

**MINUTE ITEM**  
This Calendar Item No. 29  
was approved as Minute Item  
No. 29 by the State Lands  
Commission by a vote of 3  
to 0 at its 3/26/87  
meeting.

**CALENDAR ITEM**  
**29**

A 11, 16  
S 7, 3

03/26/87  
W 23772 PRC 7062  
Lane

**APPROVAL OF A GENERAL LEASE - RIGHT-OF-WAY USE**

**APPLICANT:** Chevron U.S.A., Inc.  
Richmond Refinery  
P. O. Box 1272  
Richmond, California 94802

**AREA, TYPE LAND AND LOCATION:**  
A 1.652-acre parcel of tid and submerged land,  
located in San Pablo Bay near Point San Pablo,  
Richmond, Contra Costa County.

**LAND USE:** Construction and use of a Deep Water Outfall.  
Dredge a maximum of 80,000 cubic yards of  
minerals other than oil, gas and geothermal and  
dispose at Alcatraz Disposal Site.

**TERMS OF PROPOSED LEASE:**  
Initial period: 25 years beginning April 1,  
1987.  
Surety bond: \$10,000.  
Public liability insurance: Combined single  
limit coverage of \$500,000.

**CONSIDERATION:** \$2,970 per annum; with the State reserving the  
right to fix a different rental on each  
fifth anniversary of the lease.

**Royalty:** No royalty shall be charged  
for material placed at the  
approved offshore disposal  
site.

(PAGES 115-115.14)  
(ADDED 03/24/87)

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A royalty of \$0.25 per cubic yard shall be paid for any material used for any private or commercial benefit.

**BASIS FOR CONSIDERATION:**

Pursuant to 2 Cal. Adm. Code 2003.

**APPLICANT STATUS:**

Applicant is owner of upland.

**PREREQUISITE CONDITIONS, FEES AND EXPENSES:**

Filing fee has been received.

**STATUTORY AND OTHER REFERENCES:**

- A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13.
- B. Cal. Adm. Code: Title 2, Div. 3; Title 14, Div. 6.

AB 884:

09/15/87.

**OTHER PERTINENT INFORMATION:**

1. The proposed project consists of construction of a deep water outfall for discharging Chevron's Richmond Refinery's treated process wastewater. The outfall will replace the existing outfall discharging wastewater into Castro Cove and is required to bring the Refinery's effluent discharge into compliance with the Regional Water Quality Control Board's Basin Plan which prohibits the discharge of waste water that does not constitute an initial dilution of 10:1. The pipeline is to be installed two feet below the Bay bottom and the diffusers will extend two feet vertically into the Bay Waters.

Terms in the proposed lease require the applicant to build the outfall foundations and facilities earthquake resistant and develop an emergency resource plan to minimize damage should such an event occur. The plan shall be submitted and approved by the Executive Officer.

(ADDED 03/24/87)

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2. This activity involves lands identified as possessing significant environmental values pursuant to P.R.C. 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.
3. An EIR was prepared and adopted for this project by City of Richmond. The State Lands Commission's staff has reviewed such document and believe that it complies with the requirements of the CEQA.

Staff has identified the following significant environmental effects which involve the part of the project that the Commission will be considering for approval. Exhibit "D" contains a discussion of changes, alterations, or permit conditions which should be required in or incorporated into the proposed project. In addition, a statement follows each mitigation measure explaining why or how such measure will accomplish its intended goal:

Impact 1. The project will continue to discharge the same amount of toxic components in the wastewater effluent as is currently being discharged.

Mitigation 1. A phased Toxic Reduction Evaluation (TRE) will be performed under the guidance of the Regional Water Quality Control Board (RWQCB), including monitoring, characterization of effluent, bioassay and toxicity testing and control of metals at their source. This mitigation is part of the RWQCB permit for this project.

Impact 2. The cumulative effects of the Chevron discharge will continue to have an adverse effect on sensitive fish species in the San Pablo and San Francisco Bay system.

Mitigation 2. Implementation of TRE by the RWQCB.

Impact 3. Sediments in the deep water channel downstream from the outfall will become slightly more toxic.

Mitigation 3. Implementation of TRE by the RWQCB.

Impact 4. Striped bass and salmonids may be attracted to the Chevron effluent and may experience some chronic effects that can lead to premature death.

Mitigation 4. Implementation of TRE by the RWQCB.

Impact 5. The outfall would be located on soils that are susceptible to failure during earthquakes, and it is possible that the pipeline could rupture, causing effluent to be discharged into the Bay at concentrations greater than those planned for the end of the diffuser system.

