CALENDAR ITEM
87

MINUTE ITEM
This Calendar Item No. 87
was approved as Minute Item
No. 87 by the State Lands
Commission by a vote of 3
to 0 at its 7/6/95
meeting.

A 11

S 7

07/06/95
W 30068.14
WP 600.1
Griggs
Plummer

CERTIFICATION OF FINAL EIR PREPARED FOR CONSIDERATION OF A NEW LEASE FOR THE OPERATION OF A CRUDE OIL AND PETROLEUM PRODUCT MARINE TERMINAL ON STATE TIDE AND SUBMERGED LANDS AT UNOCAL'S SAN FRANCISCO REFINERY, OLEUM, CONTRA COSTA COUNTY

APPLICANT (ASSIGNOR):

Marjorie M. Hatter
Chief Refinery Engineer
Unocal Petroleum Products
Unocal Corporation
1380 San Pablo Avenue
Rodeo, California 94572

LOCATION:

State tidelands and submerged lands on the east side of San Pablo Bay, Contra Costa County, between the Towns of Rodeo and Crockett, 1.8 miles west of the Carquinez Strait Bridge.

LAND USE:

The Marine Terminal is a pier consisting of a tee-head ship and barge-berthing structure, a mooring-breasting dolphin, and a shore-connecting trestle-pipelineway. The ship-berthing structure is 1,250 feet long and 136 feet wide. The mooring-breasting dolphin measures 51 by 32 feet and is located 74 feet from the west end of the tee. The trestle pipelineway connecting the Terminal to shore is 1,730 feet long and 77 feet wide.

OTHER PERTINENT INFORMATION

The Commission, as Lead Agency, has caused an Environmental Impact Report (EIR) to be prepared pursuant to and in accordance with the CEQA (Public Resources Code, Section 21000 et seq.), and the State EIR Guidelines (California Code Regulations, Sections 15000 et seq.) and the Commissions regulations (California Code Regulations, Title 2, Division 3, Chapter 1, Article 10).

Staff prepared an Initial Study and Notice of Preparation (NOP) which were circulated from October 4 to November 4, 1991. Based on such documents, the staff determined that the project could result in significant adverse impacts and therefore required that an EIR be prepared for the Proposed Project.

A Draft EIR (SCH 91053082) was prepared by Chambers Group, Inc. under contract to the Commission and copies were circulated for review and comment to Responsible and Trustee Agencies and the public from March 7 to May 2, 1994. During this public review process, the Commission's staff held two public hearings for the project: one on April 13, 1994 at 4:00 p.m. and the other at 7:00 p.m. at the Pinole Public Library. No members of the general public or commenting agencies were present at either of the two public hearings.

The EIR addresses the project - specific impacts related to normal operations and for accident conditions resulting in spills at the Marine Terminal, in the San Francisco Bay shipping lanes, and along the northern outer coast of California from Santa Cruz north to the Oregon border. Oil spill impacts along shipping routes from San Francisco Bay south have previously been addressed in the GTC Gaviota Marine Terminal Project Final Supplemental EIR/EIS (Aspen 1992).

The major areas analyzed include Water Quality, Marine Biology, Fisheries, Vehicular and Rail Transportation, Air Quality, Noise, Earth Resources, Aesthetics, Land Use/Recreation, Cultural Resources and Energy. A summary of the specific and cumulative impacts and proposed mitigation for each resource category is described in Exhibit "B".

A Finalizing Addendum, responding to all comments received on the Draft EIR, was prepared and constitutes, in conjunction with the Draft, the Final EIR. The Final EIR was mailed to all the individuals, groups and government agencies that received and commented on the Draft EIR.

EXHIBITS:

A. Location Map
B. Summary of Impacts

COMPLIANCE DATES:

Certification of Final EIR Pursuant to the Provisions of the CEQA (PRC Section 21100.2): **July 26, 1995**

Consideration of the Proposed Project Pursuant to the Provisions of AB 884 (Gov. Code Section 65950): **January 5, 1996**

AB 884: N/A

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CERTIFY THAT AN EIR FOR THIS PROJECT, NUMBER 636, STATE CLEARINGHOUSE (SCH) NO. 91053082 WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

