## **Mitigation Monitoring Table**

	Mitigation	Monitoring/	Effectiveness	
Impact	Measure	Reporting Action	Criteria	Timing
AESTHETICS				
I.1: Installation of the 4,000-foot replacement section of pipeline in Martinez would have a temporary, but significant impact on scenic vistas viewable from the adjacent shoreline parks administered by the East Bay Regional Park District and from portions of the City of Martinez.	I.1: Prior to commencing construction activities, the new owner (SPBPC) of the Richmond to Pittsburg Fuel Oil Pipeline and Hercules Pump Station shall coordinate construction activities affecting parklands and trail systems with the East Bay Regional Park District and the City of Martinez. This shall include submittal of an aesthetic resources plan to the City and the Parks District that addresses the potential for construction activities to have impacts on aesthetics resources, including specific measures that will be taken to restore such resources to preconstruction conditions or to make improvements to these resources in cooperation with the City and the Parks District. The plan shall also include: details of the methods of shielding and placement of new above-ground components, such as valve stations, that would be viewable where no such components currently exist. The plan shall include a discussion of actions taken such that final pipeline alignment and construction activities associated with this project shall not interfere with the implementation of the Martinez Intermodal Project (which includes the new bridge over Alhambra Creek) and the Martinez drainage project. SPBPC shall not commence construction activities along the replacement segment in Martinez until the aesthetics resource plan is reviewed and approved by the East Bay Regional Parks District, the City of Martinez, and the CPUC mitigation monitor. The CPUC's mitigation monitor shall verify compliance with the aesthetics plan during construction of the replacement section.	SPBPC shall submit documentation to the CPUC verifying that the SPBPC has made a binding commitment to participate in the compilation and implementation of an Aesthetics Resources Plan in coordination with the East Bay Regional Park District and the City of Martinez.	Documentation of delivery to the CPUC of documentation verifying that the SPBPC has entered into a binding agreement to participate in the compilation and implementation of an Aesthetics Resource Plan and has given notice of such participation to the City of Martinez and East Bay Regional Park District.	Prior to the transfer of title and submission and certification of construction plans for the 4,000-foot pipeline replacement section.

Impact	Mitigation Measure	Monitoring/	Effectiveness Criteria	Timing
Impact		Reporting Action See measure I.1.		Timing
I.2: Vegetation removal, construction activity, and installation of the proposed 4,000-foot replacement section in Martinez would affect local scenic resources in the vicinity of the construction activity.	Implement measure I.1.	See measure 1.1.	See measure I.1.	See measure I.1.
I.3: Vegetation removal, construction activity, and installation of the proposed 4,000-foot replacement section in Martinez would degrade the existing visual character and quality of the project area.	Implement measure I.1.	See measure I.1.	See measure I.1.	See measure I.1.
AIR QUALITY				
III.1: Emissions from construction-related activities would cause a temporary increase in local particulate matter concentrations.	<ul> <li>III.1: SPBPC shall implement the following fugitive dust control and emissions reduction measures during construction of the 4,000-foot pipeline replacement. These measures are prescribed by BAAQMD to ensure that construction impacts are less than significant, and they include:         <ul> <li>Construction areas, unpaved access roads, and staging areas shall be watered at least twice daily during dry weather, or soil stabilizers shall be applied during active work.</li> <li>Trucks hauling soil and other loose material shall either be covered, have at least two feet of freeboard, or be sprayed with water prior to arriving and departing from the construction site.</li> <li>Construction vehicles shall use paved roads to access the construction site wherever possible.</li> </ul> </li> </ul>	SPBPC shall submit documentation to the CPUC that the new owner (SPBPC) has made a binding commitment to participate in BAAQMD prescribed measures and has given notice of such participation to the Planning Director of the BAAQMD.	Receipt by the CPUC mitigation monitor of the described documentation.	At least 10 days prior to the transfer of title of the Pittsburg-to-Richmond Fuel Oil Pipeline and Hercules Pump Station.

