MINUTE ITEM

This Calendar Item No. <u>C62</u> was approved as Minute Item No. <u>62</u> by the California State Lands Commission by a vote of <u>3</u> to <u>6</u> at its <u>9-17-04</u> meeting.

MINUTE ITEM C62

08/17/04 W 9777.226 G. Gregory M. Eskijian

CALIFORNIA STATE LANDS COMMISSION (PARTY)

CALENDAR ITEM C62 WAS MOVED FROM CONSENT TO REGULAR.

STAFF MADE A PRESENTATION TO THE COMMISSION PERTAINING TO IMPLEMENTATION OF THE OIL SPILL PREVENTION PROGRAM.

THE ITEM WAS APPROVED AS PRESENTED BY A 3-0 VOTE.

## CALENDAR ITEM C62

Α	)	08/17/04
	) Statewide	W9777.226
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# CONSIDER APPROVAL OF THE MARINE OIL TERMINAL ENGINEERING AND MAINTENANCE STANDARDS (MOTEMS)

#### **EXECUTIVE SUMMARY:**

Under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990 (the Act), the California State Lands Commission is mandated to adopt rules and regulations for the performance standards of marine oil terminals. Staff is proposing the approval for submission to the Building Standards Commission of the Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS) which will become part of the California Building Standards Code (Title 24, Part 2, Vol. 1, Chapter 31F (Marine Terminals), California Code of Regulations). These standards have now completed the public comment period and the next step is the approval of the Commission. If the Commission approves the Standards, the document will be submitted to the Building Standards Commission for adoption. It is anticipated that the Standards will become regulatory by mid-2005.

#### **BACKGROUND:**

The State of California has a legitimate reason for concern about the structural integrity, the deteriorating condition of electrical/mechanical equipment, pipelines and fire protection and the safe mooring of marine oil terminals in California. The average age of these facilities is about 50 years, and many operators plan to keep these pier or wharf structures in service for another 20 to 40 years. All of the major marine oil terminals in California are near major active earthquake faults. Most were designed to very primitive seismic standards and for vessels much smaller than those currently moored. Many have never had a comprehensive underwater inspection. Wind and current forces on large tank ships can cause mooring lines and structures to fail. Having a large tank vessel break away from a wharf and impact a bridge can result in severe structural damage or collapse. If the vessel hits any hard point, a petroleum tank could be ruptured, creating a major oil spill.

The Commission has long been involved in overseeing the integrity and operation of many of these marine oil terminals through its leasing program. Since adoption of the Act in 1990, the Commission has also had responsibility for regulation, operational monitoring, comprehensive inspection and requalification of all marine oil terminals in

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California. Under Section 8755 of the Public Resources Code (P.R.C.), the Commission has a mandate 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. Under Public Resource Code Section 8756, the Commission must 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.

Given these concerns and responsibilities, the Commission's Staff has sought means to establish performance standards for those facilities. Funding for the development of these Standards was obtained through a hazard mitigation grant program of the U.S. Federal Emergency Management Administration (FEMA), as a result of the 1994 Northridge earthquake. The Commission itself also authorized additional funding.

As a result of these efforts, the Commission's Marine Facilities Division (MFD) has completed the MOTEMS and now has a set of proposed regulations that, if approved, will provide performance standards for these facilities under the Commission's jurisdiction.

#### **PROGRAM STATUS:**

The MOTEMS were submitted for public comment; the period closed July 13, 2004. All of the comments received have been addressed. Commission staff believes that there is no need to change or modify any portions of the Standards as a result of public comments received. If approved by the Commission, the MOTEMS will go to the Building Standards Commission for adoption.

## **SUMMARY OF THE MOTEMS:**

The MOTEMS contains eleven divisions of engineering requirements:

- Division 1 provides an overview of the MOTEMS.
- Division 2 provides requirements for above- and underwater inspections.
- Division 3 provides the loading criteria (e.g. seismic, wind/wave/current) to be applied to a marine oil terminal.
- Division 4 provides methods of seismic analysis and defines structural performance criteria.
- Division 5 provides mooring and berthing analysis and design criteria.
- Division 6 provides geotechnical criteria.
- Division 7 provides structural performance standards (concrete, steel, timber).

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- Division 8 provides requirements for fire prevention, detection and suppression.
- Division 9 provides criteria for pipelines.
- Division 10 provides criteria for the mechanical systems.
- Division 11 provides criteria for the electrical systems.

#### **ISSUES OR CONCERNS:**

A few concerns and comments have been raised before and during the public comment period.