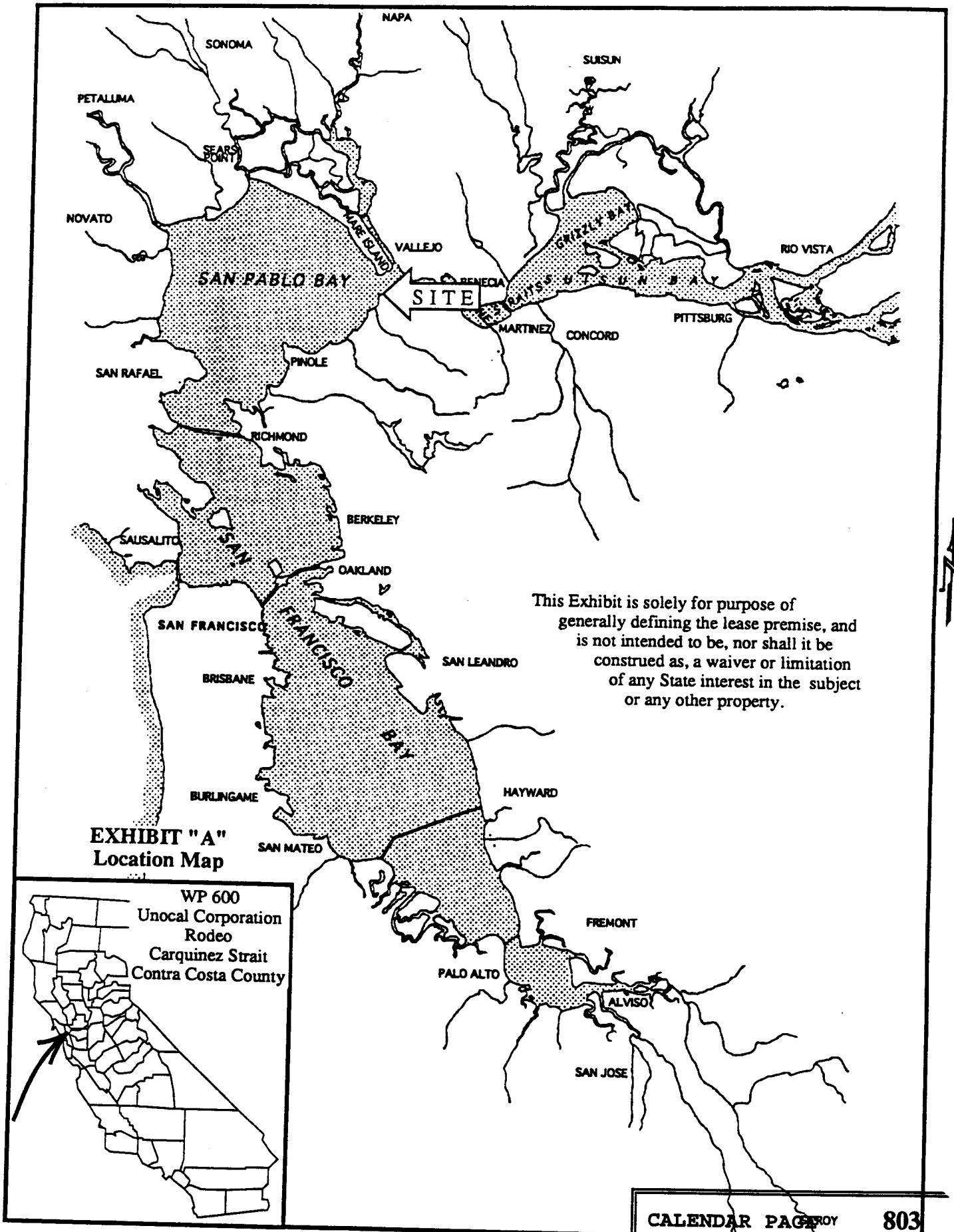

EXHIBIT "A"
Location Map

W 30068.14

EXHIBIT B

UNOCAL MARINE TERMINAL EIR

IMPACT AND MITIGATION SUMMARY

BY RESOURCE FOR

PROPOSED PROJECT AND ALTERNATIVES

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Chambers Group, Inc.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
OPERATIONAL SAFETY/RISK OF ACCIDENTS				
PROPOSED PROJECT				
Continuation of Existing Operations				
Recent inspection of the Terminal discovered potential deficiencies in the structural integrity of the wharf.	If allowed to remain, may result in potentially significant (Class II) impact to wharf's structural integrity and lead to spills.	Conduct a structural and system safety audit of the Terminal as per SLC's Marine Terminal Audit program document, and implement required improvements. Install Allision Avoidance System to prevent damage to pier. Develop and implement a wharf preventative maintenance program. SLC to have option to reopen lease if spills greater than 50 bbl occur.	Unocal with review and inspection by SLC, and third party consultant.	Reduced to nonsignificant.
There has been a history of small spills from the pipelines on the wharf due to corrosion and erosion.	If allowed to remain, may result in releases of hydrocarbons into the water (Class II).	Update P&ID's and flow diagrams. Develop and implement program to minimize the potential for pipeline leaks. Program should assess current condition of the pipelines, plan for correcting deficiencies, inspection and maintenance, installation of a leak detection system where feasible, and an option for SLC to reopen lease if spills greater than 50 bbl occur.	Unocal with review and inspection by SLC.	Reduced to nonsignificant.
The potential exists for spills to occur during transfer operations at the Terminal. The probability of small release is higher than those of large releases.	Accidental spills greater than 50 bbl during hydrocarbon transfers are a significant (Class I) impact.	Institute operational procedures to reduce the probability of a spill occurring. These shall include loading limits for vessel tanks, manning requirements for vessels and terminal, inspection of components related to transfer operations, English language requirements, quick release couplings, use of strain gauges, planned audit and maintenance program, booming, and SLC option to reopen lease if spills greater than 50 bbl occur.	Unocal with review and inspection by SLC.	Impacts to sensitive resources remain significant.

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
The detonation arrester at Berth M-1 has been removed from its original location. This and other factors result in a small probability of a fire or explosion at the Terminal.	A fire or explosion could cause significant damage to the wharf and/or vessel at the wharf (Class I).	Institute measures to reduce the potential for a fire or explosion including either reinstallation of the detonation arrester, or a section of the berth M-1 cargo vapor pipeline must be cut and fitted with a blind flange to rectify the missing detonation arrester. Other measures include requiring English fluency, assuring vessels can depart the wharf in 30 minutes in the event of an accident, requiring minimum vessel and terminal manning levels, use of quick-release couplings, strain gauges, developing emergency response procedures for vessel accidents, and SLC to have option to reopen lease if spills greater than 50 bbl occur.	Unocal with review and inspection by SLC.	Reduced to nonsignificant.
The potential exists for spills from tankers and barges in route to or from the Unocal Terminal due to accidents or other unexpected incidents.	The release of hydrocarbons from a tanker or barge is considered a significant (Class I) impact.	Require all vessels to use the VTS, adhere to recommendations of the Harbor Safety Plan, assure adequate underkeel clearance near Terminal, ensure that all vessels have approved oil spill response plan, use state-of-the-art tug escorts, use Main (Western) traffic lanes to or from the precautionary area, and SLC option to reopen lease if spills greater than 50 bbl occur.	Unocal with review by SLC.	Impacts to sensitive resources remain significant.
A butane tank will continue to be leased on filled state lands.	Tank constructed to rigorous standards resulting in remote possibility of explosion. Explosion could cause damage to nearby neighborhoods (Class I).	Because tank is designed and operated in accordance with strict standards and because potential for accident is remote, no additional mitigation measures are recommended.	Remote possibility of damage to surrounding neighborhood remains.	Remains significant.

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Future Conditions The probability of spills at the Terminal and along the shipping lanes will increase.	Even though the risk increases, the significant (Class I) impacts to sensitive resources from a spill remain as for continuation of existing conditions.	See above.	Unocal with SLC inspection.	Remains significant.
Cumulative Impacts Twenty-four marine terminals operate within the Bay and contribute to the risk for accidents.	Even though the risk increases, the significant (Class I) impacts to sensitive resources from a spill remain as for the continuation of existing conditions.	See above. All terminals should be required to comply with all regulations and specific mitigations to be determined on an individual basis.	All terminal operators.	Remains significant.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios Abandonment would involve removal of pipelines and/or removal of complete structure, or conversion of pier to other uses.	If the pier is abandoned in-place or removed completely, there would be a small potential for spillage from pipeline removal resulting in a significant (Class II) impact. There would be no risk to vessel traffic from pier remaining in-place.	Removal of pipeline mitigation involves development and adherence to a spill contingency response plan.	Unocal.	Reduced to nonsignificant.
Refinery Scenarios Unocal has no pipeline available to bring in the quantity of crude to Unocal to replace tankering. A new pipeline or connection to another pipeline or terminal would be necessary. Risks of pipeline spills are nearly the same as those for tankers; however, amount of oil released is substantially less.	A pipeline spill or rupture would generally not cause as much environmental damage as a tanker spill because less oil would generally be released. However, if a spill was to occur with sensitive resources present, a significant (Class I or II) impact would result.	No effective mitigation is available for spillage onto sensitive resources. Other spills can be contained through adherence to spill control contingency measures.	Unocal.	Impacts on sensitive resources remain significant. Other impacts reduced to nonsignificant.