	Mitigation	Monitoring/	Effectiveness	
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	<ul> <li>Vehicle speeds shall be limited to 15 mph on unpaved roads and construction areas, or as required to control dust.</li> </ul>			
	<ul> <li>Paved access roads, parking areas, and staging areas at construction sites and streets shall be cleaned daily with water sweepers if excessive soil material is carried onto adjacent public streets.</li> </ul>			
	<ul> <li>A carpooling strategy shall be implemented for construction workers prior to commencing construction (during construction worker orientation and training).</li> </ul>			
	<ul> <li>Vehicles used in construction activities shall be tuned per the manufacturer's recommended maintenance schedule.</li> </ul>			
	Vehicle idling time shall be minimized whenever possible.			
III.2: Emissions from construction- related activities would cause a temporary cumulatively significant increase in local NOx and PM-10 emissions.	Implement measure III.1.	See measure III.1.	See measure III.1.	See measure III.1.

	Mitigation	Monitoring/	Effectiveness	
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BIOLOGICAL RESOURCES				
IV-1: Pipeline replacement in Martinez may significantly impact special status animal species protected by State and Federal ESA. Several species could be impacted by habitat alteration or direct displacement along the pipeline replacement corridor.	IV.1: Prior to commencing construction activities, SPBPC shall conduct a biological survey of all areas that would be affected by construction of the replacement section in Martinez and submit the survey for review and approval by the CPUC mitigation monitor. The survey shall include a biological assessment of the potential of construction activities to create an adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. If the survey reveals that such a potential exists, SPBPC shall conduct a formal consulting process with the appropriate resources agencies to address the potential to create a significant impact to listed species.  Based on this consultation process, SPBPC shall implement measures deemed necessary by these agencies to reduce potential impacts to a less than significant level. SPBPC shall inform the CPUC mitigation monitor of the results of the coordination and details of such measures to be implemented. The CPUC mitigation monitor shall monitor compliance with such measures.  Measures that might be required could include those such as the following proposed by PG&E in the Proponents Environmental Assessment:  General  Environmental training covering protection of biological resources in the 4,000-foot replacement section area shall be given to	SPBPC will provide the CPUC mitigation monitor with the results of the biological assessment. If the survey reveals that the project may potentially impact a listed species, SPBPC shall conduct a formal consulting process with the appropriate resources agencies to address the potential to create a significant impact to listed species.  Based on this consultation process, SPBPC shall implement measures deemed necessary by these agencies to reduce potential impacts to a less than significant level. SPBPC shall inform the CPUC mitigation monitor of the results of the coordination and details of such measures to be implemented. The CPUC mitigation monitor shall monitor compliance with such measures.	Documentation of delivery to the CPUC of the results of the biological assessment, a summary report of agency consultation with USFWS and CDFG, and details of the measures to be implemented.	Prior to the transfer of title and again prior to the certification of the construction plans for the 4,000-foot pipeline replacement section.

	Mitigation	Monitoring/	Effectiveness	
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	<ul> <li>appropriate project personnel prior to construction.</li> <li>Erosion control measures and Best Management Practices shall be installed</li> </ul>			
	adjacent to Alhambra Creek, the unnamed drainage, and any associated wetlands to prevent sediment from entering the drainages.			
	<b>Botanical Resources</b>			
	<ul> <li>A revegetation plan shall be prepared if native vegetation would be removed.</li> </ul>			
	<ul> <li>Previously vegetated areas that would be cleared during construction activities shall be revegetated with appropriate species, as required.</li> </ul>			
	<ul> <li>Flagging and/or fencing shall be installed around adjacent riparian habitat to prevent incidental impacts to the area.</li> </ul>			
	<ul> <li>If any native vegetation were removed at the replacement section, the affected area shall be revegetated with an appropriate native seed mix.</li> </ul>			
	Wildlife Resources			
	<ul> <li>Prior to construction, surveys shall be performed for the California red-legged frog to determine presence or absence.</li> </ul>			
	<ul> <li>If the California red-legged frog is determined to be present onsite, construction would not commence in this area until the U.S. Fish and Wildlife Service and California Department of Fish and Game were notified, and appropriate measures were developed to</li> </ul>			

