

MINUTE ITEM

This Calendar Item No. C01 was approved as Minute Item No. 01 by the California State Lands Commission by a vote of 2 to 0 at its 11-13-03 meeting.

Minute Item  
C01

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11/13/03  
W 25815  
PRC 5439.1  
L. Burks  
J. Brown

SFPP, L.P., A DELAWARE LIMITED PARTNERSHIP  
(APPLICANT)

**Calendar Item C01:** Staff made a presentation to the Commission regarding improvement of a 14-inch pipeline and an addition of a new 20-inch pipeline in Contra Costa, Solano and Yolo counties. Commissioners also listened to concerns from the public.

The item was approved unanimously with the amendment that Clark Pacific and Kinder Morgan work together, and that Kinder Morgan makes every good-faith effort to accommodate Clark Pacific's construction schedule and compensation issues, as well as construction-timing issues.

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**CALENDAR ITEM  
C01**

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PRC 5439.1  
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**AMENDMENT TO MASTER LEASE NO. PRC 5439.1  
AND ISSUANCE OF A NEW  
GENERAL LEASE - RIGHT OF WAY USE**

**APPLICANT:**

Santa Fe Pacific Partners, L.P. (SFPP)  
Operating Partners to Kinder Morgan Energy  
Partners, L.P.  
1100 Town and Country Road  
Orange, California 92868

**AREA, LAND TYPE, AND LOCATION:**

**Master Lease:**

Various rivers, sloughs and creeks, as well as San Francisco Bay and the Carquinez Strait, throughout the State.

**Amendment:**

Delete from Master Lease No. PRC 5439.1, 0.85 acres, more or less, of tide and submerged lands in Walnut and Pacheco creeks and in the Carquinez Strait, Contra Costa and Solano Counties.

**New Lease:**

0.98 acres, more or less, of tide and submerged lands in Walnut, Grayson and Pacheco creeks, Cordelia Slough and the Carquinez Strait, between Concord and West Sacramento, Contra Costa, Solano, and Yolo Counties.

**AUTHORIZED USE:**

**New Lease:**

1. Proposed construction and operation of a new 20-inch petroleum products pipeline extending from the existing SFPP Concord Station in Contra Costa County to the existing SFPP Sacramento station in the city of West Sacramento, Yolo County.

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2. Continued use and maintenance of an existing 14-inch refined petroleum products pipeline known as Line Section 25 (PRC 3811.1 and PRC 4086.1).

**LEASE TERM:**

**Master Lease:**

20 years, beginning January 1, 1978, with two ten-year renewal options. A new Master Lease is currently being negotiated. The existing Master Lease is in holdover.

**New Lease:**

25 years, beginning October 20, 2003.

**CONSIDERATION:**

**New Lease:**

\$9,475 per year; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease.

**PROPOSED AMENDMENT OF EXISTING MASTER LEASE PRC 5439.1:**

Deletion of an existing 14-inch refined petroleum products pipeline known as Line Section 25. After construction of the new 20-inch pipeline is complete, with the exception of the portion across the Carquinez Strait, the existing 14-inch line will be taken out of service. This procedure is estimated to be completed within 60 days after construction of the new 20-inch pipeline. Because of these events, the existing 14-inch pipeline is being deleted from the Master Lease and incorporated into the new pipeline lease.

**SPECIFIC LEASE PROVISIONS:**

Insurance: Lessee shall maintain limits of no less than:

1. General Liability: \$25,000,000
2. Workers' Compensation: Statutory requirements of the State of California.
3. Environmental Impairment and Pollution Liability: \$10,000,000

Bonds:

1. Lease Performance Bond: \$500,000
2. Mitigation Monitoring Performance Bond: \$500,000
3. Restoration Performance Bond: \$125,000
4. Construction Performance Bond: In an amount equal to the construction cost of the new pipeline.

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**OTHER PERTINENT INFORMATION:**

1. Applicant has a right to use the uplands adjoining the lease premises.
2. The purpose of the new pipeline is to meet projected demand for petroleum products (including fuel for military installations) in the Sacramento, Roseville, Chico and Reno areas by replacing most of SFPP's existing 36-year old, 14-inch pipeline between Concord and Sacramento. The existing pipeline is approximately 60 miles long and is located primarily within Union Pacific Railroad (UPRR) right of way. Upon completion of the proposed project, most of the existing pipeline would be taken out of service from further use in petroleum product service by SFPP. The current capacity of the existing system is 152,000 barrels per day (BPD) with a current peak demand of 137,000 BPD. With a forecasted annual increase in demand of 2.5%, the existing capacity would be reached in 2006. To respond to this demand, the proposed new pipeline would carry gasoline, diesel fuel and jet fuel, and would have a capacity of 200,000 BPD. The new 20-inch pipeline would be designed to operate at a maximum pressure of 1,440 psi. However, approximately 6,000 feet of the existing 14-inch line would continue to be used for the crossing of the Carquinez Strait until such time that a new 20-inch pipe can be installed using a single horizontal directional drill (HDD). The 20-inch pipeline with 6,000 feet of 14-inch pipe beneath the Carquinez Strait would operate at a maximum of 1,350 psi.
3. SFPP proposes to install a 20-inch diameter high pressure pipeline under Walnut, Grayson and Pacheco creeks, and Cordelia Slough, Contra Costa, Solano and Yolo counties, from the existing SFPP Concord Station in Contra Costa County to the existing SFPP Sacramento Station in the city of West Sacramento in Yolo County. The total project length is 68.4 miles. The pipeline across Walnut, Grayson creeks and Cordelia Slough will be installed by HDD method. The pipeline across Pacheco Creek will be installed by open cut trenching. The total length of the pipeline which will be installed by the HDD method is approximately 2,000 feet and approximately 800 feet by open cut trenching. In addition to the proposed 20-inch pipeline between Concord and West Sacramento, SFPP proposes to construct a new 12-inch diameter pipeline branch (approximately 0.8 miles long) to service Wickland Oil Company to supply fuel to the Sacramento International Airport. This pipeline would connect to Wickland's 12-inch pipeline via its metering station at a location north of West Capitol Avenue in West Sacramento.

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The routing of the Proposed Project right-of-way, as submitted in the CSLC's application, and alternatives thereto (both right-of-way and segmental) were analyzed in the environmental documentation prepared by the Commission. Staff has been working with SFPP, based on the environmental analysis and comments thereto, on several route alignment modifications. For example, Segment 1 of the Proposed Project would pass through a portion of the Rhodia property near Martinez that is within an area that needs to be remediated pursuant to an order by the S.F. Regional Water Quality Control Board. This potential conflict would be avoided if the pipeline's routing were changed to the right-of-way of the existing 14" pipeline in Segment 1. Staff is advised, by letter dated October 10, 2003, that the applicant commits to incorporate this change, as well as other minor modifications, in a revised Project right-of-way. Although none of the proposed modifications is within the jurisdiction of the Commission and not within the proposed lease, each was discussed in the EIR prepared by the Commission. Therefore, the Proposed Project's modified right-of-way may be considered by all responsible and trustee agencies.

4. When the Concord to Sacramento pipeline project was originally proposed it required installation of a new 20-inch diameter pipeline beneath the Carquinez Strait using a single 6,800-foot HDD. After SFPP's research and consultation with five HDD contractors, SFPP determined that the drill may be feasible now; however, the contractors identified several risks associated with an HDD of this length. In addition, a 6,800-foot HDD and corresponding pull of 20-inch diameter pipe has never before been completed. To minimize the risk associated with the worst-case scenario of not being able to complete the HDD in a single drill, SFPP considered a combination HDD and open-cut construction method with approximately 1,000 to 1,500 feet of open-cut construction in the water on the north side of the Strait. Although this method is feasible, it would add considerable complexity to construction, add expense to the project, result in restrictive limitations on the construction window, and result in additional environmental impacts within the Strait and the marsh on the south side of the Strait.

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As a result, SFPP has proposed a two-phase approach to the Carquinez Strait crossing. SFPP plans to modify this pipeline project in the future to include a new 20-inch pipeline that would be installed by HDD across the Carquinez Strait when and if an HDD bore of 20 inches over 6,800 feet long becomes feasible. A separate CEQA document will be completed to address impacts of the crossing at the time it is proposed and detailed engineering plans are available.

5. After construction of the new 20-inch pipeline is complete, with the exception of the portion across the Carquinez Strait, the existing 14-inch pipeline would be taken out of service. Before a pipeline can be reclassified by the California State Fire Marshal (CSFM) from "active" to "out-of-service", a written plan describing the process to be used and future maintenance and inspections to be performed must be submitted to and approved by the CSFM. After this process has been verified and accepted in writing by CSFM, the out-of-service pipeline must comply with minimum federal maintenance and inspection requirements, which consist of maintaining cathodic protection, right of way patrols, and Underground Service Alert notifications. This procedure is estimated to be complete within 60 days after construction of the new 20-inch pipeline is complete. SFPP would maintain the pipeline in out-of-service status in accordance with CSFM requirements until a decision regarding final use of the pipeline is made. SFPP's Master Lease No. PRC 5439.1 with the California State Lands Commission will be amended to delete the existing 14-inch pipeline from the Master Lease and incorporate it into the lease for the new 20-inch pipeline. Although no proposals have been made at this time, SFPP could use the existing 14-inch pipeline for other purposes such as a wastewater conveyance, a conduit for underground electrical utilities, cable television, fiber optic lines, telephone or data circuits, or other suitable service once appropriate CEQA documentation had been prepared and adopted.
6. The proposed pipeline falls under the jurisdiction of the U.S. Department of Transportation, Research and Special Programs Administration, Office of Pipeline Safety (DOT), and conforms with the design, construction, testing operation and maintenance regulations contained in Title 49 Code of Federal Regulations (CFR) Part 195, "Transportation of Hazardous Liquids by Pipeline", as authorized by the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. 2004). However, Title 49 CFR, Part 195 requirements do not necessarily address all seismic design criteria

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required in California particularly at fault crossings and liquefaction potential zones. In California, CSLC requires the incorporation of current seismological engineering standards such as *Guidelines for the Design of Buried Steel Pipe – July 2001: by American Lifeline Alliance*, and *Guidelines for the Seismic Design of Oil and Gas Pipeline Systems – 1984: by American society of Civil Engineers* and other recognized industry standards for seismic-resistant design at fault crossings and liquefaction potential zones. Because this pipeline carries jet fuel, it will also be subject to all regulations of the California State Fire Marshal (CSFM). The CSFM requires an internal hydro test at the conclusion of construction of a new pipeline, and does not require any internal tests for the first ten years. Thereafter, hydro testing is required every five years unless the pipeline is placed on a "high-risk list". An Oil Spill Response Plan (OSRP) prepared by SFPP has been approved by appropriate federal, state and local agencies (including the California Department of Fish and Game, Office of Spill Prevention and Response). The OSRP is required under state and federal regulations (SB 2040 and 40 CFR 300, the Hazardous Substances Pollution Contingency Plan). SFPP has also prepared an Emergency Plan to specify measures to be taken in emergency scenarios. SFPP stations have fire fighting and other emergency equipment. Fire fighting equipment includes carbon dioxide and/or halon fire extinguishers inside the control rooms for electrical fires around panels and switchgear. Dry powder fire extinguishers are located in the station yard for hydrocarbon fires. Fire suppressant foaming agents (ATC concentrate) and related foam generation equipment is also onsite or readily available. Also, emergency call lists are posted at all stations, in case of accident, fire or explosion. The OSRP lists third-party contractors providing manpower and equipment such as vacuum trucks, boats, oil skimmers, absorbent and skirted booms, dump trucks, portable tanks, absorbent materials, dispersants, steam cleaners, hydroblasters, cranes and forklifts. These would include contractors located in the Bay area. In addition, SFPP operations personnel are trained in the Incident Command System and oil spill containment and cleanup procedures. Local emergency response providers would be notified to assist in traffic control, evacuations of homes or businesses, crowd control, ambulance and hospital services, and backup fire protection services. Staff will also be on site for the monitoring of the HDD's and open cut trenching of the subject waterways. Long Beach engineering staff has reviewed the pipeline specifications and indicates that the design meets standard engineering practice.

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7. A Section 401 Water Quality Certification will be issued by the Regional Water Quality Control Board (RWQCB) for this project. RWQCB generally supports the proposed project; however, they are particularly concerned about environmental impacts that could result from routing the proposed pipeline through Peyton Marsh and the Rhodia, Inc. facility (Segment 1, Concord to the Benicia Bridge), and encourage consideration of an alternate alignment in this vicinity. Alternate routes have been addressed in the EIR. To respond to RWQCB's concerns regarding the Rhodia Remediation Project, the applicant has agreed to route the proposed 20-inch pipeline within the Existing Right of Way Alternate route in Segment 1, which is described and analyzed in the EIR.
8. During consideration of this item at the Commission's October 20, 2003, meeting, a representative from Central Contra Costa Sanitary District, and a representative from Clark Trucking Service, Inc. objected to the proposed routing of the 20" pipeline in the vicinity of their properties. SFPP has since met individually with representatives of each of these entities to discuss potential resolution of their concerns.

Staff has received a letter from the Central Contra Costa Sanitary District, dated October 27, 2003, removing its objection to certification of the EIR for this project or to the Commission's action on staff's recommendation to award a lease to SFPP.

Staff has also been working with the Applicant and Mr. Cunha, Clark Trucking Service, Inc., both before and subsequent to the Commission's consideration of the Project at its meeting of October 20, 2003, to develop additional approaches to the issues originally raised in Mr. Cunha's letter of October 8, 2003, and to coordinate and facilitate additional discussions between the parties. On October 17, 2003, the Applicant spoke to Mr. Cunha and represents that Mr. Cunha was assured that the Project would not block access to his firm, would not close the street, would be constructed in 2-3 weeks and that the Applicant would reimburse the firm for any damages.

Subsequent to October 20, 2003, staff worked with the Applicant to explore two alternatives to the proposed routing within South River Road: 1) installation of the new pipeline within Jefferson Boulevard, and 2) connection of the new pipeline with an interim use of the existing 14" line within the railroad right-of-way along Jefferson Boulevard. Each of these

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modifications was presumed to address Mr. Cunha's concerns. The results of the Applicant's examination, and the issues associated with each, are enumerated below.

Relocation within Jefferson Boulevard

- As indicated at the October 20, 2003, Commission meeting, the pipeline would parallel existing residences along Jefferson Boulevard.
- Jefferson Boulevard is presently undergoing repair and repaving that will be completed in December 2003. The city of West Sacramento's Design Standards address "Open Trenching" under these circumstances as follows, "Open trenching shall be prohibited on all newly paved and newly overlaid streets and reconstructed streets for a period of two years as determined by the City Engineer..."

Interim use of existing pipeline segment

- The existing pipeline segment does not meet the design criteria for the new pipeline, i.e., its pressure rating is lower than that for the Project. Staff notes, however, that a segment of the existing 14" line under the Carquinez Strait will be incorporated into the new proposed 20" pipeline.
- Use of the segment would present additional hydraulic issues based on reduction of pipeline diameter, require the installation of a "pigging" facility in the existing right-of-way and present integrity and inspection difficulties. The latter three issues are problematic because: 1) Union Pacific Railroad (UPRR) is discouraging the placement of additional pipelines in their right-of-way due to concerns over possible derailments and the need to install additional track; and 2) ongoing litigation between the UPRR and SFPP, L.P.

