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## State Water Resources Control Board

July 26, 2023

Stephanie Hung  
Operator Certification Program Coordinator  
U.S. EPA. Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

RE: CALIFORNIA STATE WATER RESOURCES CONTROL BOARD DRINKING WATER OPERATOR CERTIFICATION ANNUAL REPORT FOR STATE FISCAL YEAR (SFY) 2022-2023

Dear Ms. Hung:

Enclosed is the California State Water Resources Control Board Drinking Water Operator Certification Annual Report for SFY 2022-2023.

Please contact Keisha Kelley at (916) 341-5665, or [Keisha.Kelley@waterboards.ca.gov](mailto:Keisha.Kelley@waterboards.ca.gov) if you have any questions.

Sincerely,

[Signed copy on file]

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Darrin Polhemus, Deputy Director  
Division of Drinking Water

[Signed copy on file]

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Joseph Karkoski, Deputy Director  
Division of Financial Assistance

Enclosure (1):

1. Drinking Water Operator Certification Program Annual Report, SFY 2022-2023

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E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

**California State Water Resources Control Board**

**Drinking Water Operator Certification Program  
2022 Annual Report**

**State Fiscal Year 2022 – 2023  
(July 1, 2022 to June 30, 2023)**

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1. Attorney General Certification
2. Electronic Annual Report (eAR)
3. Treatment Plant Classification(s)
4. Distribution System Classification(s)
5. Drinking Water Treatment Minimum Qualifications for Examinations and Eligibility Criteria for Certification
6. Drinking Water Distribution Minimum Qualifications for Examinations and Eligibility Criteria for Certification
7. Stakeholder Meeting Minutes – October 26, 2022
8. Stakeholder Meeting Minutes – April 5, 2023
9. Joint Stakeholder Meeting Minutes – June 27, 2023

# **Drinking Water Operator Certification Program Annual Report (July 1, 2022 to June 30, 2023)**

## **Introduction**

The California Drinking Water Operator Certification Program's (DWOCP) Annual Report for the State Fiscal Year (SFY) 2022-2023 (July 1, 2022 to June 30, 2023) is submitted to the United States Environmental Protection Agency (USEPA) to meet the requirements of the Final Guidelines for the Certification and Recertification of Operators of Community and Non-transient Non-community Public Water Systems. The activities of DWOCP to ensure certification of treatment and distribution operators in California are an important component of compliance with the Federal Safe Drinking Water Act (42 U.S.C., chapter 6A, subchapter XII (commencing with section 300f)), the California Safe Drinking Water Act (Health and Safety Code (H&SC), division 104, part 12, chapter 4 (commencing with section 116270)), and all implementing regulations (collectively the SDWA). The format and content of this report follow the recommendations provided by the USEPA's Office of Ground Water and Drinking Water Protection Division in a Desk Guide for Reviewing State Operator Certification Annual Reports issued in July 2018.

The DWOCP's goal is to ensure that skilled professionals are overseeing the treatment and distribution of safe drinking water that meets public health objectives. The State Water Board affirms that the state of California ensures the public health objectives are met by the DWOCP, Division of Drinking Water (DDW), and Office of Enforcement (OE).

The DWOCP is substantially the same and any procedural changes made have been done to improve administrative efficiency and oversight – i.e., there has been no “backsliding” or reduction in requirements through any change in policy, regulations, or statute. The State Water Board's DWOCP, DDW, and OE continue to institute procedures and protocols to increase enforcement efforts to ensure the integrity of certification examinations and ensure properly certified operators are operating drinking water systems.

### **1. Authorization**

The California Department of Public Health adopted regulations concerning the DWOCP in 2001 to meet federal guidelines and requirements, as well as H&SC, division 104, part 1, chapter 4, article 3 (commencing with section 106875). These regulations, referred to as the DWOCP Regulations, are codified at California Code of Regulations (CCR), title 22, division 4, chapter 13 (commencing with section 63750.10). Prior to 2001, California had a program to certify water treatment operators for public water systems but did not include certification of distribution system operators. In 2001, the certification program was broadened to include certification of operators of distribution systems serving community and non-transient non-community public water systems. In addition, the regulations contain provisions to ensure that all treatment facilities and distribution systems are classified consistent with federal guidance.

On February 17, 2023, the California Attorney General's Office certified that the statutes establishing the DWOCP and the regulations implementing those statutes were lawfully created and are consistent with California law. The California Attorney General's Office further certified that subdivisions (a)(4), (a)(5), (b)(1), and (b)(2) of section 116555 of the H&SC require the use of certified water treatment and water distribution system operators consistent with federal law (Attachment 1).

## **2. Classification of Systems, Facilities, and Operators (CCR, title 22, sections 64413.1, 64413.2, 64413.5, & 64413.7)**

As of June 28, 2023, there are 7,283 public water systems (PWSs) in California. Of these PWS, 2,851 are classified as community water systems; 2,949 are transient non-community systems; and 1,483 are non-transient, non-community systems. The number of active PWSs varies regularly, as new PWSs are added and existing PWSs are inactivated. The State Water Board's DDW District Offices and Local Primacy Agencies (LPAs) classify water treatment facilities and distribution systems statewide in accordance with CCR, title 22, sections 64413.1 and 64413.3, respectively. These classifications are maintained in the Safe Drinking Water Information System (SDWIS), DDW's database of record for water system inventory, compliance tracking, and reporting to USEPA. The SDWIS data system, specifically the fields used for storing treatment and distribution facility classifications, is not capable of tracking historical classification changes. Some PWSs have multiple treatment systems which results in approximately 8,000 treatment plants documented in SDWIS that are serving California water systems.

The State Water Board uses a five-level classification system, established in regulations for water distribution systems, water treatment facilities, and certified operators. Water distribution systems are classified into classes D1 through D5, according to population served and the complexity of the distribution system. Water treatment facilities are classified into classes T1 through T5, using a point system based upon source water characteristics, maximum capacity, and treatment techniques utilized. Operators are required to be certified for the specific classification of distribution system or treatment facility for which they are employed. In SFY 2022-2023, there were a total of 35,380 valid certificates. Of these certificates, 14,502 are valid water treatment operator certificates and 20,878 are valid water distribution operator certificates. The certificates are held by 23,470 water operators. Of the operators, 11,910 individuals hold both water treatment and water distribution operator certificates. There are 8,968 certified operators that hold only a water distribution operator certificate and 2,592 operators that hold only a water treatment operator certificate.

The State Water Board does not implement a temporary operator certification or licensing program.

DDW acquires information on a statewide basis via the electronic Annual Report (eAR) on the certification levels of operators, and whether the operator certification satisfies

the requirements for their water system facilities based on the classifications assigned by DDW staff in SDWIS. Submittal of the eAR is required annually for all PWSs and includes reporting on many aspects of the water system operations for the prior calendar year. For the calendar year 2022 (for reporting to DDW in early 2023), DDW revised the operator certification section to ask that a box be checked if their PWS does not have a designated chief treatment / distribution operator. If the box was checked, the fields in the eAR for chief operator are hidden. Evaluation of operator certification information from prior year eARs has been difficult due to the way in which the survey question was built as a nested table. Other than the eAR data collection effort, each District Office or LPA maintains information related to operator certification for each water system in disparate formats in their own offices. Assembly of all this information would require a prohibitive amount of staff time to collect and organize. The State Water Board will continue to work on improving the data collection effort within the constraints of available resources and data management systems.

The specific 2022 eAR questions related to Operator Certification are shown in Attachment 2.

In accordance with H&SC section 116555, PWS owners are required to employ or utilize only water treatment operators that have been certified at the appropriate grade. This section further specifies that owners of community or non-transient, non-community water systems shall employ or utilize distribution operators certified at the appropriate grade for positions in responsible charge of the distribution system. Operators in responsible charge are required to hold a valid certification equal to or greater than the classification of each treatment or distribution facility under their charge.

CCR, title 22, section 64413.5 specifies that each water supplier shall designate at least one chief operator and one shift operator that meets the requirements specified for each water treatment facility utilized by the water system for each operating shift. This section further specifies that a chief or shift operator shall be on-site at all times that the facility is in operation unless the water supplier's Operations Plan demonstrates an equal degree of operational oversight and reliability with either unmanned operation or operation under reduced operator certification requirements. If approved by DDW for such operations, the chief or shift operator shall be available within one hour.

The current total classifications of water treatment and water distribution facilities is tabulated in Attachments 3 and 4, by PWS classification. Water treatment and distribution classifications are determined on a point-based classification scheme. Treatment classification is determined based on source water type, source water quality, treatment type, and maximum treatment facility flow rate.

Distribution classification is determined based on population served and system characteristics.

### 3. Operator Qualifications

Requirements for water treatment operators and distribution operators are specified in DWOCF Regulations, sections 63800 and 63805, respectively. All operators must submit an examination application to the State Water Board. The applicant must meet the education requirements for the level of the examination. After successful completion of the examination, the State Water Board verifies that the applicant meets all applicable experience requirements. The required knowledge, skills, and abilities of each certification level were developed based on job analyses conducted by Subject Matter Experts (SMEs), who are typically water system operators and managers with extensive field experience. The State Water Board has an ongoing validation process to ensure that examination questions are representative of operator duties and responsibilities.