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IV.2: Pipeline replacement in Martinez may include impacts that conflict with marsh restoration activities planned at the potential construction site, and adjacent marshlands within Martinez Shoreline Park, by East Bay Regional Parks District.	<ul> <li>minimize disturbance to this species.</li> <li>Construction shall be timed to avoid the nesting period for raptors.</li> <li>If construction is scheduled to occur during the nesting season of raptors, preconstruction surveys shall be conducted to identify and avoid active raptor nests.</li> <li>Construction within one-half mile of an active raptor nest would not begin until the young had fledged from the nest.</li> <li>Bentonite released into drainages during construction shall be immediately cleaned up.</li> <li>Habitat temporarily disturbed as a result of construction shall be restored.</li> <li>IV.2: Prior to commencing construction activities, SPBPC shall contact East Bay Regional Parks District (EBRPD), the sponsor of marsh restoration activities at the Martinez Shoreline Park, to reach agreement on how to coordinate marsh restoration and pipeline installation plans: SPBPC shall avoid or minimize potential conflicts of pipeline replacement activities with marsh restoration plans at the site. Measures to avoid conflicts, such as timing of work, agreements on revegetation or replacement of habitat, would be included in this agreement. The agreement between SPBPC and the EBRPD shall be formalized in writing and submitted to the CPUC staff for review and approval by the CPUC mitigation monitor prior to commencing construction activities that may affect marsh restoration activities.</li> </ul>	The agreement between SPBPC and the EBRPD shall be formalized in writing and submitted to the CPUC staff for review and approval by the CPUC mitigation monitor prior to commencing construction activities that may affect marsh restoration activities.	The agreement between SPBPC and EBRPD shall be formalized in writing and submitted to the CPUC mitigation monitor for review prior to commencing construction activities that may affect marsh restoration activities.	The appropriate letter should be provided to the CPUC at least 40 days prior to the commencement of construction activities.

	Mitigation	Monitoring/	Effectiveness	
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IV.3: Pipeline replacement in Martinez may conflict with habitat conservation plans administered by the East Bay Regional Parks District for the Martinez Shoreline Park adjacent to the proposed construction corridor.	Implement measure IV.2.	See measure IV.2.	See measure IV.2.	See measure IV.2.
CULTURAL RESOURCES				
V.1: Potentially undiscovered surface or subsurface historical resources could be damaged and/or destroyed by trenching activities proposed as part of the pipeline replacement. Therefore, the project could cause substantial adverse changes to the significance of historical resources.	V.1a: SPBPC shall appoint a cultural resources specialist, or specialists, at least 15 days prior to the start of project-related vegetation clearance ground disturbance and grading, site or project mobilization, site preparation or excavation activities, implementation of erosion control measures, or movement or parking of heavy equipment or other vehicles onto or over unpaved or natural areas. SPBPC shall provide the CPUC mitigation monitor with the name(s) and statement of qualifications of its designated cultural resources specialist(s) who will be responsible for implementation of all project-related cultural resources mitigation measures. The statement of qualifications must be sufficient to substantiate that the specialist(s) meets the Secretary of the Interior's proposed Historic Preservation Qualification Standards as published in the Federal Register (United States Department of the Interior 1997).  At least 10 days prior to the start of any project-related activity defined above, SPBPC shall confirm in writing to the CPUC mitigation monitor that the approved designated cultural resources specialist will be available at the start of the project and is prepared to implement the mitigation measures.  At least 10 days prior to the replacement of a designated cultural resources specialist surfaces specialist. SPBPC	CPUC mitigation monitoring approval of SPBPC's proposed archaeological mitigation program and any subsequent implementation reports.	SPBPC shall provide the CPUC mitigation monitor with the name(s) and statement of qualifications of its designated cultural resources specialist(s) who will be responsible for implementation of all project-related cultural resources mitigation measures.  The statement of qualifications must be sufficient to substantiate that the specialist(s) meets the Secretary of the Interior's proposed Historic Preservation Qualification Standards as published in the Federal Register (United States Department of the Interior 1997).	At least 10 days prior to the start of any project-related activity, SPBPC shall confirm in writing to the CPUC mitigation monitor that the approved designated cultural resources specialist will be available at the start of the project and is prepared to implement the mitigation measures.  At least 10 days prior to the replacement of a designated cultural resources specialist, SPBPC shall obtain the CPUC mitigation monitor's approval of the proposed replacement cultural resources specialist.
	designated cultural resources specialist, SPBPC shall obtain the CPUC mitigation monitor's		Verification of contract wording in	