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
As an option, increased truck and rail transport may be used. Risks for spills and deaths are substantially higher for truck and rail transport. The Refinery may also either decrease its level of operation or shut down entirely.	Because of commingling with public transportation, there is a potential to result in significant (Class I and II) safety impacts. Risks at the Unocal facility would be decreased or eliminated (Class IV) impact. Risk could be transferred to other facilities.	Safety measures may be incorporated into the Refinery, but no measures would guarantee that no injury would occur to the general public. No mitigation is required.	Unocal.	Remains significant.
CONSOLIDATION ALTERNATIVE				
Unocal and Pacific Refining would share Unocal's Terminal.	Emergency access would be beneficial (Class IV). An increase in congestion could increase accident potential; however, this is not considered significant (Class III). Impacts from oil spills would be similar to the Proposed Project resulting in significant (Class I and II) impacts.	No mitigation is required. Mitigation for oil spills would remain as described for the Proposed Project.		
New pipeline construction between terminals and removal of Pacific Pier would be required.	No safety impacts associated with construction. Potential for small spills from pipeline removal at Pacific Pier.	Pipeline removal in adherence with spill contingency response plan.	Pacific Refining.	Reduced to nonsignificant.

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
WATER QUALITY				
PROPOSED PROJECT				
Continuation of Existing Conditions				
Unocal tankers unload product and take on ballast water to stabilize the vessels.	Unocal tankers unload product at ports that may have higher levels of certain contaminants than San Pablo Bay. Because of the small volume of water that would be discharged to San Pablo Bay, adverse but nonsignificant (Class III) impacts would be expected to result from discharge of segregated ballast water.	No mitigation required.		
Water quality inputs include trace metals, small leaks and spills from the Terminal, tankers and barges, and effluent discharge from Refinery (including oil transport from the Terminal) and maintenance dredging.	Contamination from small leaks and spills is considered to be adverse but nonsignificant (Class III) because rapid tidal flushing causes rapid dispersion. All discharges will continue to meet NPDES and are not significant (Class III). Sediments from dredging are clean except for small amount of elevated nickel, which is considered adverse but nonsignificant (Class III).	No mitigation required.		
	Unocal does not currently use TBT on tankers, but this substance has the potential to have significant (Class II) adverse impacts on water quality.	Use of TBT should be prohibited on Unocal tankers and all other tankers that regularly service the Terminal.	SLC, as a lease condition and inspection.	Reduced to nonsignificant.

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Table S-1
(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
An oil spill has minimal effect on physical properties of seawater, but can have significant impacts to water chemistry.	Light transmissivity reduction and sea surface warming by a spill are considered to be adverse but nonsignificant (Class III). Any size spill will violate water quality objectives and impact water chemistry, resulting in a significant (Class I) impact. The spill size, composition, and characteristics will determine severity of impact.	All operations to be conducted in a safe manner and all equipment to be maintained in proper working order to minimize chances of accidents. These include measures as presented above for operational safety/risk of accidents. If a spill occurs, Unocal must be able to provide rapid response through booms and skimmers. Dispersants should only be used with approval from the CDFG and USCG.	Unocal with inspections by SLC.	Impacts from an oil spill remain significant.
Future Conditions				
The Refinery will use less San Joaquin and more imported crude.	No significant changes in effluent discharge would be expected (Class III). Oil spill impacts remain as above.	No mitigation required for routine operations. Mitigation for spills as above.		
Cumulative Impacts				
The water quality of San Francisco Bay has been degraded by inputs of pollutants from various sources.	Any contribution to the Bay waters of a contaminant already at significantly high levels would have a cumulatively significant (Class I) impact.	Bay-wide mitigation would include measures to reduce inputs and nonpoint source discharges as well as increased control of point source discharges.	Regional Water Quality Control Board.	Impacts may remain significant.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios				
	Abandonment, removal, or retention for other uses of the Terminal would eliminate the adverse but nonsignificant (Class III) impacts to water quality from leaks, spills, and discharges.	No mitigation required.		

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
	During pipeline removal, there would be a small potential for spills resulting in a significant (Class II) impact. Turbidity impacts would not be significant (Class III).	Preparation and adherence to a spill prevention and response plan.	Unocal.	Reduced to nonsignificant.
Refinery Scenarios				
	With no Marine Terminal, the risk of crude spills into the water would be eliminated (Class IV impact). Changes in crude selenium levels are not expected to significantly impact NPDES discharge (Class III).	No mitigation required.		
New Pipeline Construction	Any submerged pipeline construction to connect to other area terminals would result in temporary sediment suspension (Class III impact).	No mitigation required.		
Truck and Rail Use Only	Would result in elimination of oil spill risks to water (Class IV impact). However, an oil spill to an inland waterway could have a significant (Class I) impact.	Mitigation for any oil spillage would include adherence to spill response plans.	Unocal or truck or rail operator.	Impacts to sensitive resources remain significant.
Reduced operation or shutdown	Reduced operation or shutdown would eliminate spill risks and reduce or eliminate discharge into Bay, resulting in a beneficial (Class IV) impact.	No mitigation required.		

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
CONSOLIDATION ALTERNATIVE				
	No changes in levels of risk to water quality are expected over those of the Proposed Project. During either construction or abandonment of submerged pipelines there would be a temporary but nonsignificant (Class III) impact from sediment resuspension. There would be a significant (Class II) impact if any spillage would occur from a pipeline.	No mitigation required for operations. Mitigation for accidents remains as per Proposed Project. Mitigation for any spillage would be adherence to spill prevention and response plans.	Unocal.	Reduced to nonsignificant.

