

Issue 11: Shortage of Water and Wastewater Operators

A. Brief Description of Issue

TCEQ's Occupational Licensing and Registration Division (OLRD) has primary jurisdiction over ten occupational licensing programs, including Water and Wastewater operator licenses. Over the last ten years, as the population of Texas has grown, there has been a steady decline in the number of licensed water and wastewater operators per capita in Texas. If this trend continues, Texas will experience a significant shortage of licensed water and wastewater operators.

B. Discussion

As more people move to Texas, water and wastewater utilities must expand to support the population growth and greater numbers of licensed operators are necessary. As smaller facilities expand, they require greater numbers of licensed individuals, which require larger budgets to support the additional staff. Water and wastewater operator professions are not consistently discussed or included in job opportunity outreach. As a result, new graduates may not have a clear picture of what these jobs entail.

Municipalities that employ water and wastewater operators struggle to maintain staff at their treatment facilities. The issue is particularly noticeable in smaller towns with smaller treatment facilities and subsequently, smaller budgets. Many times, an entry level operator will start in a position at a small system, but then leave that position to work for a larger system with a larger budget or shift to working for an industry that can pay much higher salaries.

The agency licenses water and wastewater operators, approves licensing training providers, requires trained operators at water and wastewater facilities, and regulates operations at those facilities. No previous legislative action related to the issue has occurred.

C. Possible Solutions and Impact

The Occupational Licensing Program is focusing on several paths to address this issue. First, more exams are being translated from English to Spanish. Currently, only the entry level license exams are available in Spanish, and those tests are only provided by paper exam, not computer-based testing (CBT). By translating additional water and wastewater exams into Spanish, individuals with limited English proficiency will be able to maintain and improve their credentials. Also, by making Spanish exams available on CBT, applicants for these licenses will have a greater opportunity to take the exams in Spanish than they have had before.

One obstacle moving forward with Spanish translation of exams is the limited availability of qualified translators who also have specific industry knowledge. This knowledge is critical to ensure the terminology of the specific industry is translated correctly. An additional obstacle is the lack of designated funding to contract these translators. A second measure is to create a state-wide vocational program for high schools, with cooperation from the Texas Education Agency (TEA). There are several individual high schools in Texas supporting a water and wastewater operator training program in their schools, but the goal of this new program is to provide greater support to high schools that are interested in offering this opportunity for its senior students.

The Occupational Licensing program strives to increase the number of training programs at community colleges, particularly those that also have TCEQ-contracted computer-based testing centers. These colleges can provide programs to offer all core training courses, as well as facilitate the licensing exam upon completion of the course and application approval.

Both high schools and community colleges can work with approved training providers and local utilities to provide core classes and possible hands-on training. The high school and community college programs will educate and encourage students to pursue careers in the water and wastewater fields.

Enhancing training programs would increase visibility to students in high school and community colleges, hopefully sparking interest. The benefit would be increased numbers of qualified water and wastewater operators available to support water and wastewater needs for Texas in the future.

TCEQ is also exploring additional assistance to small water systems that have historically had difficulty attracting and retaining qualified operators. This could include implementing on-site or local training programs for operators, managers, board members, and council members and potentially instituting a training certification program for managers and boards. In addition, funding could be set aside to promote “peer-to-peer” operator assistance and training across the state between more experienced operators of larger systems and newer operators of smaller systems. This could help smaller systems develop local talent rather than try to compete with larger systems for qualified operators.

Another way TCEQ can support small systems would be to establish a statewide program to provide rate and financial accountability assistance. This would help small water systems set up a rate structure that would account for current and future costs such as: maintaining, rehabilitating, and repairing their systems; complying with future regulations; and planning for future rate increases, as necessary.

The fiscal impacts of the proposed change are difficult to quantify. An increase in operators would be a benefit to Texas communities and would support the additional customers to each system but would also require an increased budget for those systems. Estimating the statewide fiscal impact would require significant input from water and wastewater systems over time.