



Apprenticeship Program

Water System Operations Specialist
Wastewater System Operations Specialist



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NJ Water Association Apprenticeship Program

- **Scope of Program**
 - Water Industry - Water & Wastewater Utilities
 - Operations Specialist (licensed operators)
- **Approved by/Registered with the U.S. Department of Labor**
- **Partners include** USDOL, NJDOL, & our National Organization

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Retirements


- During this decade, the water and wastewater profession is expected to lose upwards of **50 percent** of the licensed operator workforce **due to retirements**



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Loss of Institutional Knowledge


- Many of these retiring employees have worked at the same utility for most of their careers, and they will depart with **decades of valuable institutional knowledge**



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Growing Demand for Operators

- Water & Wastewater utilities **face challenges in recruiting, training, and retaining** licensed operators
- A national assessment (January 2018) involving several federal partners (USEPA, Water Environmental Foundation, American Water Works Association) projected that upwards of 50% of the licensed operator workforce may retire this decade
- **Obstacles tend to thin the workforce** such as *Increasing Professional Demands* - Advancements in treatment technologies & Ever-increasing regulatory requirements; *High Employee Turnover*; *Lack of Exposure to Employment Opportunities*; and *Competition with other Trades*
- These obstacles coupled with a retiring workforce **creates an ever-growing demand** for Licensed Water/Wastewater Operators



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Goals

- **Increase the pool** of highly trained water and wastewater licensed operators in New Jersey



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Goals

- **Provide greater employment opportunities to historically under-represented groups** in the industry such as women, minorities, veterans, and persons with disabilities

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Goals

- **Provide on-the-job learning & technical instruction** that leads to the development of a highly skilled, licensed workforce demanded by the water and wastewater profession

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The Apprenticeship Program

➤ OVERVIEW

- **Two years** in duration
- **4,000 hours** of mentored on-the-job training
 - Cross-Training is expected
- 288 hours of technical instruction covering introductory and advanced water and wastewater operations, safety, regulatory compliance, emergency incident management & other topics
 - **Appendices A-1 and A-2**

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Benefits to Participating Employers

- **Succession Planning** – Improved knowledge transfer
 - Employer's subject matter expert is the mentor
- Enhanced **new employee retention**
- **Highly skilled** employees - 288 hours of technical instruction
- **Safer Workplace** - emphasis on safety training

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Benefits to Apprentices

- **Paid on the job training** – Earning while they learn
- **An education** to improve skills and competences – little to no educational debt
- Potential for a successful **long-term career**
- **Competitive Salary**
- **National credential**: the apprentice receives a national credential issued by the USDOL when they successfully complete the apprenticeship program

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STANDARDS OF APPRENTICESHIP Applicants

➤ Section IV – Qualifications For Apprenticeship

- Age – must be at least 18 years of age
- Education – a high school diploma or equivalent
- Physical – physically capable of performing the essential functions of an operations specialist/LO
- Drug Screening – prior to employment
- Background Check – prior to employment
- Drivers License – possess a valid state-issued drivers license and be insurable at normal commercial rates

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STANDARDS OF APPRENTICESHIP Apprentices

- Section VIII – Probationary Period
 - **Every apprentice serves a probationary period** - first 1000 hours (six months) of on-the-job learning (OJL)
 - **During the probationary period**, either the apprentice or the sponsor may terminate the apprenticeship agreement, **without stated cause**
 - **After the probationary period**, the apprenticeship agreement may be cancelled at the request of the apprentice or may be suspended or cancelled by the sponsor for reasonable cause and a reasonable opportunity for corrective action

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STANDARDS OF APPRENTICESHIP Apprentice/Employer

- Section VI – Supervision of Apprentices & Ratios
 - **No apprentice shall work without adequate supervision** (Licensed Operator/Mentor)
 - **The mentor must hold an operator's license** in the field that the apprentice is working towards: Drinking Water (T or W), Wastewater (S or C)
 - **Adequate supervision:** the Mentor provides on-the-job learning and is responsible for making work assignments; is readily available to the apprentice; and is making sure the apprentice has the necessary instruction and guidance to perform tasks safely, correctly, and efficiently
 - **Required Ratio:** Approved (USDOL) May 2021 for 1:3 ratio (mentor to apprentice), previously 1:1

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STANDARDS OF APPRENTICESHIP Apprentice/Employer

- Section IX – Hours of Work
 - Apprentices work the same hours as fully proficient System Operations Specialists, except that **no apprentice will be allowed to work overtime if it interferes** with attendance in related instruction classes

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STANDARDS OF APPRENTICESHIP Apprentice/Employer

- Section X – Apprentice Wage Progression
 - Apprentices are paid a **pre-approved** progressively increasing schedule of wages during the apprenticeship
 - The wage schedule is established by the **participating employer**
 - NJWA/Employer evaluate the progress of the apprentice to determine advancement based on satisfactory performance in OJL and RTI.
 - Eligibility Criteria for Salary Reimbursement under NJDOL's GAINS Grant** requires the starting wage to be at least \$15/hour

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Scope of Work Licensed Operator

- Duties & Responsibilities
 - Operations
 - Maintenance
 - Regulatory Compliance
 - Emergency Incident Management
 - Asset Management

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NJWA Support to Employers

- Conduct outreach and recruitment of candidates
- Participate in Affirmative Action Plan activities
- Develop the curriculum to support the Technical Training
- Assign and Track Curriculum Requirements
- Monitor the progress of Apprentices
- Maintain apprentice records: job assignment, promotion, rates of pay, hours of work and training
- Advocate/coordinate the program with HR; Payroll, Superintendent, Operator/Mentor

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Program Administration

- NJWA Tasks:
 - **Conduct** outreach & recruitment activities
 - **Process** applications & screen candidates
 - **Establish** a network of participating utilities
 - **Manage** apprentices during the 2-year program
 - **Collaborate** with training and educational providers to establish a robust curriculum
 - **Coordinate** with NJDOL, USDOL, and NRW to address administrative & reporting requirements

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Apprenticeship Programs

- According to the U.S. Dept of Labor, **partnering with a registered apprenticeship program is a recommended model for workforce development** because it:
 - Reduces Turnover
 - Reduces the Costs associated with recruiting and onboarding new employees
 - Increases Productivity
 - Minimizes the Skills Gap
 - Creates a more Diverse Workforce
 - Provides an Entry Point for long-term career pathways

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Apprenticeship Program Water Industry

- **Water Industry Apprenticeship programs established nationally** serve as a catalyst for attracting talented individuals from many different backgrounds to develop a *robust, diverse, highly skilled, and sustainable* workforce

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National Effort



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Key Points

- **Communities depend on water/wastewater operations** to support daily routines, the economy, and protect public health & the environment
- **Vital water/wastewater services** would fail without highly trained individuals
- **Utilities face challenges** in recruiting, training, and retaining employees
- **NJWA's Apprenticeship Program** provides a reasonable, structured, and comprehensive pathway for educating and training new hires in water/wastewater operations
- **NJWA's Apprenticeship Program** provides a tool for mentoring and supporting implementation of utility succession plans and workforce development initiatives

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Let's Connect, Collaborate, & Bridge the Gap

- **Become a Participating Employer**
partner with NJWA's registered Apprenticeship Program
- **Become an Apprentice**
submit an application

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For more information

➤ Visit www.njwater.org or app.njwater.org

➤ Contact

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