Summary of the IDEM WW Operator Survey Results

Survey responses:
The survey responses were very thoughtful and candid. Many of the respondents provided similar comments and many if not most were well aligned with the issues IDEM had already identified. Some responses were provided from the view of the employee and some from the view of managers, providing for a range of responses. The survey responses have been categorized into nine broad (and somewhat overlapping) groupings:

- **Perception of the industry.** Many recognized the profession is misunderstood if it is understood at all. The work is perceived as not glamorous and dirty which tends to overshadow its importance. There is a public stigma when it comes to working with waste of any kind. There is a low public opinion of wastewater work especially when compared to other essential employees. Simultaneously, the public is unaware of the profession or its opportunities. The industry generally needs to do a better job of selling the profession. There needs to be a rebranding of titles to emphasize environmental stewardship.

- **Attitudes.** Young people are not willing to work their way up the ladder, expecting to jump quickly to the top before paying their dues. They don’t want to take the time to learn, they are not dedicated to one employer, there is a lack of work ethic, they don’t want to accept responsibility, and they don’t show a personal investment in learning. Employees don’t feel appreciated, which impacts their dedication to the work. Employers, on both the industrial and municipal side don’t know or care much about their wastewater treatment investment in infrastructure and are not interested in learning more about it. They often do not know or care what their operators are doing, are unwilling to spend money on things not part of production or value added, they just want to hear they are “in compliance.”

- **Hiring and retention.** Several commented on generally low pay (which may be more of a municipal issue), the lack of a “living wage” and poor benefits. Hard to compete with less messy jobs, jobs with more regular hours, no emergencies and no “on call” expectations. It is hard to find qualified hires, especially for the higher classes of licenses. There is a lack of organized training or rewards or opportunities for advancement. One respondent provided a story about how all of the people he works with, including himself, just fell into the business through random events and circumstances, summarizing with the conclusion there is no career path for leading people into the business.

- **Career advancement.** Among the several comments on this subject, some indicated there is no career path at all, while others commented they do have organized training systems and incentives for becoming certified. Comments were given on the limited advancement opportunities at small employers, no training budget, no entry level training for new employees, lack of educational opportunities, limited mentoring. One commented uncertified employees are boxed into their specific duties and not provided opportunities to learn about other aspects of the system—which could lead to advancement (opportunity to become certified). One commented there should be an operator training manual guiding new employees through the process of what they need to know and do. Others commented on mentoring of employees, exposing them to every aspect of work at a plant, including the lab and reporting. Engagement of workers who are not in jobs requiring certification could lead to many eventually becoming certified. One commented IDEM’s education and experience requirements are burdensome and limit opportunities to receive higher level licenses.

- **Training.** Providers need a better understanding of what is on the test so they can better prepare their students. It is hard to get training helpful for and directly related to the exams. It
is hard to get time to attend training. Training is generally available, but employers don’t want to pay for it. Training needs better promotion. Need more classroom opportunities. Operators need to have both hard and soft skills. Need more training relevant to actual operation of WWTP, WW basics, lab, hands-on, cross training, budgeting, electrical troubleshooting, automation technology, nutrient removal, pump problem solving. Need OJT from senior employees, and have it count as hours toward license renewal. Need more apprentice opportunities. Plant specific training. Tours of other WWTPs/networking with other operators. College courses should be offered. One commenter asked for a change from UC Sacramento to WEF materials.

- **Roadblocks.** Political appointments of operators. Political drive to not raise rates and not spend any money. Existing employees not willing or able to train new people. Older operators treat their knowledge of the system as proprietary and will not share with other employees. No one wants to start a new job when the facility is antiquated and in poor condition. Old employees teaching new one’s bad habits, especially with time and cutting corners. Management not willing to approve training. Employers not rewarding employees for achieving a higher level of classification. The career is not promoted.

- **IDEM Systems.** Ivy Tech system for testing is good. Too hard to get a higher classification. Some don’t like: Education/responsible charge structure, size-based structure, education/experience/time structure, “best answer” questions. Others indicated the degree of difficulty is about right or indicated the more stringent requirements are better. Need an instructor’s guide. Need study guides in preparing for the test (which we already have but should be reviewed). IDEM training center. You Tube library with videos on: Various people in the business, “day in the life of”, public service, environmental stewardship, lab procedures, responsibilities of plant owners/council members, reporting to and dealing with the town council, exam preparation, virtual plant tour, virtual inspection. Some would prefer more of a specialized license rather than a general license. Exam questions not covered by the core material. One commenter stated people should be able to pass the exam if they studied and are prepared. One asked Ivy Tech be able to do a test review at the time of the exam. Some operators are not exposed to math or reporting in their daily work. Need to provide accommodations for people with special needs. One asked if IDEM still has a technical assistance staff and if they still do regional association trainings.

- **The Future.** People responsible for WWTPs need to have succession planning. Retiring employees need to train their replacements. Mentorship of older to newer employees. Professionalization of operator duties. Need to educate kids at an early age about wastewater. Recognition of the future of fully automated and remotely controlled plants. Operators need to know the future of high-tech automated equipment. Need more apprenticeship and internship opportunities. Internships with local high school construction trades program. Employers need to consider higher wages with higher skill levels. There needs to be a curriculum for schools. There needs to be a wastewater associates degree—somewhere, sometime.

- **Partners.** IDEM needs to establish and work with partners: Ivy Tech, Purdue, other Indiana state agencies, other states (specifically mentioned were Michigan, Kentucky, Wisconsin, Ohio), professional associations, training providers. IDEM needs a Focus Group.