In addition, the Applicant, on October 21, 2003, sought an additional meeting with Mr. Cunha, which was subsequently scheduled for October 28, 2003. In attendance, in addition to Mr. Cunha and the Applicant, were additional property/business owners on South River Road and

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representatives of the city of West Sacramento. The discussions centered on the proposed routing in consideration of the above discussions. The issues raised by Mr. Cunha and information or proposals made by the Applicant to address each are described below.

- Safety of businesses along South River Road
- The pipeline is designed to comply with urban standards, i.e., constructed of high tensile strength carbon steel with a wall thickness 12.5% greater than required by the US Department of Transportation (USDOT).
- One hundred percent of the welds will be x-rayed for integrity (USDOT requires only 10% to be examined).
- The pipeline could be buried deeper.

Consistency of Project with Sacramento Riverfront Master Plan

- City staff indicates that the proposed Project, as a replacement pipeline, is consistent with the adopted Riverfront Master Plan.
- The City, utilizing the Final EIR prepared by the Commission, must issue a conditional use permit (a discretionary decision) for the Project within the City and an encroachment permit for the construction work within South River Road. Each of these actions is described in the comments of the City, dated July 22, 2003, submitted on the Draft EIR for the Project.

Closure or impairment of South River Road during Project construction

During the meeting of October 28, 2003, an additional business, Clark Pacific, another trucking company, revealed its concern that its operations, too, would be constrained by construction activities.

- Staff notes that the FEIR requires, in part, "SFPP shall develop construction scheduling in a manner that minimizes impacts to businesses, institutions, ....to avoid the hours or days of the week during which land uses receive the most activity.....In addition, SFPP shall ensure that at least one driveway is left unblocked

CALENDAR ITEM NO. C01 (CONT'D)

during all business hours or hours of use." In addition, the FEIR requires the preparation, by a registered Traffic Engineer and in conjunction with the affected local jurisdiction, of detailed Traffic Management Plans. Such Plans, in part, must "...define the use of flaggers, warning signs, lights, barricades, cones, etc. according to standard guidelines required by the affected local jurisdiction." Such plans must also provide for access by emergency response vehicles.

- In addition to the above, the Applicant offered to construct the Project at night and continue construction during the weekends as well as to time the anticipated three-week construction effort so as to avoid months in which the businesses' big projects occur.
- The Applicant has, with regard to Clark Pacific, indicated in a letter dated October 31, 2003, that, "If normal daytime construction practice under city-approved traffic control plans cannot avoid significant impact to your business, and further if coordination of our respective schedules or other off-site leasing options are unsuccessful to avoid significant impact, we will provide Clark Pacific with just compensation for such impact at that time."

Staff received a letter, dated November 3, 2003, from Clark Pacific to the Applicant that indicates that the company requires a guarantee of reimbursement of estimated costs that would be borne by the company as a result of the construction activities for the installation of the pipeline.

Staff is presently unaware of any resolution of the above issues between Mr. Cunha and the Applicant.

9. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as CSLC EIR No. 711, State Clearinghouse No. 2002022010. Such EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resources Code section 21081.6) and is contained in Exhibit C attached hereto.

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10. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit B, attached hereto.
11. A Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093) is contained in Exhibit D, attached hereto.
12. The significant impacts identified within the Final Environmental Impact Report (FEIR) that cannot be reduced, with all feasible mitigation to a level of insignificance, include:
  - A pipeline accident during operation could result in injury or fatalities to nearby public.
  - Cumulative effects of emissions of equipment exhaust could substantially contribute to existing violations of ozone standards during the construction period.
  - Pipeline spills could degrade or alter habitat for wildlife, aquatic habitats and organisms, special status plants and their habitat, upland vegetation, and/or wetlands.
  - Construction or operation and accident impacts on sensitive biological and water resources within Cordelia Marsh and Slough could affect areas of the marsh.
  - Active fault crossings could result in pipeline rupture.
  - Contamination of surface water could result from accidental rupture of the pipeline during operation or maintenance.
  - Drinking water could be contaminated if product from a pipeline accident migrated to a well used for municipal or private drinking water purposes.
  - A pipeline accident could contaminate land and property or cause death or injury due to fire or explosion.

CALENDAR ITEM NO. C01 (CONT'D)

- Accidents during operation could restrict fishing access and/or contaminate fish habitat and fishing gear.

The FEIR concludes that pipeline rupture or accidental spills would cause significant adverse environmental effects, and significant adverse effects to air quality would occur during construction. The impacts related to pipeline rupture or accidentals spills were identified in the analyses for safety, biological resources, geology, water quality, land use, and fisheries.

13. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 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.

**PUBLIC AND ENVIRONMENTAL PROCESSES**

Opportunities for public participation in the environmental process have been provided at public hearings which were held in the city of Fairfield on –

- February 20, 2002
- July 16, 2003

The public's involvement in the CEQA environmental process began on February 1, 2002, with the public release of the Notice of Preparation of a Draft Environmental Impact Report and Notice of Public Scoping Meeting. This notice was published in five newspapers having general circulation within the regions affected by the proposed project and was mailed to all recorded property owners within 300 feet of the pipeline alignment. During this period, a public scoping hearing was conducted on February 20, 2003, in the city of Fairfield.

The Draft EIR was released on June 12, 2003, and a public hearing to receive comments on the document was held in the city of Fairfield on July 16, 2003. The DEIR was circulated for a 45-day review period. The FEIR was released on October 3, 2003. The public notice identifying release of the FEIR and notice of proposed hearing by the CSLC was also published in five newspapers having general circulation within the regions affected by the proposed project and was mailed to all recorded property owners within 300 feet of the pipeline alignment.

**ENVIRONMENTAL JUSTICE**

The California State Lands Commission adopted an amended Environmental Justice Policy on October 1, 2002. The purpose of the Policy is to ensure that Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities. The Commission pledges to continue and enhance its processes, decisions, and programs with environmental justice as an essential consideration. Environmental justice is defined by State law as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."

This FEIR contains the first Environmental Justice analysis completed pursuant to the Commission's Policy. Specifically, the document analyzes the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations adjacent to the proposed and alternative pipeline corridors. This analysis focuses, in the main, on whether the Proposed Project's impacts have the potential to affect area(s) of high-minority and low-income communities disproportionately and thus create an adverse environmental justice impact. The document concludes that, with identified mitigation, the Project would not create significant environmental justice impacts.

**APPROVALS NEEDED:**

United States Fish and Wildlife Service; State Office of Historic Preservation; United States Army Corps of Engineers; California Department of Fish and Game; California Department of Transportation; Regional Water Quality Control Board; San Francisco Bay Conservation and Development Commission; California Wildlife Conservation Board; California Department of Water Resources, Board of Reclamation; Central Contra Costa Flood Control and Water Conservation District; Contra Costa County; city of Martinez, city of Benicia; Caltrans District 4; Solano County; Solano County Water Agency; city of Fairfield; city of Suisun City; Main Prairie Water District; Reclamation District 2068; Yolo County; Reclamation District 900; Sacramento/Yolo Port District; and city of West Sacramento .

**EXHIBITS:**

- A. Location Map
- B. CEQA Findings
- C. Mitigation Monitoring Program
- D. Statement of Overriding Considerations

CALENDAR ITEM NO. C01 (CONT'D)

**PERMIT STREAMLINING ACT DEADLINE:**

October 2, 2004

**RECOMMENDED ACTION:**

IT IS RECOMMENDED THAT THE COMMISSION:

**CEQA FINDING:**

1. CERTIFY THAT AN EIR NO. 711, STATE CLEARINGHOUSE NO. 2002022010, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN, AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGMENT AND ANALYSIS.
2. ADOPT THE FINDINGS, MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT B, ATTACHED HERETO.
3. ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.
4. ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

**SIGNIFICANT LANDS INVENTORY FINDING:**

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

**AUTHORIZATION:**

1. AUTHORIZE THE AMENDMENT OF MASTER LEASE NO. PRC 5439.1 A GENERAL LEASE – RIGHT OF WAY USE, OF LANDS SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF, EFFECTIVE OCTOBER 20, 2003, TO DELETE PARCELS OF TIDE AND SUBMERGED LANDS FROM THE MASTER LEASE AND INCORPORATE THEM INTO THE NEW LEASE; ALL OTHER TERMS

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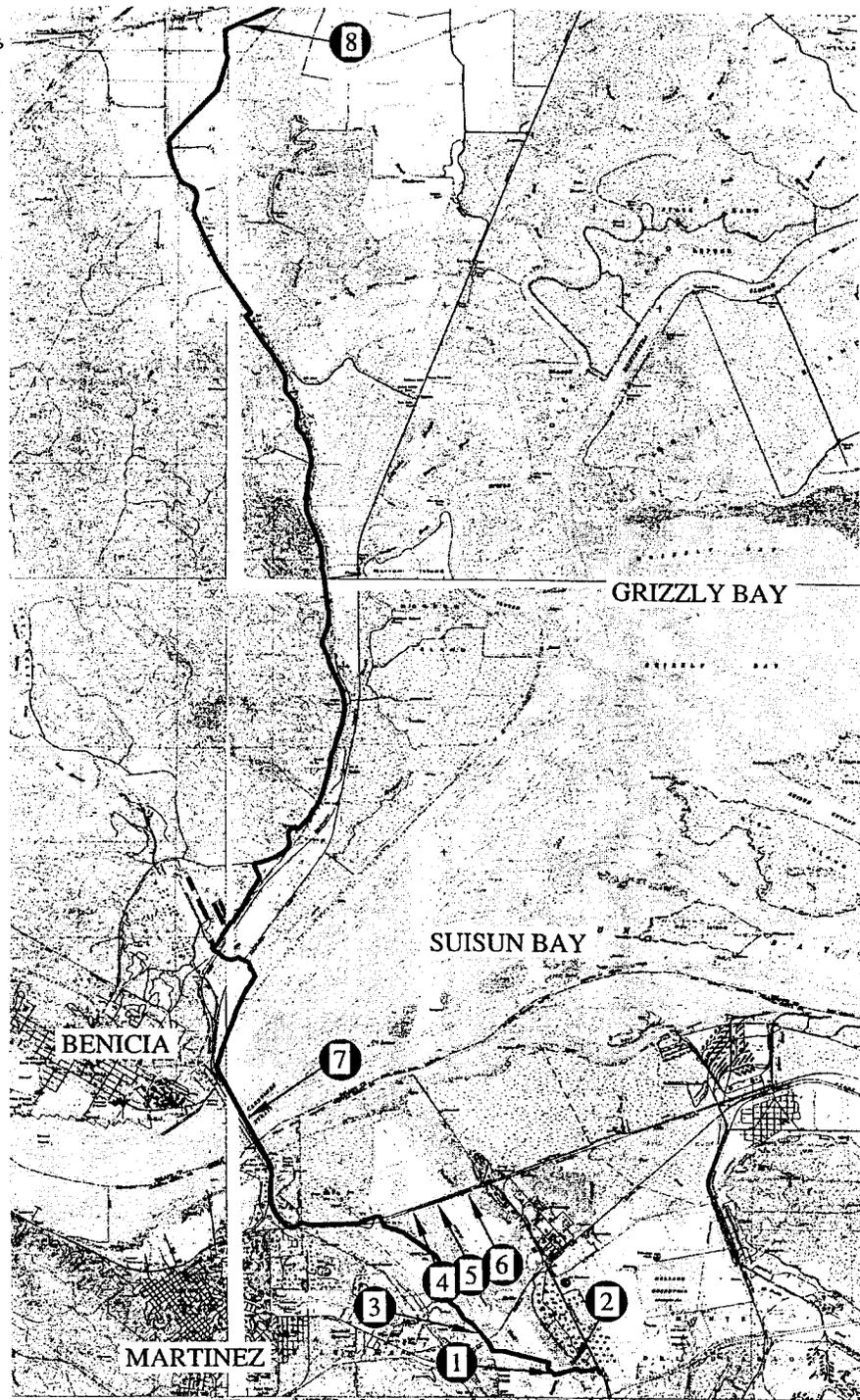
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AND CONDITIONS OF THE MASTER LEASE WILL REMAIN IN EFFECT WITHOUT AMENDMENT.

2. AUTHORIZE ISSUANCE TO SANTA FE PACIFIC PARTNERS, L.P., OPERATING PARTNERS FOR KINDER MORGAN ENERGY PARTNERS, L.P., OF A NEW GENERAL LEASE – RIGHT OF WAY USE, BEGINNING OCTOBER 20, 2003, FOR A TERM OF TWENTY-FIVE (25) YEARS, FOR PROPOSED CONSTRUCTION OF A NEW 20-INCH DIAMETER PETROLEUM PRODUCTS PIPELINE ACROSS WALNUT, GRAYSON AND PACHECO CREEKS AND CORDELIA SLOUGH BETWEEN CONCORD AND WEST SACRAMENTO, CONTRA COSTA, SOLANO AND YOLO COUNTIES; AND INCLUSION OF AN EXISTING 14-INCH DIAMETER PETROLEUM PRODUCT PIPELINE ACROSS WALNUT, PACHECO CREEKS AND THE CARQUINEZ STRAIT, CONTRA COSTA AND SOLANO COUNTIES, ON THE LANDS SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; IN CONSIDERATION OF \$9,475 PER YEAR, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; INSURANCE COVERAGE AS FOLLOWS: GENERAL LIABILITY FOR \$25,000,000; WORKERS' COMPENSATION – STATUTORY REQUIREMENTS OF THE STATE OF CALIFORNIA; AND ENVIRONMENTAL IMPAIRMENT AND POLLUTION LIABILITY FOR \$10,000,000; BONDS SHALL INCLUDE A LEASE PERFORMANCE BOND FOR \$500,000, MITIGATION MONITORING PERFORMANCE BOND FOR \$500,000, RESTORATION PERFORMANCE BOND FOR \$125,000, AND CONSTRUCTION PERFORMANCE BOND IN AN AMOUNT EQUAL TO THE CONSTRUCTION COST OF THE NEW PIPELINE.

NO SCALE

# LOCATION



## LEASE AREAS PROPOSED & EXISTING

1. Grayson Creek Crossing  
Proposed 20" Pipeline
2. Walnut Creek Crossing  
Proposed 20" Pipeline
3. Pacheco Creek Crossing  
Proposed 20" Pipeline
4. Pacheco Creek Crossing  
Existing 14" Pipeline
5. Walnut Creek Crossing  
Existing 14" Pipeline
6. Pacheco Creek Crossing  
Existing 14" Pipeline
7. Carquinez Strait Crossing  
Existing 14" Pipeline
8. Cordelia Slough Crossing  
Proposed 20" Pipeline

**Exhibit A**  
 W 25815  
 SFPP, LP  
 SOLANO and  
 CONTRA COSTA  
 COUNTIES



## PROPOSED AND EXISTING PIPELINE CROSSINGS IN SOLANO, AND CONTRA COSTA COUNTIES

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property. MAP SOURCE: USGS QUAD

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# Exhibit B. CEQA Findings

These findings on the Concord to Sacramento Pipeline Project (Proposed Project) proposed by SFPP, L.P. (SFPP or "the Applicant") are made by the California State Lands Commission (CSLC), pursuant to the *Guidelines* for the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Section 15091). All significant adverse impacts of the project in California identified in the Final Environmental Impact Report (Final EIR) are included herein and organized according to the resource affected.<sup>1</sup>

For discussion of impacts, significance is classified according to the following definitions:

- Class I – Significant, adverse impact that cannot be mitigated to insignificant.
- Class II – Significant, adverse impact that can be mitigated to insignificant.
- Class III – Adverse but insignificant impact.
- Class IV – Beneficial impact.