In SFY 2021-2022, the State Water Board partnered with Prometric to provide computer-based Operator Certification testing for the drinking water treatment (T1- T4) and drinking water distribution (D1- D5) examinations. Moving from paper-pencil examinations held twice a year (one Saturday in Spring and one Saturday in Fall) at 10 locations throughout the state to computer-based examinations held year-round at 33 Prometric testing centers statewide. Computer-based testing (CBT) began in February 2021. Benefits of CBT include no application deadlines, year-round testing opportunities, more testing locations, and faster examination results. A year-over-year comparison of computer-based examination results for SFY 2021-2022 and 2022-2023 is provided below. Due to the data being limited to only 1.5 years of computer-based examination results, any notable differences in outcomes using CBT cannot be identified and evaluated at this time.

SFY 2021-2022 (reporting period: July 1, 2021 – June 30, 2022)

Grade	Examinees	Pass	Fail/ No Show	Pass Percentage
D1	1,180	826	354	70%
D2	1,897	1,366	531	72%
D3	674	418	256	62%
D4	338	206	132	61%
D5	127	80	47	63%
Totals	4,216	2,896	1,320	69%
Grade	Examinees	Pass	Fail/ No Show	Pass Percentage
T1	538	355	183	66%
T2	1,187	831	356	70%
T3	337	246	91	73%
T4	179	125	54	70%
Totals	2,241	1,557	684	69%

SFY 2022-2023 (reporting period: July 1, 2022 – June 30, 2023)

Grade	Examinees	Pass	Fail	No Show*	Pass Percentage
D1	1,074	624	359	91	63%
D2	1,783	1097	590	96	65%
D3	718	425	264	29	62%
D4	333	179	132	22	58%
D5	145	78	58	9	57%
Totals	4,053	2,403	1,403	247	63%
Grade	Examinees	Pass	Fail	No Show*	Pass Percentage
T1	487	274	173	40	61%
T2	1,161	724	377	60	66%
T3	334	205	107	22	66%
T4	141	81	55	5	60%
Totals	2,123	1,284	712	127	64%

\*SFY 2022-2023 the fail/no show column was separated to show the actual pass percentage.

The drinking water treatment grade 5 examination is not conducted via CBT. Due to the COVID-19 pandemic impacts in SFY 2021-2022 only eight (8) T5 oral examinations were conducted in December 2022 with an 88% pass rate. In SFY 2022-2023, thirty-five (35) T5 oral examinations were conducted in July 2022 and February 2023 with a 29% pass rate.

The State Water Board uses Subject Matter Experts (SMEs) to review and validate new questions when regulation changes occur. The SMEs determine if a question is valid for the industry, link it to a Knowledge, Skill, or Ability, (KSA) listed on the Expected Range of Knowledge and determine the difficulty of the question for each level of operator using a modified Angoff method. There were no questions added during the time of this report.

The paper-pencil examination process included a review of each individual question post-examination to determine its ability to discriminate between passing and failing candidates. This review may have led to revising the question, changing the distractors, or eliminating the question altogether from the item bank. The CBT examination results are reported on score reports that do not give the specifics of any particular examination question. Examinees have the option to provide comments on each examination question. The State Water Board reviews comments periodically to identify commonalities in comments on specific questions. If commonalities are identified the applicable question would be analyzed to determine if revising the question, changing the distractors, or eliminating the question altogether from the item bank is appropriate.

All operators must meet the DWOCP examination and certification requirements for drinking water treatment and distribution which are listed in Attachments 5 and 6.



The State of California certified water treatment operators prior to the 2001 USEPA requirements. Therefore, grandparenting was not offered to water treatment operators. For water distribution operators grandparenting was offered to 6,433 operators. Grandparenting of operators ceased in 2003. Currently there are 1,053 operators that are considered grand-parented. The number of grand-parented operators reported this year increased by 108 due to a miscalculation in what was reported the previous year.

The State Water Board currently offers reciprocity to operators holding a valid, unexpired water treatment or water distribution certificate issued by another state, the United States, a territory, or tribal government that has been designated as the primacy agency by the USEPA, or a unit of any of these. The State Water Board verifies the validity of the certificate and compares the certification requirements of the issuing agency to those of the State Water Board for experience and training to determine the appropriate level of certification. In SFY 2022-2023, there were 35 certificates issued via reciprocity; 15 Distribution and 20 Treatment.

#### **4. Enforcement**

Under the applicable sections of the H&SC and the CCR, the State Water Board may take enforcement actions against a certified individual or the PWS for violating any applicable section of the statutes or regulation. The State Water Board's Office of Enforcement Special Investigation Unit (SIU) accepts operator certification program complaints (via email, phone referral, etc.) and performs follow-up investigations. In the event there is fraudulent activity or other wrongdoing, the State Water Board may suspend, revoke, or refuse to grant or renew any water distribution or treatment operator certificate, place on probation, or reprimand the certificate holder, impose administrative civil liability, or refer the matter to the appropriate District Attorney's Office.

During the time-period covered by this report (SFY 2022-2023), the SIU closed 12 drinking water operator certification complaint cases with 5 cases resulting in formal enforcement actions:

- One (1) operator certificate was revoked for falsifying chain-of-custody documents and submitting fraudulent analytical results.
- Two (2) operators were referred to DWOCP with recommendations to restrict or deny applications for examination misconduct, providing false or misleading information on an Experience Verification Letter, or insufficient hours or duties.
- Two (2) operators were issued Staff Enforcement Letters for operating drinking water systems without a valid/expired certificate of the appropriate grade level, or operator misconduct.

The SIU continues to investigate 6 individual drinking water operator certification complaints covering both treatment and distribution operators, two of which have pending enforcement actions. For water systems found in violation of operator certification requirements and the SDWA, DDW's Field Office Branch (FOB) District

office or county LPA may also take enforcement actions appropriate to the specifics of the situation, considering such factors as:

- Potential threat to public health.
- Type and complexity of water treatment processes.
- Water quality issues that could result from operator error.
- Interim action that is proposed by the system to address the problem.

For DDW review of operator certification compliance, typically, enforcement actions consist of the issuance of a citation, compliance order, or corrective action letter. In most cases, the action includes a requirement for the water system to submit a plan for bringing the water system into compliance with the operator certification requirements. Most commonly, the enforcement actions are a result of a finding that the PWS is utilizing noncertified operators to perform duties specified in subsection (b) of section 63770 of the DWOCP Regulations.

Enforcement actions often occur in cases where the lack of a certified operator is a contributing factor to a violation or potential violation of a drinking water standard or treatment technique. In SFY 2022-2023, there were 13 violations that involved 9 water systems reported in SDWIS for failure to maintain an adequately certified operator. There were 18 enforcement actions taken by a District or LPA for these violations, in the form of a Citation or Compliance Order. All enforcement actions included specific corrective actions required and a time schedule for the water system to return to compliance. The specific list of water systems that had enforcement issued for lack of adequately certified operator is provided below. DDW has found that most violations in California PWSs are incurred by small water systems. Note that 3 of these water systems have returned to compliance or became inactive and are asterisked in the table.

**Enforcement Actions for Operator Certification Violations**

System Number	System Name	PWS Classification	Number of Connections	Population	Number of Violations**
CA0400062*	Richvale Elementary School	NTNC	4	63	1
CA0900659*	Sierra Tahoe Main Lodge	NTNC	5	2,440	1
CA1500344	South Kern Mutual Water Company	CWS	15	67	1
CA2710702*	Fort Hunter Liggett	CWS	165	8,253	1
CA3500507	Bitterwater-Tully School WS	NTNC	2	145	1
CA3600157	Lucerne Vista MWS	CWS	70	224	1
CA4500023	Hat Creek Highlands	CWS	44	88	1

	Mutual Water Co				
CA4500153	Shasta District Fair	TNC	1	20,400	1
CA5401082	Ventura Costa, LLC – Visalia Division	NTNC	5	500	5

\*Violation has been resolved

\*\* Some PWSs have multiple enforcement actions associated with the violations.

CWS: Community Water System

NTNC: Non-transient, Non-community Water System

TNC: Transient, Non-community Water System

The table below shows a comparison of operator certification violations between the current and previous SFY.

#### Operator Certification Violations Over Time

System Type	Count of SFY 2021-2022 Violations	Count of SFY 2022-2023 Violations	Percent Change
CWS	14	4	-71%
NTNC	1	8	+700%
TNC	0	1	-
<b>Total</b>	<b>15</b>	<b>13</b>	<b>-13%</b>

In SFY 2022-2023, DDW is taking steps to improve the use of the compliance data generated via the eAR by generating annual compliance status reports for the Districts and LPAs to use in following up with data gaps and compliance problems. In addition, these reports help identify potential compliance violations with the intention of providing compliance decision support and accountability. In order to support use and understanding of eAR data, DDW hosted six staff reviewer trainings for the 2022 Reporting Year (RY) eAR. DDW will continue to provide reviewer trainings to support collection of useful data. DDW also supplemented this effort with four reporter trainings for the 2022 RY eAR to better support PWSs accurate and timely completion of the eAR.

As part of the improvement of the overall enforcement of operator certification requirements during FY 2018-2019, DDW established that all enforcement actions for failure to comply with the operator certification requirements set forth in regulation would be addressed with a formal enforcement action, primarily through citation issuance. A template citation was developed for use by all DDW Districts and LPAs and made available in January 2019. Annually, DDW Districts and LPAs are provided information on the public water systems that did not indicate that they maintain an adequately certified operator, based on eAR responses. Districts and LPAs should reach out to the public water system to confirm each situation, and if appropriate, issue a citation with time schedule to return to compliance.