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Table S-1
(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
MARINE BIOLOGY				
PROPOSED PROJECT				
Continuation of Existing Conditions				
Ballast water has the potential to introduce exotic organisms into the Bay.	All ballast water from tankers whose origin is other than the West Coast of North America shall be unloaded to Unocal's wastewater handling facility.	Unocal	Unocal	Reduced to nonsignificant.
Marine biological conditions are dependent on water quality conditions as presented above. The Marine Terminal sediment is large grained, has low levels of contaminant, and creates minimal turbidity. Dredged sediments recolonize rapidly.	Continued annual maintenance dredging is expected to be adverse but nonsignificant (Class III).	No mitigation required.		
Small inputs of contaminants.	Any small discharges and small chronic leaks from the Marine Terminal are not expected to result in significant impacts (Class III). Increase in contaminants would contribute to significant cumulative impacts.	No mitigation required.		
Maintenance dredging could have some adverse effects on the sensitive winter and spring runs of Chinook salmon.	Dredging at the Terminal could have significant (Class II) impacts on migratory juveniles of the sensitive winter and spring runs of Chinook salmon.	Dredging will be limited to specific time restraints as imposed by regulatory agencies having jurisdiction regarding this matter.	Unocal	Impacts from dredging on juvenile Chinook salmon would be mitigated to nonsignificant.

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Table S-1
(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Unocal tankering contributes an incremental amount of underwater noise as compared to the overall amount of tankering. Birds and fishes are accustomed to Bay activities.	Ship noise disturbance and dredging are not considered to be significant (Class III) impacts to fishes and to birds.	No mitigation required.		
Marine mammals in Bays typically are small and fast-swimming and avoid moving vessels. Injury or death from collision with whales has occurred, but is considered remote.	Impacts are considered to be adverse, but not significant (Class III) from collisions with marine mammals from continued operation.	No mitigation required.		
Oil spills have greatest risk for impacts to biological resources from spills greater than 1,000 bbl. Risks to resources are greater in shipping lanes, but chances of spills are less than those for the Marine Terminal.	Oil spills greater than 50 bbl are considered to be significant (Class I) impacts to marine resources and their habitat. Numerous species, including those that are threatened, endangered, and candidate, are at risk.	No effective mitigation is available to mitigate the effects of a large spill. Impacts can be minimized and partially mitigated through adherence to spill prevention and response plans, plans for response to sensitive resources in vulnerable locations, rehabilitation plans for oiled birds, and strategies for restoration of lost resources.	Unocal with direction from California Department of Fish and Game (CDFG) and coordination with Clean Bay and other cleanup organizations.	Impacts from oil spills remain significant.
Future Conditions				
The Refinery will use less San Joaquin and more imported crude.	No significant changes in water quality will result in no changes to future routine operations. Oil spill impacts remain as described above.	No mitigation required for routine operations. Mitigation for oil spills remains as above for continued operations.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Cumulative Impacts				
Cumulative conditions produce a greater threat of an oil spill to resources from the combined actions of all tankering and all terminals.	Significant (Class I) impacts to the cumulative environment would result from oil spills.	No effective mitigation is available to mitigate spill effects. In addition to above mitigation for spill prevention and other plans, include cooperative efforts of all terminal operators through Clean Bay and others.	All marine terminal operators and cooperative agencies.	Oil spill impacts remain significant.
Small impacts of contaminants will contribute to mass loadings in San Francisco estuary.	Any contribution to the Bay waters of a contaminant already at significantly high levels would have a cumulatively significant (Class I) impact.	Bay-wide mitigation would include measures to reduce inputs and nonpoint source discharges as well as increased control of point source discharges.	Regional Water Quality Control Board.	Impacts may remain significant.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios				
	Abandonment, removal, or retention for other uses would eliminate adverse but nonsignificant water quality impacts and thus eliminate impacts to marine resources resulting in a beneficial (Class IV) impact.	No mitigation required.		
	During pipeline removal, there could be a potential for significant (Class II) impacts from a spill. Turbidity impacts would be nonsignificant to marine resources (Class III).	Adherence to spill prevention and response plan for small spills. No mitigation required for turbidity.	Unocal.	Reduced to nonsignificant.

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Table S-1
(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Refinery Scenarios				
New Pipeline Construction	Replacement of crude by Central Valley via pipeline, or other terminals would result in elimination of marine biology impacts (Class IV). Increased selenium discharged from the Refinery would be adverse, but not significant (Class III). Construction from submerged pipelines resulting in sediment suspension would be nonsignificant (Class III).	No mitigation required.		
	An oil spill to an inland waterway could result in significant (Class I) impacts to biological resources.	Mitigation for oil spills would include adherence to spill response plans.	Unocal and truck and rail operators.	Impacts to sensitive resources remain significant.
Truck and Rail Use Only	Would result in elimination of oil spill impacts to water and biological impacts (Class IV). An oil spill to an inland waterway could result in significant (Class I) impacts to biological resources.	Mitigation for oil spills would include adherence to spill response plans.	Unocal and truck and rail operators.	Impacts to sensitive resources remain significant.
Reduced Operation or Shutdown	Would result in elimination or reduction in discharge into Bay and eliminate or reduce impacts from Unocal Refinery to marine resources (Class IV impact).	No mitigation required.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
CONSOLIDATION ALTERNATIVE				
	No changes to levels of impacts to marine resources over that of the Proposed Project. During either construction or abandonment of submerged pipelines, there would be a temporary but nonsignificant (Class III) impact to marine resources from turbidity. There would be a potential for significant (Class II) impact to resources from a pipeline spillage.	No mitigation is required for operation. Mitigation for accidents remains as for Proposed Project. Mitigation for any spillage would include adherence to spill prevention and response plans.	Unocal.	Reduced to nonsignificant.