Class III and Class IV impacts require neither mitigation nor findings.

For each significant impact (i.e., Class I or II) a finding has been made as to one or more of the following, as appropriate:

- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- b) 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.
- c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

A discussion of the facts supporting them follows the findings.

Whenever Finding (b) occurs, the agencies with jurisdiction have been specified. These agencies, within their respective spheres of influence, have the ultimate responsibility to adopt, implement, and enforce the mitigation discussed within each type of impact that could result from project implementation. However, under the CEQA (Public Resources Code Section 21081.6), the CSLC, as CEQA Lead Agency, has the responsibility to ensure that the mitigation measures contained are effectively implemented. Other specified State, local, regional, and federal public agencies include, but are not necessarily limited to the following:

- California Department of Fish and Game (CDFG);
- California Department of Toxic Substances Control (DTSC);
- California Department of Transportation (Caltrans);
- California Office of the State Fire Marshal (CSFM);

<sup>1</sup> The CEQA Findings are numbered in accordance with the impact and mitigation numbers identified in the Mitigation Monitoring Program table of the Final EIR (see Section F of the Draft EIR, with revisions in Section 4 of the Final EIR). The CEQA Finding numbers are not numbered sequentially because some of the impacts were less than significant before mitigation (Class III) or a beneficial impact (Class IV).

- California Regional Water Quality Control Board (RWQCB);
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries);
- U.S. Army Corps of Engineers (ACE, or ACOE);
- U.S. Fish and Wildlife Service (FWS);
- Yolo-Solano Air Quality Management District (YSAQMD); and
- Other local districts or jurisdictions.

Whenever Finding (c) is made, the CSLC has determined that sufficient mitigation is not practicable to reduce the impact to a level of insignificance and, even after implementation of all feasible mitigation measures, there will or could be an unavoidable significant adverse impact due to the project. The Statement of Overriding Considerations applies to all such unavoidable impacts as required by CEQA *Guidelines* Sections 15092 and 15093.

**CEQA FINDING NO. S-1.1**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-1.1: Construction activities could create traffic hazards.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

During the construction of the pipeline within, along, or near existing roadways (both paved and unpaved), the motoring public could be exposed to additional traffic related risks. These risks could result from poor signage, driver distraction by construction equipment, or constrained roadways due to construction activity. This exposure may cause traffic accidents that could result in property damage, personal injury, or death, creating a potentially significant impact.

Mitigation Measure T-1b (Traffic Control Plans) requires preparation of traffic control plans by a registered Traffic Engineer. Such plans must address, in conjunction with the affected jurisdiction, traffic control near and within the construction zone. Under such plans, motorists will be warned of activities in the zone by flaggers, warning signs, lights, barricades, and cones, and traffic will be subject to temporary reductions in speed limits. Such measures will make motorists more aware of construction equipment and activities and slow traffic to protect both motorists and workers near and within the construction zone.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. S-1.2**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-1.2: Construction activities can damage other substructures, causing contamination, injury or death.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

During excavation operations, there is a risk of personal injury or death (primarily construction worker), environmental contamination, and/or property damage which could be caused by the striking or severance of existing substructures (e.g., power cables, foreign pipelines). Some of these third party substructures are critical to local public safety.

The City of Benicia's existing 36-inch diameter water line is an example of a critical public utility that could be affected by the proposed products pipeline. SFPP's proposed 20-inch diameter pipeline will parallel a portion of this water line. The 36-inch diameter water line is virtually the City's sole water source.

Section 7110 of the Business and Professions Code relating to the State's "one call" regulations, and the California Government Code, Title 1, Division 5, Chapter 3.1 (Protection of Underground Infrastructure) provides the framework for the State's one-call system. The one-call system allows contractors to notify all operators of underground facilities within the area.

Although one-call services have been very effective in reducing unwanted damage to existing facilities, third party damage still causes approximately one-half of all hazardous liquid incident consequences. As a result, a potentially significant impact would occur, and additional measures should be incorporated to further reduce the likelihood and severity of an incident.

Mitigation Measure S-1a (Minimize Effect on Other Underground Facilities) requires due diligence above and beyond the one-call regulations to identify the existence of existing underground facilities. For example, the construction contractor is required to clear the right-of-way using a hand held line indicator prior to excavation. Before excavation begins in the vicinity of an identified facility, the contractor is required to probe and locate the facility and establish its depth. Hand digging replaces machines within specified distances of such facility to eliminate damage to excessive force.

The measure also specifies actions to be taken and procedures to be followed if "unmarked" facilities are encountered. While avoidance of such an encountered facility is preferred, procedures are outlined to, for example, identify the contents of any pipeline before the contractor is allowed to disturb or modify the pipeline to accommodate the Proposed Project. Finally, the measure requires SFPP, 30 days prior to construction, to submit an agreement, with specified considerations, between SFPP and the City of Benicia to protect the City's water pipeline during construction.

Taken together, the above described measures will ensure that sufficient care is taken during pipeline construction to reduce the potential for damage to existing underground facilities.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. S-1.3**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-1.3: Construction activities can cause fires, resulting in property damage, injury, or death.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Personal injury, death, or property damage can result from construction-caused fires. Fires can be caused by welding, grinding, vehicle exhausts, sparks, etc. To minimize the risk of these incidents, in addition to compliance with OSHA requirements, Mitigation Measure S-1b should be employed.

Mitigation Measure S-1b (Minimize Risk of Fire) requires seven procedures, during all construction activities, to prevent fires. Specifically, vegetation and other flammable materials are to be cleared from the location of welding or grinding operations. All equipment, gas-powered hand tools and automobiles are to be equipped with spark arrestors. The means to combat fires, should they occur, in spite of prevention measures, is also specified. The use of the required procedures, when used in combination, will reduce the risk of identified impacts by both reducing the potential for fires to occur and by providing the means necessary to control and extinguish any fire that should occur.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. S-2**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-2: A pipeline accident could result in injuries or fatalities to nearby public.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

A fire could result from a pipeline release and a nearby source of ignition (a vehicle or construction machinery). The risk of a petroleum product fire is significant, because components of refined products such as gasoline evaporate quickly, and can form flammable vapor clouds. In the event that a pipeline accident results in a rupture or large release, there is a likelihood that the product could ignite if the following two conditions exist: (1) a high concentration of flammable hydrocarbons, and (2) a source of ignition.

There is a roughly one in seven likelihood of a fatality being caused by the Proposed Project during the project life. Mitigation measures will reduce the likelihood and/or severity of the impacts to human life and safety. However, even with implementation of additional measures, the impact remains significant.

Mitigation Measure S-2a (Supplemental Spill Response Plan) requires submittal and approval of response plans for pipeline failures including the specific response strategies necessary for protecting urban environments and water resources in the Delta or Carquinez Strait. It will be focused on identifying and protecting schools, residences, religious facilities, recreation lands, other lands with high concentrations of people, and environmentally sensitive habitat. Before approval of construction this plan must be submitted to the CSLC, the CSFM, and all jurisdictions along the pipeline for review and comment, and it must be approved by the CSLC in conjunction with the CSFM.

Mitigation Measure S-2b (Leak Detection) requires routine leak detection tests to avoid unintentional releases. Under this measure, the tests must be conducted routinely, when the line is not flowing. These tests will allow early detection and identification of leaks of petroleum products or vapors.

Mitigation Measure S-2c (Valve Review) requires analysis and approval of the final valve system including locations and methods of actuation. Where manual valves are being proposed, this measure will require conversion of the valve to remote or automatic operation if it will result in a significant reduction in spill volume.

Mitigation Measure S-2d (Prevent Third-Party Damage) requires specific design features (for example, by increasing pipeline wall thickness) in urban areas where third party damage will be most likely to occur. This requires SFPP to identify specific features to ensure pipeline integrity especially in the Fairfield/Suisun City area and in West Sacramento, where there is a high risk of third-party damage.

These measures, when taken together, reduce the likelihood of large spills, increase the ability to detect unintentional releases, and ensure a rapid response to spills especially in critical areas. While these measures reduce both the likelihood and severity of a potential impact, a small risk remains that an accident could cause injuries or fatalities.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. S-2.1**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-2.1: External corrosion can result in pipeline leaks or ruptures.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

External corrosion of a buried pipe can occur when bare (uncoated) steel is in contact with the earth. The moist soil surrounding a pipeline can serve as an electrolyte. When this occurs, the pipe can become an anode. The current then flows through the electrolyte, from the anode (pipe) to the cathode (soil). In this instance, the anode (pipe) loses material (corrodes) as this process occurs. External corrosion typically causes a relatively large percentage of unintentional releases. Often, these leaks are relatively small in volume, with low release rates. However, they can go unnoticed for long periods of time.

To mitigate the likelihood of releases caused by external corrosion, SFPP has proposed to install a high quality exterior pipe coating. The coating will be a Pritec 10/40 or similar polyethylene product. The pipeline will also be protected using an impressed current cathodic protection system.

In addition, internal inspections by "smart pigs" will be used to detect external corrosion. SFPP will perform a baseline internal inspection (smart pig) run after pipeline construction is complete. They plan to perform subsequent smart pig runs in accordance with 49 CFR 195.452, at intervals not exceeding once every five years.

SFPP also plans to employ the following measures to minimize the recurrence of external corrosion-caused releases.

- **Rectifier Readings.** As required by 49 CFR 195.573, Pipeline operators are required to inspect their cathodic protection rectifiers at intervals not exceeding two-and-one-half months, but at least six times each calendar year
- **Monitor Cathodic Protection Systems.** At least once each calendar year, at intervals not exceeding 15 months, hazardous liquid pipeline operators are required to test their cathodic protection system in accordance with 49 CFR 195.573.

- **Corroded Pipe.** The strength of any pipe known to be corroded would normally be evaluated using ASME B31G, *Manual for Determining the Remaining Strength of Corroded Pipelines*. This method considers the size, shape, and remaining wall thickness of corroded pipe to determine its safe operating pressure.
- **Inspections.** Each time buried pipe is exposed for any reason, it will be examined for evidence of external corrosion in accordance with 49 CFR 195.569. If active corrosion is found, the operator is required to investigate and determine the extent.
- **Maintain Records.** Pipeline operators are required to maintain records of the DOT required inspections.

Mitigation Measures S-2e (Conduct Pipeline Inspections) and S-2f (Ensure Proper Cathodic Protection) ensure that adequate inspections and cathodic protection are maintained throughout the operating life of the pipeline. The measures specifically require SFPP to work with the City of Benicia to monitor the cathodic protection system, and require SFPP to fund the costs of independent review of the system and to fund any remedies related to maintaining the City's system. The requirements of these measures are above and beyond the federal requirements in 49 CFR 195.

With the proposed mitigation, the likelihood of external corrosion causing a pipeline accident will be reduced, but even with inspections, external corrosion remains a frequent cause of pipeline accidents.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. S-2.2**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-2.2 : Internal corrosion could cause a pipeline accident.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

Internal corrosion is another cause of unintentional pipeline releases. Although refined petroleum products are generally not considered corrosive, 49 CFR 195.579, Subpart H outlines the regulatory requirements for internal corrosion control and monitoring.

Smart pig inspections that will be required by Mitigation Measure S-2e (Conduct Pipeline Inspections) will also detect anomalies caused by internal corrosion. These inspections will occur at startup, and at least every five years afterward. If the internal inspections reveal defects and Mitigation Measure S-2e is implemented, then the defects will need to be repaired. This measure when coupled with compliance with the existing federal and State regulations minimizes the risk of accidents caused by internal corrosion by providing early warning of potential problems and specified resolution of such problems before damage occurs to the pipeline.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. S-2.3**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-2.3: Third party damage could cause a pipeline accident.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Third party damage causes a large percentage of unintentional pipeline releases. Geological and hydrological hazards (e.g., landslide, exposed pipe within stream channel) can also cause third party/outside force pipeline incidents. There are several mechanisms for reducing the frequency of third party damage-caused releases. Some of these include:

- **One Call System.** Participation in a one-call system meets the requirements for an operator's damage prevention program, per 49 CFR 195.442 and California State law
- **Line Marking.** 49 CFR 195 prescribes the minimum line marking requirements.
- **Right-of-Way Inspection.** 49 CFR 195.412 requires, "Each operator shall, at intervals not exceeding three weeks, but at least 26 times each calendar year, inspect the surface conditions on or adjacent to each pipeline right-of-way." Methods of inspection include walking, driving, flying, or other appropriate means of traversing the right-of-way.
- **Public Education.** 49 CFR 195.440 requires pipeline operators to, "... establish a continuing educational program to enable the public, appropriate government organizations and persons engaged in excavation-related activities to recognize a hazardous liquid or a carbon dioxide pipeline emergency and to report it to the operator or the fire, police, or other appropriate officials . . . ."
- **Facility Security.** 49 CFR 195.436 requires, "Each operator shall provide protection for each pumping station and breakout tank area and other exposed facility (such as scraper traps) from vandalism and unauthorized entry."

Mitigation Measure S-2g (Pipeline Markers) requires adequate pipeline marking. This helps to minimize the frequency of third party damage by improving the marking over the minimum of what will be required by 49 CFR 195. As alternatives to improved marking, intrusion detection, increased depth of cover, or increased wall thickness will be required. These measures will put

contractors on notice as to the location of the pipeline and thereby reduce the likelihood of unintentional third-party damage to the pipeline causing an unintentional release. Even with implementation of Mitigation Measure S-2g, the likelihood of occurrence of third party damage to cause pipeline accidents remains high, so the impact remains significant.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. S-2.5**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-2.5: Design flaws or incomplete/inadequate engineering can contribute to likelihood of a pipeline accident.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

Proper engineering design can minimize the likelihood and severity of an unintentional release. Because a third party engineering review, or an independent third party construction inspection, is not required by 49 CFR 195 or any other applicable regulation.

Mitigation Measure S-2h (Design and Design Approval) minimizes the risks associated with pipeline operation because it requires a third party engineering review by the CSLC in conjunction with the CSFM. With this measure, the CSLC will actively participate and provide oversight in the design review and approval process. This helps to ensure that the project meets applicable federal standards, building codes, seismological engineering standards, and other recognized industry standards. Detailed hydrotest procedures must also be approved by the CSLC in conjunction with CSFM. Mitigation Measure S-2h, when coupled with compliance with the existing federal and State regulations, minimizes the risk of accidents by minimizing the likelihood of design flaws through independent engineering reviews.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. S-3**

**PIPELINE SAFETY AND RISK OF ACCIDENTS**

Impact: **S-3: Improper pipeline abandonment could cause contamination, landslides, or erosion.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

Pipeline operators generally propose to abandon pipelines in place. The practice of purging abandoned pipelines with nitrogen may not remove all products. Abandonment, in lieu of pipeline removal, also poses the potential for the abandoned pipe to become a future conduit for underground or surface waters, after it deteriorates. Further, the soil above the pipeline could settle after the pipe deteriorates. The abandonment process will apply to the process of taking the existing 14-inch pipeline out of service, after the Proposed Project is operational, and to the Proposed Pipeline at the end of its service life.