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
Пірасс	approval of the proposed replacement cultural resources specialist.	Reporting Action	construction plans.	Timing
Refer to Impact V.1 for impact discussion.	V.1b: In the event that previously unidentified historic resources are encountered, the new owner (SPBPC) shall evaluate such resources for California Register of Historical Resources eligibility and conduct data recovery.  The cultural resources specialist shall ensure that the evaluations are supervised by individuals meeting the Secretary of the Interior's proposed Historic Preservation Qualification Standards (United States Department of the Interior 1997) for each particular resource type. An evaluation form shall be submitted to the CPUC mitigation monitor and the California Historical Resources Information Center.  For resources determined to be significant, the cultural resources specialist will prepare a resource-specific Data Recovery Plan to mitigate any significant project-related effects. Upon approval of this plan by the CPUC mitigation monitor, mitigation measures will be implemented prior to any project activities within 100 feet of the resource's boundary.	CPUC mitigation monitoring approval of SPBPC's proposed archaeological mitigation program and any subsequent implementation reports. An evaluation form shall be submitted to the CPUC mitigation monitor and the California Historical Resources Information Center.	For resources determined to be significant, the cultural resources specialist will prepare a resource-specific Data Recovery Plan to mitigate any significant project-related effects.  Upon approval of this plan by the CPUC mitigation monitor, mitigation measures will be implemented prior to any project activities within 100 feet of the resource's boundary.	Approval of the evaluation from the CPUC at least 10 days prior to the start of any project-related activity.
Refer to Impact V.1 for impact discussion.	V.1c: Prior to the commencement of construction or ground distributing activities, all construction personnel will receive environmental training in a manner that would inform all personal of the possibility of encountering cultural or historical resources.  All construction personnel involved in activities that may uncover prehistoric resources will be trained in the identification of prehistoric resources, which could include flaked stone, projectile points, mortars, pestles, and soil containing shell and bone, or human burials.	Prior to the commencement of construction or ground distributing activities, all construction personnel will receive environmental training in a manner that would inform all personal of the possibility of encountering cultural or historical resources.	Verification of construction personal training by the CPUC Mitigation Monitor.	Prior to the commencement of construction or ground distributing activities.

	Mitigation	Monitoring/	Effectiveness	
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	Historic resources could include stone or adobe foundations or walls, structures and remains with square nails, and refuse deposits. Construction personnel involved in activities that may uncover paleontological resources will also be trained in the identification of paleontological resources, which could include true fossils, trace fossils, and/or breas as defined under the above Paleontological Resources subsection. The level of training for construction activities should be sufficient such that the workers would know when to call their supervisors to investigate objects that may be a cultural resource. Supervisors would receive sufficient training to determine when a cultural resources specialist should be contacted to identify any found objects. If cultural resources were encountered during construction, the crew would halt work in the area and not collect or disturb the materials until the cultural resource specialist, appointed under Mitigation Measure V.1a, has evaluated the location and determined an appropriate mode of action.	Teporting rection	Criteria	
V.2: Trenching or boring through these resources, if significant undiscovered resources were present, would cause an adverse change to their significance.  Therefore, the project would have the potential to cause adverse changes to the significance of currently unknown unique archaeological resources.	Implement measures V.1a, V.1b, and V.1c.	See measures V.1a, V.1b, and V.1c.	See measures V.1a, V.1b, and V.1c.	See measures V.1a, V.1b, and V.1c.
V.3: Installation of the new pipeline segment along the 4,000-foot replacement section would involve shallow excavations primarily in pre-disturbed soils within the UPRR easement and city streets. Because significant fossil	V.2: SPBPC shall notify a qualified paleontologist of unanticipated discoveries, made by either the cultural resources monitor or construction personnel responding to their environmental training classes, as required in Mitigation Measures V.1a, V.1b, and V.1c, and document the discovery as needed. In the event	Documentation will be submitted to the CPUC indicating that the SPBPC shall notify a qualified paleontologist of unanticipated discoveries, made by either the cultural resources monitor or	The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is	In the event of an unanticipated discovery of a breas, true, and/or trace fossil within the 4,000-foot replacement section

