Aquarium Life Support Technician I #03170
City of Virginia Beach – Job Description
Date of Last Revision: 03-12-2020

FLSA Status: Non-Exempt  Pay Plan: General  Grade: 15

City of Virginia Beach Organizational Mission & Values
The City of Virginia Beach exists to enhance the economic, educational, social and physical quality of the community and provide sustainable municipal services which are valued by its citizens. The City of Virginia Beach organization is based upon a belief in the democratic process of government. This belief provides meaningful ways for citizens, reflecting the diversity of our City, to contribute to the development of public policy. This process is enhanced by organizational values which guide member performance within the Virginia Beach Quality Service System. These Values define our desired organizational culture. We value quality customer service; teamwork; leadership and learning; integrity; commitment; and inclusion and diversity.

Class Summary
Assist in the operation, maintenance, construction and repair of live exhibit and aquarium life support systems for the Virginia Aquarium and Marine Science Center and in accordance with industry best practices, safety protocols, standards and guidelines established by the Virginia Aquarium, governing agencies and regulatory/accrediting bodies. Assist in training life support section staff, volunteers, and interns to meet the mission and objectives of the Virginia Aquarium. Comply with all applicable safety and security procedures and protocols.

Representative Work Functions and Responsibilities
Demonstrate commitment to Virginia Aquarium and Marine Science Center guest experience, mission, vision, and values.

Support the guest experience by participating in visitor enhancement development; may lead public programs and tours; serve as a spokesperson on behalf of the Aquarium; and actively seek out guest engagement opportunities.

Provide for the needs of all animal and aquarium life support systems in assigned areas by doing regular daily inspections, maintaining water quality through monitoring and operation of individual life support systems and performing preventative maintenance tasks on life support and related equipment as directed by senior staff. Respond to automated control system alerts and alarms.

Assist in the troubleshooting and repair of life support systems and mechanical equipment such as automated controls, pumps, electric motors, compressors, ozone generators, filters, foam fractionators, etc.

Monitor and analyze trends; recognize issues and respond per established protocols. Assist with conducting and interpreting water quality tests and analyze data, and assist with corrections as needed.

Maintain exhibit quality standards through regular maintenance and cleaning activities.

Assist with upgrading and/or installing life support systems in exhibits. May assist in exhibit design, construction, assembly, maintenance and repair, including but not limited to, fiberglass and concrete décor; waterproofing materials and treatments; and acrylic.

Interpret schematics, equipment drawings and automated control system display drawings and indicators.

Assist with the installation of hardware connected to the automated controls system.
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Communicate with staff across functional areas regarding maintenance for each system to maintain the highest animal care standards. Collaborate with water quality, veterinary, and animal care staff to ensure the highest standards of animal care and welfare for all animal exhibits and holding/quarantine systems.

Assist in training staff, volunteers, and interns.

Recommend and maintain the stock of required spare parts, tools, equipment and supplies.

Keep accurate paper and electronic records on all life support, training and water testing activities including daily system maintenance, equipment maintenance and observations, and materials acquisition and disposition. Compile data and prepare numerical and narrative reports.

Keep work area clean and organized and report mechanical failures to supervisors in a timely fashion; and keep service areas and mechanical spaces clean, neat and well organized.

Receive work assignments from senior staff and generate work orders, progress reports, and daily logs.

Research and suggest upgrades, visitor enhancements, and changes to exhibit and life support systems to senior staff.

Cross-train with other staff.

Operate forklift to move materials and supplies.

May require occasional travel for training and professional development.

Perform other job duties requiring skills, knowledge and physical requirements as demanded by those duties described or less. Individual assignments will be determined by the supervisor based on then current workloads and department needs.

Performance Standards
Perform life support system operations and other life support maintenance work satisfactorily under the supervision of senior staff; consistently and effectively monitor and respond to automated control systems; compile reports and narratives with satisfactory degree of accuracy; and complete assigned tasks to quality standard; and effectively train, and assist other staff, volunteers, and interns in relevant tasks. Aquatic Animal Life Support Operator Level I certification and/or Water Quality (AALSO) Level I certification.

Minimum Qualifications
Requires any combination of education (above the high school level) and/or experience equivalent to two (2) years’ experience in fields utilizing the required knowledge, skills, and abilities and associated with positions such as aquarium life support operator/technician, water treatment plant operator, aquaculturist, aquarist, exhibits technician, or maintenance worker in a similar facility.

Must have, or obtain, a current and valid Virginia or North Carolina driver’s license in accordance with Virginia or North Carolina DMV driver’s license eligibility requirements.

Preferred Qualifications
Associates of Applied Science degree in Aquarium Science or Bachelor’s degree in a related field. Aquatic Animal Life Support Operator Level I certification and/or Water Quality (AALSO) Level I certification. Aquatic animal life support operation and maintenance experience in a public aquarium or similar facility. Experience repairing life support systems and equipment. Experience working with

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mechanical equipment such as pumps, motors, piping systems, compressors, filters, etc. Experience working at an Association of Zoos & Aquariums (AZA) accredited facility. National Swimming Pool Foundation (NSPF) Certified Pool Operator (CPO).