Mitigation Measure S-3a (Pipeline Abandonment Procedures) reduces potential impacts of pipeline abandonment or removal from service by requiring advance approval of the abandonment procedures from CSLC in conjunction with the CSFM. SFPP will be required to clean the pipeline of hydrocarbons and remove or fill abandoned sections of the pipeline if there is any soil settlement or adverse effects to land uses if the pipe were to be left to deteriorate. Compliance with Mitigation Measure S-3a reduces the likelihood of soil contamination through the removal of potential contaminants from the pipeline or other impacts, such as soil settlement, resulting from improper pipe abandonment to less than significant levels.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. A-1**

**AIR QUALITY**

Impact: **A-1: Emissions of equipment exhaust could substantially contribute to existing violations of ozone standards during the construction period.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Heavy equipment use and fuel combustion during construction will cause emissions of exhaust contaminants (NO<sub>x</sub>, VOC, PM<sub>10</sub>, CO, and SO<sub>x</sub>). In the Bay Area Air Quality Management District (BAAQMD), construction emissions are included in the regional inventory that is the basis for attainment planning, so they will not obstruct attainment of the ozone standards or delay implementation of the air quality management plans. However, construction emissions are evaluated differently in the Yolo-Solano Air Quality Management District (YSAQMD). While the YSAQMD maintains an inventory similar to that of the BAAQMD for planning, the YSAQMD believes that these construction emissions could conflict with ozone attainment in the Sacramento Valley, and that emissions over their threshold will substantially contribute to existing violations of the ozone standards. Because the eight-month construction schedule will substantially contribute to existing violations in the Sacramento Valley during one ozone season (one summer), NO<sub>x</sub> emissions during construction will cause a short-term significant impact.

Mitigation Measure A-1a (Control Equipment Emissions) requires SFPP to implement the YSAQMD and BAAQMD recommendations for reducing construction equipment impacts. This measure requires limiting the idling of equipment, properly maintaining equipment, use of newer, lower-emitting equipment, and use of electrified equipment in certain instances. The requirements of this measure are more stringent than the local air district rules and regulations, because they do not mandate reductions from construction equipment. Even with implementation of Mitigation Measure A-1a, emissions from construction equipment will remain above the YSAQMD significance thresholds.

Because the impacts of construction activities will be short-term (limited to eight months), project-related construction emissions will not conflict with or significantly delay implementation of air quality management plans in the Bay Area. By exceeding the YSAQMD thresholds, the residual impact will, however, substantially contribute to existing violations of State and federal ozone standards in the Sacramento Valley (YSAQMD) for the short-term duration of construction.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. A-2**

**AIR QUALITY**

Impact: **A-2: Emissions of airborne dust could substantially contribute to existing violations of PM<sub>10</sub> standards during the construction period.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Dust will be generated from all aspects of activity on unpaved or uncovered surfaces, and dust will be generated from material handling during trenching and backfilling. Without dust control, more than 300 pounds per day of PM<sub>10</sub> could occur from the unpaved areas. To avoid a potentially significant impact, SFPP proposes to control fugitive dust, mainly from the unpaved areas. Without dust control, the PM<sub>10</sub> emissions could locally exacerbate violations of the PM<sub>10</sub> standards, and in the vicinity of residences or workplaces, dust could be considered a nuisance that will violate BAAQMD Regulation 2, Rule 1, or YSAQMD Rule 2.5. Because construction dust during the eight-month construction schedule could cause a nuisance and has the potential to locally contribute to existing violations of PM<sub>10</sub> standards, these emissions will cause a short-term potentially significant impact.

Mitigation Measure A-2a (Control Dust and Particulate Emissions) requires rigorous dust control practices be implemented at all construction and staging areas. The various requirements include watering active construction areas, sweeping streets, containing storage piles, and limiting the travel speed of vehicles on unpaved surfaces. These requirements are more rigorous than the rules of the local air districts, which focus on nuisances. With implementation of Mitigation Measure A-2a, nuisance conditions will be avoided, and particulate emissions and fugitive dust will be controlled to a level that will be below YSAQMD significance thresholds.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. A-3**

**AIR QUALITY**

Impact: **A-3: Emissions of motor vehicle exhaust could substantially contribute to existing violations of ozone and PM<sub>10</sub> standards during the construction period.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Emissions will be generated by offsite and on-highway mobile sources used to transport personnel, materials, and equipment to and from each work spread. The impact of offsite and on-highway motor vehicle emissions will be potentially significant because it will contribute to short-term significant impacts from other construction activities identified above (Impact A-1). To ensure that carpooling and shuttling efforts are implemented, mitigation is necessary to reduce impacts to less than significant levels.

Mitigation Measure A-3a (Transportation Management) requires SFPP to provide carpooling and find nearby disposal and supply sites to reduce the amount of emissions from on-highway traffic. Reducing the length and number of on-highway trips will result in a reduction of emissions from those vehicles. With this measure, offsite and on-highway motor vehicle emissions will be reduced to below the YSAQMD significance thresholds.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BW-1**

**BIOLOGICAL RESOURCES**

Impact: **BW-1: Wildlife habitat removal from construction could effectively remove existing habitat, thereby reducing its availability to local wildlife populations.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Wildlife habitat removal can result from construction and continuing operation and maintenance activities, including: (1) ground surface blading, grading, and subsurface trenching, (2) tree or shrub removal and tree trimming/crushing, (3) storage of trench spoils, or (4) pipeline stringing and installation. Each of these activities can effectively remove existing habitat, thereby reducing its availability to local wildlife populations.

Temporary loss of habitat within the right-of-way (ROW) can affect some small mammal, reptile and/or amphibian species with very limited home ranges and mobility. Therefore, temporary clearing along the proposed alignment is considered a potentially significant impact.

Reducing potential impacts to wildlife habitat can be effected through a range of mitigation measures that will be implemented, mainly involving definition of habitat areas and then avoidance of those areas. Mitigation Measure BW-1a (Pre-Construction Surveys) will determine wildlife presence or absence through the completion of pre-construction surveys. Sensitive resources will be mapped on project drawings prior to construction, or if the sensitive resources cannot be avoided, consultation with the appropriate resource agencies will be necessary to ensure that the action will not result in significant biological impacts. The required surveys, mapping, and avoidance of this measure will reduce disturbance of sensitive resources in the project area.

Mitigation Measure BW-1b (Establish Buffer Zones) requires appropriate demarking of resources with flagging, stakes, or barrier fencing in areas with sensitive resources at buffer distances determined by the appropriate resource agencies. This measure will prevent construction activities from occurring in areas that have sensitive wildlife populations.

Mitigation Measure BW-1c (Conduct Worker Training) requires implementation of a Workers Environmental Awareness Plan (WEAP). The worker training for construction crews and contractors, prior to starting work on the project and within two days of any new worker arrival, will be conducted by the Environmental Monitor. The training program will include an overview of the legal status, biology, distribution, habitat needs, and compliance requirements for each special status species that may occur in the project area and attendance of the training will be recorded. The WEAP will educate the construction workers and contractors about sensitive species, and inform workers of legal requirements to ensure that the guidelines and restrictions concerning sensitive resources are understood and adhered to. Providing education about

protection of biological resources will allow workers to better avoid activities that could damage valuable habitat.

Mitigation Measure BW-1d (Confine Activity to Identified ROW) requires establishing construction exclusion zones by fencing to make sure that there is minimal surface disturbance outside of the established ROW. Used in conjunction with Mitigation Measure BW-1a, which requires mapping of sensitive resource areas, and Mitigation Measure BW-1d, in which construction personnel will be trained, this measure will avoid disturbance to sensitive resources outside of the project ROW by confining construction activities to areas determined to be free of sensitive resources.

Mitigation Measure BW-1e (Minimize Disturbance at Water Crossings) will minimize disturbance to existing sensitive aquatic habitats by implementing boring techniques and construction setbacks at water crossings. Open-trench crossing of streams, wetland features, or other U.S. waters is not allowed unless approved in a required permit and a 15-foot setback from riparian vegetation is also required. By avoidance of construction within waterbodies and aquatic habitats, this measure will reduce sedimentation in waterways, and will prevent the direct disturbance to aquatic habitats that can occur when construction equipment is used adjacent to waterways.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BW-2**

**BIOLOGICAL RESOURCES**

Impact: **BW-2: The direct loss of wildlife (e.g., small mammals, reptiles, and other less-mobile species) primarily would occur from construction activities associated with pipeline installation, staging areas, boring locations, and access roads. Direct mortality may also be associated with increased human activity and animal/vehicle collisions.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Direct loss of small mammals, reptiles, and other less-mobile species could result from the use of construction equipment and vehicles during stringing and installation of the pipeline. Surface disturbance during construction and maintenance of the Proposed Project could result in a potential loss of less-mobile individual animals and/or ground nests. Clearing, grading, excavating, and/or burying habitats could also lead to mortality of small mammals, reptiles, and nesting birds with eggs or young. Although common species are expected to quickly re-colonize the corridor after construction and subsequent revegetation work is completed, impacts to wildlife species, especially special status wildlife species, would be potentially significant.

Mitigation Measures BW-2a (Reduce Direct Mortality to Wildlife) and BW-2b (Employ Biological Monitors) provide specific methods or actions to reduce direct mortality of wildlife in the vicinity of project construction. Mitigation Measure BW-2a imposes conditions on all construction personnel, including a 15 mph speed limit on non-paved portions of access roads, daily litter removal, and pet restrictions. Mitigation Measure BW-2b provides for the presence of a trained and qualified biological monitor, who will be present full-time during all water crossings and in areas where known sensitive species or their habitat is known or suspected. These requirements, along with those defined above for Impact BW-1, will reduce the likelihood that wildlife will be killed during construction.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BW-3**

**BIOLOGICAL RESOURCES**

Impact: **BW-3: Construction and operational impacts of the Proposed Project could cause habitat removal or disturbance of special status wildlife species.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Forty-two special status terrestrial wildlife species were identified as potentially occurring within the Proposed Project area (Appendix 1B of the Draft EIR). Of these 42 species, 15 have the potential to be adversely impacted by the proposed pipeline project. These 15 species are either known to occur or have a high probability of occurring within or near the project segments. In addition to the 15 special status species potentially affected by the Proposed Project, special status raptors, protected under the Migratory Bird Treaty Act, would also be impacted if active raptor nests are destroyed or disturbed by project-related actions. Disturbance of these species would result in a potentially significant impact.

Mitigation Measure BW-3a (Protect Special Status Wildlife) defines specific actions that would reduce the likelihood that construction would destroy special status wildlife habitat or affect the animals themselves. SFPP will complete pre-construction surveys, adjust construction timing to periods in which risk to these species is least, relocate animals, and restore habitat. Affected species include the California red-legged frog, giant garter snake, special status vernal pool branchipods, Swainson's hawk, western burrowing owl, salt marsh harvest mouse, and the western pond turtle.

Mitigation Measure BW-3b (Protect Specified Bird Species) requires pre-construction surveys, guidelines, and construction timing in areas near riparian or marsh habitats that support special-status bird species, including tricolored blackbird, saltmarsh common yellowthroat, Suisun song sparrow, and California black rail. Mitigation Measure BW-3c (Protect Raptor Nests) defines actions to protect raptor nests by requiring pre-construction surveys and establishing no-disturbance buffers by staking and flagging if active nests are found.

Mitigation Measure BW-3d (Consultation to Minimize Impacts) requires the consultation with the appropriate resource agencies if avoidance of sensitive species habitat is not possible and the development of additional protection requirements/mitigation after CSLC approval. Consultation and appropriate new mitigation approval prior to construction activity would ensure minimal impacts on sensitive species and their habitat.

Effective application of these measures and other mitigation measures for protecting biological resources (as defined for Impacts BW-1 and BW-2 above) will protect, primarily through avoidance of such resources, special status wildlife species and their habitats during construction, ensuring that no habitat is lost and that individual animals are not disturbed or killed.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BW-4**

**BIOLOGICAL RESOURCES**

Impact: **BW-4: Human disturbance during project construction, maintenance, or the reclamation efforts could cause temporary displacement of some wildlife, avoidance of preferred habitat areas or reduced reproductive success.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Construction, maintenance, or reclamation efforts can create noise, dust, nighttime activities, lighting, etc. that could cause temporary displacement of some wildlife to habitat that may or may not be able to support additional individuals. This disturbance can affect songbirds, small mammals, reptiles, and special status species. Project activities are likely to also temporarily displace a variety of wildlife from adjacent habitats, lowering the overall habitat availability and value of these areas. Since this effect could be detrimental to some wildlife during their critical life stages and could increase competitive pressures among adjacent populations and habitats, the impact could be significant. Impacts as a result of increased human disturbance also include reduced reproductive success in local wildlife populations, including songbirds, small mammals, reptiles, and special status species. Disturbance from increased human presence is considered potentially significant, but mitigable to less than significant levels.

Mitigation requires defined for Impacts BW-1 and BW-3 above require conducting pre-construction surveys to determine wildlife presence or absence, establishing habitat setbacks and appropriate construction timing and measures to limit access to the approved work zone, appropriately demarking resources, and implementing a Worker Environmental Awareness Program. With application of these avoidance mitigation measures, human disturbance to wildlife will be minimized and reproductive success will be maintained.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BM-1**

**BIOLOGICAL RESOURCES**

**Impact: BM-1: Pipeline construction could degrade aquatic habitat and temporarily disrupt fish movement.**

**Class: II**

- Finding(s):**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG and RWQCB 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(S)**

Construction of the Proposed Project will result in crossing approximately 64 waterbodies, ranging from small creeks and sloughs to the Carquinez Strait. Construction methods proposed for the water crossings will be completed by horizontal directional drilling (HDD), slick bore, cased bore, or open cut. Special status aquatic biota could be adversely impacted by construction at water crossings that occur within all the project segments. Special status aquatic species most likely to be adversely impacted at the project's water crossings include a variety of fishes, amphibians, and reptiles that are known or expected to occur in the vicinity of the project segments including: Central steelhead, Chinook salmon, Delta smelt, Sacramento splittail, green sturgeon, river lamprey, Pacific lamprey, California red-legged frog, western pond turtle, and giant garter snake.

Open cut trenching at water crossings could temporarily disrupt aquatic habitat and interfere with fish movement, especially where crossings occur where there is tidal flow. This is especially of concern at Pacheco Creek, which while not always carrying water, has the potential for valuable aquatic habitat.

HDD of waterways would not create construction disturbance to waterways unless an accidental release of drilling fluids were to occur. However, construction activity adjacent to waterbodies creates the potential to degrade the waterbodies by the introduction of sediment from erosion or by spills of fuel or other hazardous materials into the stream. Disturbance of sediment during construction could result in turbidity and degradation of tidal habitat downstream. Degradation of downstream habitat, even temporarily, could affect use of the area by sensitive fish species including the listed Sacramento splittail, and, potentially, Chinook salmon and steelhead. Degradation of downstream tidal habitat or any degradation of waterbodies used by listed fish species is considered a potentially significant impact.