Mitigation 5. The State Lands Commission should require all foundations and facilities for the project to be designed to resist the effects of an earthquake resulting in a peak ground acceleration of .30 g at the site. During geotechnical investigations induced liquefaction or settlement should be identified. All incompetent materials should be removed and replaced along the alignment where appropriate, and pilings should be used to support structures in questionable areas. Finally, an emergency diversion plan should be prepared as described in the EIR.

APPROVALS OBTAINED:

Department of Fish and Game, Regional Water Quality Control Board, and City of Richmond.

(ADDED 03/24/07)

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**FURTHER APPROVALS REQUIRED:**

Bay Area Conservation and Development  
Commission, and United States Army Corps of  
Engineers.

**EXHIBITS:**

- A. Land Description.
- B. Location Map.
- C. Notice of Determination.
- D. EIR Executive Summary.
- E. CEQA Findings.

**IT IS RECOMMENDED THAT THE COMMISSION:**

1. FIND THAT AN EIR WAS PREPARED AND ADOPTED FOR THIS PROJECT BY THE CITY OF RICHMOND AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
2. ADOPT THE FINDINGS IN CONNECTION WITH THE PROJECT HERETO ATTACHED AS EXHIBIT "E" IN COMPLIANCE WITH THE CEQA (P.R.C. SECTION 21000 ET SEQ.) AND THE STATE EIR GUIDELINES;
3. DETERMINE THAT THE PROJECT, AS APPROVED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT;
4. FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED FOR THE LAND PURSUANT TO P.R.C. 6370, ET SEQ.
5. AUTHORIZE THE EXECUTIVE OFFICER TO APPROVE, PRIOR TO THE OPERATION OF THE PROPOSED FACILITY, AN EMERGENCY RESPONSE PLAN.
6. AUTHORIZE ISSUANCE TO CHEVRON U.S.A., INC. OF A 25-YEAR GENERAL LEASE - RIGHT-OF-WAY USE BEGINNING APRIL 1, 1987; IN CONSIDERATION OF ANNUAL RENT IN THE AMOUNT OF \$2,970, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENTAL ON EACH FIFTH ANNIVERSARY OF THE LEASE; PROVISION OF A \$10,000 SURETY BOND; PROVISION OF PUBLIC LIABILITY INSURANCE FOR COMBINED SINGLE LIMIT COVERAGE OF \$500,000; FOR CONSTRUCTION AND USE OF A DEEP WATER OUTFALL; DREDGE A MAXIMUM VOLUME OF 80,000 CUBIC YARDS OF MATERIAL (TO BE DISPOSED AT ALCATRAZ DISPOSAL SITE) ON THE LAND DESCRIBED ON EXHIBIT "A" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

(ADDED 03/24/87)

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EXHIBIT "A"

LAND DESCRIPTION

W 23772 .

A strip of tide and submerged land 23 feet wide in Section 4, T1N, R5W, MDM, and in Sections 32 and 33, T2N, R5W, MDM, Contra Costa County, California, the center line of said strip being described as follows:

BEGINNING on the northern line of Tide Lot 4, in said Section 4 as said Lot is designated on Sheet 2 of the Record Survey filed February 13, 1985, Book 76, L.S.M., pages 29 and 30, Contra Costa County Records, distant thereon S 86°49'30" E 631.42 feet from the northwestern corner thereof; thence northwesterly along the arc of a circle to the left, having a radius of 3,000.00 feet, the center of which bears S 56°23'32" W, through a central angle of 40°46'58", an arc distance of 2,135.38 feet; thence tangent to said circle, N 74°23'26" W, 2,523.62 feet.

The sidelines of said strip of land to be lengthened or shortened so as to terminate at the southeast in said northern line of Tide Lot 4, and at the northwest in a line that bears N 15°36'34" E.

EXCEPTING THEREFROM any portion thereof lying within the lands granted to the City of Richmond pursuant to Chapter 379, Statutes of 1935.

END OF DESCRIPTION

PREPARED OCTOBER 29, 1986 BY BOUNDARY SERVICES UNIT, M. L. SHAFER SUPERVISOR.

