MINUTE ITEM
This Calendar Item No. C57 was approved as Minute Item No. 57 by the California State Lands Commission by a vote of 3 to 0 at its 10-01-02 meeting.

CALENDAR ITEM
C57

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M. Eskijian, G. Gregory, M. Meier; D. Brown

REQUEST AUTHORITY FOR EXECUTIVE OFFICER TO SOLICIT PROPOSALS, NEGOTIATE FAIR AND REASONABLE PRICE, AWARD AND EXECUTE AGREEMENT TO PROVIDE DATA AND ANALYSIS CONCERNING THE EFFECTS PASSING VESSELS HAVE ON MOORED TANK VESSELS

PARTY:

California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825-8202

PROPOSED ACTIVITY:

Because of concerns regarding the oil transfer operations at marine oil terminals in high-traffic areas, the Commission's Staff proposes a project to develop and analyze data concerning the effects passing vessels have on tank vessels moored nearby. The proposed project involves instrumentation, testing and documentation of the forces induced by those passing vessels. To accomplish this, the services of a contractor will be required.

BACKGROUND:

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 (the Act) requires the State Lands Commission (SLC) to: *"...adopt rules, regulations, guidelines and commission leasing policies for reviewing the location, type, character, performance standards, size and operation of all existing and proposed marine terminals within the state..."* (Public Resources Code (PRC) Section 8755 (a)) and to *"...periodically review and accordingly modify its rules, regulations, guidelines and commission leasing policies to ensure that all operators of marine terminals within the state and marine facilities under the commission's jurisdiction always provide the best achievable protection of the public health and safety, and the environment..."* (PRC Section 8756).

To meet this mandate, the Commission's Marine Facilities Division has developed comprehensive engineering and maintenance standards for marine oil

terminals throughout California. This set of standards, called "the Marine Oil Terminal Engineering and Maintenance Standards" (the MOTEMS), has been developed over a five-year period. The goal of the MOTEMS is to provide the best achievable protection for the public health, safety and the environment. The MOTEMS will mitigate the risk of damage, potential oil spills, mooring/berthing accidents and reduce the seismic vulnerability of California's marine oil terminals. Staff expects to present the MOTEMS to the Commission as a proposed regulatory requirement in the spring of 2003.

One of the issues addressed in the MOTEMS is the effect of large vessels passing close by tank vessels that are moored. Historically this has been a problem for some marine oil terminals, and the MOTEMS seeks to address this issue. In 1997, a tank vessel pulled away from a wharf in the Carquinez Strait because of excessive current combined with forces from a passing vessel. All mooring lines were broken, the petroleum-loading arm was sheared off, a small amount of oil was released into the water and the tanker began drifting with the current. The captain dropped an anchor, thereby halting the runaway vessel. Had this quick action not been performed, the vessel may have struck a bridge, another vessel or the shoreline, resulting in a major spill or other catastrophe. Additionally, there have been a number of "near miss" events in which a moored vessel has moved because of a passing vessel. Vessel movement at a wharf can be critical, as the loading arms and/or hoses that are used for petroleum transfer are very limited in allowable motion. If such motion occurred during a transfer and a loading arm was ripped off the wharf, a major spill could result.

In the MOTEMS, there are equations that provide the critical distance, velocity and resulting forces from vessels passing near moored tank vessels. However, there is disagreement among experts and the regulated community as to whether the equations and methodology are overly conservative or are too difficult to compute and employ. The tests proposed for this project will address these issues and provide hard data as to the distance and actual forces induced by a vessel passing near a moored tank vessel.

The objective of the study here proposed is to validate and/or adjust the equations provided in MOTEMS in order to provide the "best achievable protection" for the safe mooring of tank vessels along California's coast. The operators of the Amorco terminal near Martinez have recently installed load-recording devices on mooring hooks at the terminal and are willing to allow Staff to record mooring line tension data. Staff would then also record pressure changes in the water column adjacent to the wharf and obtain information regarding the characteristics of each vessel passing the subject terminal during the study period, including size, draft, velocity and distance from the moored vessel. This information would then be analyzed, and the results would be used to establish which methodology and sets of equations best fits the full-scale data.

In order to carry out this project, it will be necessary to secure the services of an engineering firm having the requisite expertise. The testing program is proposed as a joint effort of the terminal operator, the Commission's Marine Facilities Division and the selected engineering contractor. The project has been approved through a Budget Change Proposal and is funded for a total amount of $60,000 for a two-year period. In-kind contributions are also a part of this study. The operator of the Amorco facility, Tesoro, is willing to let the Staff use company resources to gather and record the data. In addition, Mr. John Flory of TensionTechnology, who markets a static and dynamic mooring analysis program, is donating time and computational resources to assist in this project.

STATUTORY AND OTHER REFERENCES:

A. Public Resources Code Section 6106 (Delegation to execute written instruments)
B. State Contracts Manual Section 11.00 (A & E method)
C. Public Contract Code Section 6106
D. Government Code Section 4526
E. California Administrative Code Title 2 Article 13 Section 2980.0 - 2990.0

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THESE ACTIVITIES ARE EXEMPT FROM THE REQUIREMENTS OF CEQA PURSUANT TO 14 CAL CODE REGS. 15061 BECAUSE THESE ACTIVITIES ARE NOT PROJECTS AS DEFINED BY PUBLIC RESOURCES CODE SECTION 21065 AND 14 CAL CODE REGS. 15378.

2. FIND THAT THE SELECTION OF CONSULTANT UNDER THIS PROCESS DOES NOT AFFECT SMALL BUSINESSES AS DEFINED IN GOVERNMENT CODE SECTION 11342, SUB. (H), BECAUSE THEY WILL BE ACCORDED EQUAL OPPORTUNITY TO SUBMIT STATEMENTS OF QUALIFICATIONS AND PERFORMANCE DATA.

3. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO SOLICIT PROPOSALS, NEGOTIATE FAIR AND REASONABLE PRICE, AWARD AND EXECUTE CONTRACT IN ACCORDANCE WITH STATE POLICIES AND PROCEDURES TO PERFORM THE TESTING AS DESCRIBED ABOVE. THE AMOUNT OVER A TWO-YEAR PERIOD IS ESTIMATED TO BE $60,000.