2 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) is required.

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

Water System Operator II

Experience:

Two (2) years of experience in water distribution system operation and maintenance.

VALLEY WATER DISTRICT
Water System Operator I/II (Continued)

Education/Training:

Equivalent to graduation from the twelfth (12th) grade.

Certificate:

Possession of a valid D3 Distribution System Operator Certificate issued by the State Water Resources Control Board (SWRCB) and a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board (SWRCB).

License:

Possession of, or ability to obtain within one (1) year of appointment, a valid Class A California Commercial driver's license with a Hazardous Materials endorsement is required, together with a satisfactory driving record.

PHYSICAL DEMANDS AND WORKING CONDITIONS

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 job functions.

Physical

While performing the duties of this class, the employee is regularly required to walk; talk or hear in person; sit; climb or balance; stoop, kneel, crouch or crawl; smell; use hands to finger, handle, feel or operate objects, tools or controls; and reach with hands or arms. Employees are frequently required to stand. Employees regularly lift and/or move up to 50 pounds and frequently up to 100 pounds.

Mental Demands

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Environment

While performing the duties of the job, the employee frequently works in extreme outside weather conditions, in or near road traffic; near moving mechanical parts and in high or precarious places. The employee is frequently exposed to wet and/or humid conditions, vibration, fumes, airborne particles, toxic or caustic chemicals, and the risk of electrical shock. The noise level is frequently loud.

Vision

Specific vision abilities required by this job include close vision, distance vision, color vision, depth perception and the ability to adjust focus.

Hearing

Hear in the normal audio range with or without correction.