During the annual evaluation of the LPA programs, DDW reviews a select number of water system files to evaluate the compliance of these systems with operator certification requirements. The results of the review showed that the LPAs are adequately enforcing and following up on Operator Certification requirements. In addition, DDW reviews the overall work of the LPAs in enforcing regulatory requirements including operator certification requirements. Any questions or issues related to the enforcement of the operator certification requirements are brought to the attention of the LPA.

The State Water Board estimates compliance with the operator certification regulations using information submitted by water systems on the eAR. For the 2022 eAR, the following information has been reported, although data accuracy has not been verified (based on those systems reporting as of June 2022).

- To date, 99 percent of CWSs have filed a 2022 eAR.
- To date, 39 CWSs self-reported in the 2022 eAR that they are not in compliance with the distribution operator requirements and 29 self-reported that they are not in compliance with the treatment operator requirements.
- To date, 98 percent of NTNCs have filed a 2022 eAR.
- To date, 11 NTNCs self-reported in the 2022 eAR that they are not in compliance with the distribution operator requirements and 12 self-reported that they are not in compliance with the treatment operator requirements.

### 2022 eAR Results

<b>CWS - Total Count = 2,850*</b>				
	<b>Size Category</b>			
<b># of connections</b>	<b>&lt;200</b>	<b>200 – 999</b>	<b>&gt;1,000</b>	<b>Totals</b>
# Systems	1,768	409	673	<b>2,850</b>
# Filing the 2022 eAR as of 7/2023**	1,744	408	673	<b>2,825</b>
# Required to have a certified WT operator	1,019	318	581	<b>1,918</b>
# Reporting a certified WT operator	1,318	337	599	<b>2,254</b>
# Required to have a certified WD operator	1,721	408	673	<b>2,802</b>
# Reporting a certified WD operator	1,531	375	650	<b>2,556</b>

\*Based on the number of active PWSs existing in the SDWIS database as of July 2023.

\*\*Some CWSs reported WT Operators that are not required to have WT Operators.

<b>NTNC – Total Count = 1,481*</b>	
# Filing a 2022 eAR as of July 2023	1,312
# Required to have a certified WT operator	851
# Reporting a Certified WT Operator	656
# Required to have a certified WD operator	1,465
# Reporting a Certified WD Operator	1,177

\*Based on the number of active PWS existing in the SDWIS database as of July 2023.

\*\*Some NTNCs reported WT Operators that are not required to have WT Operators.

During December 2019, DDW engaged a focused effort to correct water system classifications in SDWIS to ensure the information that identifies the requirements for water systems is currently correct. In the past, there was a lack of clear guidance to staff on how to correctly code classifications to treatment and distribution facilities in SDWIS. With that correction of the information in SDWIS, the reported numbers of systems required to have a certified operator are significantly different than those reported last year. DDW runs an 'error report' for lack of appropriate classifications in SDWIS, which is intended to facilitate timely corrections of errors. As of July 2022, there are about 20 errors for distribution classification, and 76 errors for treatment classification. DDW management reviews this error report monthly.

The eAR allows the State Water Boards' DDW District Office field staff to cross-check their current information on operator certification status by verifying the names of certified operators reported by water systems against their records and the database of certified operators. This information is used to evaluate compliance with regulatory requirements for operator certification and to develop reports of systems not complying with these certifications requirements for potential enforcement.

The State Water Board DDW has developed a standardized schedule recommended for DDW District and LPAs for the annual eAR process. The 2022 eAR schedule is as follows:

### **2022 Electronic Annual Report Tasks/Dates**

<b>Task</b>	<b>Date</b>
2022 eAR Released. Issued technical reporting orders to all water systems	3/15/2023
Deadline for water systems to submit eAR	5/15/2023
Issue reminders to delinquent water systems	5/15/2023

Enforcement for delinquent PWSs	6/12/2023
DDW LPA Review & Approve / Accept eARs	6/30/2023

For the 2022 Reporting Year (RY) EAR, under the advice of the Office of Chief Council, DDW issued technical reporting orders to all PWS. The intent of the technical reporting orders was to require submission of the eAR under the authority of H&SC section 116577 and provide authority for issuing enforcement to those PWS that fail to complete an eAR.

Additionally, it has been recognized that the degree of reporting from some water systems is not adequate to fully identify compliance with the operator certification requirements.

DDW has in the last three years identified some fields within the eAR as mandatory. A water system cannot submit the eAR without those fields completed. DDW has made the operator certification portion mandatory for those systems that have a regulatory or permit requirement to maintain a distribution or treatment operator. Additionally, DDW will take steps to ensure staff reviewing submitted eARs return them for additional information if they do not appear to be complete.

DDW, USEPA, and DWOCP have agreed to discuss the status of DWOCP compliance and enforcement on a quarterly basis in conjunction with the regular program status meetings held between USEPA and DDW. DDW agrees to provide updates on enforcement actions by both DDW District Office and LPAs against water systems for violations of DWOCP requirements. As part of those quarterly updates, DDW will provide updates on progress made by DDW in further developing and aligning data systems and reporting tools to facilitate evaluation of compliance by the Districts and LPAs. Specifically, DDW will seek to provide reporting and analysis tools that combine the data from the EAR, SDWIS, and the DWOCP database. Such reports will better serve to evaluate consistency statewide and identify compliance problems that require the attention of the Districts and LPAs.

## 5. Certification Renewal

Operators are required to renew their certificates every three years. To be eligible for certificate renewal, certified operators must complete a specified number of continuing education contact hours after the previous renewal or issuance of certificate pursuant to DWOCP Regulations, section 63840. Grand-parented operators must meet the same renewal requirements as operators that have passed an examination. In SFY 2022- 2023, there were 1,083 operators that were required to complete continuing education contact hours for renewal approval. The State Water Board’s website has a list of continuing education providers who offer acceptable courses throughout the state as well as online courses for operators in remote areas. In order to ensure compliance with renewal requirements, the State Water Board reviews continuing education courses for subject matter content and verifies the operator completed the course within

the renewal period.

**Required Continuing Education Contact Hours for Certificate Renewal**

<b>Treatment Operators</b>	Contact Hours Required	Number of Operators Renewing
Grade T1	12	297
Grade T2	16	788
Grade T3	24	189
Grade T4	36	96
Grade T5	36	18
<b>Distribution Operators</b>		
Grade D1	12	606
Grade D2	16	1,160
Grade D3	24	387
Grade D4	36	171
Grade D5	36	47

In SFY 2022-2023, a total of 3,759 certifications were renewed. This includes 1,388 certified water treatment certificates and 2,371 certified water distribution certificates. Due to the COVID-19 pandemic impacts, no examinations were conducted in 2020. Any certifications issued after passing an examination in 2020 would have been due for renewal in 2023. Since there were no examinations conducted in 2020, very few certifications were issued which has caused a significant drop in the number of certifications renewed in SFY 2022-2023. Examinations resumed in 2021.

The State Water Board has, for many years, used part of the DWSRF set-aside to fund technical assistance providers that provide training, including classroom, online and one-on-one assistance, to water systems and water system operators. The training programs are a significant resource for operators to obtain Continuing Education Units (CEUs) to qualify for certification renewal. These programs are popular primarily because they are free and are easily accessible at locations throughout California or online.

California Technical Assistance Providers Stakeholders Group Training assistance to small systems operators is provided through a stakeholder’s group called California Technical Assistance Providers (CalTAP). The group includes State Water Board personnel and representatives from California Rural Water Association, Rural Community Assistance Corporation, University of California - Davis, Sacramento State University, the California- Nevada Section of the American Water Works Association (CA/NV AWWA), and USEPA. In SFY 2022-2023, CalTAP held 1 event on March 16, 2023, in Valencia, California. This event benefits small water systems in the local areas.

**6. Resources Needed to Implement the Program**

The State has a dedicated fund established in which all fees/revenue are deposited. This revenue is generated through examination, certification, and renewal fees. These fees fully fund the operation of the program, including the \$849,958 contract with Prometric to administer CBT examinations. The DWOCP currently consists of 11.2 staff positions, administering a program of 35,380 certificates.

Position Description		Personnel-Years*
<b>Administration</b>		
	Assistant Deputy Director	0.2
	Manager II	0.5
	Manager I	0.7
	Manager I	0.7
	Clerical Support	0.7
	Clerical Support	0.7
	Clerical Support	0.7
	Analyst	0.3
	Analyst	0.5
	Analyst	0.5
	Analyst	0.7
	Analyst	1.0
	Analyst	1.0
	Analyst	1.0
	Analyst	1.0
	Technical	0.2
<b>Legal</b>		
	Attorney	0.1
<b>Enforcement</b>		
	Engineer	0.5
	Senior Engineer	0.2
<b>TOTAL</b>		<b>11.2</b>

\*Personnel-years are equivalent to a Full-Time Employee (FTE)

Personnel Services	\$2,219,164
SFY 2022-2023 Prometric Contract	\$849,958
<b>TOTAL</b>	<b>\$3,069,122</b>



## 7. Recertification

Pursuant to DWOCP Regulations, section 63845, the DWOCP may reinstate an expired certificate if the certificate has been expired for no more than one year. Individuals who wish to be recertified after the one-year reinstatement period must re-apply for the examination and meet all the examination and certification requirements in order to be recertified. The State Water Board reviews the applicant's education and experience to ensure all examination and certification can count toward the experience requirements for the current certificate application. In SFY 2022-2023, there were 138 certificates that required the operator to re-test in order to be re-certified. This included 69 distribution system certificates and 69 water treatment certificates.