Waterbodies can be degraded by the accidental release of drilling muds into the water column during HDD (this event is also known as a "frac-out"). Released drilling muds would cause a localized increase in turbidity. A localized increase in turbidity would be an insignificant impact but if drilling muds flowed downstream and affected a wider area. habitat used by listed fish

species would be degraded and sensitive life stages such as salmon smelt might be harmed by the turbid waters.

The potential also exists to degrade the aquatic habitat between through the discharge of hydrostatic test water into streams. Hydrostatic test water could introduce contaminants such as metals into these streams. Because waterbodies crossed by the pipeline route (i.e., Peyton Slough, Pacheco Creek, Grayson Creek, and Walnut Creek) are used by listed fishes including Sacramento splittail, Chinook salmon, and steelhead, any degradation of the habitat of these species would be considered a potentially significant impact.

Implementation of Mitigation Measures HS-1a through HS-1d and HS-3a will result in preparation of specific plans for each water crossing, prevention of open cut stream crossings unless they are dry, prevention of erosion, the development of a contingency plan for unanticipated release of drilling fluids. These measures will prevent degradation of the habitat of listed fishes. Mitigation Measure HS-1d requires that Pacheco Slough be crossed without disturbing the streambed if flowing water is present. In addition, mandatory compliance with NPDES requirements for preparation of a Stormwater Pollution Prevention Plan and a Hazardous Materials Management Plan will also minimize disruption to aquatic species and habitats.

Aquatic habitat will be protected from degradation resulting from the introduction of toxic substances in hydrostatic test water with implementation of Mitigation Measure HS-2a (Hydrostatic Test Water, in Hydrology and Water Quality). The measures defined herein will protect water quality during construction by, for example, requiring site specific information and site specific construction practices, and allow continuous fish movement.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BB-1**

**BIOLOGICAL RESOURCES**

Impact: **BB-1: Erosion of clean and/or contaminated soils exposed during trenching or from deposition of hazardous substances could cause habitat degradation to sensitive plant species or within wetlands.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the RWQCB 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(S)**

Construction activities can degrade or destroy habitat or destroy individuals of rare, threatened, or endangered plant species. These species include Mason's lilaeopsis, Suisun marsh aster, Contra Costa goldfields, and hogwallow starfish. Direct loss of habitat could occur within wetlands adjacent to the construction areas. Indirect impacts to special status wetland plant species could occur where construction and related activities (from HDD work areas and pipeline trenching, etc.) may impinge upon habitat due to erosion/sedimentation of clean and/or contaminated soils exposed during trenching. In addition, plants could be affected by the release of hazardous substances (e.g., diesel fuel) during construction. This impact would be considered potentially significant.

SFPP will comply with NPDES requirements for preparation of a Stormwater Pollution Prevention Plan and a Hazardous Materials Management Plan. These plans will specify practices to be followed to prevent sediment runoff and equipment fuel leakage during construction. In addition, Mitigation Measures HS-1a through HS-1c (requirements for development of water crossing plans and Erosion Control Procedures and use of Best Management Practices for erosion/sedimentation and management of hazardous substances, would ensure that erosion is minimized so that special status plants and wetland habitats are not degraded.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BB-2**

**BIOLOGICAL RESOURCES**

Impact: **BB-2: Construction could result in the loss of individuals or known habitats of sensitive plant species, or the loss of special status plant species or associated habitats. .**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG and USFWS 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(S)**

Pipeline construction could cause the loss of individuals or known habitats of rare, threatened, or endangered plant species where construction activities would remove or impact the buffer zone for plant species of concern. These plants include the fragrant fritillary, Suisun marsh aster, and hogwallow starfish. Construction activities resulting in the removal of a special status plant species would be considered potentially significant.

Mitigation Measure BB-2a (Rare Plant Avoidance or Potential Impact) requires SFPP to avoid impacts to plant species by performing additional surveys and demarking the areas of plant occurrences. Appropriately timed pre-construction surveys are necessary to the accurate identification of species; this will be followed by mapping and flagging of locations supporting sensitive and special status plant species (if located) for avoidance during construction. The measure also requires that all roadway construction be limited to the existing road ROW where adjacent special status plant species occur. Implementation of the workers' training program (as defined above under Impact BW-2) will also reduce the potential for loss of sensitive plant species or habitats. With the implementation of Mitigation Measure BB-2a, rare plants or known habitats of sensitive plant species will be avoided. If avoidance is not possible, appropriate mitigation or compensation will be implemented by the CDFG and the USFWS prior to ground disturbance to ensure that no overall loss of species results from project construction.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BB-3**

**BIOLOGICAL RESOURCES**

Impact: **BB-3: Upland vegetation removal during construction activities could result in temporary loss of vegetation, adversely impacting upland vegetation.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG 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(S)**

Upland vegetation may be removed during construction within the 100-foot pipeline ROW. Vegetation will also be removed during grading, trenching, pit excavation (associated with the three bore stream crossings), and preparation of staging areas. These activities result in a temporary loss of vegetation. Impacts to riparian forest, oak woodland (including individual oak trees), and Protected Trees (certain species, groves and/or large-sized trees as defined by the local jurisdiction) are potentially significant.

Mitigation Measure BB-3a (Tree Avoidance and Replacement) requires identification, flagging and avoidance of Protected Trees and other trees and, if necessary, replacement of lost resources by planting new trees. Development of a Tree Replacement Plan and supervision by an environmental monitor will ensure implementation of this measure. Tree removal will not be permitted until a qualified forester, arborist, or restoration ecologist has reviewed the procedures for identification of proposed tree removal locations, a discussion demonstrating how maximum avoidance has been accomplished and why the trees proposed for removal cannot be avoided, appropriate tree replacement ratios, suitable tree replacement locations, tree species and size specifications, proposed understory native seed mix composition and application methods, planting methodology, a description of protective staking and caging measures, a description of irrigation and plant maintenance regime, a description of a five-year monitoring effort to measure replacement success, success criteria (including survival rates) and contingency measures in case of mitigation failure. Submission of an annual monitoring report to responsible agencies evaluating mitigation success would also be required.

These requirements will establish guidelines for avoidance of trees and will implement a Tree Replacement Plan to compensate for tree loss. As a result, tree loss caused by project construction will be reduced or additional trees planted to replace such loss.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BB-5**

**BIOLOGICAL RESOURCES**

**Impact:** BB-5: Construction in wetlands (freshwater seep, brackish marsh, freshwater marsh, seasonal alkali marsh, salt marsh, riparian scrub, riparian forest, and vernal pool) would result in vegetation removal within the project ROW, also including a maximum 100-foot construction ROW, laydown areas, HDD setup areas, pipe-stringing areas, and staging areas. Construction could also disrupt the hydrology of the wetlands within and adjacent to the construction area, affecting wetlands that are habitat for special status plant species.

**Class:** II

- Finding(s):**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG, USACE, and RWQCB 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(S)**

A Wetlands Jurisdictional Delineation was performed by URS Corporation (2003) along the proposed route in order to locate, delineate, and map portions of the route that qualify as wetlands and other waters of the U.S. under federal jurisdiction pursuant to Section 404 of the Clean Water Act. Appendix 1E of the Draft EIR, with revisions in the Final EIR, is a set of aerial strip maps illustrating the jurisdictional delineation of wetlands along the project ROW.

Temporary impacts to wetlands could be caused by interception and detention of groundwater or surface water within the excavated trench, thus reducing the hydrologic input to the adjacent wetland. Long-term hydrologic change to wetlands could result from trench backfill and topographic restoration activities. Backfill material and methods would affect wetland hydrology by altering surface and subsurface flow. Surface alteration would impede or accelerate drainage. Compaction and settlement of backfill would create ditches along the pipeline. Excess backfill may restrict surface or groundwater connections to wetlands. Impacts to the hydrologic function of wetlands would be considered potentially significant. Impacts to wetlands that are habitat for special status plant species would cause an impact to the species occupying those habitats. Such impacts may occur to species, such as Suisun marsh aster, Contra Costa goldfields, and hogwallow starfish. Impacts to these special status plant species and wetlands/riparian forests would be considered potentially significant.

Mitigation Measure BB-5a (Wetland Avoidance and Restoration) requires avoidance of impacts to and, if necessary, restoration/creation of wetlands. Fencing wetlands and appropriate buffer zones, restricting vegetation removal, and agency consultation and appropriate restoration for unavoidable impacts are all required by this measure. Consistent with requirements set forth in permits issued by appropriate resource agencies for work in wetlands and with other plans

developed for the pipeline construction project, delineations for wetland areas outside of those already surveyed, maximum avoidance procedures, restoration procedures, replacement ratios, 5-year restoration monitoring, annual reporting, and contingency measures will all be addressed and implemented. The Environmental Monitor would supervise and verify compliance.

Mitigation Measure BB-5b (Trench Backfill and Topographic Restoration) requires stockpiling of and backfilling with native soil (or comparable type, if contaminated), proper compaction, and contour grading to ensure that the hydrologic functions of wetlands are not permanently altered by the project, construction timing. Appropriate agencies will approve the procedures that include excavation, soil storage and backfill methods, separation of topsoil and subsoil in upland storage locations, methods to ensure native seed survival within stored topsoil, circumstances requiring use of imported soils, proposed source of soil, backfill compaction specifications to ensure that changes in infiltration and lateral flow do not substantially alter subsurface hydrology, and specifications for the restoration of pre-construction surface topography to ensure that mounds or berms, due to overfill, or trenches, due to soil settling, are not created that will substantially alter surface hydrology. The Environmental Monitor would supervise and verify compliance.

Mitigation Measure BB-5c (Riparian Avoidance and Restoration) is established so that construction activities avoid and minimize impacts to riparian forest during construction due to trenching, open cut crossings of streams, and pit excavation for bore crossings of streams, or develop appropriate compensation. The measure requires identification and avoidance (by boring and/or fencing) of riparian vegetation and, if necessary, mitigation by planting replacement riparian habitat and consultation with appropriate resource agencies. Procedures for salvaging topsoil, vegetation clearing, streambank restoration, replacement ratios, native seed mix and application methods, irrigation and plant maintenance regime, success criteria, and post-construction monitoring are also required. Five years after all human support (e.g., replanting, fertilization, irrigation) has ceased, a report is required that summarizes results and will allow the appropriate resource agencies to evaluate whether successful implementation of the riparian restoration procedures has been complete or whether continued monitoring or contingency measures are required.

Mitigation Measures BB-5a (Wetland Avoidance and Restoration), BB-5b (Trench Backfill and Topographic Restoration), and BB-5c (Riparian Avoidance and Restoration) will each help to reduce wetland and riparian impacts by avoiding or compensating for damage to wetland and riparian vegetation.

Construction in wetlands is also subject to the permitting processes of the CDFG, USACE, and RWQCB. These permits and the mitigation measures defined above will result in minimizing of construction in wetlands and implementation of appropriate restoration where construction does affect wetlands.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. BB-6**

**BIOLOGICAL RESOURCES**

Impact: **BB-6: Construction-related disturbance could provide an opportunity and seedbed for the invasion of weeds, which could adversely affect special status plant species, upland vegetation, and/or wetlands.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG, USACE, and USFWS 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(S)**

Construction-related disturbance of habitats could allow invasion of weeds. Weeds are non-native opportunists that have developed reproductive features that give them a competitive advantage over many native plants. The introduction or expansion of exotic species is deleterious to native vegetation types. The introduction or expansion of exotic species may reduce habitat available to Suisun marsh aster, Contra Costa goldfields, and hogwallow starfish. Impacts to special status plants, upland vegetation, and/or wetlands from weed invasion would be considered potentially significant.

Mitigation Measure BB-6a (Weed Management) requires cleaning of vehicles, weed-free certification of materials, and vegetation clearing to minimize introduction of non-native species to sensitive communities. In addition, as supervised by the Environmental Monitor, weed management procedures also include salvaging the upper 6 inches of topsoil and timing and width restrictions of vegetation clearing. This measure would reduce the potential for weed invasion, especially where sensitive vegetation types exist, by setting required procedures for clearing and restoration of vegetation.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. B-1**

**BIOLOGICAL RESOURCES**

Impact: **B-1: Pipeline spills could degrade or alter habitat for wildlife, aquatic habitats and organisms, special status plants and their habitat, upland vegetation, and/or wetlands, potentially causing mortality and degradation of habitat to the point of precluding species re-establishment.**

Class: I or II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG, USACE, USFWS, and RWQCB 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Pipeline accidents resulting in large spills, particularly in aquatic and wetland areas, could result in petroleum products spreading beyond the 200-foot-wide study area that has been surveyed for special status plants. The extent of the impacts to special status plants from a pipeline spill is difficult to quantify for several reasons: (1) the area of impact for larger spills, especially those in aquatic and wetland areas, would be difficult to determine but could be very large, (2) the occurrence of special status plants outside the Study Area or that may become established within the study area during the lifetime of the project is unknown, and (3) the direct effects of the spilled product on special status plant species is unknown. In addition, for larger spills, mitigation for impacts to special status plants may be infeasible due to difficulty in re-establishing plants and remediating soil contamination to pre-existing conditions over very large areas.

Larger spills, particularly in aquatic and wetland areas, may spread beyond the project area, potentially affecting tidal marshes and sloughs. As a result, the potential for a large spill to occur is considered a significant and unmitigable impact for wetlands and special status plants.

When spills that occur in an area where the occurrence of special status plants is known, and where mitigation is feasible and could be completed in a relatively short time period, impacts would be considered potentially significant, but mitigable to less than significant levels.

Impacts to upland vegetation may also occur from pipeline spills. These impacts may include plant mortality, and degradation of habitat precluding re-establishment of the pre-existing vegetation type.

Spill impacts to sensitive upland vegetation types including oak woodland, riparian forest and native grassland, however, would be considered potentially significant. Mitigation for spill impacts to sensitive upland vegetation would likely be feasible since the extent of impacts could more easily be determined following the spill.

Mitigation Measure B-1a (Pipeline Spill Mitigation for Biological Resources) requires that SFPP prepare an addendum to its existing Emergency Response Plan and Emergency Plan regarding spill extent determination, cleanup and restoration measures for vegetation. The addendum is required to include procedures such as emergency diversion and containment measures to minimize the flow of product into known colonies of sensitive plant species or wetlands in the vicinity of the pipeline, equipment storage areas and mobilization procedures for each portion of the pipeline, non-destructive cleanup and restoration procedures, specifics of how to deal with oiled wildlife, both terrestrial and aquatic, a list of names and telephone numbers of persons who are expert in the rehabilitation of oiled wildlife, locations and response times of facilities and persons for responding to oiled wildlife, creating facilities if necessary, and an indication of an ability to rehabilitate oiled wildlife over the long term, if necessary. All cleanup and restoration work shall be supervised and verified by the Environmental Monitor.

Implementation of all construction mitigation measures related to Biological Resources and Mitigation Measure B-1a will reduce the extent and severity of pipeline spills on documented special status plant occurrences, upland vegetation, and/or wetlands. However, impacts to biological resources, especially wetlands and aquatic resources, from a large spill (greater than 50 barrels) are considered to be significant and unmitigable.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. B-2**

**BIOLOGICAL RESOURCES**

Impact: **B-2: Impacts to wetlands, special status plants and wildlife, and upland vegetation may occur during cleanup activities following a pipeline spill.**

Class: I or II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG, USACE, USFWS, RWQCB 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

The severity of impacts to biological resources from spill response activities would range from less than significant for small spills in areas where resources are well-defined and can be avoided, to significant and unmitigable where clean up activities could affect a large extent of valuable tidal or marsh habitat.