DATE ADOPTED: November 2001

DATE MODIFIED: May 2014

DATE MODIFIED: December 2014

DATE MODIFIED: January 2015

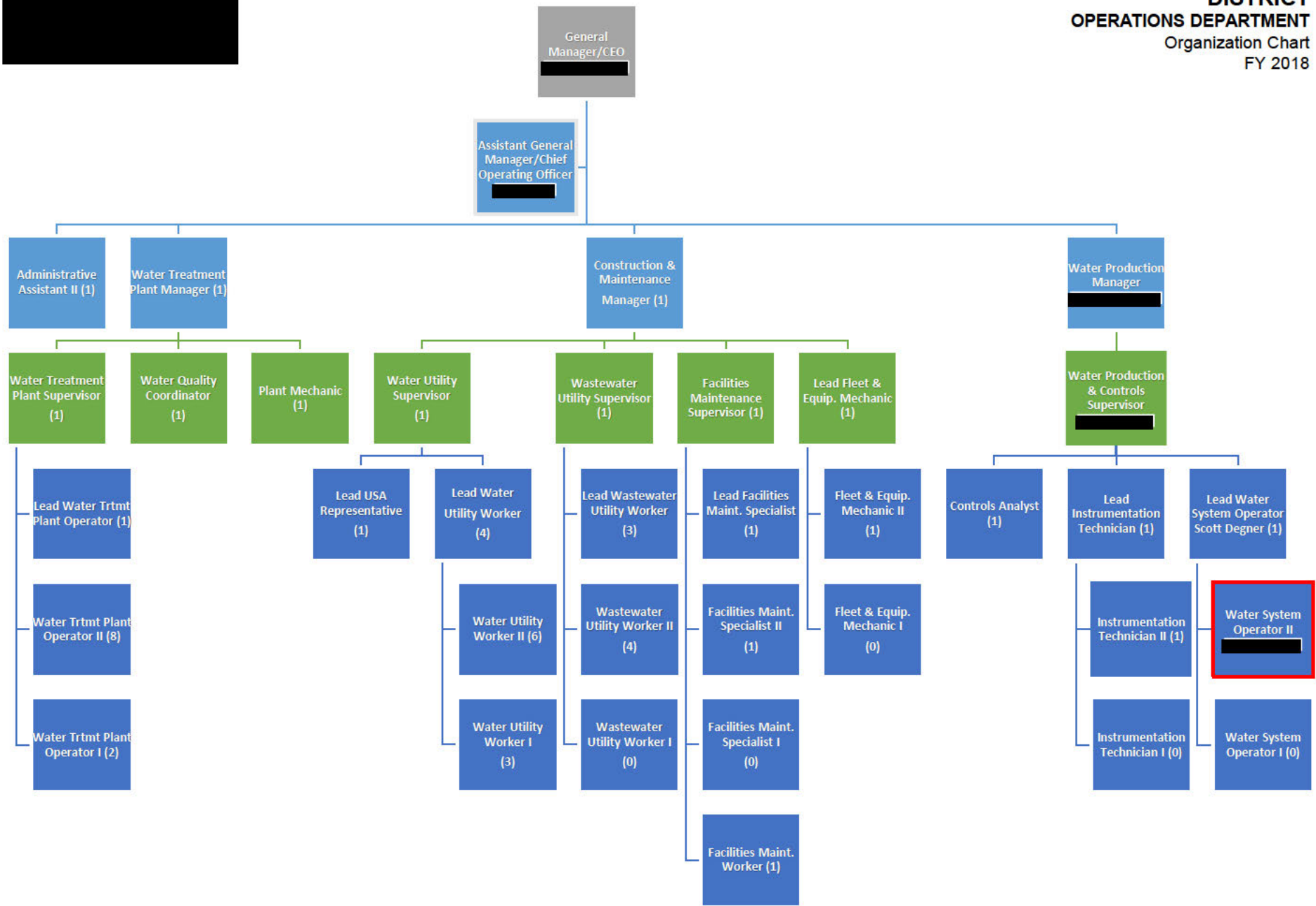
DATE MODIFIED: April 2015

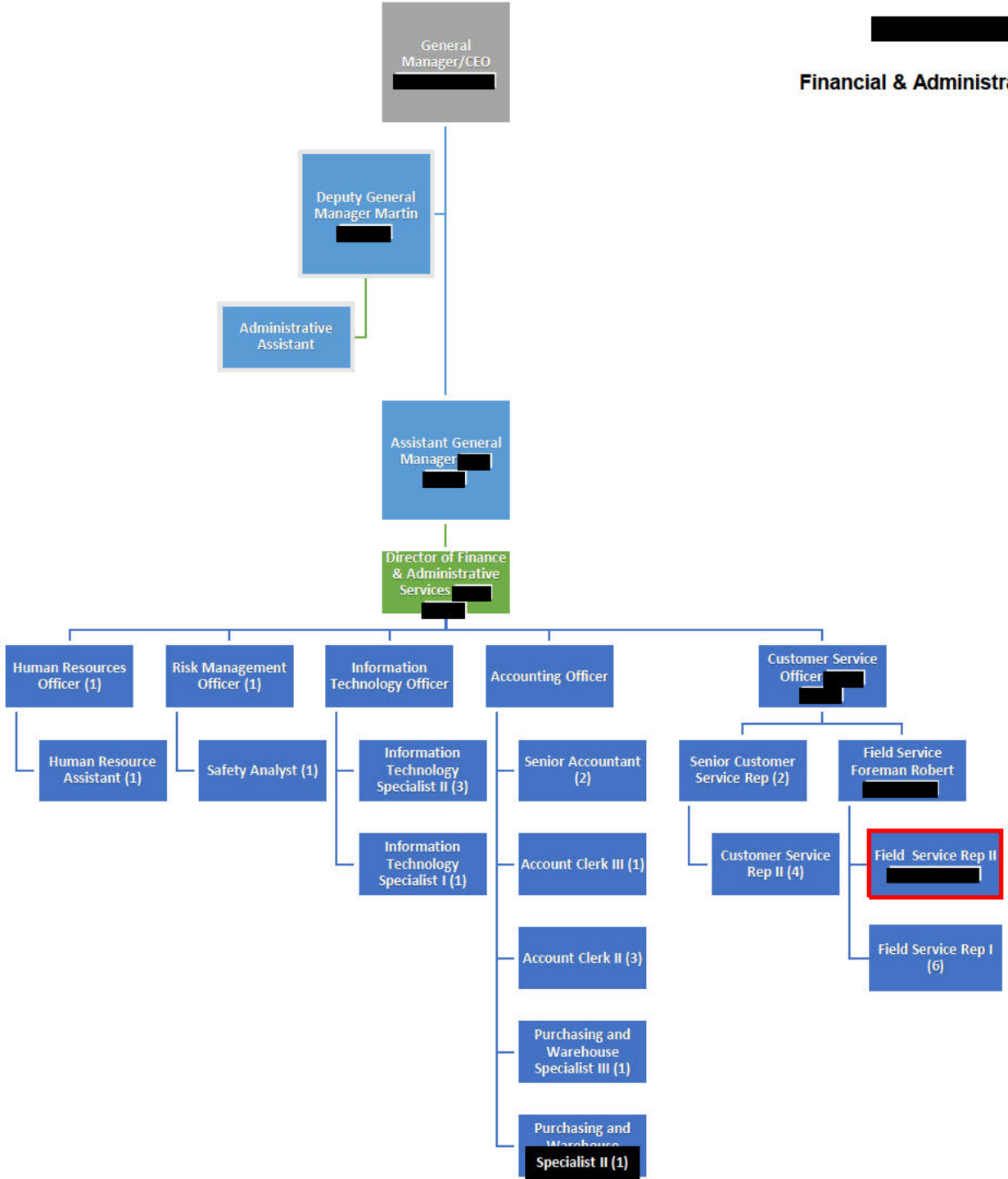
DATE MODIFIED: February 2016

██████████ WATER DISTRICT
Water System Operator I/II (Continued)