The first concern is with the costs likely to be incurred with the implementation of the MOTEMS. Some terminals may require no retrofitting or rehabilitation, while others may need little. As for those that do require extensive work, it is true that meeting the requirements may be expensive and partially disruptive to normal operations. However, the benefits in terms of environmental and economic interests far exceed the expense. Commission Staff has carefully evaluated the costs incurred as a result of implementing the MOTEMS as opposed to remedial costs associated with substantial damage as a result of a moderate earthquake and/or a major oil spill, regardless of cause. As part of the rulemaking file, Form 399 provides the economic analysis overview for the implementation of these proposed regulations. If these new standards keep just one facility from spilling 1200 barrels of oil, the benefit to cost ratio is almost 5. This is without any consideration that a port may be forced to close for a day or longer for oil spill clean up operations. Cost figures from the recent strike in Southern California estimate that closure of either the Port of Los Angeles or Long Beach could have reached as much as 1 billion dollars/day. If a moderate earthquake closed more than one facility, which is a likely scenario without these Standards being implemented, there is also the possibility of loss of feedstock to California's refineries. The intent of the MOTEMS has been to reduce the seismic vulnerability of marine oil terminals to the same level as is already in place for refineries.

A second concern is that these new Standards may force operators to close or temporarily shut down while repairs are being made. As Staff has seen at a number of these facilities, upgrades can be performed without a complete cessation of operations or loss of income. The rehabilitation, as specified in the MOTEMS "Action Plan", can be scheduled over a reasonable period of time to facilitate maintaining operations/scheduling of vessels, to obtain the requisite permits, and to consider environmental and budget constraints. As far as the potential shut down of terminal operations, and the effect on oil throughput required for California's refineries, we have determined that 13 out of the 40 terminals provide 90 % of California's maritime

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throughput. Most of these 13 terminals are rated as "good" or better, and many have already performed partial audits, as required by the MOTEMS. Several forward-looking terminal operators have already upgraded their facilities to reduce environmental and operational risks.

A third concern is in regard to California's overall energy infrastructure policy. There were 17 oral comments presented by the Western States Petroleum Association (WSPA) during the public hearing held on July 13, 2004. None of those comments pertained directly to the provisions of the regulations. WSPA however, commended the Commission on its world-class effort in promoting safety and environmental protection with the MOTEMS. One comment however, recommended that the State consider the entire energy policy as a whole rather than the proposed regulations that only address "...a small slice of the energy pie" (i.e., marine oil terminals). This is a matter for the Governor and the California Energy Commission (CEC). WSPA's recommendation could perhaps be integrated into the CEC's draft "Energy Policy Report" (2003). In any case, the Commission's responsibilities under Public Resources Code Section 8755 to protect the public health and safety and the environment with regard to every marine terminal is not limited by the State's energy policies.

The requirements of the MOTEMS generally represent the best industry practice and meet the standards of "best achievable protection" required under the Act. The benefits of compliance with the MOTEMS far exceed the serious environmental and economic consequences if the operations of a marine oil terminal were to be shutdown coincident with a major oil spill or moderate earthquake.

#### JUSTIFICATION FOR THE STANDARDS

The MOTEMS fulfills the Commission's mandate under "the Act" to adopt regulations that provide performance standards for marine oil terminals. This effort has not been accomplished by the Commission's Staff alone; it has involved the direct participation by affected parties, including the regulated community. MFD hosted two workshops, with 80 to 100 participants each, including terminal operators, port and consulting engineers and engineering academics. In addition to the two large workshops, a technical advisory group reviewed the seismic and structural portions. The inspection, fire, mechanical and electrical portions were reviewed by a WSPA working group, and a number of geotechnical engineers reviewed Division 6. This project also incorporates the MFD experience in inspecting facilities and reviewing mooring assessments and structural analyses for the 40-plus terminals in California. Each has been inspected a number of times; some have already had partial audits performed.

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Regarding the veracity of the MOTEMS, with all of the peer review and participation from industry, there has been no lingering engineering disagreement as to the performance standards and requirements of the MOTEMS. As confirmation of this effort, MOTEMS recently received the Engineering Excellence Award (Silver Award) in the category of "Studies, Research and Consulting Engineering Services" from the New York Association of Consulting Engineers. Letters of endorsement of the MOTEMS have been received from three highly rated engineering consulting firms and the Port of Long Beach. The Port of Oakland has already used the seismic procedures of the MOTEMS to rehabilitate aging wharves. A newly proposed "state-of-the-art" marine oil terminal in the Port of Los Angeles is committed to using the MOTEMS. The seismic portion of the MOTEMS has been incorporated into a recognized international text published by PIANC (International Navigation Association), entitled "Seismic Design Guidelines for Port Structures". The work will be referenced in the upcoming edition of the NEHRP (National Earthquake Hazard Reduction Program, FEMA 368 and 369). And from a recent national ports conference, sponsored by the American Society of Civil Engineers, Staff has learned that consulting engineering firms are using the MOTEMS for marine terminals outside of California.