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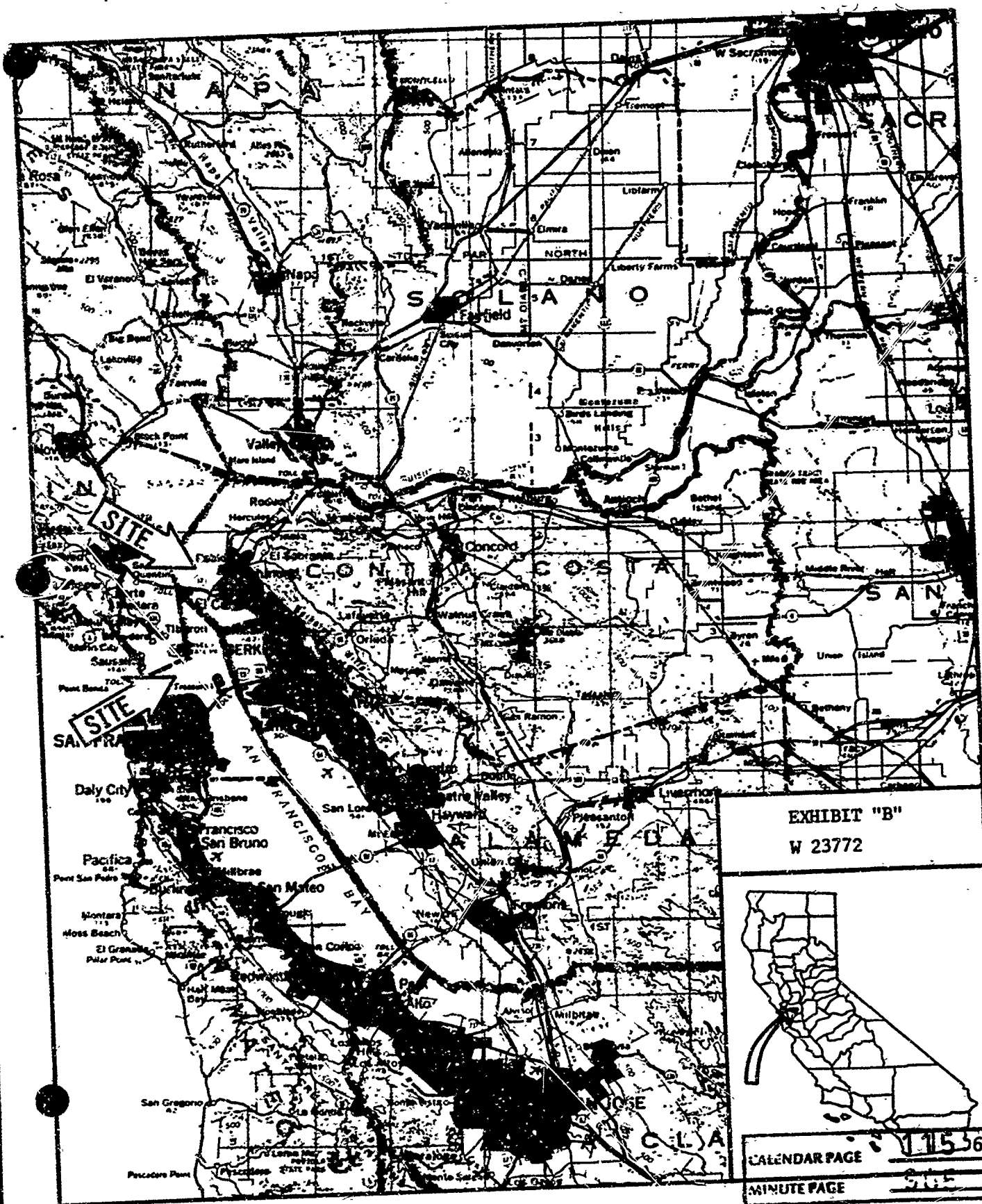


EXHIBIT "B"  
W 23772



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Date: March 20, 1967

EXHIBIT "C"

NOTICE OF DETERMINATION

TO: (X) Office of Planning Research  
1400 Tenth Street, Room 121  
Sacramento, California 95814

FROM: Planning Department  
City of Richmond  
City Hall, Civic Center  
2600 Barrett Avenue  
Richmond, California 94804

( ) County Clerk  
County of Contra Costa  
Administration Building  
Martinez, California 94553

PROJECT TITLE CHEVRON RICHMOND REFINERY DEEP WATER OUTFALL PROJECT

STATE CLEARINGHOUSE NUMBER (IF SUBMITTED) 85121005

CONTACT PERSON Nancy Kaufman (415) 620-6706

PROJECT LOCATION 841 Standard Avenue, Chevron Refinery. The pipeline would be situated above, and in certain locations below the ground along the northeastern shoreline of San Pablo Ridge peninsula bordering the westerly side of Castro Cove. It would enter San Pablo Bay at the Chevron Yacht Harbor. The 7,200+ offshore section would follow a north-northwesterly arc terminating about 1,800' north of Point San Pablo, Richmond, Contra Costa County.