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Table S-1
(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Cumulative Impact
FISHERIES				
PROPOSED PROJECT				
Current and Future Operations				
The area around the Marine Terminal supports shrimp, salmon, sturgeon, bass, and perch.	Fishing activity is light, and continued impacts to fisheries around the Terminal are considered adverse but nonsignificant (Class III). Disturbance from continued maintenance dredging is considered minimal with adverse But nonsignificant impacts on bay shrimp from smothering of dredged materials disposal (Class III).	No mitigation required.		
	Loss of fishing area from tankers and barges in the shipping lanes is not significant (Class III), except for herring, which loses about 25% of its fishing area resulting in a significant (Class II) impact.	Vessel conformance with agreements between CDFG, herring harvesters, and other parties to minimize conflicts.	Unocal.	Reduced to nonsignificant.
	Fishing areas at highest risk from tanker and Terminal oil spills are those located in Suisun Bay, rivers and sloughs near the Unocal Terminal, eastern San Pablo Bay, and the central portion of San Francisco Bay. The most vulnerable species are shrimp, herring, salmon, sturgeon, bass, smelt, perch, and clambeds. Depending on the size and type of spill, significant (Class I or II) impacts are predicted.	No mitigation is available after a spill for impacts to tainted fisheries. Targeting cleanup measures to the most vulnerable locations, financial compensation, contributions to habitat enhancement programs, and education and research are recommended to minimize the effects.	Unocal with cooperating agencies and organizations.	Remains significant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Cumulative Impact
Outer coast fisheries at risk include dungeness crab because of their vulnerability in the bay, and Pacific hake, salmon and other anadromous species, and estuarine species including halibut, starry founder, and English sole.	Along the outer coast, most offshore fisheries have a moderate to high level of risk from oil spills from tankers. The most vulnerable nearshore fisheries are dungeness crab, sea urchin, and fisheries harvested from shore. Impacts are predicted to be significant (Class I and II). Impacts to aquaculture and kelp harvesting are considered to be significant, Class I and II, respectively.	No mitigation is available after a spill for impacts to tainted fisheries. Mitigation for kelp includes financial compensation.	Unocal.	Fisheries impacts remain significant. Kelp impacts are reduced to nonsignificant.
Cumulative Impact				
Oil tankering, terminals, refineries, other industrial and agricultural polluters all contribute to fisheries impacts.	Water pollution results in significant (Class I) impacts to fisheries.	Abide by policies and criteria, contribute to mitigation and restoration programs.	All industrial/agricultural sources.	Remains significant.
		Unocal's share to be determined through periodic review of lease.	Unocal.	Reduced to nonsignificant.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios	If the Marine Terminal is abandoned, the previously precluded buffer area around the Terminal would open for fishing and dredging would cease (Class IV impacts). Removal of the pier would temporarily preclude fishing, but no significant (Class III) impact would occur. Removal of the pier would open additional fishing area (Class IV).	No mitigation required.		

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(Continued)

UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Cumulative Impact
<u>Refinery Scenarios</u>	If tankering was replaced by pipelines, rail, or trucks, impacts to fisheries would remain as slightly beneficial (Class IV) as described above for abandonment.	No mitigation required.		
CONSOLIDATION ALTERNATIVE				
	Removal of the Pacific Refining pier and removal or construction of submerged pipelines would result in a short-term but nonsignificant (Class III) impact to fishing area disruption. A previously precluded buffer area would open to fishing (Class IV impact).	No mitigation required.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
VEHICULAR AND RAIL TRANSPORTATION				
PROPOSED PROJECT				
Continuation of Existing Conditions				
The site currently generates approximately 65 truck trips on a daily basis.	The project would continue operations as they presently exist and no additional truck trips would be produced.	No mitigation is required.		
Future Conditions				
Based on an import increase of 60% and export increase of 30% through the Terminal, as many as 152 equivalent average daily trips could be produced if all additional product is shipped out by truck.	Traffic forced onto I-80 or SR-4 will encounter Level of Service (LOS) F traffic, producing a significant (Class II) impact. The use of other local access routes will not produce significant impacts.	Any mitigation measures relating to future conditions involving new fuels product trucking from the refinery should be tied directly to BAAQMD regulatory requirements. In the event that the trucking of product would be required, construction of a loading rack for product transfer would necessitate permits from the BAAQMD, including compliance with its Regulation 13 - Transportation Control Measures.	Unocal.	Reduced to nonsignificant.
Cumulative Impacts	Significant (Class I and/or II) impacts occur at congestion points on I-80, San Pablo Avenue, SR-4, and other streets.	As above for future conditions, plus use of local shuttles, promote TDMs, work with City/developers on new projects, provide bicycle storage.		For roadways already exceeding capacity, impacts will remain significant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios	Construction efforts to remove pipelines and pumping equipment only or in conjunction with pier removal will force construction vehicles onto I-80, which operates at LOS F resulting in a short-term significant (Class II) impact.	Haul trips: Haul trips should be scheduled to avoid peak-hour traffic. Unocal should stockpile the debris onsite for subsequent removal by rail or barge. Worker trips: If workers other than those currently employed by the site are to be used, the work schedule should be staggered so that peak-hour traffic can be avoided. Unocal should develop a trip reduction plan to achieve 1.5 persons per vehicle for both construction and permanent employees. Unocal could provide peripheral park-n-ride lots. Unocal could provide preferential parking to high-occupancy vehicles and shuttle services. Unocal could charge parking lot fees to low occupancy vehicles. Delivery of the pipe to the various staging areas and removal of soil should be conducted during offpeak hours.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Refinery Scenarios				
New Pipeline Construction	Construction vehicles will be forced onto LOS F routes (I-80) resulting in a short-term significant (Class II) impact.	The work schedule should be staggered so that peak-hour traffic can be avoided. Unocal should develop a trip reduction plan to achieve 1.5 persons per vehicle for construction workers and permanent employees. Delivery of pipe to various staging areas and removal of soil should be conducted during offpeak hours.	Unocal.	Reduced to nonsignificant.
	Pipelines crossing or paralleling roads may necessitate temporary lane closures and traffic congestion, resulting in short-term significant (Class I and II) impacts.	Where pipelines are to cross or parallel roadways, the following measures should be applied: Avoid closing any lanes entirely during construction unless absolutely necessary. If possible, keep all lanes open during peak traffic hours and schedule necessary lane closures during offpeak hours. Use signing and flagmen where construction equipment is to interface with traffic and give sufficient warning such that cars may choose an alternate route if possible.	Unocal.	Remains significant where lane closures cannot be avoided. Other impacts reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
New Pipeline Construction (Continued)		Institute public information programs to enable motorists to avoid congested areas. Include placement of public notices in local newspapers and the distribution of fliers in the project area.		
New Pipeline Operations	The replacement of the Terminal with pipelines to import crude will necessitate some use of trucks and rail to export product and force vehicles on to LOS F routes, resulting in a significant (Class I) impact.	Same as Proposed Project cumulative and future listed above.	Unocal.	If trucks are used, the impact remains significant. If rail transport is heavily used, impact is reduced to nonsignificant.
Truck and Rail Use Only	The replacement of the Terminal with increased truck and rail use and force vehicles on to LOS F routes, resulting in a significant (Class I) impact.	Same as Proposed Project cumulative and future listed above.	Unocal.	If trucks are used, the impact remains significant. If rail transport is heavily used, impact is reduced to nonsignificant.
Reduced Level of Operation	Reduced operations would reduce truck, passenger vehicle, and rail transport, resulting in a beneficial (Class IV) impact.	No mitigation required.		Beneficial impact.
Refinery Shutdown	Both short- and long-term beneficial (Class IV) impacts because the level of traffic generated by the site would be reduced during demolition and curtailed afterward.	No mitigation required.		Beneficial impact.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
CONSOLIDATION ALTERNATIVE				
	Construction traffic would be forced on to LOS F routes, resulting in a short-term significant (Class II) impact.	Same as New Pipeline Construction listed above.	Unocal.	Impact of vehicles on LOS F routes is reduced to nonsignificant. If pipelines are to cross major roads, the impact is expected to remain significant through construction period.
	Operations traffic would be similar to current site-generated traffic levels.	No impact.	No mitigation required.	