Safety Sensitive Position

WATER DISTRICT OPERATIONS DEPARTMENT
 Organization Chart
 FY 2018







FIELD SERVICE 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

Under supervision, installs, maintains and reads water meters in an assigned area; turns water service on and off; analyzes and interprets data; communicates directly with customers; and performs a variety of other field tasks associated with customer service and relative to the assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and levels of work performed in the Field Service Technician job series.

Field Service Technician I is the entry level in the Field Service Technician series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision, with less latitude for independent action.

Field Service Technician II is the experienced, journey-level in the Field Service Technician series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Field Service Supervisor and/or Customer Service Manager.

Technical or functional work direction may occasionally be provided to Field Service Technician I/II by the Lead Field Service Technician.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Reads water meters in an assigned area using an Automated Meter Infrastructure (AMI) and handheld reading device; uploads and downloads readings to and from computerized customer service data base and makes necessary calculations for service start up and/or accountability; responds to requests for exception re-reads.
2. Installs, tests and calibrates new or replacement water meters and ensures they are registering properly; assigns sequencing number for new installations to place in right order on meter reading route; operate meter data management (MDM) system.
3. Retrofits and/replaces meters as part of meter replacement program; cleans in and around meter boxes; performs routine maintenance on meters and associated devices; repairs meter leaks and performs other related repairs, and replaces meter boxes and lids.

Field Service Technician I/II

Essential Functions (continued):

4. Turns water service on and off for customers, both during normal working hours and after hours; explains District policy relative to the field. Collects in-field payments with mobile card reader devices, as assigned.
5. Responds to customer inquiries at their home or business, including answering questions regarding meter leaks, water pressure, water quality, or high consumption readings; analyzes and interprets consumption data; performs water audits to assess water utilization patterns of customers.
6. Interprets and communicate water flow data (AMI reports).
7. Performs commercial, industrial and residential landscape surveys/audits and identifies water conservation efforts.
8. Identifies and communicates leaks and high use flow to customers, report water savings and identify water conservation opportunities thru the District's Water Watch Program using MDM systems.
9. Identifies and assists in the location and isolation of residential leaks with the use of leak detection devices.
10. Collaborate with engineering staff to assist in infrastructure improvements with the ability to read and interpret standard drawings and maps.
11. Coordinates and inspects the proper installation of meters and boxes with developers for new meter services.
12. Inspects installation and operation of water meters at construction sites in absence of a Construction Inspector.
13. Installs telecommunications equipment (CCU, RPTR), establishing connections and integrations; following industry standards. Documents and prepares an install report. Maintains network by troubleshooting and repairing outages; testing network back-up procedures; updating documentation.
14. Operates a District vehicle on a daily basis in a safe and effective manner.
15. Regular attendance at the work site.

Marginal Functions:

1. Able to perform installation and repairs using an aerial man-life (bucket/boom truck).
2. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Operational characteristics of water meters and meter reading equipment.

Field Service Technician I/II

Knowledge of (continued):

Basic procedures for installing, removing, calibrating and testing the operation of water meters.
Principles and practices of good customer service.

Occupational hazards and standard safety practices.
Basic mathematics.

Skill in:

Operating and maintaining automated meter reading equipment with radio frequency competency.
Operating a personal computer/tablet, and using customer service MDM databases
Driving a District vehicle in a safe manner.

Ability to:

Read a variety of makes and models of water meters quickly and accurately.
Learn and perform general maintenance and calibration of water meters, and diagnose malfunctions.
Interpret and explain District policies to customers, and deal with them in a tactful and courteous manner.
Work alone independent of immediate supervision.
Understand and carry out oral and written instructions.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain cooperative working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.
Operate and work from an aerial lift (bucket/boom truck).
Learn and perform concrete demolition, finishing, and repair.

Field Service Technician I

REQUIRED QUALIFICATIONS

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 (1) year of experience reading and maintaining water meters, supplemented by specialized training in water meter operation and maintenance or water technology is desirable.

Education/Training: Equivalent to the completion of the twelfth grade.