PROJECT DESCRIPTION Proposal is to construct and operate a deep water outfall in San Pablo Bay for the discharge of treated process wastewater from Chevron's Richmond Refinery.

This is to advise that the City of Richmond (Lead Agency or Responsible Agency)

has approved the above described project and has made the following determination regarding the above described project:

1. The project X will, \_\_\_ will not, have a significant effect on the environment.

2. X An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.

\_\_\_ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.

The EIR or Negative Declaration and record of project approval may be examined at the Richmond Planning Department, City Hall, Civic Center, 2600 Barrett Avenue, Richmond, CA 94804.

3. Mitigation measures X were, \_\_\_ were not, made a condition of the approval of the project.

4. A Statement of Overriding Considerations X was, \_\_\_ was not, adopted for this project.

Date Received for Filing \_\_\_\_\_

*C. E. Hoffman*  
Signature

Planning Director  
Title  
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## CEQA FINDINGS

These findings are made by the State Lands Commission pursuant to Section 15091, Title 14, California Administrative Code, on the proposed deep water outfall EIR for the Chevron refinery at Richmond, California. All significant impacts of the project identified in the EIR are listed and discussed.

For each significant impact, one of the following findings have been made as appropriate:

- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
- 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- 3) Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR.

IMPACT: The project will continue to discharge the same amount of toxic components in the wastewater effluent as is currently being discharged.

- FINDINGS:
- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency, specifically the Regional Quality Control Board, and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

FACTS SUPPORTING THE FINDING:

Although the construction of a deepwater outfall with a diffuser system will improve the water quality within Castro Cove, where the effluent is currently discharged, it will not decrease the total amount of toxic components being discharged into San Pablo and San Francisco Bays.

The EIR recommends a four phased mitigation program for adoption. First, a dye dispersion study should be conducted to determine actual dilution and dispersion of the effluent plume after construction is complete (p. IV-155). Second, a three-year monitoring program should be set up by the applicant to examine the sediments affected by the discharge (p. IV-155). Third, the sediments within Castro Cove should be monitored for three years to determine the rate of recovery after the discharge has been removed (p. IV-155). And lastly, a phased Toxics Reduction Evaluation (TRE) should be performed under the guidance of the Regional Water Quality Control Board (p. IV-156).

(Page numbers refer to location of information in the EIR.)

All four of these mitigations have been incorporated into the discharge permit issued by the RWQCB, and will be implemented by the project applicant.

The combination of these four mitigations outlined above constitute reasonable and prudent efforts to reduce the amount of toxic material released into San Pablo and San Francisco Bays. Because of the time needed to characterize both the toxic components within the effluent and methods to control them the actual reducing of toxics will only take place over the next three years.

**IMPACT:** The cumulative effect of the Chevron discharge, when added to other manmade toxic sources found in San Pablo and San Francisco Bays, will continue to have an adverse effect on specific sensitive fish species in the Bay.

- FINDINGS:**
- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency, specifically the Regional Quality Control Board, and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

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FACTS SUPPORTING THE FINDING:

As discussed above, there will be no immediate reduction in the toxic materials released in to the San Pablo and San Francisco Bay system. There will be immediate cessation of toxic releases to Castro Cove, and a long-term reduction in toxic releases as the proposed mitigations are implemented.

The EIR evaluated the current state of the San Pablo and San Francisco Bay waters receiving the Chevron refinery effluent, and found that they contain high levels of copper and zinc. They were also used as diluent water during on-site bioassay studies which had very high control mortalities. These factors indicate that excessive metals and possibly other pollutants currently exist in ambient bay water. The major source for this pollution is the cumulative effect of point source discharges.

As with the first impact, the long-term reduction in toxic levels with the Bay depends on implementation of TRE's. Such a plan will be mandated by the RWQCB as a mitigation for this project.

IMPACT: Sediments in the deepwater channel downstream from the outfall will become slightly more toxic.

- FINDINGS:
- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency, specifically the Regional Quality Control Board, and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

FACTS SUPPORTING THE FINDING:

Until such time as the proposed mitigations become effective, the discharged effluent will continue to contain toxic materials, although the installation of a diffuser system will dilute them to a much greater degree than in the present case. These materials will settle down into the downstream sediments over time, building up toxicity to some extent.