	Mitigation	Monitoring/	Effectiveness	
Impact discoveries can be made even in areas designated as having low potential, excavation activities for the pipeline could possibly unearth significant paleontological resources contained within intertidal sedimentary deposits.	Measure  of an unanticipated discovery of a breas, true, and/or trace fossil within the 4,000-foot replacement section during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume	Reporting Action  construction personnel responding to their environmental training classes, as required in Mitigation Measures V.1a, V.1b, and V.1c, and document the discovery as needed.	Criteria  allowed to resume at the location of the find.	Timing during construction.
V.4: Trenching, boring, or other subsurface excavation involved with the project could potentially disturb or destroy human remains from both prehistoric and historic time periods, including those interred outside of formal cemeteries.	V.3: If human remains are found at any time along the entire pipeline alignment or during project-level vegetation clearance; ground disturbance and grading; site or project mobilization; site preparation or excavation activities; implementation of erosion control measures; or the movement and/or parking of heavy equipment or other vehicles onto or over the project surface, SPBPC and its contractors shall stop all work within 100 feet of the find. The cultural resources specialist will be notified immediately and will, in turn, immediately notify the Contra Costa County coroner, in compliance with Section 7050.5 of the California Health and Safety Code. Upon the completion of compliance with all relevant sections of the California Health and Safety Code, the cultural resources specialist will implement Mitigation Measure V.1b.  If the human remains are determined to be Native American in origin, the Contra Costa County coroner will notify the Native American Heritage Commission within 24 hours of the find. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent of the deceased Native American. The most likely descendent may make recommendations to the SPBPC and its contractors for means of treating or disposing of,	Documentation will be submitted to the CPUC indicating that the SPBPC's cultural resources specialist will be notified immediately if human remains are found. In turn, the cultural resource specialist will immediately notify the Contra Costa County coroner, in compliance with Section 7050.5 of the California Health and Safety Code. Upon the completion of compliance with all relevant sections of the California Health and Safety Code, the cultural resources specialist will implement Mitigation Measure V.1b.	Verification of the mitigation wording in construction plans.	Prior to all project-related ground disturbance.

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
	with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Where conditions A, B, and/or C under Section 15064.5 (e) (2) occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.			
GEOLOGY AND SOILS				
VI.1: Although PG&E reports no problems attributable to tectonic creep, the pipeline's present ability to withstand future offset generated by tectonic movement or sudden earthquake displacement cannot be fully determined, because the amount of pipeline distortion from historical creep is unknown. Therefore, an assessment of historical and cumulative tectonic creep and an inspection of creep compensating design features is required at the pipeline-fault crossings to determine the current ability of the pipeline to accommodate future distortion from lateral or vertical offset,	VI.1: Prior to operation of the pipeline, the new owner (SPBPC) shall perform an evaluation of the effect of tectonic creep on the pipeline at the Hayward and Concord fault crossings. A civil or geotechnical engineer licensed by the State of California, with expertise in seismic design and structural seismic response shall conduct this evaluation. The evaluation shall include a review of available geotechnical, engineering, and construction design and testing information to determine original pipeline bending and compression/elongation capabilities at the fault crossings. Secondly, the evaluation shall include an inspection of the pipeline to determine the degree to which the pipeline has been affected by tectonic creep along the Hayward and Concord fault crossings since installation in the 1970's. This evaluation shall be submitted to the CPUC mitigation monitor. Should this evaluation	The SPBPC shall perform an evaluation of the effect of tectonic creep on the pipeline at the Hayward and Concord fault crossings.  Secondly, the evaluation shall include an inspection of the pipeline to determine the degree to which the pipeline has been affected by tectonic creep along the Hayward and Concord fault crossings since installation in the 1970's.  This evaluation shall be submitted to the CPUC mitigation monitor.	SPBPC shall undertake repair or modification of the pipeline accordingly, and submit documentation to the CPUC mitigation monitor showing these repairs or modifications have been completed should the evaluation determine that tectonic creep has rendered the pipeline unable to withstand a major seismic event.	Prior to the operation of the pipeline.  The findings of these inspections would be reported to the State Fire Marshall, which in California assume responsibility for enforcement of the above regulations for the federal Department of Transportation.

elongation, or compression in the

event of continued tectonic creep

characteristic earthquake on the

Hayward and Concord faults.