Certificate:

Possession of, or ability to obtain within one (1) year of appointment, a valid DI Distribution System Operator Certificate issued by the State Water Resources Control Board.

Possession of, or ability to obtain within one (1) year of appointment the in-house Landscape Irrigation Audit certification.

Field Service Technician I/II

Required Qualifications (continued):

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board and/or possession of a valid certificate as a Certified Backflow Prevention Device Tester issued by the San Bernardino County Department of Environmental Services is desirable.

Possession of a certificate of completion for Aerial Man-Lift (bucket/boom truck) Operator and Safety Course is desirable.

License:

Possession of a valid Class C California driver's license and a satisfactory driving record.

Field Service Technician II

REQUIRED QUALIFICATIONS

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:

Two (2) years of experience reading and maintaining water meters, supplemented by specialized training in water meter operation and maintenance, irrigation systems, or water technology.

Education/Training: Equivalent to the completion of the twelfth grade.

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board.

Possession of, or ability to obtain within one (1) year of appointment a certificate of completion for Aerial Man-Lift (bucket/boom truck) Operator and Safety Course.

Possession of, or ability to obtain within one (1) year of appointment the in-house Landscape Irrigation Audit certification.

Possession of, or ability to obtain within one (1) year of appointment the AWWA Water Use Efficiency Practitioner Grade I certification.

Possession of a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board and/or possession of a valid certificate as a Certified Backflow Prevention Device Tester issued by the San Bernardino County Department of Environmental Services is desirable.

License:

Possession of a valid Class C California driver's license and a satisfactory driving record.

Field Service Technician I/II

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment:

Outdoor field environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain.

Physical:

Incumbents require sufficient mobility to work in a field environment; walk for prolonged periods of time; frequently stoop, bend, kneel, crouch, and reach; push, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; climbing and working in elevated outdoor locations, with the ability to operate and work an aerial man-lift (bucket/boom truck).

Mental Demands:

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Vision:

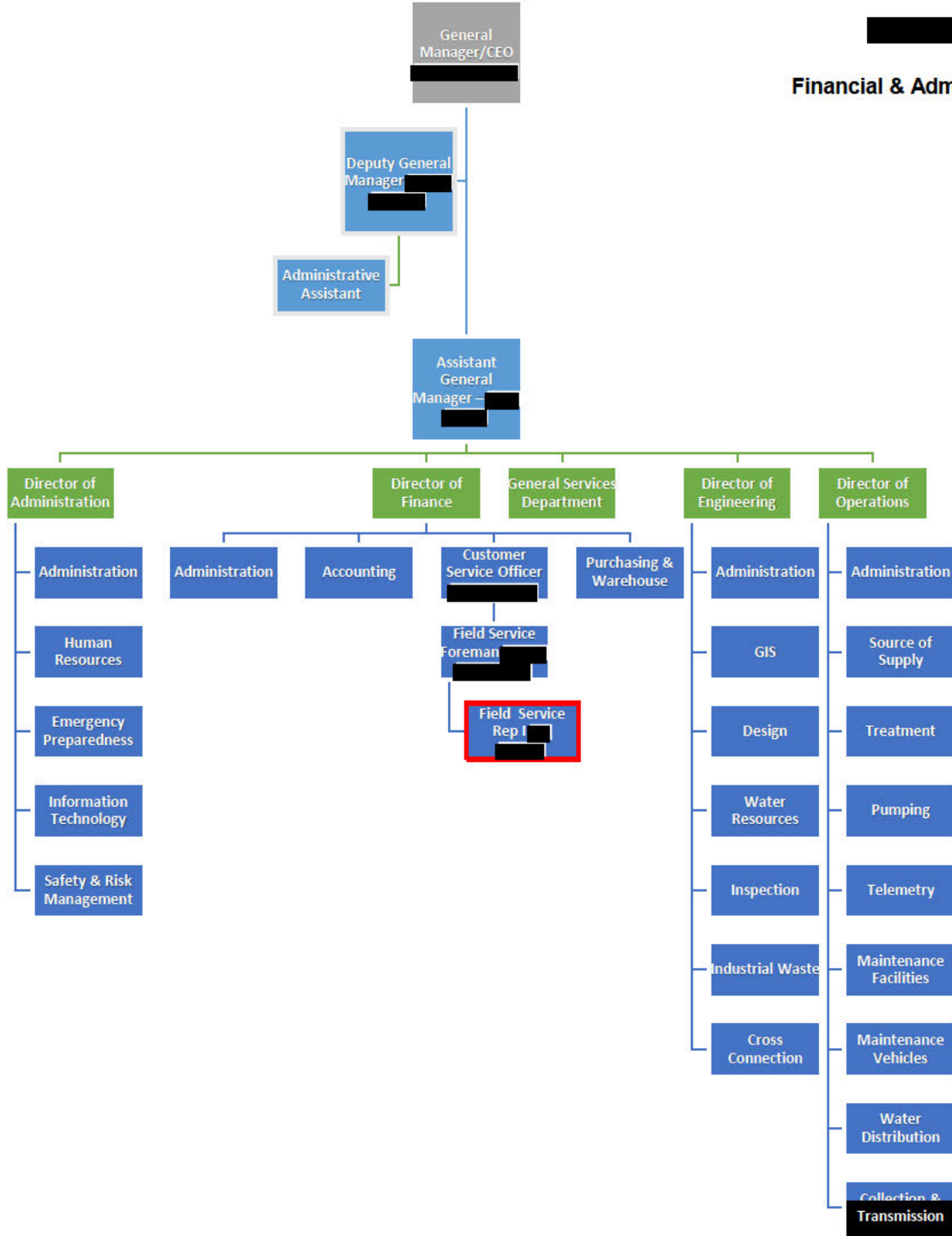
See in the normal visual range with or without correction; vision sufficient to read printed documents and computer screens; and to operate assigned equipment.

