## SPECIALIZED EXPERIENCE

## PORT AND HARBOR FACILITIES

Proposed Landfill, for Port of Los Angeles - As Project Engineer for Dames & Moore, coordinated field laboratory and analytical studies on aseismic design of a proposed hydraulic fill in Los Angeles Harbor. Prepared technical paper on this work (see Publication List).

Proposed LNG Terminals at Los Angeles and Oxnard, California and Nikisi, Alaska, for Western LNG Terminal Company - As Senior Engineer and consultant to Dames & Moore, participated in seismic hazard studies and, for the California sites, liquefaction analyses for LNG terminals.

Sohio Crude Oil Terminal, Long Beach, California, for Sohio Transportation Company - As Senior Engineer and consultant to Dames & Moore, conducted liquefaction and seismic stability study of proposed tank farm site.

NSF Sponsored Research Study - Consultant to Agbabian Associates on study of aseismic design of port and harbor structures.

Pier A Reconstruction and Proposed Pier J Expansion, Port of Long Beach - Consultant to Geofon on aseismic design and slope stability.

Port of Los Angeles, Pier 400 - Consultant to Frederic R. Harris / Moffat & Nichol on conceptual and final design of major new landfill and breakwater.

Port of Los Angeles, Pier 300, LAXT - In association with Geofon, Inc., conducted seismic stability analyses of dredged slope.

Guam Earthquake of August 1993 - Co-principal investigator for NSF sponsored studies of liquefaction of calcareous sands and damage to waterfront structures.

Wharf Sierra, U.S. Naval Activities, Guam - Consultant to Geo-Engineering & Testing and Berger/ABAM on repair of wharf damaged in 1993 earthquake.

Pier T, Port of Long Beach - Consultant to design team for major new container facility.

GATX Terminal, Port of Los Angeles - Consultant to Frederic R. Harris on improvements to existing liquid bulk terminal.

Port of Oakland – Member of 3-person panel for developing new seismic loading criteria.

Port of Oakland – Advisor on study of ultimate capacity of pile supported wharves.