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCES FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
AIR QUALITY				
PROPOSED PROJECT				
Continuation of Existing Operations The site currently generates air emissions from both direct and indirect sources. However, these are considered in the existing conditions for the local air basin.	The project would continue operations as they presently exist, and no additional emissions would be produced. Indirect emission reductions will result in a beneficial (Class IV) impact.	No mitigation required.		
Future Conditions Based on an import increase of 60% and export increase of 30% through the Terminal and 30% over land, additional air emissions would be produced from both direct and indirect sources.	PM_{10}, SO_x, NO_x, and POC will be increased by significant levels.	Mitigation focuses on the use of the best available control technology available at the time. BAAQMD will set limitations on allowable emissions levels. Offsets may be required.	Unocal working with BAAQMD.	Reduced to less than significant.
Cumulative Impacts All projects generate direct and indirect air emissions in the cumulative environment.	Only if Unocal augments its facility operation will it increase its contribution to the local air shed.	No mitigation required.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCES FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios	Construction efforts to remove pipelines and pumping equipment will result in a short-term Class III impact. A Class IV impact would result from elimination of direct and indirect emissions from the Terminal.	No mitigation required.		
Refinery Scenarios				
New Pipeline Construction	Construction equipment and vehicles will create a short-term significant (Class II) impact for NO_x. Fugitive dust will be raised, but will be controlled by standard watering techniques.	Keep all equipment in a proper state of tune per the manufacturer's recommendations. Equipment should incorporate an additional 4 degrees of ignition retard. Equipment should use "clean burning" low-sulfur diesel. Equipment should not be left idling for prolonged periods.	Unocal.	Reduced to nonsignificant.
New Pipeline Operation	Emissions would be less than those produced by the Marine Terminal, resulting in a beneficial (Class IV) impact.	No mitigation required.		Beneficial impact.
Truck and Rail Use Only	Beneficial (Class IV) impact is associated with the reduction in air emissions.	No mitigation required.		Beneficial impact.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCES FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Reduced Level of Operation	Reduced operations would reduce both direct and indirect source emissions, resulting in a beneficial (Class IV) impact.	No mitigation required.		Beneficial impact.
Refinery Shutdown	Curtailed operations would reduce both direct and indirect source emissions, resulting in a beneficial (Class IV) impact.	No mitigation required.		Beneficial impact.
CONSOLIDATION ALTERNATIVE				
Operation of the consolidated terminals would lead to the elimination of a terminal, reducing air emissions.	Construction could produce a short-term significant (Class II) impact or a nonsignificant (Class III) impact.	Same as New Pipeline Construction listed above.	Unocal.	Reduced to nonsignificant.
	Reduced or curtailed operations would reduce direct source emissions, resulting in a beneficial (Class IV) impact.	No mitigation required.		Beneficial impact.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
NOISE				
PROPOSED PROJECT				
Continuation of Existing Conditions				
Ambient noise levels range from 59.4 dBA on streets to 74.3 dBA at the Terminal.	The project would continue operations as they presently exist. No impacts would result.	No mitigation required.		
Cumulative and Future Uses				
Noise increases can be expected primarily from non-refinery related uses.	Unocal will not contribute significantly to cumulative or future noise increases.	No mitigation required.		
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios				
Truck and rail noise ranges as high as 83 dBA along I-80 and 6[illegible] dBA at grade rail crossings at 5[illegible] and 100 feet, respectively.	Construction efforts to remove pipelines and pumping equipment only, or in conjunction with pier removal, are expected to reach 89 dBA at 50 feet. Because sensitive receptors are out of range, no impacts will result.	No mitigation required.		
Refinery Scenarios				
New Pipeline Construction	Construction of a new pipeline could be significant near sensitive receptors. This would be a temporary, significant (Class II) impact. Truck and rail noise increases would be considered nonsignificant.	Pipeline construction should avoid sensitive areas; equipment should be kept in tune with operating mufflers. Hours of construction should be restricted. Stationary equipment should be located as far from receptors as feasible. Portable noise barriers may be necessary.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Truck and Rail Use Only	Use of truck and rail only with no pipeline would result in significant (Class II) noise impacts.	Mitigation includes trip reduction measures, maximize use of rail, limitation on trucking hours, keeping trucks in tune, and use of mufflers.	Unocal.	Reduced to nonsignificant.
Reduced Levels of Operation	Reduced operation would reduce truck and rail trips, resulting in a slight Class IV impact.	No mitigation required.		Beneficial impact.
Refinery Shutdown	Potential short-term, significant (Class II) construction impacts would result from Refinery dismantling.	No effective mitigation except limitation on construction hours and daily number of haul trips.	Unocal.	Reduced to nonsignificant.
	Long-term impacts would be less traffic and less noise, resulting in a slight Class IV impact.	No mitigation required.		Beneficial impact.
CONSOLIDATION ALTERNATIVE				
	New pipeline construction would be required between refineries, resulting in increased noise levels during the construction period; however, all temporary impacts would be nonsignificant due to distances to receptors.	No mitigation required.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
EARTH RESOURCES				
PROPOSED PROJECT				
Existing and Future Conditions				
Faulting and Seismic Ground Shaking				
There are no known active faults under the site.	No significant impacts will result from fault rupture.	No mitigation required.		
Several active faults are located with the Bay Area.	The Terminal and butane tank are designed to withstand major events; however, pipeline valving or bracings could fail, resulting in materials spill creating a significant (Class II) impact.	Routine inspection program and seismic retrofit where needed.	Unocal and SLC inspection.	Reduced to nonsignificant.
Secondary Effects				
Liquefaction:				
The Marine Terminal and wharf are supported by vertical and battered piles founded on dense sands and bedrock.	The potential impact to the wharf is considered to be adverse but nonsignificant (Class III).	No mitigation required.		
The area beneath the butane sphere is fill material with a high water table.	Pile foundation may result in susceptibility to potentially significant (Class II) impact.	Conduct soils/geotechnical engineering to determine adequacy of pile foundation and retrofit as needed.	Unocal.	Reduced to nonsignificant.
Differential Settlement Spreading and Lurching:				
Shoreline acreage consists of artificial fill and Bay mud adjacent to Terminal.	Potential for significant (Class II) impacts along the shoreline acreage.	Conduct surveys and inspection of shoreline areas after seismic events and refilling and use of riprap as required.	Unocal	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Tsunami:				
Tsunami potential considered low - a 200-foot wave at the Golden Gate would occur 1/200 years.	Wave height would attenuate from the Golden Gate to the Terminal to levels of nonsignificance.	No mitigation is required.		
Structural Conditions of Terminal				
Data interpolation shows that the Terminal's load bearing capacity is adequate for continued use at present loading conditions with a factor of safety of 1.5.	No impacts will result. If future vessels are larger, potentially significant (Class II) impacts would occur to pier's structural integrity.	Inspection and preventative maintenance; engineering and modification if larger displacement vessels are used.	Unocal, third party consultant, and SLC inspection.	Reduced to nonsignificant.
Corrosion of structural steel on piles and beams.	If left to deteriorate, could result in significant structural (Class II) impacts.	Conduct structural and system safety audit as per SLC Marine Terminal Audit Program, repair deficiencies, and use of avoidance monitors for approaching vessels.	Unocal, third party consultant, and SLC inspection.	Reduced to nonsignificant.
Structural Condition of Butane Sphere				
Data interpolation shows concrete piles capable of supporting the 30-ton design load with the factor safety of 2.	No impacts are foreseen with present continued use of the sphere. If used for heavier materials, further evaluations should be conducted to avoid significant (Class II) impacts.	Inspection and engineering to be conducted to determine viability for storage of other materials.	Unocal with SLC concurrence of structural analysis review.	Reduced to nonsignificant.
Cumulative Conditions				
The San Francisco Bay Area is an area of high seismic activity.	Extensive damage in the Bay Area could result from large earthquakes resulting in a significant (Class I) impact. The Unocal Marine Terminal would contribute nonsignificantly to overall damage.	Inspection of structures, seismic retrofitting, and proper design of new structures to safeguard against damage to the maximum extent feasible.	All facilities.	Potential for damage remains significant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios	If pier is dismantled in part or completely, there would be no structures to be damaged, and no spills that would occur (Class IV impact).	No mitigation required.		