Hearing:

Hear in the normal audio range with our without correction.

JOB STATUS:	Non-Exempt
DATE ADOPTED:	January 2015
DATE AMENDED:	November 2021

Safety Sensitive Position





FIELD SERVICE 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

Under supervision, installs, maintains and reads water meters in an assigned area; turns water service on and off; analyzes and interprets data; communicates directly with customers; and performs a variety of other field tasks associated with customer service and relative to the assigned area of responsibility.

DISTINGUISHING CHARACTERISTICS

This series class specification defines and describes the nature and levels of work performed in the Field Service Technician job series.

Field Service Technician I is the entry level in the Field Service Technician series. At this level, incumbents learn and perform a limited range of the less complex or specialized work tasks, under closer supervision, with less latitude for independent action.

Field Service Technician II is the experienced, journey-level in the Field Service Technician series. At this level, incumbents perform the full range of tasks common to the classification series, under less supervision, while exercising discretion and independent judgment within established guidelines.

SUPERVISION RECEIVED AND EXERCISED

Direct supervision is received from the Field Service Supervisor and/or Customer Service Manager.

Technical or functional work direction may occasionally be provided to Field Service Technician I/II by the Lead Field Service Technician.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS

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

Essential Functions:

1. Reads water meters in an assigned area using an Automated Meter Infrastructure (AMI) and handheld reading device; uploads and downloads readings to and from computerized customer service data base and makes necessary calculations for service start up and/or accountability; responds to requests for exception re-reads.
2. Installs, tests and calibrates new or replacement water meters and ensures they are registering properly; assigns sequencing number for new installations to place in right order on meter reading route; operate meter data management (MDM) system.
3. Retrofits and/replaces meters as part of meter replacement program; cleans in and around meter boxes; performs routine maintenance on meters and associated devices; repairs meter leaks and performs other related repairs, and replaces meter boxes and lids.

Field Service Technician I/II

Essential Functions (continued):

4. Turns water service on and off for customers, both during normal working hours and after hours; explains District policy relative to the field. Collects in-field payments with mobile card reader devices, as assigned.
5. Responds to customer inquiries at their home or business, including answering questions regarding meter leaks, water pressure, water quality, or high consumption readings; analyzes and interprets consumption data; performs water audits to assess water utilization patterns of customers.
6. Interprets and communicate water flow data (AMI reports).
7. Performs commercial, industrial and residential landscape surveys/audits and identifies water conservation efforts.
8. Identifies and communicates leaks and high use flow to customers, report water savings and identify water conservation opportunities thru the District's Water Watch Program using MDM systems.
9. Identifies and assists in the location and isolation of residential leaks with the use of leak detection devices.
10. Collaborate with engineering staff to assist in infrastructure improvements with the ability to read and interpret standard drawings and maps.
11. Coordinates and inspects the proper installation of meters and boxes with developers for new meter services.
12. Inspects installation and operation of water meters at construction sites in absence of a Construction Inspector.
13. Installs telecommunications equipment (CCU, RPTR), establishing connections and integrations; following industry standards. Documents and prepares an install report. Maintains network by troubleshooting and repairing outages; testing network back-up procedures; updating documentation.
14. Operates a District vehicle on a daily basis in a safe and effective manner.
15. Regular attendance at the work site.