## 8. Stakeholder Involvement

### DWOCP Advisory Committee

The State Water Board's ten-member DWOCP Advisory Committee met on October 26, 2022, and April 5, 2023. The DWOCP Advisory Committee meetings are public and are held twice a year but may be held more often if necessary. The meeting minutes are in Attachments 7 and 8.

### DWOCP Community Outreach

DWOCP continues to participate in community outreach. Due to COVID-19, many of the conferences and meetings were cancelled. Conference participation provides operators the opportunity to receive CEUs, engage in discussion on program issues/concerns, and gain information on the program. Below is a list of seminars/symposiums that DWOCP staff has attended:

- CA-NV AWWA Water Education Seminar August 2022
- CA-NV AWWA Fall Conference 2022
- CA-NV AWWA Spring Conference 2023

## 9. Program Review

Program review is provided on an on-going basis by the State Water Board appointed DWOCP Advisory Committee and the Office of Operator Certification management team. As part of the internal State Water Board review, management evaluates processes and/or procedures for the examination, certification, and the certificate renewal. Procedures and processes are changed, as needed, to realize efficiency gains.

## 10. Conclusion

Although California's DWOCP is faced with many challenges due to increasing demands and interests of the program, continuous improvement efforts are being implemented to meet the public and stakeholders needs.

In August 2022, the DWOCP and Wastewater Operator Certification Program (WWOCP) Advisory Committees Sub Workgroups were formed to focus on specific areas to address water sector concerns and issues related to operator certification and workforce challenges.

In October 2022, the DWOCP began an organizational restructure to implement process improvements and workflow efficiencies by realigning staffing resources and its functionalities.

The program launched a customer service survey in March 2023 to survey active and potential operators on program satisfaction. Survey responses are assessed and used to improve customer service and identify any emerging issues.

The DWOCP and WWOCP Advisory Committees Sub Workgroups presented recommendations for consideration to the DWOCP and WWOCP Advisory Committees at a joint meeting held on June 27, 2023. Pertaining to DWOCP, the proposed recommendations covered: 1) utilizing a guidance document on reporting drinking water operator certification experience; 2) amending experience requirements for certified drinking water treatment operators at advanced treatment facilities; and 3) establishing clear processes and procedures in implementing Assembly Bill 1588, in recognizing military experience. The meeting minutes are in Attachment 9.

The DWOCP has initiated development of an interactive online application portal to allow applicants the ability to submit applications, review, resolve application deficiencies online, and track application status which will increase efficiency in application review and improve processing times. The anticipated rollout date for Grades 1 and 2 examination applications is August 31, 2023.

Communication with the operators has improved using an email subscription service in which operators are notified of upcoming deadlines, Advisory Committee notifications, and potential regulation changes. California's DWOCP is increasing efforts with community outreach and meeting requirements that are important for the SDWA.

CERTIFICATION FOR CLEAN WATER STATE REVOLVING FUND<sup>1</sup> PROGRAM;  
DRINKING WATER STATE REVOLVING FUND<sup>2</sup> PROGRAM; AND PUBLIC WATER  
SYSTEM OPERATOR CERTIFICATION PROGRAM

I am Robert W. Byrne, Senior Assistant Attorney General of the Natural Resources Law Section, California Department of Justice, Office of the Attorney General. Under my general direction, the Natural Resources Law Section represents the California State Water Resources Control Board (State Water Board). After consultation with the State Water Board, and independent review by this office of the statutes and regulations pertaining to the programs addressed by this Certification, the Attorney General has designated me to certify, and I do certify, on behalf of the California Attorney General, the following pursuant to 40 Code of Federal Regulations part 35.3110(d) and part 35.3545(d):

Clean Water State Revolving Fund

1. The State Water Pollution Control Revolving Fund program for California (Wat. Code, div. 7, ch. 6.5, §§ 13475–13485) was lawfully created and is consistent with California law.
2. Water Code section 13477 authorizes the State Water Board to administer the State Water Pollution Control Revolving Fund.
3. Water Code section 13478, subdivision (a)(1), authorizes the State Water Board to enter into agreements with the federal government to accept federal contributions to the State Water Pollution Control Revolving Fund. These federal contributions may be referred to as “capitalization grants.”
4. Water Code section 13478, subdivision (a)(2), authorizes the State Water Board to accept federal contributions to the State Water Pollution Control Revolving Fund.
5. Water Code section 13478, subdivision (a)(4), authorizes the State Water Board to use moneys in the State Water Pollution Control Revolving Fund for the purposes permitted by the federal Clean Water Act (33 U.S.C. §§ 1251 et seq.).
6. California’s qualifications-based requirements set forth in Government Code sections 4525–4528 for negotiation of architectural and engineering services by a state agency head are equivalent to the requirements set forth in chapter 11 of title 40 of the United States Code for purposes of compliance with 33 U.S.C. section 1382(b)(14).
7. Water Code section 13478, subdivision (a)(14) authorizes the State Water Board to cross-collateralize revenue bonds issued for the purposes of the Safe Drinking Water State

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<sup>1</sup> Referred to in the California Water Code as the State Water Pollution Control State Revolving Fund.

<sup>2</sup> Referred to in the California Health and Safety Code as the Safe Drinking Water State Revolving Fund.

Revolving Fund created pursuant to Section 116760.30 of the Health and Safety Code, as authorized by Section 35.3530(d) of Title 40 of the Code of Federal Regulations.

8. Water Code section 13478, subdivision (a)(13) authorizes the State Water Board to engage in the transfer of capitalization grant funds as authorized by Section 35.3530(c) of Title 40 of the Code of Federal Regulations and reauthorized by Public Law 109-54, to the extent set forth in an Intended Use Plan that shall be subject to approval by the State Water Board.

#### Drinking Water State Revolving Fund

1. The Safe Drinking Water State Revolving Fund program for California (Health & Saf. Code, div. 104, part 12, ch. 4.5, §§ 116760–116762.60) was lawfully created and is consistent with California law.
2. Health & Safety Code section 116760.30, subdivision (a), authorizes the State Water Board to administer the Safe Drinking Water State Revolving Fund.
3. Health & Safety Code section 116760.40, subdivision (a)(1), authorizes the State Water Board to enter into agreements with the federal government for federal contributions to the Safe Drinking Water State Revolving Fund. These federal contributions may be referred to as “capitalization grants.”
4. Health & Safety Code section 116760.40, subdivision (a)(2), authorizes the State Water Board to accept federal contributions to the Safe Drinking Water State Revolving Fund.
5. Health & Safety Code section 116760.40, subdivision (a)(3), authorizes the State Water Board to use moneys in the fund for the purposes permitted by the federal Safe Drinking Water Act.
6. Health and Safety Code section 116760.40, subdivision (a)(18), authorizes the State Water Board to cross-collateralize revenue bonds issued for the purposes of the State Water Pollution Control Revolving Fund created pursuant to Section 13477 of the Water Code, as authorized by Section 35.3530(d) of Title 40 of the Code of Federal Regulations.
7. Health and Safety Code, section 116760.40, subdivision (a)(17) authorizes the State Water Board to engage in the transfer of capitalization grant funds as authorized by Section 35.3530(c) of Title 40 of the Code of Federal Regulations and reauthorized by Public Law 109-54, to the extent set forth in an Intended Use Plan that shall be subject to approval by the State Water Board.

#### Public Water System Operator Certification

1. The Public Water System Operator Certification program for California (Health & Saf. Code, div. 104, part 1, ch. 4, art. 3, §§ 106875–106910) was lawfully created and is consistent with California law.

2. The regulations implementing the Public Water System Operator Certification program (Cal. Code Regs., tit. 22, §§ 63750.10–63850 and 64413.1–64413.7) were lawfully adopted.
3. Health & Safety Code section 116555, subdivision (a)(4), requires all public water systems to employ or utilize only certified water treatment operators that have been certified at the appropriate grade.
4. Health & Safety Code section 116555, subdivision (a)(5), requires all public water systems to comply with the appropriate requirements of the Public Water System Operator Certification program.
5. Health and Safety Code section 116555, subdivision (b)(1), requires community and nontransient noncommunity water systems to employ or utilize only water distribution system operators who have been certified at the appropriate grade for positions in responsible charge of the distribution system.
6. Health & Safety Code section 116555, subdivision (b)(2), requires community and nontransient noncommunity water systems to place the direct supervision of the water system, including water treatment plants, under the responsible charge of an operator or operators holding a valid certification equal to or greater than the classification of the treatment plant.
7. Health & Safety Code section 116555, subdivision (b)(2), requires community and nontransient noncommunity water systems to place the direct supervision of the water system, including water distribution systems, under the responsible charge of an operator or operators holding a valid certification equal to or greater than the classification of the distribution system.

Date: February 17, 2023

*Robert W. Byrne*  
\_\_\_\_\_  
ROBERT W. BYRNE  
  
Senior Assistant Attorney General  
Public Rights Division,  
Natural Resources Law Section  
California Department of Justice  
Office of the California Attorney General  
  
For: ROB BONTA  
California Attorney General



State of California  
Office of the Attorney General

**ROB BONTA**  
ATTORNEY GENERAL

ATTORNEY GENERAL DELEGATION OF AUTHORITY  
To Execute  
California Attorney General Certification Statements  
for California State Water Resources Control Board's  
State Drinking Water Program

I, Rob Bonta, Attorney General of California, hereby authorize the Senior Assistant Attorney General of the Natural Resources Law Section, Public Rights Division, California Department of Justice, Office of the Attorney General to execute on my behalf, as my delegatee, certifications required under Code of Federal Regulations, title 40, section 142.12 (c)(1)(iii), attesting that amendments to the state statutes and regulations implementing the federal Safe Drinking Water Act have been duly adopted and are enforceable under California law and the California State Constitution.