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The TRE proposed as a mitigation and incorporated into the permit issued by the RWQCB is the only way to significantly reduce the toxicity of the Chevron effluent. As described in the EIR, this includes complete characterization of the effluent, bioassay analysis to determine specifically which components of the effluent have toxic effects, and treatment plans to remove those elements identified as toxic. As those plans are implemented, the toxicity of the effluent will decrease and the accumulation of the toxics in the downstream sediments will cease.

IMPACT: Striped bass and salmonids may be attracted to the Chevron effluent and may experience some chronic effects that can lead to premature death.

- FINDINGS:
- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency, specifically the Regional Quality Control Board, and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

FACTS SUPPORTING THE FINDING:

In testing done for this EIR, migratory fish such as striped bass and salmonids indicated a behavioral preference for the effluent in concentrations as dilute as 500:1. Some chronic toxic effects were also found for these species at very low concentrations.

Exposure of fish species in areas of high current velocities at the chosen location is not expected to be high. Pelagic fish studied in this EIR preferred the upper portion of the water column, swimming at depths of less than 30 feet, while the highest plane concentrations from the outfall are predicted at depths greater than 40 feet. In addition, the total area of highest concentration is predicted to be relatively small. However, the preference of these fish for the effluent will draw some of them into concentrations where they could suffer toxic effects.

Moving the outfall out of Castro Cove will not reduce the toxicity or the attractiveness of the effluent. It will, however, greatly reduce the exposure time that most fish will receive. Currently the fish are attracted into the Cove, where there is little circulation, and where the toxic materials have accumulated. The fish, caught in an area of stagnant flow, suffer severe toxic effects. In the new location, high current flows will rapidly disperse the effluent, reducing both its attractiveness and toxicity.

The ultimate solution of this problem requires the completion of the further studies proposed as a TRE. Under the review of the RWQCB, the effluent will more fully be characterized and the attractor and toxic elements removed from it. This TRE will be added as a permit condition by the RWQCB.

IMPACT: The outfall will be located on soils that are susceptible to failure during earthquakes, and it is possible that the pipeline could rupture, causing effluent to be discharged into the Bay at concentrations greater than those proposed at the end of the diffuser system.

- FINDINGS:
- 1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
  - 2) Some changes or alterations are within the responsibility and jurisdiction of another public agency, specifically the Regional Quality Control Board, and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

FACTS SUPPORTING THE FINDING:

Ground shaking resulting from a major earthquake could damage project facilities. It has been calculated that an earthquake recurring at an 85-year interval and with a peak ground acceleration of .20 g would not cause failure of the lagoon dike; however, it is possible that higher peak ground accelerations could occur at the site, which might result in dike failure and possible damage or rupture to the pipeline.

The offshore pipeline could be significantly damaged by earthquake-induced settlement or liquefaction of subsurface sand layers and the resultant lurching or sliding of overlying material. These lenses or layers of sand may be thin or discontinuous and are sometimes difficult to identify, particularly in submarine borings. Such an event could cause structural damage to or rupture of the pipeline. In the event that rupture occurs anywhere along the pipeline, the wastewater would be discharged into the No. 2 oxidation pond and either stored in the pond until the pipeline is repaired or, when the effluent volume is too great, directed into the 250-foot channel and discharged into Castro Cove at the current discharge location. The effluent that would leak from the ruptured pipeline would cause water quality and aquatic damage similar to that now existing in Castro Cove.

The EIR proposes three mitigations which are included as proposed SLC lease conditions:

1. All foundations and facilities would be designed to resist the effects of an earthquake having a 200-year recurrence interval, estimated to result in a peak ground acceleration of between .25 g and .30 g at the site. This is compatible with standard engineering practice for similar industrial facilities and would minimize the potential for damage to the pipeline.
2. During geotechnical investigations for final design, all areas susceptible to earthquake-induced liquefaction or settlement would be identified. All incompetent materials would be removed and replaced along the alignment where appropriate and pilings would be used to support structures in questionable areas.
3. An emergency diversion plan would be designed to respond to any emergency situations, including the following:
  - pipe failure or breakage
  - pump failure
  - power outage
  - major system failure due to earthquakes or tsunamis.

In the plan, specific procedures for each failure would be clearly presented for implementation by operating personnel. Operating personnel would be trained in these emergency procedures and periodic drills conducted. Such plan shall be submitted to and approved by the SLC prior to the operation of the new facility.

In addition, the TRE proposed as a mitigation and included in the permit to be issued by the RWQCB will reduce the damage caused by a potential break in the pipeline or holding pond dikes.

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