or displacement during a

determine that tectonic creep has rendered the

pipeline unable to withstand a major seismic event

on the Hayward or Concord fault, or to withstand

the further seismic creep expected along the two

pipeline, SPBPC shall undertake repair or modification of the pipeline accordingly, and submit documentation to the CPUC mitigation monitor showing these repairs or modifications have been completed. In accordance with federal

faults during the expected operating lifetime of the

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	regulation (Title 49, Section 195, et al.), the pipeline will be inspected on a regular basis, and immediately following a seismic event or any other event that may effect the safety of the pipeline system or pump station. The findings of these inspections would be reported to the State Fire Marshall, which in California assumes responsibility for enforcement of the above regulations for the federal Department of Transportation.			
VI.2: The 4,000-foot pipeline replacement section could be subjected to strong ground shaking during a seismic event, potentially resulting in pipeline rupture or long-term service interruption.	VI.2: Prior to commencing construction activities, the new owner (SPBPC) shall prepare a geotechnical report for the 4,000-foot replacement route in Martinez that includes an analysis of ground shaking effects, liquefaction potential, earthquake-induced settlement, and other seismic hazards and provide recommendations to reduce these hazards. The geotechnical and seismic evaluation shall be conducted by a California-registered geotechnical engineer and include appropriate evaluation of anticipated ground motion using currently accepted seismic parameters and methods. Subsurface exploration and soil testing, where appropriate, shall be conducted to assess the soil and bedrock conditions along the proposed pipeline easement. Where applicable, structural and seismic design parameters shall conform to the current Uniform Building Code (UBC) and the API standards. The results of the geotechnical evaluation shall be submitted to the CPUC mitigation monitor. Based on the geotechnical study, recommendations of the geotechnical engineer shall be incorporated into the design and construction of the pipeline segment. In addition to complying with all applicable local, state, and federal policies, codes, and regulations, SPBPC shall submit documentation to the CPUC mitigation monitor showing these recommendations were implemented.	The results of SPBPC's geotechnical evaluation shall be submitted to the CPUC mitigation monitor.	In addition to complying with all applicable local, state, and federal policies, codes, and regulations, SPBPC shall submit documentation to the CPUC mitigation monitor showing that these recommendations were implemented.	Prior to commencing construction activities for the 4,000-foot replacement section.

	Mitigation	Monitoring/	Effectiveness	
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VI.3: The 4,000-foot pipeline replacement route in Martinez would be subject to liquefaction hazards.	Implement measure VI.2.	See measure VI.2.	See measure VI.2.	See measure VI.2.
VI.4: Portions of the 4,000-foot replacement section may be located in areas with expansive soils.	Implement measure VI.1.	See measure VI.1.	See measure VI.1.	See measure VI.1.
HAZARDS AND HAZARDOU	JS MATERIALS			
VII.1: If the 4,000-foot replacement section of pipeline encounters soil or groundwater contaminated by previous activities in the area, excavation or extraction of groundwater could expose construction workers and the public to potentially hazardous conditions.	VII.1: SPBPC shall conduct a Phase I Environmental Site Assessment along the length of the replacement pipeline route to ascertain the potential for construction activities to encounter impacted soil and/or groundwater, and submit the Phase I Environmental Site Assessment to the CPUC staff for review and approval by the CPUC mitigation monitor. Should the Phase I indicate the pipeline route would likely disturb impacted materials, a Phase II Environmental Site Assessment shall be conducted to quantify levels of contamination along the pipeline route, and establish appropriate measures to protect construction workers and the general public from exposure to impacted materials. SPBPC shall submit the Phase II Environmental Site Assessment to the CPUC mitigation monitor for review and approval. In addition, should Phase I or Phase II activities determine that construction activity will involve trenching or tunneling through potentially impacted areas, SPBPC shall implement the following mitigation measures:	SPBPC shall submit the Phase II Environmental Site Assessment to the CPUC mitigation monitor for review and approval.	Documentation of delivery to the CPUC of the Phase I/II Environmental Site Assessments.	Within 10 business days prior to transfer of title.
Refer to Impact VII.1 for impact discussion.	VII.1a: An environmental site health and safety plan shall be created to address worker safety hazards that may arise during construction activities.  The contractor shall be required to comply with all applicable OSHA regulations regarding	SPBPC will provide the CPUC mitigation monitor with a disclosure form signed by the new owner listing documents to accomplish this condition.	Documentation of delivery to the CPUC of the disclosure form.	At least 3 business days prior to transfer of title.