Marginal Functions:

1. Able to perform installation and repairs using an aerial man-life (bucket/boom truck).
2. Performs related duties and responsibilities as required.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

Operational characteristics of water meters and meter reading equipment.

Field Service Technician I/II

Knowledge of (continued):

Basic procedures for installing, removing, calibrating and testing the operation of water meters.
Principles and practices of good customer service.

Occupational hazards and standard safety practices.
Basic mathematics.

Skill in:

Operating and maintaining automated meter reading equipment with radio frequency competency.
Operating a personal computer/tablet, and using customer service MDM databases
Driving a District vehicle in a safe manner.

Ability to:

Read a variety of makes and models of water meters quickly and accurately.
Learn and perform general maintenance and calibration of water meters, and diagnose malfunctions.
Interpret and explain District policies to customers, and deal with them in a tactful and courteous manner.
Work alone independent of immediate supervision.
Understand and carry out oral and written instructions.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain cooperative working relationships with those contacted in the course of work.
Maintain physical condition appropriate to the performance of assigned duties and responsibilities.
Maintain mental capacity which allows the capability of making sound decisions and demonstrating intellectual capabilities.
Maintain effective audio-visual discrimination and perception needed for making observations, communicating with others, reading, writing and operating assigned equipment.
Operate and work from an aerial lift (bucket/boom truck).
Learn and perform concrete demolition, finishing, and repair.

Field Service Technician I

REQUIRED QUALIFICATIONS

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 (1) year of experience reading and maintaining water meters, supplemented by specialized training in water meter operation and maintenance or water technology is desirable.

Education/Training: Equivalent to the completion of the twelfth grade.

Certificate:

Possession of, or ability to obtain within one (1) year of appointment, a valid DI Distribution System Operator Certificate issued by the State Water Resources Control Board.

Possession of, or ability to obtain within one (1) year of appointment the in-house Landscape Irrigation Audit certification.

Field Service Technician I/II

Required Qualifications (continued):

Possession of a valid T1 Water Treatment Operator Certificate issued by the State Water Resources Control Board and/or possession of a valid certificate as a Certified Backflow Prevention Device Tester issued by the San Bernardino County Department of Environmental Services is desirable.

Possession of a certificate of completion for Aerial Man-Lift (bucket/boom truck) Operator and Safety Course is desirable.

License:

Possession of a valid Class C California driver's license and a satisfactory driving record.

Field Service Technician II

REQUIRED QUALIFICATIONS

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:

Two (2) years of experience reading and maintaining water meters, supplemented by specialized training in water meter operation and maintenance, irrigation systems, or water technology.

Education/Training: Equivalent to the completion of the twelfth grade.

Certificate:

Possession of a valid D2 Distribution System Operator Certificate issued by the State Water Resources Control Board.

Possession of, or ability to obtain within one (1) year of appointment a certificate of completion for Aerial Man-Lift (bucket/boom truck) Operator and Safety Course.

Possession of, or ability to obtain within one (1) year of appointment the in-house Landscape Irrigation Audit certification.

Possession of, or ability to obtain within one (1) year of appointment the AWWA Water Use Efficiency Practitioner Grade I certification.

Possession of a valid T2 Water Treatment Operator Certificate issued by the State Water Resources Control Board and/or possession of a valid certificate as a Certified Backflow Prevention Device Tester issued by the San Bernardino County Department of Environmental Services is desirable.

License:

Possession of a valid Class C California driver's license and a satisfactory driving record.

Field Service Technician I/II

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment:

Outdoor field environment; travel from site to site; exposure to noise and all types of weather and temperature conditions; exposure to hazardous traffic conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces and rough terrain.

Physical:

Incumbents require sufficient mobility to work in a field environment; walk for prolonged periods of time; frequently stoop, bend, kneel, crouch, and reach; push, lift, and/or carry moderate to heavy amounts of weights; operate assigned equipment and vehicles; climbing and working in elevated outdoor locations, with the ability to operate and work an aerial man-lift (bucket/boom truck).

Mental Demands:

While performing the duties of this class, the employee is regularly required to use oral and written communications skills; read documents or instructions; analyze and solve problems; observe and interpret data or information; use math and mathematical reasoning; learn and apply new information or skills; interact with District staff, other organizations and customers who may be upset or dissatisfied.

Vision:

See in the normal visual range with or without correction; vision sufficient to read printed documents and computer screens; and to operate assigned equipment.

Hearing:

Hear in the normal audio range with our without correction.

