

Position	Senior Life Support and Water Quality Specialist (ARCC)
Facility	Monterey Bay Aquarium - Animal Research and Care Center
Location	Marina, CA
Job Summary	Under limited supervision, play a leadership role in the operation, quality assurance, troubleshooting, repairs, maintenance, and monitoring of water and mechanical systems at the MBA Animal Research and Care Center (ARCC); responsible for water quality laboratory analyses, design of new life support systems, quality control and assurance, and operation of life support, Heating Ventilation and Air Conditioning (HVAC), specialty equipment, filtration, and water quality sensors in order to maintain and optimize water flow and water quality at the facility; access and monitor computerized control system during work and off hours to provide 24/7 coverage of the life support; performs other duties as required.
Essential Functions	Acts as team lead in troubleshooting and repair of critical water and mechanical plants associated with an offsite live animal holding and quarantine facility incorporating 350,000 gallons of semi-closed seawater systems; systems include pumps, pressure sand filters, ozone systems, protein fractionators, ultraviolet sterilizers, drum filters, bag filters, carbon filters, air blowers, air compressors, boilers, chillers, heat exchangers, and HVAC with cooling tower Design new system modifications or new life support systems to improve system functioning or water parameters, based on the computer-based control system data, animal health needs, water flow needs, fluid dynamics, or regulatory requirements Analyze water quality data results and flow data and recommend life support changes based on the analysis Develop preventative maintenance schedules and operational protocols for life support, mechanical plant, HVAC, and water quality equipment. Write and implement Quality Assurance and Quality Control protocols and laboratory processes and maintain laboratory SOPs. Perform water quality laboratory analyses of ARCC systems using handheld and bench-top instrumentation and laboratory wet chemistry techniques. Act as team lead in preventative maintenance on water and mechanical plants, to include pumps, pressure sand filters, ozone systems, protein fractionators, ultraviolet sterilizers, drum filters, bag filters, carbon filters, air blowers, air compressors, boilers, chillers, heat exchangers, and HVAC with cooling tower Train and mentor new staff, interns, volunteers, and outside researchers. Respond to after-hours water systems and life support alarms, providing 24-hour facility alarm coverage 365 days per year
Other Duties and Responsibilities	
Knowledge, Skills and Abilities	Excellent mechanical skills Excellent laboratory skills Problem solving skills Excellent communication and interpersonal skills Experience in plumbing and electrical design, assembly, and maintenance Advanced knowledge of aquariums (home or commercial) and design/function of aquatic life support system components Advanced knowledge of life support system equipment operation and maintenance Advanced knowledge of automated controls, pneumatics, electro-mechanical and electro-optical devices Practical knowledge of techniques and instrumentation used in

analytical seawater chemistry and microbiology Practical skills with hand and power tools used for light fabrication and mechanical maintenance Familiarity with OSHA safety guidelines Familiarity with three-phase 480V electrical systems and components Fundamentals of Engineering (FE) certification Ability to prioritize work while multi-tasking, without immediate supervision Ability to analyze data quickly and translate data into operational decisions Ability to work independently and as part of a team Demonstrated ability to train and teach other staff Ability to work within, and maintain Monterey Bay Aquarium's Core Values

Education & Experienced Required

Undergraduate degree in Engineering, Biological Science, Hydrology, or Chemistry OR equivalent combination of education, training and experience 6+ years experience operating and maintaining a facility incorporating aquatic animal life support systems

Licenses and Certifications Required

Physical Requirements

Sitting, standing, walking several miles, climbing stairs, climbing ladders, reaching, pulling, pushing Occasional unassisted lifting up to 50 lbs, to include bags and large fish (tuna) Forklift, van, hand and shop tools, power tools, laboratory tools (pipettes, spectrophotometer, etc), pullies, lifts, fine tools for instrumentation work

Working Conditions

Quarantine facility, mechanical rooms, outdoors, confined spaces, roofs, office, animal care spaces This is our off-site animal holding and quarantine facility, 10 miles north of the main Aquarium

Salary

Respond To

<https://montereybayaquarium.snaphire.com/index> Kasie Regnier, kregnier@mbayaq.org