This Delegation of Authority is retrospective to the date on which I took office as Attorney General. This Delegation is expressly limited to executing the said Certificate Statements.

GIVEN BY MY HAND AT SACRAMENTO, CALIFORNIA this 7-20-21 day of July, 2021.

BY: Rob Bonta  
Attorney General

A handwritten signature in black ink that reads "Rob Bonta".



## Electronic Annual Report (eAR)

### 11. Operator Certification

Please list the **State certified Drinking Water Operators** employed by your water system that supervise and direct the operation of your distribution system and water treatment plants where applicable.

#### A. DISTRIBUTION SYSTEM CERTIFIED OPERATORS

Your Distribution System Classification is: ◻

Do your Chief and Shift Distribution System Operators have the minimum level required? --Pick one--

Check this box if your public water system does not have a designated Chief Distribution Operator.

Name of Chief Distribution Operator (First name Last name):	
Grade of Chief Distribution Operator (1, 2, 3, 4 or 5):	
Distribution Operator Number (3, 4 or 5 digits):	

Distribution Certification Expiration Date (MM/DD/YYYY):

If your public water system has additional certified distribution system operators, enter the information in the table below. ◻

\*[Click here](#) to download, update, and/or upload an Excel spreadsheet of your water system's certified distribution operators.\*

<sup>1</sup>Use "C" for Chief Operator and "S" for Shift Operator. If neither, put an "X". Do not leave blank.

#### B. TREATMENT PLANT CERTIFIED OPERATORS

Your Highest Treatment System Classification is: ◻

Do your Chief and Shift Treatment Plant Operators have the minimum level required? --Pick one--

Check this box if your public water system does not have a designated Chief Treatment Operator.

Name of Chief Treatment Operator (First name Last name):	
Grade of Chief Treatment Operator (1, 2, 3, 4 or 5):	
Treatment Operator Number (3, 4 or 5 digits):	
Treatment Certification Expiration Date (MM/DD/YYYY):	

If your public water system has additional certified treatment plant operators, enter their information in the table below. ◻

\*[Click here](#) to download, update, and/or upload an Excel spreadsheet of your water system's certified water treatment operators.\*

<sup>1</sup>Use "C" for Chief Operator and "S" for Shift Operator. If neither, put an "X". Do not leave blank.

COMMENTS (Note: Comments will be made publicly available): ◻

**Need Help Completing the EAR. Click [HERE](#).**

To view last year's report, click [here](#).

Treatment Plant Classification(s)

PWS Class	Count of Treatment Facilities by PWS Class	Total Count of WS with TP Requirements	Count by Treatment Classification					
			T1	T2	T3	T4	T5	TD
C	5,396	1,927	358	548	188	51	87	695
NC	1,020	1,004	268	223	6	0	0	507
NTNC	1,094	841	255	190	24	1	0	371
<b>Total</b>	<b>7,510</b>	<b>3,772</b>	<b>881</b>	<b>961</b>	<b>218</b>	<b>52</b>	<b>87</b>	<b>1,573</b>

CWS: Community Water System

NTNC: Non-Transient, Non-Community

TNC: Transient Non-Community



Distribution System Classification(s)

PWS Class	Count of Distribution Systems by PWS Class	Total Count of Assigned Distribution Classes	Count by Distribution System Classification					
			D1	D2	D3	D4	D5	NR
C	2,851	2,824	1,850	442	222	174	136	22
NC	2,949	506	488	18	0	0	0	2,428
NTNC	1,483	1,427	1,380	43	2	2	0	54
<b>Total</b>	<b>7,283</b>	<b>4,757</b>	<b>3,718</b>	<b>503</b>	<b>224</b>	<b>176</b>	<b>136</b>	<b>2,504</b>

CWS: Community Water System

NTNC: Non-Transient, Non-Community

TNC: Transient Non-Community



## 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 <b>Grade T1</b> examination within the three years prior to submitting certification application.
T2	High School Diploma / GED Equivalency* <b>AND</b> <b>One</b> 3-unit (or 36-hour) course of specialized training covering the fundamentals of drinking water treatment.	Successful completion of the <b>Grade T2</b> examination within the three years prior to submitting certification application.
T3	High School Diploma / GED Equivalency* <b>AND</b> <b>Two</b> 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 <b>Grade T3</b> examination within the three years prior to submitting certification application <b>AND</b> At least <b>one year</b> of operator experience working as a certified T2 operator at a T2 facility or higher. This may be substituted with (3) below. <b>AND</b> At least <b>one additional year</b> of operator experience working as a certified treatment operator. This may be substituted with (1), (2), or (4) below.
T4	Current T3 certification <b>AND</b> <b>Three</b> 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 <b>Grade T4</b> examination within the three years prior to submitting the application for certification <b>AND</b> At least <b>one year</b> 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. <b>AND</b> At least <b>three additional years</b> of operator experience working as a certified treatment operator. This may be substituted with (1) or (4) below.
T5	Current T4 certification <b>AND</b> <b>Four</b> 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 <b>Grade T5</b> examination within the three years prior to submitting the application for certification <b>AND</b> At least <b>two years</b> 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. <b>AND</b> At least <b>three additional years</b> 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).



## 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 <b>Grade D1</b> examination within the three years prior to submitting certification application.
D2	High School Diploma / GED Equivalency* <b>AND</b> <b>One</b> 3-unit (or 36-hour) course of specialized training covering the fundamentals of water supply principles.	Successful completion of the <b>Grade D2</b> examination within the three years prior to submitting certification application.
D3	Current D2 certification <b>AND</b> <b>Two</b> 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 <b>Grade D3</b> examination within the three years prior to submitting certification application <b>AND</b> At least <b>one year</b> of operator experience working as a certified D2 operator for a D2 system or higher <b>AND</b> At least <b>one additional year</b> of operator experience working as a distribution operator. This may be substituted with (1) or (2) below.
D4	Current D3 certification <b>AND</b> <b>Three</b> 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 <b>Grade D4</b> examination within the three years prior to submitting the application for certification <b>AND</b> At least <b>one year</b> of operator experience working as a certified D3 operator for a D3 system or higher <b>AND</b> At least <b>three additional years</b> of operator experience working as a distribution operator. This may be substituted with (1) or (2) below.
D5	Current D4 certification <b>AND</b> <b>Four</b> 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 <b>Grade D5</b> examination within the three years prior to submitting the application for certification <b>AND</b> At least <b>two years</b> of operator experience working as a certified D4 operator for a D4 or D5 system <b>AND</b> At least <b>three additional years</b> 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.

**Office of Operator Certification (OOC)**

**Drinking Water Operator Certification Program Advisory Committee**

**Meeting Minutes – October 2022**

**Meeting Date:** Wednesday October 26, 2022

**Attendees:** **Advisory Committee Members**

Michael Maestas, Ramzi Mahmood, Jose Martinez, Tai Tseng, John Brady, Dan DeMoss, Steven Gardner, Chris Castaing, Gregory Williams, Jim McVeigh

**State Water Resources Control Board (State Water Board)**

Joe Karkoski, Annette Caraway, Michael Rohner, Neal Funston, Julie Osborn, Jessica Sanchez, Bryan Elder, Tomas Eggers, Christopher Walker, Rebecca Tindell-Hofman, Ruby Torres, Annette Caraway, Randy Barnard, Alessandra Langen

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**Item 1 - Introductions**

- Annette Caraway, Operator Certification Program Manager acted as moderator for this meeting. Meeting was held via Video/Teleconference and in person at the CA-NV AWWA Fall Conference at the Sacramento Convention Center. Introduced Waterboards staff and Advisory Committee Members.

**Item 2 - Agenda Review**

- Agenda Item 3 Public Comments moved to last item due to the size of attendance.

**Item 9 – California Rural Water Association (CRWA) Apprenticeship Program - Dan DeMoss - CRWA**

- Program is 4-5 years old. Provides a way for employed workers to become fully qualified as an operator since there is an increasing demand for operators due to current operators reaching their retirement age. Both drinking water and wastewater programs are two years in duration. Along with mentorship from those already in the industry, it is a good way to get skilled workers in the industry especially in rural areas. Two programs are offered in both Treatment and Distribution; an incumbent program for those that are already hired, and a new program for those new to the drinking water industry. Both programs consist of 288 hours of formal training courses along with 4,000 hours of on the job training. For more information contact Dan DeMoss [ddemoss@calruralwater.org](mailto:ddemoss@calruralwater.org)

## **Office of Operator Certification (OOC)**

### **Drinking Water Operator Certification Program Advisory Committee**

#### **Meeting Minutes – October 2022**

#### **Item 5 – Enforcement Update – Bryan Elder and Tomas Eggers- State Water Board Office of Enforcement**

- Special Investigations Unit (SIU) division of the Office of Enforcement (OE) investigates complaints against operators and systems(?). The types of complaints that are being investigated are exam misconduct, certification levels not meeting the requirements, falsifying documentation, any fraudulent or misleading claims. COVID-19 allowed for the backlog of investigations to be cleared. Bryan introduced new unit chief, Tomas Eggers. There are 17 open investigations, seven of those in drinking water. The remaining 10 are of Wastewater operators.
- Q: Is there priority for OE regarding contract operators? Smaller systems have the most health-based violations and those are the ones most likely to use contract operators.