Accident response actions could affect biological resources through the following activities: (1) overland travel resulting in crushing individuals, vegetation removal, and degrading habitat, (2) access to, excavation, and re-installation of the pipeline resulting in plant removal, potential hydrologic alteration, including erosion/sedimentation onto individuals or habitat, (3) contaminated soil removal resulting in plant and seedbank removal, and (4) soil disturbance facilitating invasion by weeds. Because the effectiveness of cleanup of large spills in areas where special status plants occur cannot be determined, indirect impacts of cleanup activities on wetlands and special status plant populations is considered to be significant and unmitigable. However, cleanup of a smaller spill occurring in an area where the occurrence of special status plants is known could be effective in reducing impacts.

Cleanup impacts resulting in weed invasion and removal of vegetation and seedbank within sensitive vegetation types (oak woodland and riparian forest) would be considered significant, but mitigable since the extent of impacts could be determined following the spill. Larger spills, particularly in aquatic and wetland areas, may spread beyond the project area. The size of spill that may extend outside the project area is unknown. Indirect impacts extend over an even larger area. For larger spills, mitigation for indirect impacts to wetlands may be infeasible, due to difficulty in re-establishing plants in areas of overland travel and controlling weeds over very large areas. Therefore, potential direct impacts from large spills would be considered significant

and unmitigable (Class I). Cleanup impacts to wetlands from small spills are considered significant, but mitigable since the mitigation on a small scale is feasible and could be completed in a relatively short time period.

The construction-related mitigation measures related to Biological Resources and Mitigation Measure B-1a, requiring a supplement to the existing Emergency Response Plan, would reduce impacts of small to medium spills to documented special status plant occurrences, upland vegetation, and/or wetlands within the extent of the spill to less than significant levels. However, indirect impacts of cleanup activities could result in the loss of undocumented special status plant populations and direct impacts on wetland areas.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. B-3**

**BIOLOGICAL RESOURCES**

Impact: **B-3: Impacts to special status wildlife or plant species and upland vegetation or their habitats and/or to wetlands may occur due to overland travel pipeline maintenance and repair.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Pipeline operation and maintenance activities can affect vegetation by because vegetation can be crushed, hydrologic alteration of wetlands can result, erosion/sedimentation can degrade habitat due, and weed invasion can be facilitated due to ground disturbance or seed import. These impacts would be considered significant, but mitigable to less than significant levels.

Impacts to special status plant species and upland vegetation or their habitats and/or wetlands may occur during pipeline maintenance or repair work. Pipeline repair would generally involve excavation of soil and exposure of the pipeline and backfilling following repair. This would cause temporary vegetation removal and soil disturbance. These impacts to special status plant species could result from (1) removal of sensitive vegetation types (e.g., oak woodland, riparian forests, and/or wetland), individuals, seeds, or their habitat during excavation, (2) erosion/sedimentation during soil excavation or backfilling, (3) deposition of hazardous substances (e.g., diesel fuel), (4) hydrologic alteration to wetlands or to special status wetland plant species from improper backfilling, compaction or re-contouring, and (5) facilitating weed invasions due to soil disturbance and seed import.

Potential impacts on wildlife from operation of the proposed pipeline include disruption of wildlife during aerial and ground inspections of the pipeline ROW and maintenance and repair of valves. Since the location and timing of a major repair are impossible to predict, impacts on wildlife from repair operations could range from short-term, less than significant if no sensitive wildlife resources are present to potentially significant if sensitive wildlife resources are present.

Mitigation Measure B-3a (Pipeline Operations and Maintenance) requires development of an addendum to the Operations Plan that would include restrictions on off-road vehicular travel, mapping and avoidance of sensitive resources, and record keeping of monitoring activities.

Pipeline operation and maintenance, especially repair work, can create similar impacts as pipeline construction, all relevant construction measures should also be implemented to address impacts related to overland travel (e.g., restoration of sensitive vegetation types). Therefore, the addendum will also include measures, which will develop routine pipeline monitoring methods (i.e., establish proposed travel routes that limit off-road vehicular travel), create a map of the pipeline route depicting the location of all special status plant species and wetlands to be used during necessary off-road vehicular travel to avoid these resources, prohibit off-road vehicular travel during rainstorms or within a two-week period following any precipitation event, and finally prohibit disturbance and clearing of riparian and wetland vegetation during inspections.

Significant effects of repair operations can be avoided by implementation of Mitigation Measures BW-1a through BW-3d, along with measures for accidents/operation (Mitigation Measure B-1a), and Mitigation Measure B-3a. When taken together, these measures will protect areas of sensitive vegetation and prevent degradation of those areas.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. B-4**

**BIOLOGICAL RESOURCES**

Impact: **B-4: Construction disturbance to vegetation and wetlands and wildlife resources within Cordelia Marsh and Slough would be potentially significant. In addition, there is also the potential for a pipeline accident (Impacts B-1 and B-2) to occur in this area, resulting in significant unmitigable impacts in wetland areas.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

The Cordelia Marsh and Slough have areas of annual grasslands, brackish marsh, riparian scrub, and vernal pools. Many sensitive plant and animal species inhabit each of these habitat types. The area is specifically designated as special status species habitat for the Suisun shrew, the California clapper rail and black rail, and the salt marsh harvest mouse. Just west of Suisun Creek (MP 20.2-20.5), there are occurrences of blue and federally threatened valley elderberry, host plants for the valley elderberry longhorn beetle, which will be avoided by rerouting the pipeline 150 feet from the shrubs. Impacts identified that are associated with construction disturbance to vegetation and wetlands and wildlife resources within Cordelia Marsh and Slough would be potentially significant. In addition to construction and operational impacts through approximately 2.4 miles of sensitive marsh habitat, there is also the potential for a pipeline accident (Impacts B-1 and B-2) to occur in this area, resulting in significant unmitigable impacts in wetland areas (Class I).

Mitigation Measure B-4a (Cordelia Mitigation Segment) was investigated as a possible means to avoid construction, operation, and a potential accident in the sensitive biological and water resources within Cordelia Marsh and Slough. If implemented, this measure would require a revised pipeline route through this area.

The CSLC, as a decision-making body, has the ability to consider both possible alignments and decide which, on balance, will result in the least overall adverse impacts on the environment. Biological impacts could be reduced with the Cordelia Mitigation Segment, but impacts to historic resources would be substantially increased. During the public review period for the Draft EIR, the CSLC received information indicating that the mitigation segment would occur in close proximity to a historic district and planned transportation infrastructure projects in the area. Due to the high value placed by resource agencies on this habitat and its water resources, any reduction of long-term spill risk in the Cordelia Slough area is considered to be a significant benefit. However, regardless of implementation the Cordelia Mitigation Segment, impacts from a medium or large spill could still flow into the Cordelia Slough if the accident occurred near the

two waterway crossings in this segment. Use of the Cordelia Mitigation Segment would not prevent significant biological impacts to Cordelia Slough because of the possibility of a pipeline accident contaminating the slough if it occurred on either route. In addition, the mitigation segment would increase impacts to historic resources and have greater impacts to transportation and utilities. Within either the proposed right of way or the Cordelia Mitigation Segment, the impact of a pipeline accident in the Slough (Impact B-1, Pipeline Accident Affecting Biological Resources) would still be significant.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. CUL-1**

**CULTURAL RESOURCES**

Impact: **CUL-1: Identified cultural resources within and adjacent to the project alignment may be damaged or destroyed by construction operations.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Several recorded cultural resource sites are identified within 50 feet of the proposed ROW. Subsurface disturbance during pipeline construction will include surface preparation for construction lay down and stockpile areas, work areas, access roads, and excavations associated with pipeline removal and pipe replacement or the placement of new pipe. Natural soils encountered during surface preparation and excavation and trenching may include cultural materials. Construction and lay down areas would be adjacent to excavated bore pits. Additional ground disturbing impacts could include trenching for pipeline anomalies, infrastructure foundations as well as for underground utilities connections. These activities would cause potentially significant impacts if cultural resources are damaged or destroyed.

Mitigation Measures Cul-1a (Archaeological Monitoring and Site Avoidance), Cul-1b (Approval of Erosion Control Procedures), Cul-1c (Cultural Resources Awareness Training) require SFPP to revise the alignment as necessary to avoid archaeological sites. These measures also establish on-site construction monitoring by requiring presence of a Cultural Resources Monitor in sensitive areas. Cultural site recording, evaluation, and curation, approved erosion control procedures, and training of workers to recognize and avoid cultural resources are also aspects of these measures. Implementing Mitigation Measures Cul-1a through Cul-1c will improve the likelihood of avoiding sensitive cultural sites, and if a previously unknown site is encountered, these measures will also improve the likelihood of that site being formally identified, preserved, and recorded for curation.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. CUL-2**

**CULTURAL RESOURCES**

Impact: **CUL-2: Cultural resources that are presently unknown may be affected by project construction.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Some portions of the pipeline route were not surveyed by SFPP's consultant due to restricted access. In addition to areas that have not yet been surveyed, there is the possibility that unrecorded sites will be discovered during construction. Therefore, it is important that cultural resources monitoring take place in identified areas, and that appropriate data recovery be implemented in the event of a discovery. In the absence of such monitoring, the impact to cultural resources would be potentially significant.

Mitigation Measure Cul-2a (Archaeological Site Monitoring and Data Recovery) requires on-site monitoring of all construction work near known archaeological sites and sensitive areas. If cultural resources are discovered during ground-disturbing activities, work must stop in that area until the designated Cultural Resources Monitor can assess the significance of the find. This measure also requires treatment of any unanticipated resources according to guidelines from appropriate agencies. This helps to ensure that unanticipated cultural resources discovered during construction will be properly evaluated and/or treated and protected.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. CUL-3**

**CULTURAL RESOURCES**

Impact: **CUL-3: Project construction has the potential to expose Native American remains at both recorded and as yet unknown locations.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Surveys conducted along the Proposed Project ROW did not identify Native American remains. However, due to the extent of trenching that would occur during construction of the pipeline system, these remains could be discovered, which would be a potentially significant impact.

Mitigation Measure Cul-3a (Native American Coordination) requires coordination with appropriate agencies, including the Native American Heritage Commission, and implementation of appropriate security measures, as required by the California Health and Safety Code and Public Resources Code, if remains should be discovered. Implementation of this measure ensures proper treatment and respect of Native American remains, if they are discovered.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. EC-1**

**ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

Impact: **EC-1: Pipeline construction through contaminated sites could cause health hazards to construction workers and the public.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the DTSC 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(S)**

Transport of contaminants to the pipeline route from high and medium potential sites would result in impacts that are potentially significant. Subsurface migration of mobile contaminants within groundwater or along the pipeline route itself following permeable backfill materials may provide a conduit to the project area. Shallow groundwater will likely be encountered at bored water crossings and near waterbodies such as straits, rivers, unlined canals, drainage ditches, and ponds. It is possible that previously unidentified sites could be discovered during construction of the proposed pipeline. Soil contamination may be encountered during trench excavation in places where no recorded sites are currently designated or identified. Offsite migration of contamination, unauthorized dumping, or historic, unreported hazardous materials spills may adversely impact the soil throughout much of the industrial land use areas.

Mitigation Measures EC-1a (Medium Potential Impact Sites) and EC-1b (High Potential Impact Sites) require agency coordination to identify contamination along the approved alignment and establish safe work practices to would avoid or reduce the likelihood of encountering contamination. This requires SFPP to review records of the Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board, and local county environmental health departments and fire departments. SFPP must then define the extent of contamination or conduct sampling or surveys to define the presence of the contamination where it is unknown, and then demonstrate that the coordinating agencies have successfully approved work in the area. Mitigation Measure EC-1c (Unknown Soil or Groundwater Contamination) also requires continuous inspection of conditions along the alignment for possible contamination and proper handling of the contamination, if it is discovered. Implementation of Mitigation Measures EC-1a, EC-1b, and EC-1c will ensure that health hazards to workers and the public in the vicinity of contaminated sites along the construction ROW are minimized.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. EC-2**

**ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

Impact: **EC-2: The presence of landfills near the proposed pipeline alignment could result in encountering methane or other flammable or toxic gases during construction.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the DTSC 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(S)**

Contamination associated with two landfills could affect the pipeline construction zone, releasing methane, other flammable gases, and volatile organic compounds into excavated trenches and other areas of the active construction zone. The release of such gases could cause an explosion or fire hazard and/or potential health hazards, which would be a potentially significant impact.

Mitigation Measure EC-2a (Landfill Gases) requires soil vapor surveys in the vicinity of landfills, if available agency records cannot confirm a gas-free environment. SFPP must provide documentation of the site research and subsequent approval of safe conditions from the DTSC or local county environmental health department before work in the area is allowed to go forward. Pre-clearance of affected areas will protect both workers and the public from fire or health hazards.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. EC-3**

**ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

Impact: **EC-3: Construction activities associated with the Proposed Project could result in the release of natural gas from existing gas wells, causing an explosion or fire hazard and/or potential health hazards.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the DOGGR 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(S)**

There are numerous small active and abandoned natural gas fields in the vicinity of portions of the proposed pipeline route. Construction activities associated with the Proposed Project that result in ground disturbances could interfere with existing abandoned or inactive gas wells and cause release of natural gas that could result in an explosion or fire hazard and/or potential health hazards to the construction workers and other people in the vicinity of the active construction zone. This hazard would be a potentially significant impact.

Mitigation Measure EC-3a (Abandoned Natural Gas Wells) requires coordination with the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) for information on natural gas wells near the approved alignment. This requires SFPP to make a diligent effort to avoid construction near abandoned natural gas wells that are identified by DOGGR, and it requires SFPP to ensure that plugged or abandoned wells or previously unidentified wells are flagged for avoidance of correctly abandoned. By properly treating or avoiding existing gas wells, the risk of hazards will be minimized.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. EC-5**

**ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

**Impact:** EC-5: Pipeline accidents could result in small to very large spills of refined petroleum products that would cause soil and potential groundwater contamination.

**Class:** II

- Finding(s):**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the DTSC 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(S)**

Pipeline accidents could result in spills of refined petroleum products ranging from small (less than one barrel) to very large (over 10,000 barrels). Refined petroleum products such as gasoline contain numerous regulated hazardous chemicals. Depending on the location of a pipeline spill and the rate of the leak, the petroleum product would cause soil and/or groundwater contamination. The impact of soil and groundwater contamination by a refined petroleum product is potentially significant.

Mitigation Measure EC-5a (Site Characterization After Accident) requires the accident site to be characterized and for the remedial action to be reviewed and approved by the oversight agencies, including DTSC, RWQCB, or local environmental health departments. This requires SFPP to determine the extent of the contamination and the potential environmental risks, and it requires SFPP to follow an approved work plan for remedial action. Other steps are in place to minimize the likelihood of pipeline accidents, and with implementation of Mitigation Measure EC-5a, impacts of soil and groundwater contamination resulting from a pipeline accident will be minimized through specified remediation of affected area(s).

