



WASTEWATER TREATMENT PLANT OPERATOR CERTIFICATION THREE DECADES OF EXCELLENCE

OPERATOR SUCCESSION A MAJOR CHALLENGE FOR WWTPs

Treatment Plant Operators in the State of California are required to have an appropriate license issued by the State Water Resources Control Board, Office of Operator Certification (OOC). Many wastewater treatment plants underwent significant improvement and expansion during the EPA Construction Grants program of the 1970s and 1980s. All of the plants had to hire and train operators in large numbers. California plants attracted operators from all over the country. By the late 1980s and early 1990s the number of Wastewater Treatment Plant Operators peaked. The operator labor market in California has been relatively stable as many agencies downsized, others expanded, and new operators had adequate time to be trained. However the average age of the workforce continued to increase. A recent survey of BACWA members in 2003 showed that 47.6% of 390 certified operators were over 50 years old.

Obtaining operator certifications is more difficult today than it was in the 1980s. In addition to required coursework and passing a series of exams, the individual must have minimum time in service performing specific qualifying operational experience. That experience is reviewed carefully and accepted or denied by the staff of the Office of Operator Certification. For example, it takes ten years of experience as a Wastewater Treatment Plant Operator with a high school degree to qualify for a Grade V Operator Certificate as shown on the following chart.

Certificate Required	Years of Experience for Certificate (with High School degree only*)
Grade V	10 years
Grade IV	6 years
Grade III	4 years
Grade II	2 years
Grade I	1 year

* See Title 23, Sections 3670.1, 3671, and 3683

Within the last few years, the operator market has tightened as operators began to retire. Many jurisdictions have reported that a large number of operators will retire over the next five years causing the market for operators to tighten even more. Operators are also retiring younger as PERS benefits have increased. Thus, many of the treatment plants will be looking to hire trained operators, with a premium placed on operators with high certifications and /or with supervisory skills.

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The five associations (work group) wrote this position paper because we have a major concern about the industry's ability to replace an unprecedented number of operators who will retire within a narrow period of time. The concern is especially critical for the replacement of experienced operators (Grate IV and V) because their replacements must come from either a limited pool of existing operators or the ability to train new operators. That ability is limited by the training and experience requirements necessary to advance to the higher levels.

To address these challenges, the work group proposes a three-tiered approach to solving this problem.

I - PROMOTION OF THE WASTEWATER TREATMENT PLANT OPERATIONS CAREER

Although wastewater treatment plant operation is not a glamorous career, it is a solid one that will always have a valuable role in our society. As the market gets tighter in the coming years, salaries will likely increase as agencies and companies compete to get employees. Furthermore, people in the field can take pride and satisfaction in the fact that they are helping to protect public health and the environment. The difficulty in attracting new workers was emphasized in a recent (June 19, 2005) article in the San Francisco Chronicle: "Who will fill Baby Boomer's big work boots?".

A solid plan of action should be developed where the career is promoted at the high school and community college level. The best people to do that are the five associations, which developed this position paper. A statewide committee should be formed to develop a Plan of Action and then all five associations and their members should promote the program at their local levels.

II - TRAINING OF EXISTING AND POTENTIAL WASTEWATER TREATMENT PLANT OPERATORS

With the exception of a series of home study courses, the formal classroom training that was available 25 years ago has been greatly reduced. Many community colleges, which provided those classes, have either discontinued the courses or have eliminated the major from their list of degrees. In their place, training is available through numerous private educational opportunities and through training and conferences provided by the work group associations. Therefore, a person who is interested in a wastewater career and has started as an Operator in Training has difficulty finding the training that is out there.

A plan of action should be developed to ensure that information on the wide variety of class work is available from a number of sources through out the state and is kept in a central clearinghouse for use by operators. The best organization to develop and promote this database would be the California Water Environment Association because training is a fundamental part of their mission.

III – UPDATING THE OPERATOR CERTIFICATION REGULATIONS

As noted above, the State Water Resource Control Board, Office of Operator Certification (OOC), administers the certification of wastewater treatment plant operators. They use Title 23 of the California Code of Regulations to implement the program. In administering the program they follow three sets of rules: (1) those contained in State Law; (2) regulations developed and approved by the State Water Resources Control Board and (3) rules developed by an interpretation of a law or regulation. In recent years interpretations of the laws and regulations have made it more difficult for people to advance in a wastewater treatment plant operator career.

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On a regular basis, OOC works with a group of people in the industry, the Operator Certification Advisory Committee. Several years ago, that committee proposed a complete overhaul of the portions of Title 23 that pertain to operator certification. That proposal, which would have revised many of the obstacles now in the operator certification program, was never acted upon. It needs to be acted upon and if any of the proposals need changes in the law, the five associations can provide the lobbying effort needed to get that done.

In the near term, there are four actions, which the OOC can implement, that would streamline the certification process without sacrificing the integrity of the program. They are as follows:

- The OOC should include, as full time experience, operating time that is less than a full shift on small plants that do not require full time operation, as certified by the Chief Plant Operator.
- When qualifying an operator for certification, the OOC should rely on the supervising operator's approval that an OIT or subordinate operator has adequate experience to qualify for certification to the next level.
- After passing a certification exam, an OIT should be allowed more time and /or extensions on initial training certifications to complete education, experience and certification requirements. This is very important for people entering the field. After they apply and pass the certification test, the clock ticks down as they struggle to get an internship or OIT positions and actually start working.
- The OOC should re-visit its reciprocity rules for operators coming to California from other states to assist in their transition to our certification process.

This group supports the efforts of the OOC in requiring that operation of privately owned treatment works be performed by certified operators and thus the time spent working at privately owned treatment works should count as experience towards certification. This will help the operator succession problem by increasing the pool of experienced operators.

The above four issues would be fairly easy for the OOC to implement and would help get new people into the wastewater operator field and help the existing pool of workers advance to fill the positions being vacated by retirements. The CASA legal counsel, Somach, Simmons and Dunn, has provided the attached analysis of the five actions and has determined that four of them are interpretations and thus can be changed directly by OOC and only one would need a regulation change through the State Board.

SUMMARY

In summary, there is a major succession challenge facing the wastewater industry where, within a few short years, an unprecedented number of operators will be retiring within a narrow time frame, and these operators must be replaced to maintain competent staffing levels. The five statewide associations, in partnership with the State Office of Operator Certification, can keep this problem from occurring by developing the following programs:

- **Promotion of the Wastewater Treatment Plant Operator as a Career.** The five associations need to develop a plan of action to promote wastewater treatment plant operations to high school and community college students as a career.

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- **Training of Existing and Potential Wastewater Treatment Plant Operators.** The CWEA needs to continue implementing the promotion and advertisement for training of wastewater treatment operators through out the State.
- **Updating the Operator Certification Regulations.** In the near term OOC needs to modify its interpretation of its rules to streamline the certification process. In the long term, OOC needs to update Title 23 and address the proposed changes recommended by the Operator Certification Advisory Committee in 2001.

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