Summary of Duties: An Aquarist procures and maintains a variety of live seawater animals and plant life in aquaria; maintains the electrical and mechanical components of large seawater systems; and does related work.

Distinguishing Features: An Aquarist is responsible for the acquisition, care, feeding and maintenance of all live seawater specimens in many aquaria and for the maintenance of the pumps, filters, refrigeration, and plumbing of a seawater system to assure proper water quality and temperature for supporting aquarium specimen life and growth; and is responsible for obtaining and maintaining collecting equipment, and maintaining the collecting vessel. In addition, an Aquarist must be readily able to recognize unusual specimen behavior and adjust life support systems in order to maximize specimen health.

The work of an Aquarist is distinguished from that of a Marine Museum Exhibits Director in that the latter is responsible for planning and acquisition for both live and inanimate exhibits and overall exhibit management, while the former is responsible for assisting the Director in matters related to the acquisition and daily care of live specimens and maintenance of the life support system. The work is assigned by general written and oral communications and reviewed on the basis of results attained in the maintenance and propagation of the live specimen collection.

Examples of Duties: Through observation, determines if the seawater environment of live marine specimens is proper; takes water temperature readings and analyzes aquarium seawater to determine if the water is in proper condition to maintain marine specimens; makes adjustments to the life support systems of aquaria relative to temperature, oxygenation, salt content, pH factor, and mineral and other foreign matter contents; performs or arranges for major repair to the seawater life support system, including aeration, filtration, temperature control and other aquarium mechanisms; directs major cleaning operations on aquaria, holding tanks, filters and pipes; provides for the day to day care of the live marine exhibits including the daily feeding of such specimens; assists in determining specimen diets and quality and quantity of marine foods; observes animal and plant specimens in the aquaria and recommends or initiates changes as necessary to assure environmental compatibility to maintain and propagate the specimens; collects marine animals and plants using a variety of techniques, including underwater methods using scuba, hand nets, scrapers, hand, barrier nets and other required techniques; procures and maintains collecting equipment such as scuba tanks, nets, hand collecting devices, collecting boat and boat trailer; assists in researching types of marine specimens to be acquired and assuring their proper display in terms of their natural habitat; assists in the design and construction of small aquaria and aquarium mechanisms for special exhibits;
Prepares orders for sand, stone, and other aquarium display material including marine plant life as is necessary including replacement display material, supplies and marine food; assures that proper supply levels are maintained; keeps a daily log on aquarium conditions and specimen conditions; reports major problems on aquarium maintenance; may answer questions on live marine exhibits from the public and special tour groups; may prepare budget requests for aquarium specimen and environmental maintenance; may supervise part-time employees engaged in aquarium maintenance activities; may occasionally be assigned other duties for training purposes or to meet technological changes or emergencies.

Qualifications: A thorough knowledge of the mechanical aspects of marine life support systems and of the routine maintenance and repair requirements of such systems; a thorough knowledge of the environmental factors necessary to support a wide variety of live marine animal and plant life; a thorough knowledge of the care and feeding of marine animals and the care of marine plant material; a good knowledge of the ecology of marine and plant life necessary to aquarium display purposes; a good knowledge of the kinds of marine animal and plant life native to the west coast of the United States; a working knowledge of collecting techniques for marine plants, invertebrates and fish; a working knowledge of boat operation and maintenance; a working knowledge of common marine animal diseases; a working knowledge of aquarium display materials and techniques; a working knowledge of aquarium construction techniques; a general knowledge of marine ecology; the ability to recognize and correct negative marine environmental factors in an aquaria; the ability to analyze seawater and determine its content relative to the support of marine animal and plant life; the ability to conduct research on live exhibit displays including specimen compatibility, habitat, and care and maintenance requirements; and the ability to work with marine museum specialists, other employees, and volunteers.

Graduation from a recognized four-year college of university with a major in a biological science and 18 months of full-time paid experience or the equivalent as an aquarist in collection and care of live seawater specimens and the maintenance of a large seawater system is required. One year of the above specified experience may be substituted for each year of education lacking. An accepted certification as a basic scuba diver is required prior to appointment.

Physical Requirements: Strength to perform average lifting up to 35 pounds and occasionally over 70 pounds; arm, hand, and finger dexterity with both hands involved in activities such as reaching, handling, and feeling; and good eyesight.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determination must be made on an individual basis in light of the person's limitations, the requirement of the position, and the appointing authority's ability to effect reasonable
accommodations to the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory, and not restrictive. It is not intended to declare what the duties and responsibilities of any position shall be.