A: OE does not currently have this as priority. OE does not see a trend in cases for smaller systems and contract operators.

Since there is no industry standard for documenting certifications, OE would like to advocate for changes in regulation to see a standard implemented. Most referrals about misconduct come from OOC, agencies, water systems, and operators.

#### **Item 6 – Recycled/Advanced Water Treatment (AWT) – Steven Garner CA-NV AWWA**

- This certification program has been in existence for three years. 108 operators currently hold Grade 3-5 certificate in AWT through CA-NV AWWA. 108 hold Grade 3, 38 with a Grade 4, and 19 with a Grade 5 certification. For operators looking for education options, look at the associations, industry, unions, and academia as resources. CA-NV AWWA has thorough resources and “need to know” criteria on their website.

#### **Item 7 – Regulatory Update from Division of Drinking Water (DDW) (Surface Water Augmentation, etc.) – Randy Barnard DDW**

- Regulatory updates available on the Waterboards website. Draft of Direct Potable Reuse (DPR) regulations on the website as well. Currently soliciting comments regard Advanced Water Treatment.

## Office of Operator Certification (OOC)

### Drinking Water Operator Certification Program Advisory Committee

#### Meeting Minutes – October 2022

**Item 4 – United States Environmental Protection Agency (USEPA) Update – Adam Ramos** USEPA No updated provided. Adam Ramos did not attend.

#### Item 8 – DWOC Program Update

- Introduced new Advisory Committee Members. Once vacancy on committee, LPA. Submit vacancy nominations to Alessandra Langen for information [Alessandra.langen@waterboards.ca.gov](mailto:Alessandra.langen@waterboards.ca.gov)
- July 26, 2022 Joint Advisory Committee meeting proposed fee increases in FY 23/24 and formed sub workgroups to address CA-NV AWWA/CWEA whitepaper.
- Online application portal to come in 2023. Where operators can view and submit exam, certification, and renewal applications. Phased roll out.
- Customer service survey coming in 2023. Will be sent on the Drinking Water Operator Certification Program's distribution list as well as posted to website.
- Q: Will portal be for exams? A: Eventually for everything, first phase will be exams.
- Q: Is there still a backlog on exam applications?
  - A: It has been cleared, 2-3 weeks for testing notification to be emailed and 120-day exam window given once approved. Once the notice has been received it is advised to schedule for the exam as soon as the notification is received.
- Q: Suggestion to have calculators/conversion sheets physically available?  
A: Each examination site has a limited number of calculators available. If the site has calculators available, the operator may ask to use it but cannot bring in their own calculator. The conversion sheets are provided on the computer.
- Q: Update on T5 exams.
  - A: Final filing date for fall/winter testing was October 14, 2022. Exam to take place December 2022. Details to come.
- Comment: Request to have updated modern monitors, calculators at exam site.
- Sub Workgroups:
  - AB1588 Steven Garner CA-NV AWWA
    - This bill's purpose is to incorporate military training into requirements for exam taking and the certification process. The goal is to model the evaluating process to be like other states and similar between Drinking Water and Wastewater.
    - Find ways to apply military experience regarding exams, reciprocity. The objective is to establish a clear process for military personnel to receive cred for water operator experience gained while serving in the US military. The date of completion goal is September of 2023. Websites like My Next Move and O' Net Online provide a military crosswalk to the civilian side of the water industry. It has created a presence on the national level in the

## Office of Operator Certification (OOC)

### Drinking Water Operator Certification Program Advisory Committee

#### Meeting Minutes – October 2022

American Council of Education and the local level in CA/NV AWWA basecamp site for the gathering of resources and job titles. There is a survey of other jurisdictions identifying processes to grant reciprocity. The Defense Department issues a DD-214 to each veteran identifying the veteran's condition of discharge - honorable, general, other than honorable, dishonorable, or bad conduct and includes a record of their training and or certificates received. Texas is one of the states surveyed using similar methods. CWA/AWWA and AWC are developing standardized testing. Dr John Rowe, of the Office of Water Programs at CSUS provides relevant training.

- Operator in Training Requirements/Experience (OIT)
  - The biggest challenge for an OIT (Operator in Training) is satisfying the educational requirements and then gathering the experience. The ultimate focus of the OIT Program is to maintain public health and safety. The program is important in looking at workforce development. The committee is working on incorporating questions for a satisfaction survey that will be issued by CWEA within the next few weeks.
- Guidelines for Reporting Operator Experience
  - Industry need, ongoing need for new operators. Improving the Grade 3-5 certification process. OIT not a required for DW just WW. Four meetings thus far established a goal to reduce the review period to four weeks. Better define eligibility for certificate upgrade. Focusing on the workflow process and creating a “perfect” certification application package. Plans to format a universal template letter for operator experience.
  - Q: Standardized letters? A: That is one of many options, a template of some sort is in the works.
  - Q: Will that be part of the on-line portal? A: Eventually that will be the case.
- One Water Regime
  - Meeting is held weekly. The mission statement of the One Water Regime has been developed, which will define the purpose, and what water means in California. The group is using SWOT analysis for brainstorming and SWOT analysis to be used for developing opportunities for how to use water in California. Also looking at how other states are defining one water. Google Drive will be used to collaborate with others and collect information in the One Water Regime.

## Office of Operator Certification (OOC)

### Drinking Water Operator Certification Program Advisory Committee

#### Meeting Minutes – October 2022

#### Item 3 - Public Comments

- Larry Lyford: Thank DW for coming to AWWA Fall Conference. Exalted all to come to Annette's roundtable discussion at 1:00p.
- CWEA thanked DWOCP for their collaboration and workgroups.
- Q: Why don't operators get full credit for working WW and DW? A: This subject is being considered by the operator experience subgroup.
- Q: Why is WW and DW lab experience not being considered? A: Operator subgroup will have to look at that issue.
- Jody Hack is seeking panelists for the T5 exam. Those interested email Annette Caraway. [Annette.caraway@waterboards.ca.gov](mailto:Annette.caraway@waterboards.ca.gov).

#### Item 11 - Schedule next meeting

- Next meeting: April 19,2023. Location TBD



**Office of Operator Certification (OOC)**

**Drinking Water Operator Certification Program Advisory Committee**

**Meeting Minutes – April 2023**

**Meeting Date: Wednesday April 5, 2023**

**Attendees: Advisory Committee Members**

**Michael Maestas, Chris Castaing, Jim McVeigh, Dan DeMoss,  
Gregory Williams, Ramzi Mahmood, Jose Martinez, Tai Tseng,  
John Brady, Steven Garner**

**State Water Resources Control Board (State Water Board)**

**Christine Gordon, Doug Wilson, Valerie Gregory, Jaime  
Marotte, Bonnie Sutherland, Julie Osborn, Bryan Elder,  
Tomas Eggers, Brian Bernados**

**Item 1 – Introductions**

- Christine Gordon, Assistant Deputy Director, Operator Certification Program acted as moderator for this meeting. Meeting was held via Video/Teleconference and in-person for California-Nevada Section American Water Works Association (CA-NV AWWA) at the CA-NV AWWA 2023 Spring Conference at Town and Country Hotel in San Diego, CA. Introduced Waterboards staff and Advisory Committee Members.

**Item 2 – Agenda Review**

**Item 3 – Public Comments**

- There were no public comments.

**Item 4 – Enforcement Update – Bryan Elder and Tomas Eggers - State Water Board Office of Enforcement**

- The Office of Enforcement (OE), Special Investigations Unit (SIU) investigates complaints against operators and systems. OE is currently investigating ten (10) open cases: four (4) cases in Wastewater Operator Certification Program (WWOCP) and six (6) cases in Drinking Water Operator Certification Program (DWOCP).

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The open cases involve exam misconduct, misrepresentation of experience hours, failure to maintain Chief Plant Operator status, and other categories not yet determined.

OE recently closed 16 cases: ten (10) cases in WWOCP and six (6) in DWOCP. The closed cases involved operator and exam misconduct, lab reporting, and misrepresentation of experience hours. OE took actions that include revocation, reprimands, referrals, and notices of violation. Double counting of experience hours across distribution, treatment and wastewater certifications was noted.

#### **Item 5 – Recycled/Advanced Water Treatment Operator – Steven Garner CA-NV AWWA**

- Advanced Water Treatment (AWT) Program Grades 3-5. Operators must be certified at minimum Drinking Water Treatment Operator Grade 3 level or Wastewater Operator Grade 3 level to be eligible. Currently, there is a total of 152 AWT certified operators at the Grade 3 (90), Grade 4 (40), and Grade 5 (22) level.

#### **Item 6 – Regulatory Update from Division of Drinking Water (DDW) (Surface Water Augmentation, etc.) – Brian Bernados – DDW**

- Direct Potable Reuse (DPR) requires AWT certification. DDW/DPR is DDW's highest priority. Actual permitting of AWT/DPR Ductile Iron Pipe Research Association (DIPRA) systems is 1-2 years out. DIPRA CPO and Shift Operators will need to hold an AWT Grade 5 CA-NV AWWA certificate. Formal rulemaking process will occur soon with a 45-day public comment period. Onsite treatment and reuse for non-potable in high rises, multifamily dwellings, and commercial buildings will occur by the end of 2023. Cross Connection Control Policy handbook with testing and

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certification criteria will be available by the end of 2023. Lead and Copper EPA improvements compliance date set for 2024. Maximum Contaminant Level (MCL) revisions are continuing to see if we can get closer to public health goals. It was stated that tertiary should be considered DPR.