JOB STATUS:	Non-Exempt
DATE ADOPTED:	January 2015
DATE AMENDED:	November 2021

Safety Sensitive Position

APPENDIX N

TREATMENT AND DISTRIBUTION SYSTEM CLASSIFICATIONS

DISTRIBUTION CLASSIFICATION

System Name: _____
 System No: _____
 Reviewing Engineer: _____
 Date of Inspection: _____

Section 64413.3. Distribution System Classification
Table 64413.3-A

Population	Class
1,000 or less	D1
1,001 through 10,000	D2
10,001 through 50,000	D3
50,001 through 5 million	D4
Greater than 5 million	D5

Population: 145,500
 Distribution Class
 (based on population only): D4

System Characteristics Total: 23
 Final Distribution Class: D5

Chief Operator Class: D5
 Shift Operator Grade: D3

System Characteristics	Point Value	Calculation
(1) Pressure Zones = 1 to 3	0	0
Pressure Zones = 4 to 10	4	0
Pressure Zones = greater than 10	6	6
(2) Single Disinfectant Added	5	5
Multiple Disinfectants*	8	0
(3) Pump Station(s) up to 50 HP	4	0
Pump Station(s) greater than 50 HP	6	6
(4) Distribution Reservoirs = 1 to 5	4	0
Distribution Reservoirs greater than 5	6	6
(5) One or More Uncovered Reservoirs	10	0
(6) Customers Served Non-Potable Water	6	0
System Characteristics Total =		23

Overall Distribution Class (based on system characteristic total): D5

TREATMENT PLANT AND OPERATOR CLASSIFICATION

System Name: [REDACTED]
 System No.: [REDACTED]
 Reviewing Engineer: [REDACTED]
 Date: [REDACTED]
 Facility Name: [REDACTED]

22 CCR Section 64413.1. Water Treatment Facilities Classification
 Table 64413.1-A

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	T3
60 through 79	T4
80 or more	T5

Total Points: 51
Treatment Facility Class: T3
Minimum Chief Operator Grade: T3
Minimum Shift Operator Grade: T2

1) Type of source water used by the facility	Points	Value	Calculation
Groundwater and/or purchased treated water meeting primary and secondary drinking water standards, as defined in section 116275 of the Health and Safety Code	2	0	0
Water that includes any surface water or groundwater under the direct influence of surface water	5	1	5
2) Median Coliform Density Most Probable Number Index (MPN)	Points	Value	Calculation
less than 1 per 100 mL	0	1	0
1 through 100 per 100 mL	2	0	0
greater than 100 through 1,000 per 100 mL	4	0	0
greater than 1,000 through 10,000 per 100 mL	6	0	0
greater than 10,000 per 100 mL	8	0	0
3) Maximum Influent Turbidity Level Nephelometric Turbidity Units (NTU)	Points	Value	Calculation
Less than 15	0	1	0
15 through 100	2	0	0
Greater than 100	5	0	0
4) Nitrate and Nitrite Data Average	Points	Value	Calculation
Less than or equal to the maximum contaminant level (MCL), as	0	0	0
Greater than the MCL	5	1	5
5) Contaminant Data Average	Points	Value	Calculation
Less than or equal to the MCL	0	0	0
for each contaminant greater than the MCL	2	1	2
for each contaminant 5 times the MCL or greater	5	0	0
6) Surface Water Filtration Treatment	Points	Value	Calculation
Conventional, direct, or inline	15	0	0
Diatomaceous earth	12	0	0
Slow sand, membrane, cartridge, or bag filter	8	0	0
Backwash recycled as part of process	5	0	0
7) Other Treatment Process for Primary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 used to reduce the concentration of one or more contaminants with a primary MCL (including blending)	10	1	10
8) Other Treatment Process for Secondary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 or No. 7 used to reduce the concentration of one or more contaminants with a secondary MCL (including blending)	3	0	0