Refinery Scenarios				
New Pipeline Construction	Additional pipeline for oil import could result in an increased risk for rupture and spills on land resources. However, as long as these are properly designed to withstand a maximum credible earthquake, no significant impacts should result (Class III). Significant (Class I) impacts could occur from corrosion of aged pipelines and/or vandalism.	Pipelines are to be constructed in accordance with all seismic engineering considerations and checked throughout the life of the pipeline.	Unocal.	Reduced to nonsignificant.
Reduced Operation/Shutdown	With no new lease, there could be a reduction in Refinery operation or closure. With no facility to damage, impact risk would reduce to a beneficial (Class IV) impact.	No mitigation required.		
CONSOLIDATION ALTERNATIVE				
	Pacific Refining would abandon and dismantle Terminal. No additional significant impacts would result. Impacts are as described for the Proposed Project.	See Proposed Project above.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
AESTHETICS				
PROPOSED PROJECT				
Existing and Future Conditions				
Continuation of the Terminal operations will not result in any changes to the existing visual environment.	No impacts will occur from normal operations. Visual impacts from oil spills could range from a slight surface sheen to heavy lumps of floating tar, resulting in significant (Class I and II) impacts.	No additional measures available other than adherence to contingency planning and response procedures to minimize spread of spills.	Unocal/Clean Bay.	Remains significant until natural dissipation occurs.
Cumulative Conditions				
	If several spill events occurred in the Bay simultaneously, significant (Class I and II) visual impacts would result.	No additional measures available other than adherence to contingency planning and response procedures to minimize spread of spills.	Responsible facilities/Clean Bay.	Remains significant until natural dissipation occurs.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios				
	As long as the pier is maintained, no impacts would result from abandonment. If the pier is removed, slight beneficial (Class IV) visual impacts would result.	No mitigation required.		
Refinery Scenarios				
New Pipeline Construction	Temporary significant (Class II) visual impacts could result from new pipeline construction from grading, trenching, landform alteration, and vegetation scarring.	Repaving, revegetation, returning contouring to existing conditions.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Refinery would operate at reduced levels or shut down	An adverse, but nonsignificant (Class III) impact would result from truck traffic increases. No significant changes would occur to the visual environment from reduced operations. If the Refinery was removed entirely, a beneficial visual (Class IV) impact would result.	No mitigation required. No mitigation required.		Beneficial impact.
CONSOLIDATION ALTERNATIVE				
Consolidation between the Unocal and Pacific Refining Terminals to the Unocal Terminal would result in the dismantling of the Pacific Pier.	Elimination of the Pacific Pier would result in a slight beneficial (Class IV) visual impact.	No mitigation required.		Beneficial impact.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
LAND USE/RECREATION				
PROPOSED PROJECT				
Existing and Future Conditions				
The continuation of Terminal operations will not require any physical land use modification or changes to the recreational environment.	No changes in existing land uses or recreational resources will occur from the Proposed Project. No impacts will result.	No mitigation required.		
	The Unocal facility precludes proposed shoreline recreational trail access development resulting in a significant (Class II) policy impact.	Unocal should work with the SLC, County, and EBRPD to develop a feasible plan for trail alignment around the Refinery.	Unocal with SLC oversight.	Reduced to nonsignificant.
	During accident conditions, there is a potential for significant (Class I and II) impacts to the shoreline affecting onshore land uses and recreation. There would also be a significant (Class I and II) impact for Bay and offshore recreation.	No effective mitigation is available other than adherence to contingency planning and spill response procedures.	Unocal/Clean Bay.	Impacts may remain potentially significant until natural dispersion occurs and/or cleanup is complete.
Cumulative Conditions				
	Cumulatively, multiple spills or accidents would significantly affect land use and recreational resources, creating significant (Class I and II) impacts.	All terminals should have contingency planning and spill response procedures. Interaction between involved agencies and terminals to provide for Bay-wide spill response.	All marine terminals, Clean Bay, and other responsible cleanup parties.	Impacts may remain potentially significant until natural dispersion occurs and/or until cleanup is complete.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios				
	Abandonment in place or pier removal would not result in any land use or recreation impacts. Pier removal would open a small area to offshore fishing and other uses.	No mitigation is required.		
	The Unocal facility precludes shoreline recreational trail access development, resulting in a significant (Class II) impact.	Unocal should work with the SLC, County, and EBRPD to develop a feasible plan for trail alignment around the Refinery.	Unocal.	Reduced to nonsignificant.
Refinery Scenarios				
New Pipeline Construction	Construction of a new pipeline would result in temporary (Class III) impacts to land use along its route due to disturbance. No conflicts with zoning or land use policies are anticipated.	No mitigation is required.		
	The Unocal facility precludes shoreline recreational trail access development, resulting in a significant (Class II) impact.	Unocal should work with the SLC, County, and EBRPD to develop a feasible plan for trail alignment around the Refinery.	Unocal.	Reduced to nonsignificant.
Reduced Levels of Operation	No changes would occur to land use, and no impacts would result.	No mitigation is required.		
	The Unocal facility precludes shoreline recreational trail access development, resulting in a significant (Class II) impact.	Unocal should work with the SLC, County, and EBRPD to develop a feasible plan for trail alignment around the Refinery.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Refinery Shutdown	Complete remediation of the site would be required to allow for other uses if the facility is dismantled. No land use impacts are expected if this site was to be used for other uses compatible with site zoning.	No mitigation required.		
	The Unocal facility precludes shoreline recreational trail access development, resulting in a significant (Class II) impact.	Unocal should work with the SLC, County, and EBRPD to develop a feasible plan for trail alignment around the Refinery.	Unocal.	Reduced to nonsignificant.
CONSOLIDATION ALTERNATIVE				
	No impacts would result from consolidation. No land use or recreation resources would be involved.	No mitigation required.		
	The Unocal facility precludes recreational trail access development resulting in a significant (Class II) impact.	Unocal should dedicate a right-of-way and improvements along San Pablo Avenue.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
CULTURAL RESOURCES				
PROPOSED PROJECT				
Continuation of Existing Operations and Future Conditions	No impacts would result to cultural resources from continued operation of the Marine Terminal.	No mitigation required.		
Cumulative Conditions Cumulative uses in the area have the potential for increases in disturbances to prehistoric and historic resources.	There is the potential for significant (Class I and II) impacts to the area's cultural resources.	Mitigation should be developed on a project-specific basis. Cultural resource specialists would possibly be required to be onsite during excavations. If resources are uncovered, appropriate mitigation would be applied.	Project developers.	Reduced to nonsignificant.
NO PROJECT ALTERNATIVE				
Abandonment/Pier Scenarios	If the Marine Terminal is dismantled, there is a potential that previously unrecorded cultural resources could be disturbed, resulting in a significant (Class II) impact. No impacts are expected to historic resources.	An archaeological monitor would be required to be present during removal when earth resources are involved. If resources are uncovered, appropriate mitigation would be applied.	Unocal.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Refinery Scenarios				
New Pipeline Construction	New pipeline construction has the potential to impact prehistoric and historic resources resulting in significant (Class II) impacts.	Mitigation would include avoidance during route planning. Also an archaeological monitor would be required to be present during removal when earth resources are involved. If resources are uncovered, appropriate mitigation would be applied.	Unocal.	Reduced to nonsignificant.
Reduction in Operation or Refinery Shutdown	There is a potential that previously unrecorded cultural resources could be disturbed, resulting in a significant (Class II) impact.	An archaeological monitor would be required to be present during removal when earth resources are involved. If resources are uncovered, appropriate mitigation would be applied.	Unocal.	Reduced to nonsignificant.
CONSOLIDATION ALTERNATIVE				
	No impacts are expected from removal of subsea pipelines between the Pacific Terminal and Refinery.	No mitigation required.		
	Construction of new pipelines between Refineries has the potential to disturb previously unrecorded sites, resulting in a significant (Class II) impact.	An archaeological monitor would be required to be present during removal when earth resources are involved. If resources are uncovered, appropriate mitigation would be applied.	Unocal/Pacific Refining.	Reduced to nonsignificant.

