

Rethinking Operator Certification

The role of the multiskilled worker

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Times have changed since the promulgation of the Clean Water Act and Safe Drinking Water Act. All states, many provinces, and some foreign countries now have operator certification pro-

grams. Each year has brought more state and federal regulations. Attitudes also have changed. The public now demands improved service delivery and greater accountability from government agen-

cies. Local governments are being forced to find ways of holding costs, stabilizing rates, and increasing investment in infrastructure — all while maintaining high service levels. Water and waste-

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water agencies are well aware of the impacts of these changes.

All of these factors suggest that there may be a need for rethinking operator certification. Traditional thinking about the operator's role has evolved. No longer is there the luxury of staffing at a level that permits discrete, skilled trades to perform a narrow range of specialized activities. The pressure is now on to develop a flexible work force that is trained to perform many craft tasks at core proficiency levels, with costs savings and efficiency as the benefits. Are certifying authority rules and regulations going to allow our public agencies to be more efficient, or will they pose a bureaucratic obstacle to improved efficiency?

The following are best practices that should become standard to increase plant efficiency:

- Move away from the old model. Operators should no longer function as caretakers, sitting around performing process control calculations, and waiting for something to go wrong. Instead, they should be multiskilled, journeyman-level technicians that perform a wide variety of tasks, including maintenance and laboratory work.
- Consider the possibility of no longer staffing your facility 24 hours a day, 7 days a week but, rather, taking advantage of technology to provide highly reliable, unattended off-shift

operations.

- Exchange a highly rigid organizational structure and tightly defined job descriptions for a flattened organization composed of a flexible and trained work force. This is the work force that will result in high performance.

In order to make these ideas a reality, we must focus on training and certifying core competency skill sets. Training must focus on requisite skills necessary to perform routinely encountered, cross-functional operation and maintenance activities. This will start when we change the way we think about job descriptions and ideas about what is and is not an operator's job.

In employment postings, companies typically list the required skills, knowledge, and abilities. Agencies translate skills as certification levels, knowledge as educational level, and ability as years of experience. While this is a good place to start, we really should focus on whether employees can demonstrate broad-banded proficiencies at core competency levels in more than one skill. An operator should be able to

- perform routinely encountered maintenance procedures (both mechanical and electrical);
- perform periodic, systematic observations of equipment, systems, and processes;
- perform bench-top laboratory analyses and interpret results; and

- make process control adjustments in accordance with standard procedures, established unit operating strategies, process directives, or as directed.

It is easy to see how an employee who can perform a wide variety of tasks — at a core competency level — can provide more value to the agency than a highly specialized, master-level technician who is competent only in a narrow area of expertise.

Although you may think this kind of attitude would put you at odds with your employees, even labor unions have recognized the importance of reducing areas of specialization. They have recently begun supporting the movement toward developing a multiskilled work force. Doing this will reduce costs, increase competitiveness, and maintain system reliability.

The challenges of the times necessitate rethinking the operator's roles and the need to redesign operator certification. Regulators and certifying agencies must also recognize that these business trends exist and move forward accordingly. If not, we will be ill-equipped to certify technical proficiency in the future.

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