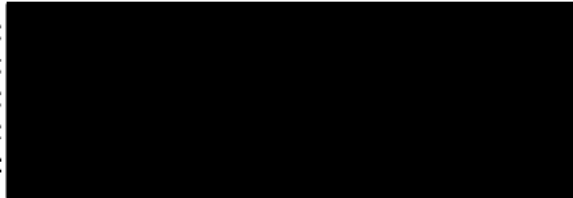


TREATMENT PLANT AND OPERATOR CLASSIFICATION

9) Corrosion Control or Fluoridation	Points	Value	Calculation
each treatment process utilized not included in No. 6, No. 7, or No. 8 used for corrosion control or fluoridation	3	0	0
10) Disinfection Treatment Process with Inactivation Credit	Points	Value	Calculation
Ozone	10	0	0
Chlorine and/or chloramine	10	0	0
Chlorine dioxide	10	0	0
Ultra violet (UV)	7	0	0
11) Disinfection/Oxidation Treatment Process without Inactivation Credit	Points	Value	Calculation
		0	0
Ozone	5	0	0
Chlorine and/or chloramine	5	1	5
Chlorine dioxide	5	0	0
Ultra violet (UV)	3	0	0
Other oxidants	5	0	0
12) any other treatment process that alters the physical or chemical characteristics of drinking water not included in Nos. 6, 7, 8, 9, 10, or 11	Points	Value	Calculation
	3	0	0
13) Facility Flow	Points	Value	Calculation
2 per MGD or fraction of maximum permitted treatment facility capacity, maximum of 50 points (Capacity = 7,984 gpm = 11.5 MGD)	2	12	24
TOTAL POINTS			51
TREATMENT FACILITY CLASSIFICATION			T3

TREATMENT PLANT AND OPERATOR CLASSIFICATION

System Name:
 System No.:
 Reviewing Engineer:
 Date:
 Facility Name:



22 CCR Section 64413.1. Water Treatment Facilities Classification
 Table 64413.1-A

Total Points	Class
Less than 20	T1
20 through 39	T2
40 through 59	T3
60 through 79	T4
80 or more	T5

Total Points: 16
Treatment Facility Class: T1
Minimum Chief Operator Grade: T1
Minimum Shift Operator Grade: T1

1) Type of source water used by the facility	Points	Value	Calculation
Groundwater and/or purchased treated water meeting primary and secondary drinking water standards, as defined in section 116275 of the Health and Safety Code	2	1	2
Water that includes any surface water or groundwater under the direct influence of surface water	5	0	0
2) Median Coliform Density Most Probable Number Index (MPN)	Points	Value	Calculation
less than 1 per 100 mL	0	1	0
1 through 100 per 100 mL	2	0	0
greater than 100 through 1,000 per 100 mL	4	0	0
greater than 1,000 through 10,000 per 100 mL	6	0	0
greater than 10,000 per 100 mL	8	0	0
3) Maximum Influent Turbidity Level Nephelometric Turbidity Units (NTU)	Points	Value	Calculation
Less than 15	0	1	0
15 through 100	2	0	0
Greater than 100	5	0	0
4) Nitrate and Nitrite Data Average	Points	Value	Calculation
Less than or equal to the maximum contaminant level (MCL), as	0	1	0
Greater than the MCL	5	0	0
5) Contaminant Data Average	Points	Value	Calculation
Less than or equal to the MCL	0	1	0
for each contaminant greater than the MCL	2	0	0
for each contaminant 5 times the MCL or greater	5	0	0
6) Surface Water Filtration Treatment	Points	Value	Calculation
Conventional, direct, or inline	15	0	0
Diatomaceous earth	12	0	0
Slow sand, membrane, cartridge, or bag filter	8	0	0
Backwash recycled as part of process	5	0	0
7) Other Treatment Process for Primary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 used to reduce the concentration of one or more contaminants with a primary MCL (including blending)	10	1	10
8) Other Treatment Process for Secondary MCL Reduction	Points	Value	Calculation
each treatment process utilized not included in No. 6 or No. 7 used to reduce the concentration of one or more contaminants with a secondary MCL (including blending)	3	0	0

TREATMENT PLANT AND OPERATOR CLASSIFICATION

9) Corrosion Control or Fluoridation	Points	Value	Calculation
each treatment process utilized not included in No. 6, No. 7, or No. 8 used for corrosion control or fluoridation	3	0	0
10) Disinfection Treatment Process with Inactivation Credit	Points	Value	Calculation
Ozone	10	0	0
Chlorine and/or chloramine	10	0	0
Chlorine dioxide	10	0	0
Ultra violet (UV)	7	0	0
11) Disinfection/Oxidation Treatment Process without Inactivation Credit	Points	Value	Calculation
		0	0
Ozone	5	0	0
Chlorine and/or chloramine	5	0	0
Chlorine dioxide	5	0	0
Ultra violet (UV)	3	0	0
Other oxidants	5	0	0
12) any other treatment process that alters the physical or chemical characteristics of drinking water not included in Nos. 6, 7, 8, 9, 10, or 11	Points	Value	Calculation
	3	0	0
13) Facility Flow	Points	Value	Calculation
2 per MGD or fraction of maximum permitted treatment facility capacity, maximum of 50 points (Capacity = 1,100 gpm, 1.58 MGD)	2	2	4
TOTAL POINTS			16
TREATMENT FACILITY CLASSIFICATION			T1