#### **Item 7 – Program Update – Christine Gordon, Assistant Deputy Director, Operator Certification Program**

- Translating exams into other languages (Spanish). Which grade levels? Presumably lower grade levels. Barriers to entry? Advancement? Requesting feedback?
- Operator Certification reorganization explained – functionality over program.
- Tentative date for DWOCP and WWOCP Joint Advisory Committee meeting late June 2023. June 1<sup>st</sup> deadline for sub workgroup committees to bring forth recommendations. Exam and certification approval numbers are holding steady despite staffing challenges. Computer based testing (CBT) pass/fail rates in line with paper exam (pre-2020) pass/fail rates. Grade T5 oral exams will be held August 7 -9, 2023 -8/9/23 (Northern) and August 14 – 16, 2023 (Southern). Exam application postmark deadline is June 2, 2023.
- Online Application Submittal Portal for drinking water operator examinations Grades 1 and 2 (D1, D2, T1, T2) estimated date to go live is Fall 2023. Higher grade examinations and certifications are estimated to be completed in 2024.
- Operator certification customer service survey – everyone asked to complete survey.
- Sub work groups presented updates

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##### **A. Guidelines for Operator Experience– Mike Maestas**

Experience recommendations presented from sub workgroup. Citing technological advancements in the water industry, recommending operators receive experience credit on both treatment and distribution sides of the house. No mention of non-potable (wastewater, sewer, collections, etc.) certifications.

##### **B. AB 1588 Military Experience/Education– Steve Garner**

Recommendations will be finalized September 2023. The sub work group verified other states requirements and how experience is evaluated. Pilot evaluations are being conducted.

##### **C. One Water Regime – John Brady**

The sub workgroup is using the strength, weakness, opportunity, and threats (SWOT) methodology to evaluate the one water concept. John talked about direct potable reuse, advanced water treatment, drinking water, and wastewater. There are more commonalities between drinking water treatment (DWT) and wastewater treatment (WWT) although there are some that are exclusive to each. Recycling plants allow certified DWT operators to work recycled operator duties. More coordination between drinking water and wastewater operations is needed, and reuse – where we are drawing from now can be used as potable or non-potable. The group found that most DW and WW facilities classifications are generally level. Need to meet the standards to protect public health and will continue to review regulations and best practices in DW and WW, looking at other states to add comparison and identify best practices. Already have recommendations on regulation changes that have not yet been drafted.

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**D. Operator in Training (OIT) Requirements/Experience – Chris Castaing**

Working on evaluating and adopting an amendment to WW OIT qualifications while keeping public health and safety a priority. Looking at changing educational credits.

**Item 8 – Schedule Joint Advisory Committee Meeting to discuss potential recommendations from the sub workgroups – Late June 2023 (tentative)**

Any member of the public may address the Committee on any matter within the Committee's jurisdiction that is not on the agenda. Comments will be limited to three minutes per speaker or otherwise at the discretion of State Water Board Staff. Members of the public are encouraged to provide their comments in writing to the Committee members and State Water Board staff.

**Office of Operator Certification (OOC)  
Wastewater & Drinking Water Operator Certification Program Joint Advisory Committee  
Meeting Minutes – June 27, 2023**

**Meeting Date:** Tuesday, June 27, 2023

**Attendees:** Advisory Committee Members

Steve Krai, Ben Carver, Josh Vieira, Louis Sun, Monte Hamamoto, Ramzi Mahmood, Steven Garner, Jose Martinez, Greg Williams, John Brady, Chris Castaing, Mike Maestas

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Christine Gordon, Keisha Kelley, Julie Osborn, Valerie Gregory, Jaime Marotte, Bonnie Sutherland, Doug Wilson, Mercedes Jones, Jon Hermison, Desiree Hatton, Alex Strack, Sarah Miller, Tomas Eggers, Sahand Rastegarpour, Randy Barnard

**Public**

Sue Mosburg, Norah Duffy

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**Item 1 – Introductions**

- Christine Gordon, Assistant Deputy Director acted as moderator for this meeting. Meeting was held via video/teleconference and in person at the CalEPA building.

**Item 2 – Agenda Review**

- Christine Gordon reviewed the agenda for all, asked if anyone had time constraints and needed to present before their turn. There were no comments agenda proceeded as scheduled. It was explained that the meeting is being recorded and requested to speak up with your name and who you represent when speaking to ensure accuracy.

**Item 3 – Public Comments**

- There were no public comments.

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**Item 4 – Presentations**

- Christine Gordon gave an update on OOC staffing shortage. At last meeting OOC was at a 45% vacancy rate, currently, the rate is reduced to 13% with all manager positions filled. OOC anticipates that all vacancies will be filled by August 1, 2023. During the staffing shortage, the application processing times remain within 45 days.
- We cannot do this without our partners commitment, and dedication – committee members and stakeholders. Christine announced Joe Karkoski is on the phone, on video and wanted to say a few words.
- Joe thanked everyone for their dedication. We're very excited with all the new staff and the Operator Certification Program moving forward. There has been a big transition, all positive with the engagement we've been having and looking forward to recommendations and coming up with solutions.
- Christine read the letter and certificate of appreciation the Advisory Committee members will be receiving.
- There are five advisory committee positions ending June 30, 2023. One position has been vacant since 2019. There will be a final approval within the next couple of weeks.

**Item 5 – Division of Drinking Water (DDW) – Regulating Direct Potable Reuse**

- Randy gave an overview of all 2023 updates and prior year updates.
- Perchlorate detection limits for purposes of reporting (DLR) regulations became effective July 2021. Due to this, the count of sample stations has increased 60% over the last six months. With this increase, it better tells us where in the State the problems are.
- The definition of "Microplastics" was adopted in June 2020, and the microplastics policy handbook was adopted in September 2022. Environmental Laboratory Accreditation Program (ELAP) accreditation was in September 2022 and pre monitoring orders started on May 22, 2023. The State Water Board leads the nation in microplastic research and regulation despite the timeline delays. DDW regulations are being worked on by priority in this order:
  - Hex Chrome
  - Arsenic
  - Perfluoro-octanoic acid (PFOA) and perfluoro-octane sulfonic acid (PFOS)
  - N-nitroso-dimethylamine (NDMA)
  - Disinfection byproducts
  - Styrene
  - Cadmium and Mercury

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- There is a financial burden on smaller systems and the draft regulation text will be released June 16, 2023, with a workshop August 2, 2023, to receive public comments.
- Regulatory Priorities - see DDW's website: [Drinking Water Programs | California State Water Resources Control Board](#) .
- Direct Potable Reuse (DPR) - Consists of wastewater (WW) to drinking water (DW) treatment intakes. DDW expects to have DPR regulations completed by December 2023. The proposed rulemaking will be posted on July 11, 2023. California is first in the world to regulate DPR, with groundwater recharge and surface water augmentation for non-potable use and raw water augmentation/treated water augmentation for potable use.
- Groundwater recharge is WW to reclaimed to injection wells and stays there for years. There are currently 10 permitted projects.
- Indirect Potable Reuse (IPR) is indirect surface water augmentation. WW treated with reverse osmosis and ultraviolet disinfection (RO/UV) to a reservoir/lake/raw water supply to a DW treatment plant will be online in the next year or so. DPR shows a lack of environmental barrier, not effective or none at all. Extra treatment and monitoring adopted by the end of 2023 to allow DPR treated water augmentation straight from WW treatment plant straight to homes. Onsite treatment and reuse for multi-family residential, commercial, and building formal rulemaking in August 2023, and final Board consideration in September 2023. The Board will consider a revision, update, and replacement of the current cross-connection control policy handbook with testing and certification requirements in late 2023. In April 2021, this was brought up with hundreds of comments and in December 2022 with more comments. There will be 2 public hearings.
- Recycled Water Regulation - an update to the Title 17 cross connection needs to be completed prior to the recycled water regulations Title 22 being revised. DDW is looking at two years down the road possibly.
- Lead and Copper Rule – we are waiting for the US Environmental Protection Agency (EPA) lead and copper rule to be set before DDW decides on improvements.
- Metal DLR's -\_reduce Maximum Contaminant Levels (MCL) with Environmental Laboratory Technical Advisory Committee (ELTAC). There was a pre rulemaking workshop in November 2022.
- Lower priorities include primacy packages to align with EPA/Federal requirements for funding, lowering Manganese Notification Level/Response Level (NL/RL's), and lowering Algal Blooms NL/RL's. Need financial assurance, minimum acceptable capability of feasibility, and upgrading systems.



