

Project Name

Honouliuli Wastewater Treatment Plant Upgrade, Ewa, Oahu, Hawaii

Client / Owner

City & County of Honolulu, Department of Design and Construction

Year Completed

On-Going

Project Description & Firm's Responsibility

The Honouliuli Wastewater Treatment Plant was constructed over 30 years ago and is experiencing various degrees of deterioration of its components. This project addressed the rehabilitation and/or upgrading of various components of the plant.

Rehabilitation / upgrade of the treatment plant was categorized into various work tasks: (1) develop a system to provide sufficient emergency power to the influent pump station during power outages; (2) design a system to prevent periodic overflows from the grit chamber / preaeration tank; (3) provide a system to utilize recycled water for irrigation instead of potable water, which is currently being used; (4) implement a system to repair building structures from the deteriorating effects of salt-laden wind and highly corrosive gases; (5) evaluate redundancy systems of valving to deter discharge; (6) develop a flow measuring system to document the discharge through the Honouliuli Outfall in compliance with US Environmental Protection Agency regulations; and (7) recommend various corrosion protection systems for channels and pipes.