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. EC-6**

**ENVIRONMENTAL CONTAMINATION AND HAZARDOUS MATERIALS**

**Impact: EC-6: Spills of pigging waste could cause soil contamination at the pig receiver.**

**Class: II**

- Finding(s):**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the DTSC 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(S)**

Potential environmental contamination resulting from pipeline operation consists of pipeline cleaning by pigging. Spills of pigging waste could cause soil and/or contamination at the pig receiver and result in a potentially significant impact.

Mitigation Measure EC-5a (Site Characterization After Accident) addresses impacts caused by pipeline accidents. If a pigging waste spill occurs, it must be handled as a pipeline accident and requires SFPP to follow accident response procedures, including remedial action if deemed necessary by DTSC, RWQCB, or local environmental health departments. With implementation of Mitigation Measure EC-5a, the effects of soil contamination from a pigging waste spill will be minimized through appropriate remediation.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-2**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-2: Pipeline construction could expose and damage paleontological resources.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

In numerous locations, the proposed pipeline crosses geologic units that are considered moderate to highly sensitive with respect to paleontological resources. Pipeline construction could expose and damage these resources.

Mitigation Measure G-2a (Paleontological Resource Procedures) defines procedures to protect paleontological resources and requires monitoring by a qualified paleontologist in specified areas with high potential for uncovering paleontological resources. It also requires that the monitor provide education and training for construction workers regarding potential resources that may be discovered. The monitor will also survey sensitive areas during construction, and if potential paleontological resources are encountered, the monitor will have the ability to stop construction to protect the resources. This measure would allow identification of paleontological resources as construction progresses because the construction crew will be trained to identify them and the monitor will be present. When trench spoils are seen to include these resources, this mitigation will require that construction be stopped so the resources can be identified and collected for curation at an appropriate institute.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-3**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-3: Slope failures or downslope creep of unstable natural or man-made slopes along the pipeline could lead to substantial pipeline damage or failure.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

In the slopes west of I-680 between MP 15.1 and 15.25 (Segment 2), the pipeline route passes through a geologic formation containing deeply weathered Sonoma Volcanics, which are susceptible to slope failures. Although the pipeline would be buried at the base of these slopes, a deep-seated slope failure upslope of the pipeline may involve bedrock and soil as deep or deeper than the pipeline. A slope failure could bend and stretch the pipeline, causing rupture or pipeline damage that could lead to product release.

Mitigation Measure G-3a (Geotechnical Investigation at Landslide Crossing) requires completion of geotechnical investigations at specifically-defined landslide crossings so that final pipeline design can incorporate engineering protection of the pipeline to prevent damage. These measures may include soil improvements, buttressing of the slopes, compaction of trench backfill, or deepening of trenches. This measure will ensure that the pipeline is protected from slope failure, reducing the likelihood of pipeline damage if the slope fails.

In addition, Mitigation Measure G-3b (Valves at Landslide Crossings) requires that motor operated and/or check valves be installed at either side of landslide zones. This measure is required because Mitigation Measure G-3a cannot completely eliminate the risk that a landslide could damage the pipeline. The appropriate location of required valves will be evaluated by the CSLC and CSFM in their review of SFPP's final pipeline design. If a landslide occurs, the valves will be closed to ensure that the amount of product that can spill is only the volume between the two valves.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-4**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-4: Due to surcharge loading attributable to trains, there could be a failure of an excavation in areas where the proposed pipeline crosses beneath active railroad ROW, which could seriously impact operation of the railroad.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of Caltrans 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(S)**

The Proposed Project requires approval from the applicable jurisdiction or property owners for all highway and railroad crossings. The minimum depth of cover for the pipeline at highways may be specified by the permitting agencies. Where the proposed pipeline crosses beneath active railroad right of way (Segment 1, where the route follows the Existing Pipeline ROW Alternative route; Segment 3, MP 21.7 and 22.0; Segment 5, MP 32.6; and Segment 6, MP 68.5, 68.6, and 68.9), trench and pipeline design need to take into account the additional weight surcharge of passing trains. These excavations can be completed safely if sufficient engineering precautions are implemented. However, failure of an excavation in these areas, due to surcharge loading attributable to trains, could seriously impact operation of the adjacent railroad or highway.

Mitigation Measure G-4a (Construction Below Active Highways and Railroads) defines specific construction requirements that must be implemented when construction occurs below active highways and railroads. It requires maintaining a minimum depth of cover underneath highways and railroads, and also the completion of geotechnical investigations when construction occurs within 10 feet of the centerline of an active railroad. These investigations will allow development of specific engineering measures to protect the stability of the excavation. This measure, along with other steps that would be taken near highways and railroads, including compliance with the required permitting processes of the highway and railroad owners, will reduce the risk of excavation failure which protects the continued operation of the adjacent road or railroad.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-5**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-5: Active fault crossings could result in pipeline rupture.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Oil and gas pipelines can be designed to withstand substantial fault movement without rupture when the direction and magnitude of anticipated offset is well defined. However, because of the uncertainties regarding direction and magnitude of anticipated offset and because fault-crossing design has not been thoroughly tested by large earthquakes, two of the pipeline's active fault crossings (Concord and Green Valley faults) are designated as significant and unmitigable (Class I) impacts.

The pipeline crossing of the Cordelia Fault is designated a potentially significant but mitigable impact. The Vaca Fault crossing is also designated as a significant but mitigable impact because of the lower probability of rupture during the design life of the project facilities. The Great Valley Fault is a blind thrust and is not expected to produce surface rupture, though it may produce extreme ground shaking over a broad area. Impacts from this type of movement can be mitigated with appropriate pipeline design measures.

Mitigation Measure G-5a (General Fault Crossing Design Parameters) presents specific fault crossing design parameters to enhance pipeline safety at the Concord, Green Valley, and Cordelia Faults. These parameters include crossing of each fault at as close to a 90 degree angle as possible (because this angle avoids creation of shortening or large compressive strains during fault movement), as well as use of specific engineered backfill, thicker walled pipe, additional valves on either side of the fault zone. The measure also requires SFPP to define the worst-case spill at each fault crossing, identify biological resources near each crossing that could be affected by a pipeline spill, maintain spill response resources near the fault locations so that clean up of a spill happens as quickly as possible. The measure also requires that SFPP pay a mitigation fee or restoration of like-habitat if a spill does occur as a result of fault movement, so that valuable habitat can be maintained. With this measure, the likelihood of an earthquake damaging the pipeline is reduced, and even if a damaging earthquake occurs, spill response and restoration mechanisms are defined to reduce the damage to valuable habitat.

Mitigation Measure G-5b (Pipeline Operations Plan) also reduces the risk of a product spill at the three active fault crossings. This measure requires that SFPP implement a Pipeline Operations Plan immediately following an earthquake, successfully completing internal and external inspection and integrity testing. These tests will identify areas where pipeline damage occurred so pipeline segments can be replaced before a leak or rupture occurs. However, the Concord and Green Valley Faults have the potential for lateral movement of up to 9.5 feet, and no pipeline design measures would prevent rupture in that situation.

Even with the implementation of the Mitigation Measures G-5a and G-5b, impacts associated with the fault crossings (Concord and Green Valley faults) are still considered to be significant because fault movement could exceed existing feasible pipeline design measures.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. G-6**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-6: Strong earthquake-induced ground shaking could result in significant damage to aboveground structures and lead to failure of open trenches during construction.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Strong earthquake-induced ground shaking generally only affects aboveground structures, but it can also damage buried structures like pipelines. This occurs when the shaking induces ground failure such as settlement or liquefaction, or when the buried structure spans an abrupt change from stiff to soft or very soft soils. The aboveground facilities at the Concord Station will experience strong ground shaking in an earthquake due to its location in Seismic Zone 4. In addition, there is a risk that the trench used for pipeline construction could collapse during construction.

Mitigation Measure G-6a (Excavation Safety and Trench Design) requires that SFPP develop an OSHA-approved design for trench shoring. This shoring design will be reviewed and approved by the CSLC, and SFPP will implement it during construction to prevent trench collapse and protect construction workers in the event that an earthquake occurs.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-7**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

**Impact:** G-7: Liquefaction often results in loss of ground bearing capacity and/or lateral spreading, both of which could result in damage to engineered structures like pipelines.

**Class:** II

- Finding(s):**
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

Liquefaction is a seismic hazard that can occur during or after an earthquake. Liquefaction hazards result where the pipeline is buried in a competent soil that overlies deeper liquefiable soil layers. Liquefaction of the deeper layers may result in substantial lateral spreading of the upper competent soil. Lateral spreading along the Proposed Project alignment is particularly likely in the vicinity of unlined stream and river channels or other sloping locations such as those along Walnut and Grayson Creeks in Concord, and along the Deep Water Ship Channel and Turning Basin in West Sacramento. Damage induced by lateral spreading and liquefaction is generally most severe when liquefaction occurs within 15 to 20 feet of the ground surface. The potential for liquefaction and lateral spreading damage to the pipeline is designated as a potentially significant impact.

Mitigation Measure G-7a (Reduce Liquefaction Hazard) requires that final geotechnical analysis be completed in specific areas along the pipeline route where liquefaction potential is considered to be high. If this analysis confirms high liquefaction potential, then specific design measures will be implemented to reduce the likelihood of pipeline damage in an earthquake. The design measures to be implemented include burial of the pipeline below liquefaction hazard areas; use of stone columns, concrete coating, or thicker walled steel pipe where pipeline uplift could occur; and other measures similar to those used to reduce pipeline damage at fault crossings. Implementing this measure will reduce the likelihood, through use of accepted engineering methodologies, that liquefaction during an earthquake could damage the pipeline and cause the release of petroleum products.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. G-8**

**GEOLOGY, SOILS, AND PALEONTOLOGY**

Impact: **G-8: A seiche could remove soil cover and damage the pipeline.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

The potential for seiche inundation is limited to the Carquinez Strait crossing in Segment 1. Given the relatively high probability of a major earthquake in this region, and the relatively flat topography at these locations, a seiche could be expected to generate sufficient erosive energy to remove the cover and damage the pipeline. Therefore, the potential for seiche inundation is designated as a potentially significant impact.

Mitigation Measure G-8a (Protection from Seiche Inundation) requires completion of an analysis of the wave run-up and erosion potential in the pipeline segments that are immediately adjacent to the Carquinez Strait (both north and south of the Strait). Erosion protection such as riprap, paving, or armoring will be installed to prevent waves from uncovering the buried pipeline. The measure also requires that adequate pipeline cover be maintained throughout the project life. Ensuring that the pipeline is adequately buried and protected from waves and erosion will prevent erosion from exposing the pipeline to damage, thus reducing the likelihood that petroleum products will be released.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. HS-1**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-1: Construction activities including ROW clearing can disturb stream sediments and leave exposed soil that can be washed into nearby waterways.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CDFG and RWQCB 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(S)**

Discharge of fine sediments into streamflow during construction activities can cause: gullies to grow to large size; loss of vegetative habitat; erosion damage to property; public safety risks; and possible exposure of the pipeline. The Pacheco Slough crossing is considered to have a higher potential for in-stream sediment disturbance during construction than the other trenched crossings. This stream channel is steep-sided and relatively deep, with a potential for lateral erosion. Given the need to protect the pipeline against streambed scour and lateral erosion that could result in pipeline rupture, a wide, deep trench in a potentially flowing stream may be necessary. The potential for construction to introduce fine sediments to waterways is potentially significant.

Mitigation Measure HS-1a details the requirements for the construction plan for water crossings (e.g., stream plan view, stream cross section, pipeline location and burial depth, crossing techniques, trench dimensions, sediment control structures, etc.), sets scheduling restrictions, and restricts materials in the streambed. Mitigation Measure HS-1c establishes erosion control procedures, including the discussion of locations where permanent erosion control features will be installed, restoration/revegetation, specific best management practices (BMPs) for erosion and sediment-control techniques (i.e., silt fences, straw bale dikes, diversion channels), permanent erosion control measures (i.e., water bars, trench dams, diversion ditches, water bars, energy dissipators, dips, staked bales, erosion control mats, sediment basins, and berms), erosion-control structures (i.e., water bars and terraces), stream crossing angles, ROW drainage, and ROW construction restrictions. Together, Mitigation Measure HS-1a (Construction Plans to Define Water Crossings) and HS-1c (Erosion Control Procedures) would require coordinated agency approval of site-specific construction plans and schedules in the vicinity of water crossings. These measures also require steps be taken to preserve the condition of streambeds and expedite construction in these areas.

Mitigation Measure HS-1b (Open Cut Crossing Methods) requires use of controlled channels or culverts to ensure that open cut crossings, where necessary, are conducted in dry conditions. Mitigation Measure HS-1d (Pacheco Slough Crossing) requires use of a directional drilling

method for the crossing of Pacheco Slough if any flowing water is present or expected to be present during construction.

With implementation of Mitigation Measures HS-1a through HS-1d, stream crossing requirements are established to reduce discharge of fine sediments into streamflow during construction. Overall disturbance to waterways and water quality will be minimized.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. HS-2**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-2: Contaminants leaking from construction equipment or discharge of hydrostatic test or dust control water could degrade surface or groundwater quality.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the RWQCB 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(S)**

Water used for hydrostatic testing could degrade the aquatic habitat if it is discharged into nearby streams. Several construction spreads would work simultaneously along the pipeline route. Discharge of this water could adversely affect surface water quality. Water quality degradation from the introduction of toxic substances in hydrostatic test water would be a potentially significant impact.

Mitigation Measure HS-2a (Hydrostatic Test Water) requires disposal of this wastewater to an approved facility. This will minimize the potential for the degradation of surface or groundwater quality from the discharge of chemical contaminants, hydrostatic test water, or dust control water into the streamflow during construction by requiring adequate disposal of wastewater.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. HS-3**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-3: Surface water can be contaminated during directional drilling if drilling fluid is released.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the RWQCB 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(S)**

Seepage of drilling fluids such as bentonite or similar materials could occur during boring operations if fractures are encountered in the underlying rock, and drilling fluid pressures are great enough to force the material to the surface. Drilling fluids can emerge on the ground surface or within the waters of the waterway being crossed. Because there are 46 proposed bore and HDD surface water crossings, the possibility of such a drilling fluid release (also called a "frac-out") is a major concern. A release of drilling fluids would adversely affect water quality down stream of the seepage causing potentially significant impacts.

Mitigation Measure HS-3a (Response to Unanticipated Release of Drilling Fluids) requires establishing a "frac-out" prevention and response plan that forces work to stop and containment and remedial action for any drilling fluid that is accidentally released. The required plan addresses the monitoring of drilling fluid pressures, site-specific geotechnical data, HDD depth restrictions, sizing techniques (e.g., move bores back and forth slowly to keep track of potential frac-outs), surface casings, nighttime drilling restrictions, containment equipment requirements, turbidity monitoring, the reporting of bentonite seeps to the appropriate resource agencies, on-site boat monitoring, and mitigation/compensation procedures. Implementation of this measure with its "frac-out" prevention and response procedures will both minimize the likelihood of release of drilling fluids into waterways and will allow faster response to an accident if it occurs. As a result, water quality (and aquatic habitat for biological resources) will be protected and improved, if warranted.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. HS-4**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-4: Streambed scour could potentially rupture the pipeline causing a release of petroleum products.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM and RWQCB 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(S)**

The buried pipeline can be uncovered and exposed by bank erosion or streambed scour during significant flood events. Exposure of the pipeline through erosion would increase the risk of pipeline rupture because an exposed pipeline is subject to external damage. In the event of a pipeline rupture, spilled petroleum product would flow into the surface waterbody causing potentially significant degradation of water quality downstream.