**Item 6 – Drinking Water and Wastewater Operator Certification Programs  
Advisory Committee Sub Workgroups**

**Guidelines on Reporting Drinking Water Operator Experience**

- Michael Maestas presented on behalf of the group.
- Presented a draft document with recommendations for updated experience requirements for DW treatment and DW distribution operator certification, Grades 3-5.
- To use this document if accepted as a supplemental experience document on the operator certification website and operator certification providing all links to this document. It includes additions to the required supervisor letter being signed by the operators' immediate supervisor and the chief operator of the water discipline they are applying for DW treatment/DW distribution, name, position, certification numbers, system name and classification. Proposing an annual review of this document. Mike went over entire document with experience examples and referred all to download it including definitions, minimum qualifications for treatment and distribution experience guidelines, additional experience time for shift and chief operators, experience substitutions and advance water treatment in the future. If adopted operator certification's web page will include links to all documents, samples of supervisor letters and Grades T4 and D5 certification applications.
- Questions? Mike Answered questions.
  - Steve Molino- are there provisions for recycled water operators in this document? *No, recycled water is not incorporated into this document.*
  - John Brady- aside from the supervisor letter and required signatures is there anything else required from systems to prove accountability? *We have recommended to have the immediate supervisor and the chief operator both sign the letter instead of previously needing one signature.*
    - Does it exclude the general manager from decision? Is the chief operator required to sign a letter for poor performing employees? Who says operator has achieved competency? *The chief operator is responsible for all of this.*
    - With a 40/20 split the operator can manipulate his/her hours. 40/20 double dipping? Is this, OK? *Yes, as long as criteria is met.*
  - Tim Collie-Thank you this is long overdue. Is the job description approved by the State or water entity. *Job description is from water entity.*

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- Bill Cardinal- T3 chief operator at a T3 DW facility- should be able to be granted a T5 certificate if they're not working at a T4 facility because of the grade and site requirement for T5 certification.
  - *John Brady responded – At a T5 water system there is a higher risk of public impact treating more gallons of water. In the interest of public health, experience is built incrementally.*
  - *Bill Cardinal responded- DDW treatment plant classification is based on the number of treatment processes as opposed to the number of gallons produced and population served.*
  - *Larry Lyford responded- He understands both sides of the argument, but this is more about the application process, an annual review will include improvements. Let's revisit this another time.*
- Ian Tillery – chief plant operator (CPO) letter vs. supervisor letter. Can CPO write their own letter? What if the general manager is the CPO? How do they go about getting authorization for their experience?
  - *Mike – This would be answered by the state.*
  - *Christine – Whoever the CPO reports to would sign document. The hierarchy and structure of organization would be reviewed to look at who is at top of structure.*
- Katie Porter – are there current timeframe processing recommendations?  
*Within four weeks of receipt of a complete application.*
- Steve Garner – DW treatment operators working at an Advanced Water Treatment Facility (AWTF) classified as a WW facility are not getting DW treatment experience credit.
  - *Christine – This will possibly come up in the One Water Regime recommendations.*
  - *Mike- Now it is an existing experience substitution only.*
- Sue Mosburg – What should be in a certification package? Should this be added to the document? Might the examples be reformed over time?
  - *Mike- We would update the examples using existing forms and regulations.*
- Tomas Eggers – Thanked Mike for all the work. Clarify absolute values up to a certain number of hours. When would that be evaluated and by whom?
  - *Mike – maximum weekly hours available to an operator who falls under each category, supervisor letter will decide number of hours.*
- Steve Molino – Would the chief operator sign off on the certification if the chief operator has no responsibility over the operator? In some cases, the CPO is working in operations only.

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- *Christine – This would be a concern if the CPO is not responsible for the operators.*
- *Larry Lyford – For a distribution operator it would be the distribution chief operator not the CPO. The supervisor still signs the letter, then the chief operator additionally signs. When the chief operator signs, it puts teeth in it.*
- *Christine – Thank you for the clarification, Larry. I agree that the chief operator should get involved to put his stamp of certification on it.*
- *Yan Zhang – Agree, that was the intention of the work group to provide the chief operator in addition to the supervisor signature.*
- Julie - CAUTION! The State Water Board cannot approve or post anything that conflicts with current regulations. Conversation about distribution operators not getting experience credit unless certified, incorrect guidance not from the Division of Financial Assistance (DFA).
  - *Sue Mosburg – Yes, they can, see regulations. When making decisions about regulations, certification needs to be included.*
- Julie – When regulations are updated this will be recognized and updated.
  - *Sue- The current regulations are being interpreted that way; the industry hope is regulations need to change. The guidance document needs to reflect those changes.*
- Christine – bringing forward to DW Operator Certification Advisory Committee for a vote. We need to go back and identify considerations: agree, update, or deny/reject. If we do not vote today, we cannot vote until January 2024. Everyone voting will need to be here in person if this happens.
- Voting commenced.

**WW Operator In Training (OIT) Requirements and Experience**

- Chris Castaing presented on behalf of the group.
- Proposed an online survey to solicit feedback, revise educational requirements by eliminating or lowering hours necessary. Recommend that educational credits can be earned after OIT certificates are issued, while gaining certification hours simultaneously. This allows people to get into the trade as other operators age and retire. Educational credits are not necessary to learn OIT duties while gaining experience. Agencies to establish OIT apprenticeship programs approved by the State. This will provide more flexibility to smaller systems.

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- Steven Garner – Who will approve the criteria? Then who will approve at the State? *Responsibility placed on individual agencies if they choose to develop an OIT apprenticeship program.*
- Josh Viera – the State will approve multiple programs? Not sure what benefit this would have.
  - *Sue Mosburg – Gives the opportunity on all sides of the house DW treatment, DW distribution, WW to have experience guidelines. Lots of work to be done on what an apprenticeship program would consist of. Is this a path that would be supported?*
  - *Norah Duffy – We realize it's a heavy lift but would inject flexibility.*
- John Brady – Agencies responsibility? How does this benefit an agency? Lessening education – bad.
  - *Monte Hamamoto – Large agencies have programs established but they have to obtain OIT certificate first to complement their program. They want the programs they've been using for years to be approved by the State.*
  - *Jose Martinez – Paid OIT position could be cost prohibitive to smaller agencies. Smaller WW systems could hire with approved plan in lieu of OIT certificate.*
- Louis Sun - If an agency has a program approved will an OIT certificate then be issued. *An approved program would take the place of an OIT certificate, and they could apply for a WW grade level certificate. The intention is apprenticeship hours would apply towards certification. Per regulations they must be holding a certificate, does not stipulate an OIT certificate. Would require a change in regulations, State funding for changes, and would qualify you for a Grade I WW certificate.*
- Steve Garner – Issue a certificate?
  - *Julie - Yes, would have to be a certificate, not necessarily an OIT certificate.*
  - *Sue Mosburg – when this started it was a wish list of what changes were wanted in your perfect world.*
  - *Norah Duffy – OIT is controversial. It works for some agencies, not for others. Potential path forward may lead to some improvements.*
  - *John Brady – Option one gives WW operators an easier way to get in.*
  - *Steven Garner - If earned after program there are funding concerns, an undue burden to say yes.*

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- *Christine - Advisory Committee to decide priorities. If accepted, how do we move forward? We will need the Advisory Committee to recommend criteria.*
- *Sue Mosburg - Is this a direction we want to go and put effort into? Shift for further development.*
- *Dr. Ramsey Mahmood – details to be figured out later. Let's vote on principle of requirement.*
- Steve Creighton – I'm confused. Is the subgroup bringing recommendations forward, then meet and move forward? DW moving to staff levels, subgroup voted. We want this program, will State approve? Need more detail and specificity.
  - *Norah – opening the door and pushing it forward.*
  - *Julie – Vote or work longer to be approved or say no completely. We have options. A vote to approve will bring it to staff level.*
- Steve Molina – Is recycled included in OIT at all?
  - *Christine – No, recycled will be in One Water Regime.*
- Voting commenced.

**One Water Regime**

- Greg Williams presented on behalf of the group.
- 1. A certified DW treatment operator could qualify for their AWT experience for DW treatment certifications provided regulations, Title 22, would allow for this. Or would it require a regulation change?
- 2. To increase collaboration between DW and WW for a one water future. We should consider joint meetings – communication and collaboration are essential.
- WW operator experience needs a job task analysis survey sent out every 5-7 years for exam criteria questions. Jon Strutzel and Annette Caraway did it for DW exams and needs to be done for WW exams.
  - Steven Garner– Tertiary water? Distribution purple pipes? DPR?
  - *Greg – has not been talked about.*
  - Brian Bernados – Will there be an AWT certification committee? How will AWT be defined?
  - *Greg – AWT processes to be included are in our recommendations.*
  - *Brian – We know those questions need to be addressed.*
  - *John Brady – Need an experience credit chart for AWT like Mike's for DW. This process will prompt conversation between DW and WW for what that process will look like.*
  - *Steve Garner – both DW and WW Advisory Committee members can vote on AWT.*

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- Voting commenced.

**Assembly Bill 1588**

- Jose Martinez presented on behalf of the group.
- Will military experience require regulation changes for exams? Evaluating experience bodies include American Council on Education, COOL, My Next Move, O\*Net Online, Military Crosswalk, Ca-Nevada AWWA basecamp. Revise guidelines for application reviews, revise exam and certification applications and possible supplemental form for military experience, reciprocity, or exam waiver. Update our guidelines to reflect military guidelines and procedure changes. Update existing Advisory Committee groups to include military representative. Recommend more frequent joint meetings – quarterly?
  - Steven Garner - Is it acceptable to consider subgroup points to reflect on applications?
  - Jose – Propose supplemental form for military experience, like Mike Maestas' guidelines?
    - *Christine – The guidelines you are referring to are for DW only not WW. Sue was looking for procedures to go over applications.*
  - Sue/Steve recommend changes to proposal and get WW guidelines done.
  - Christine - What are we voting on in terms of recommendations?
  - Mike – Is there a negative impact on voting?
  - Steve Krai – So many Advisory Committee and joint meetings might overload State staff? Work should be done by subcommittees and then present.
  - Christine – Suggests going forward with vote, if modifications are necessary, please state that when voting.
- Voting commenced.

**Item 7 – Meeting Recap and Next Steps**

- Christine informed the Advisory Committees that due to the meeting running over time, the meeting recap and next meeting date will be scheduled via email.