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
ENERGY				
PROPOSED PROJECT				
Continuation of Existing Conditions				
New lease will result in maintenance of existing crude oil deliveries, refining capacity, and product shipment.	No impacts will result.	No mitigation required.		
Future Conditions				
Overall refining capacity to remain constant and may decline. Crude oil tankering to increase.	No impacts will result.	No mitigation required.		
Cumulative Conditions				
Overall oil deliveries and refining to remain relatively constant with a low, but steady growth demand.	No impacts will result.	No mitigation required.		
NO PROJECT ALTERNATIVE				
Refinery Scenarios				
Reduced Refinery Operation:				
Reduction in refining capacity at Terminal.	An adverse, but nonsignificant (Class III) impact is associated with product shipment.	No mitigation required.		
Obtain Crude/Shipment of Product from Other Sources:				
Sharing of marine terminals/ pipelines with other facilities.	An adverse, but nonsignificant (Class III) impact will result.	No mitigation required.		

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UNOCAL MARINE TERMINAL EIR
IMPACT AND MITIGATION SUMMARY BY RESOURCE FOR PROPOSED PROJECT AND ALTERNATIVES

Existing Conditions	Issues and Impacts	Mitigation	Responsible for Mitigation	Residual Impact
Shutdown of Refinery: Loss of about 9 percent of refining capacity in Bay area.	A significant (Class II) impact will result due to shortfall in refining capacity.	May require importation of refined products.	Unocal.	Reduced to nonsignificant.
CONSOLIDATION ALTERNATIVE				
	No impact to overall energy supply.	No mitigation required.		

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