Mitigation Measure HS-4a (Adequate Pipeline Burial and Protection) requires appropriate design and approval of pipeline burial depths at stream crossings. After floods or other high-flow events, SFPP is also required to monitor cover depth and pipeline integrity where the pipeline is located near streams. In order to minimize bank erosion, plans for setback and/or bank protection, with backup engineering analysis and calculations, will also be approved by the CSLC. Implementation of this measure requiring adequate burial and protection reduces the potential for pipeline accidents that can result if the pipeline is exposed within a waterway.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. HS-5**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-5: Contamination of surface water could result from accidental rupture of the pipeline during operation or maintenance.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Pipeline rupture can occur from a variety of causes such as scour and erosion, third-party damage, corrosion, landslides, earthquakes, construction defects, or long-term pipeline weakening. The discharge of pipeline product into streamflow is the most damaging impact to surface water that could result from the construction or presence of the pipeline. Spilled product entering a stream would be transported downstream with the flow until captured by emergency response techniques, captured in a reservoir, or dissipated. The petroleum product carried by the pipeline contains chemicals that are flammable, toxic, and carcinogenic and which can destroy aquatic life and threaten human health and safety.

The proposed route crosses areas of the CALFED Bay-Delta Program and through the Primary Zone of the Legal Delta (includes agricultural lands in Solano County and the Yolo Bypass in Yolo County), which is, therefore, within the jurisdiction of the Delta Protection Commission. It is the Commission's mandate to protect, maintain, and enhance the Delta's existing agricultural, recreational, and wildlife values. In addition to the Delta, the Carquinez Strait, the Suisun Slough and wetlands in the Suisun Marsh, Walnut Creek, and Ledgewood Creek are all waterbodies that are listed as "impaired" under the Clean Water Act Section 303(d). Impaired waterbodies require especially strict water quality protection standards.

There is a probability that a large product spill (greater than 1,000 barrels) could affect surface water during the lifetime of the pipeline, and such a spill could affect highly sensitive surface water resources, including the threatened waterbodies mentioned above. Therefore, this impact is classified as significant and unmitigable.

Mitigation Measure HS-5a (Spill Response Plan to Protect Waterways) requires that SFPP prepare a Supplemental Spill Response Plan, which would present measures for containment and cleanup of product spills that could affect surface water, as well as discuss notification

procedures to appropriate agencies. Implementing Mitigation Measure HS-5a and the requirements of the Supplemental Spill Response Plan will minimize both the likelihood of a pipeline spill and the size of a potential spill.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. HS-6**

**HYDROLOGY AND WATER QUALITY**

Impact: **HS-6: The proposed pipeline could indirectly cause an increased risk of flooding and erosion**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

The placement of fill, debris, and above-ground structures (e.g., pipeline control valves) within a stream channel or the floodplain could result in and an increased risk of flooding and erosion. Flooding of above-ground structures could result in damage to the structure and/or water quality degradation. This would be considered a potentially significant impact.

Mitigation Measure HS-6a (Floodplain Protection) prohibits placement of most structures or fill related to the pipeline in the floodplain of a river or stream (including valves, stations, and streambed protection devices such as riprap). The measure requires that if structures or fill are essential, SFPP shall demonstrate that the structure or fill is essential in that location, that it is the minimum size necessary, that it has no adverse flooding or erosion effect on adjacent property, and that the natural or existing cross section of a stream is not be permanently altered. This measure includes requirements and restrictions to reduce the likelihood that flooding or erosion near the pipeline could damage other existing facilities through either avoidance or engineering modifications.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. GW-2**

**HYDROLOGY AND WATER QUALITY**

Impact: **GW-2: An accidental release of pollutants during construction activities could degrade groundwater quality.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the RWQCB 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(S)**

Areas that have been stripped of vegetation and topsoil would provide less treatment to infiltrating runoff than areas that remained undisturbed. Risk of direct groundwater contamination would likely be increased in areas of shallow groundwater by construction-related activities. In addition, the use of motorized heavy equipment (which can release hydraulic fluid and fuel) and stored construction materials would increase the risk of introducing contaminants to groundwater exposed in a trench or to near-surface groundwater. The chemicals used to facilitate the drilling process (drilling muds) can also be oil- or water-based, and other chemicals are sometimes used.

Mitigation Measure HS-2a (Hydrostatic Test Water) related to Impact HS-2 (Discharge of Chemical Contaminants into the Streamflow During Construction) defines pollution prevention requirements for construction to prevent the accidental release of contaminants. Implementation of this measure, along with NPDES requirements for preparation of a SWPPP and HMPP, will ensure that groundwater quality is protected during construction.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. GW-3**

**HYDROLOGY AND WATER QUALITY**

Impact: **GW-3: Trenching and other construction activities increase the risk of accidental damage to a well or supply lines from a well by heavy equipment.**

Class: II

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM 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(S)**

Large construction vehicles could damage a groundwater supply system located in the construction ROW by accidental direct impact. This impact would likely be limited to individual receptors and could be quickly repaired with replacement of damaged material. The impact is considered to be potentially significant.

Mitigation Measure GW-4b (Water Well Protection) requires SFPP to implement preventative measures when the pipeline is within the vicinity of water supply wells, including avoidance of these areas (see Impact GW-4 below). The potential for damage to water supply systems (e.g., wells or supply lines) from trenching, heavy equipment, and other construction activities is minimized with the implementation of the preventive measures laid forth in Mitigation Measure GW-4b. As a result, water supply systems will be protected from damage during construction.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. GW-4**

**HYDROLOGY AND WATER QUALITY**

Impact: **GW-4: Drinking water could be affected if contaminants released in groundwater migrated to a well used for municipal or private drinking water purposes.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - b) Such changes or alterations are within the responsibility and jurisdiction of the CSFM and RWQCB 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.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

If a pipeline accident occurs, it is likely that groundwater would become contaminated because the pipeline is buried and the project area has relatively shallow groundwater. The extent and severity of contamination would depend on the location of the accident and the density of nearby wells, especially public water supply wells. If groundwater that supplies drinking water wells becomes contaminated, the effects would be severe and of long duration. A variety of mitigation measures are available to reduce the severity of this impact. However, since large product spills potentially resulting in discharge of product to groundwater are expected to occur at least once during the lifetime of the pipeline, this impact is classified as significant and unmitigable.

Mitigation Measure GW-4a (Install Thicker-Wall Pipeline or Weight Coating in Strategic Areas) will reduce pipeline buoyancy and provide increased wall thickness in areas that are within a shallow aquifer or likely to be disturbed by future construction activity and that are near municipal wells. The measure also includes monitoring requirements for potential seismic-induced liquefaction following a seismic event.

Mitigation Measure GW-4b (Water Well Protection) requires steps to ensure pipeline integrity and proper accident response to protect drinking water supply wells in the event of a spill. The measure requires the reporting of any existing public water supply well within 200 feet of the proposed pipeline centerline, defines measures to protect against third-party damage (e.g., thicker-walled pipe), and requires that SFPP coordinate with well owners. A Pipeline Wellhead Protection Plan must also be approved by the CSLC and the State Fire Marshal prior to the start of construction.

Mitigation Measure GW-4c (Groundwater Remediation Procedures) requires establishing emergency response procedures that involve identification of wells potentially affected by a pipeline accident (e.g., map location, owner contact information, depth of the well) and identification of alternative sources of drinking water. To prepare for a potential accident, an overview will be developed, which includes hydrogeologic conditions throughout the length of the pipeline ROW, estimated local aquifer boundaries, groundwater flow directions, locations of stream crossings, and probable direction of flow at waterway crossings. Finally, this measure also requires SFPP to outline remediation approaches for areas potentially affected by a release in order to facilitate effective emergency response and reduce or prevent groundwater contamination before drinking water is impaired.

Mitigation Measures GW-4a, GW-4b, and GW-4c reduce the potential for contamination of drinking water from a pipeline accident and the migration of product to a well used for municipal or private drinking water purposes.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. LU-1**

**LAND USE, PUBLIC RECREATION, AND SPECIAL INTEREST AREAS**

Impact: **LU-1: Construction disturbances could create noise, dust, equipment emissions, odors, traffic congestion, limited parking, access detours, and utility disruptions.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

It can be expected that construction disturbances would occur for up to two weeks at any given point along the proposed ROW, throughout the anticipated eight-month total construction period. This would mean daily disturbances of noise, dust, equipment emissions, possible odors, traffic congestion, limited parking, access detours, and utility disruptions to land uses adjacent to the ROW, including to residents, employees, shoppers, schools, parks, community facilities, and particularly emergency vehicles.

Residential uses adjacent to, or very near, the ROW would experience increased noise, dust, and odor levels due to truck traffic, equipment operation, and trenching activities. Access to residences could be temporarily rerouted, causing inconvenience and delays for residents arriving at or departing their homes. Residents along the ROW may also experience temporary disruption of public services and utilities, such as water, gas and electricity, resulting in substantial inconvenience but usually not lasting more than several hours at a time. Overall, these impacts are considered to be potentially significant.

Mitigation Measures LU-1a (Construction Notification) requires that SFPP provide at least 30 days advance notice of the start of construction to adjacent landowners, residents, and occupants. The notice will state specifically when and where construction will occur, and if delays of more than 14 days occur, an additional notification will be made. This measure ensures that residents and owners will be aware of the anticipated short-term construction disturbance, and allows them adequate time to make any preparations necessary.

Mitigation Measure LU-1b (Minimize Impacts to Schools and Day Care Facilities) limits the construction hours during high activity hours where construction will be within 500 feet of schools and day care facilities. This will minimize disturbance of these facilities when construction activities are occurring near them.

Mitigation Measure LU-1c (Provide Telephone Access) requires SFPP to provide adjacent land uses with advance notification of work in the vicinity and requires coordination of the pipeline work with the operations of adjacent land uses. SFPP must provide a toll-free telephone number (published in the notices distributed to comply with Mitigation Measure LU-1a) for receiving questions or complaints during construction, and it must develop a procedure for responding to such questions or complaints. This measure will ensure affected parties can contact SFPP during construction so that the length and level of construction disturbance (noise, air quality, and transportation or traffic) will be minimized.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. LU-2**

**LAND USE, PUBLIC RECREATION, AND SPECIAL INTEREST AREAS**

Impact: **LU-2: Construction impacts to agricultural land could result in loss of topsoil and/or farming income.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Pipeline construction in agricultural land would temporarily remove from production a 100-foot-wide strip of cultivated land, mostly adjacent to roads. Impacts to agricultural operations could result in the loss of topsoil and farming income. These impacts would be potentially significant.

Mitigation Measure LU-2a (Topsoil Preservation) requires that SFPP set aside at least eight inches of topsoil removed from construction on agricultural lands, preserving it and replacing it when construction is completed. This will ensure that productive agricultural soils are replaced and thus remain productive after construction is completed.

Mitigation Measure LU-2b (Compensation to Land Owners) requires SFPP to work with agricultural landowners to negotiate an easement for work and to provide fair compensation for the temporary use of land during construction. Implementation of this measure will compensate agricultural landowners for loss of productive use of land during construction.

**Summary.** This impact is found to be less than significant following mitigation.

**CEQA FINDING NO. LU-3**

**LAND USE, PUBLIC RECREATION, AND SPECIAL INTEREST AREAS**

Impact: **LU-3: A pipeline accident could contaminate land and property with spilled product or cause death or injury due to fire or explosion.**

Class: I

- Finding(s):
- a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

Potential rupture of the pipeline could result from corrosion, earthquakes, or third party disturbance in the ROW. In the event of a spill in populated areas, two significant adverse consequences could occur: a) contamination of land and property from spilled product; and b) injury or death due to a fire that could result from ignition of product.

Although the probability is low that either of these impacts would occur, the consequences of such events could be significant. Mitigation measures related to Pipeline Safety and Risk of Accidents would reduce the likelihood that the impacts would occur, but it is not possible to completely eliminate the risk that an accident could occur. Therefore, Impact LU-3 is considered to be significant (Class I) in Segment 4 (Fairfield/Suisun City) and Segment 6 (West Sacramento) because in these segments, the most densely populated areas along the pipeline route could be contaminated by product or could be subjected to fire and thermal radiation effects.

Mitigation Measures S-2a through S-2d (see Impact S-2 above in Pipeline Safety and Risk of Accidents) require that SFPP prepare a Supplemental Spill Response Plan that would improve response to an accident along this new pipeline route (reducing the extent of contamination if an accident does occur) and that they implement design measures to reduce the risk of third-party accidents in the most densely populated areas. Because third-party accidents are one of the most common causes of pipeline accidents, this measure will reduce the likelihood that a pipeline accident will occur. While Mitigation Measures S-2a through S-2d will reduce the likelihood that an accident will occur and reduce the extent of impacts from a spill, leak, or fire, they cannot eliminate the risk that a serious pipeline accident could affect sensitive land uses.

**Summary.** This impact is found to be significant following mitigation. See Exhibit C, Statement of Overriding Considerations.

**CEQA FINDING NO. N-1**

**NOISE**

Impact: **N-1: Construction work would cause noise that would be short-term in duration. Noise levels from construction activities on-site and off-site could exceed applicable standards at sensitive residential receptors and other noise sensitive areas near the pipeline route, staging areas, and access roads.**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

**FACTS SUPPORTING THE FINDING(S)**

On-site construction noise would occur primarily from heavy-duty construction equipment (e.g., backhoes, excavators, loaders, cranes, and drill rigs). The peak noise levels associated with work along the work spreads will be short-term in duration, but they would create adverse impacts depending on the proximity of noise-sensitive areas to the travel routes and the hours of construction activity. In some municipalities, nighttime construction may be required to minimize the impacts on local traffic. Coordination with local municipalities will be necessary to meet more-stringent nighttime noise standards. Without additional measures the impact of construction noise on-site would be potentially significant.

The off-site component of construction noise would occur primarily from commuting workers, and from a wide range of truck trips to deliver and recover materials at the work sites along the entire alignment. The peak noise levels associated with passing trucks and commuting worker vehicles will be short-term in duration, but they could be adverse depending on the proximity of noise sensitive areas to the travel routes and the hours of off-site construction activity, resulting in a potentially significant impact.

Mitigation Measure N-1a (Restrict Work Hours) ensures that off-site activity related to nighttime work would not occur during the nighttime hours, when it would conflict with local standards. With implementation of Mitigation Measures LU-1a and LU-1b (related to Land Use, Public Recreation, and Special Interest Areas), surrounding land uses will be notified of on-site and off-site activities and made aware of the anticipated schedule, and construction activities will be adjusted to minimize impacts to schools and day care facilities. The land use measures, along with Mitigation Measure N-1a, would reduce the exposure of sensitive receptors to construction noise by ensuring that nuisance conditions are avoided and compliance with local standards.

**Summary.** This impact is found to be less than significant following mitigation.