#### STATUTORY AND OTHER REGULATIONS:

A: Public Resources Code Sections 8750 Through 8758

### PERMIT STREAMLINING ACT DEADLINE:

N/A

## OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA guidelines (14 California Code of Regulations Section 10561), the commission staff has determined that this activity is exempt from the requirements of the CEQA because the activity is not a "project" as defined by the CEQA and the State CEQA guidelines.

Authority: Public Resources Code Section 21084 And 14 California Code Of Regulations Section 15300.

2. The proposed regulations do not affect small businesses as defined in Gov. Code Section 11342, sub.(h), because all affected businesses are transportation and warehousing businesses having annual gross receipts of more than \$1,500,000, as specified under Gov. Code Section 11342, sub.(h)(2)(i)(vii).

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3. Text of the Proposed Regulations is on file at the office of the California State Lands Commission and also temporarily available on its Website at <a href="http://slc.ca.gov/Division\_Pages/MFD/MFD">http://slc.ca.gov/Division\_Pages/MFD/MFD</a> Home.htm

## IT IS RECOMMENDED THAT THE COMMISSION:

- 1. FIND THAT THE ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF CEQA PURSUANT TO TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15061, BECAUSE THE ACTIVITY IS NOT A PROJECT AS DEFINED BY PUBLIC RESOURCES CODE SECTION 21065 AND TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15378.
- 2. FIND THAT THE REGULATIONS ARE NECESSARY FOR THE IMMEDIATE PRESERVATION OF THE PUBLIC HEALTH AND SAFETY AND THE ENVIRONMENT BY ENSURING THAT MARINE OIL TERMINALS ARE FITFOR-PURPOSE.
- 3. FIND THAT THE REGULATIONS WILL NOT AFFECT SMALL BUSINESSES AS DEFINED IN GOVERNMENT CODE SECTION 11342(H), BECAUSE ALL AFFECTED BUSINESSES ARE TRANSPORTATION AND WAREHOUSING BUSINESSES HAVING ANNUAL GROSS RECEIPTS OF MORE THAT \$1,500,000, AS SPECIFIED UNDER GOVERNMENT CODE SECTION (H)(2)(I)(VII).
- 4. FIND THAT THE REGULATIONS WILL NOT HAVE A SIGNIFICANT IMPACT ON THE CREATION OR ELIMINATION OF JOBS OF NEW OR EXISTING BUSINESSES WITHIN CALIFORNIA, NOR WILL THEY HAVE AN ADVERSE ECONOMIC IMPACT ON BUSINESS, INCLUDING THE ABILITY OF CALIFORNIA BUSINESSES TO COMPETE WITH BUSINESS IN OTHER STATES.
- 5. FIND THAT NO ALTERNATIVE WOULD BE MORE EFFECTIVE IN CARRYING OUT THE PURPOSE FOR WHICH THE REGULATIONS ARE PROPOSED OR WOULD BE AS EFFECTIVE AND BURDENSOME TO AFFECTED PRIVATE PERSONS THAN THE PROPOSED REGULATIONS.
- 6. APPROVE THE PROPOSED REGULATIONS FOR SUBMISSION TO THE BUILDING STANDARDS COMMISSION FOR ADOPTION. THIS WOULD ADD REVISED 08/11/04

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PART 2, VOL. 1, CHAPTER 31F, TO TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS, SUBSTANTIALLY IN THE FORM OF THOSE SET FORTH IN EXHIBIT "A" WHICH IS ON FILE AT THE OFFICE OF THE CALIFORNIA STATE LANDS COMMISSION.

- 7. AUTHORIZE THE COMMISSION STAFF TO MAKE MODIFICATIONS IN THE REGULATIONS IN RESPONSE TO RECOMMENDATIONS BY THE CALIFORNIA BUILDING STANDARDS COMMISSION.
- 8. DIRECT THE COMMISSION STAFF TO TAKE WHATEVER ACTION IS NECESSARY AND APPROPRIATE TO COMPLY WITH PROVISIONS OF THE GOVERNMENT CODE REGARDING ADOPTION OF THE REGULATIONS AND AMENDMENTS AND TO ENSURE THAT THE REGULATIONS BECOME EFFECTIVE.
- 9. DIRECT COMMISSION STAFF TO TAKE WHATEVER ACTION IS NECESSARY AND APPROPRIATE TO IMPLEMENT THE REGULATION AT SUCH TIME AS THEY BECOME EFFECTIVE.

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