

# Seawater System Guidelines

Cal Poly's flowing seawater system can be a valuable resource for researchers. Following these simple guidelines can help jumpstart your project.

## General

- A Flowing Seawater System Use Application form must be submitted and approved by a Cal Poly faculty member and Pier Staff before any project is started.
- It is the user's responsibility to maintain a clean working area around his/her project. This includes everything from the ball valve supplying seawater to the project, to the water-table immediately around the project, to the storage rack below the water-table, and to the floor beneath the water-table.
- Use of "raw" seawater will increase the deposition of algae and other organic matter into the project and the surrounding water-table. The user will need to dedicate more time for cleaning and maintenance.
- The flow rate of seawater through the system is variable. Processes such as backwash rate (auto-cleaning routine for sand filters), bio-fouling, and time since last system cleaning all affect the flow rate. Pier staff will do all they can to maintain consistent flow rates throughout the system, but the user will need to become familiar with flow characteristics as they apply to a particular set up. Pier staff will be available for consultation and can assist with meeting necessary design criteria.
- The Flowing Seawater System building is rinsed with freshwater from ceiling to floor once per week. This procedure is critical to the long term maintenance of the system. To prevent the buildup of mold and mildew, please ensure that anything meant to remain dry is properly contained (labeled plastic tub with secure lid) and that any open containers are placed upside down.

## **Effluent**

- All seawater effluent discharged into the CCMS seawater drainage system shall not be chemically altered in any manner. This includes: chlorine bleach, soaps, detergents, fungicides, antibiotics, or anesthetics.
- All seawater effluent discharged from tanks containing non-native or genetically altered organisms must be treated in compliance with all state and federal statutes as well as campus veterinary regulations (see below for IACUC Compliance Standards).
- All seawater tank drains shall be screened with a mesh that will prevent the escape of any organisms into the CCMS seawater drainage system.
- It is permissible to discharge into the CCMS seawater drainage system seawater that has been treated with ultra violet light or ozone.
- It is permissible to discharge freshwater into the CCMS seawater drainage system; however, the same guidelines apply as to seawater regarding chemical alterations or additives.
- Users should be aware that any alteration of the effluent may negatively affect the marine environment at the discharge location (San Luis Obispo Bay).
- Under no circumstances should seawater be diverted or drained to a sewer line.

## **Wet-lab Space**

- Cal Poly Pier staff will assign seawater space to each user.

## **Institutional Animal Care and Use Committee (IACUC) Compliance Standards**

- All species maintained in the CCMS seawater system shall be maintained in compliance with all state and federal statutes as well as campus veterinary regulations.
- Contact your department, Department of Environmental Health and Safety and the campus veterinarian for specific protocol guidelines.

For more information, please contact:

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