**Special Requirements**
Must be available to work evenings, weekends, holidays, and overtime when required to meet operational needs.

This position may require that incumbents wear and maintain appropriate personal protective equipment such as, but not limited to, steel toed shoes, hard hats, safety glasses, gloves, or other safety attire and equipment in designated areas of risk. Specific requirements will be determined and communicated by the employee’s supervisor based on position assigned.

This is a safety sensitive position and is subject to mandatory drug testing and annual exams. Positive drug test results may result in counseling and/or discipline, up to and including, termination.

Alpha I Status: Positions within this class have been designated as Alpha I positions requiring employees to work during inclement weather, regardless of the City’s operational status.

Successful completion of a pre-employment physical.

**Knowledge-Skills-Abilities Required to Perform Satisfactorily**

A. **Knowledge**
   1. Knowledge of safety rules and procedures applicable to the position, and of occupational hazards and safety precautions.
   2. Knowledge of major filtration components and their application.
   3. Knowledge hydraulic systems as they relate to aquariums.
   4. Knowledge of water quality testing as it relates to aquariums.
   5. Knowledge of basic electrical theory and its application.
   6. Knowledge of Association of Zoos and Aquariums (AZA), Alliance of Marine Mammal Parks and Aquariums (AMMPA), U.S. Fish and Wildlife Service, and U.S. Department of Agriculture (USDA), and other governing agencies’ and regulatory/accrediting bodies’ standards and guidelines.

B. **Skills**
   1. Skill in the operating, trouble shooting, maintaining and repairing mechanical, electrical and automated control equipment in aquarium life support systems.
   2. Skill in the operation and repair of reciprocating compressors, centrifugal compressors, ozone generators and centrifugal pumps.
   3. Skill in cleaning, maintaining and replacing motors, bearings, and other frictional wearing surfaces that are trade related.
   4. Skill in utilizing plumbing materials, tools, and techniques related to aquarium systems.
   5. Skill in operating a computer and City standard software applications, as well as industry standard life support maintenance software.
   6. Skill in research methods and organization of subject materials.
   7. Skill in working with hazardous chemicals and materials.
   8. Skill in operating a forklift.
   9. Skill in use of small hand tools as well as basic shop tools.
   10. Skill in operating lab equipment, when applicable.
   11. Skill in closed aquarium system operation, construction and maintenance.

C. **Abilities**
   1. Ability to give and follow directions and maintain effective working relationships with Aquarium staff and other groups or organizations with which the Aquarium has contact.
   2. Ability to communicate effectively, both orally and in writing.

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3. Ability to work from technical drawings and schematics.
4. Ability to use electrical test equipment proficiently.
5. Ability to problem solve in assigned areas.
6. Ability to maintain detailed records.
7. Ability to effectively communicate to guests of the Aquarium in both formal and informal settings.
8. Ability to climb and work from tall ladders.

Working Conditions
The below stated working conditions are intended to provide a general overview of the environmental conditions inherent in the job setting, as well as the physical, mental, and sensory requirements necessary to perform the essential functions of positions in the noted job title. A more detailed description will be made available at the position (PCN) level.

NOTE: Per HR Policy 6.19, Americans with Disabilities, the City follows the requirements of the Americans with Disabilities Act (ADA) in all hiring and employment decisions. The City shall not discriminate on the basis of disability in its hiring and employment practices. The City shall make reasonable accommodations for the known physical or mental limitations of a qualified applicant or employee with a disability upon request unless the accommodation would cause an undue hardship on the operation of the City’s business.

Physical Requirements: Physical refers to the requirement for physical exertion and coordination of limb and body movement.

Medium to heavy work that involves walking, standing, bending, stooping, climbing, lifting, pushing and raising objects, and involves exerting up to 75 pounds of force on a regular and reoccurring basis; may require exerting up to 100 pounds of force on occasions; occasional use of standard office equipment; considerable skill and adeptness in the use of the fingers, hands or limbs in tasks involving close tolerance or limits of accuracy.

Mental Requirements: Mental refers to the degree that the job involves cognitive activities, and use of mental processes.

Performs specialized technical or professional work requiring general understanding of operating policies and procedures and their application to problems not previously encountered; applies specialized technical or professional principles and practices in the solution of problems; may require continuous, close attention for accurate results and frequent exposure to unusual pressure.

Environmental Conditions: Environmental refers to job conditions inherent to the job setting, including those that may lead to injury or health hazards even though precautions have been taken.

May risk exposure to animals/wildlife to include exposure to animal bites, scratches, and diseases; may be exposed to venomous and non-venomous animals, insects, fishes, amphibians, arthropods and other species of organisms; work may be performed outdoors, indoors, in or under water, under all types of weather conditions with exposure to bright/dim light, dusts and pollen, extreme heat and/or cold, wet or humid conditions, noise, vibration, fumes, odors, traffic, moving machinery, electrical shock, chemicals, height, and confining/congested spaces.

Sensory Requirements: Sensory refers to hearing, sight, touch, taste, and smell required by the job.

Normal visual acuity, depth perception, field of vision, color perception, hearing, speaking, sense of smell, and texture perception.

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