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	worker safety, consistent with standard City practices. The OSHA-specified method of compliance will be dependent upon the severity of impact to soil or groundwater, as determined by the Phase I and II investigations.			
Refer to Impact VII.1 for impact discussion.	VII.1b: SPBPC shall comply with all applicable regulatory agency requirements including those set forth by Contra Costa County and the California DTSC regulations regarding the storage, and transportation of impacted soil and groundwater.  Impacted soil generated by remediation and construction activities will be contained on-site and sampled prior to disposal at an appropriate facility, or potential re-use at the project site. Impacted groundwater generated during construction dewatering will be contained and transported off-site for disposal at an appropriate facility, or treated prior to discharge into the storm drain or sanitary sewer to levels which are acceptable to the San Francisco Bay Region (RWQCB), or Contra Costa Sanitary District, respectively.	SPBPC will provide the CPUC mitigation monitor with a disclosure form signed by the new owner listing documents to accomplish this condition.	Documentation of delivery to the CPUC of the disclosure form.	At least 3 business days prior to transfer of title.
VII.2: Construction of the 4,000-foot replacement section of the pipeline in the City of Martinez may temporarily restrict evacuation of the Martinez Regional Shoreline Park.	Implement measure XV.1.	See measure XV.1.	See measure XV.1.	See measure XV.1.
HYDROLOGY AND WATER	QUALITY			
VIII.1: Construction of the 4,000- foot replacement pipeline section could result in erosion and sedimentation of storm water originating from the project site. Spills and leaks of oils or	VIII.1: SPBPC shall obtain coverage under the General Construction Activity Storm Water Permit issued by the State Water Resources Control Board and implement measures to prevent erosion and to control sediment and otherwise prevent stormwater pollution. The	SPBPC shall submit all approved permits to the CPUC mitigation monitor prior to commencing construction of the replacement section. The CPUC mitigation monitor shall	Documentation will be submitted to the CPUC mitigation monitor verifying the of the preparation and execution of a Storm	At least 10 days prior to the start of any project-related activities, SPBPC shall obtain coverage under the General

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petroleum hydrocarbons from construction equipment could also adversely impact storm water quality.	general construction permit requires the preparation and execution of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must identify appropriate stormwater pollution best management practices to reduce pollutants in stormwater discharges from the construction site both during and after construction. Measures and practices include, but are not limited to, the following:	monitor compliance with these measures during construction of the replacement section in Martinez.	Water Pollution Prevention Plan (SWPPP).	Construction Activity Storm Water Permit issued by the State Water Resources Control Board.
	General Practices			
	<ul> <li>An environmental training program shall be conducted to communicate appropriate work practices, including spill prevention and response measures. Implementation of work practices should be monitored.</li> <li>All storm drains, drainage swales and</li> </ul>			
	creeks located along the 4,000-foot pipeline alignment shall be identified. All construction personnel and subcontractors shall be made aware of the locations of drainage pathways to prevent pollutants from entering them.			
	Leaks, drips and other spills shall be cleaned up immediately.			
	Protect all storm drain inlets using filter fabric cloth or other best management practices to prevent sediments from entering the storm drainage system during construction activities.			
	Otherwise protect stormwater runoff from potential pollutant sources.			

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	<ul> <li>To the extent possible, the area of construction shall be restored to preconstruction conditions.</li> </ul>			
	Mulching, seeding, and/or other suitable stabilization measures to protect exposed areas shall be implemented, during and after construction.			
	Protect drainage courses, creeks, and catch basins with straw bales, silt fences and/or temporary drainage swales.			
	Conduct routine inspections of erosion control measures especially before and immediately after rainstorms, and repair if necessary.			
	General Site Maintenance			
	Designate specific areas of the construction site, well away from creeks or storm drain inlets, for auto and equipment parking and routine vehicle and equipment maintenance.			
	Accidental releases of drilling mud shall be cleaned up immediately.			
	Spill kits shall be maintained on site during the construction project for small spills.			
	SPBPC shall submit all approved permits to the CPUC mitigation monitor prior to commencing construction of the replacement section. The CPUC mitigation monitor shall monitor compliance with these measures during construction of the replacement section in Martinez.			

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
VIII.2: Construction of the 4,000-foot pipeline replacement section could change drainage patterns in project area resulting in increasing run-off.	Implement measure VIII.1.	See measure VIII.1.	See measure VIII.1.	See measure VIII.1.
VIII.3: Construction of the 4,000- foot pipeline replacement section could alter drainage patterns, resulting in on- or off-site flooding.	Implement measure VIII.1.	See measure VIII.1.	See measure VIII.1.	See measure VIII.1.
VIII.4: Construction activities could impact water quality of local creeks or infiltrate the soil.	Implement measure VIII.1.	See measure VIII.1.	See measure VIII.1.	See measure VIII.1.
LAND USE AND PLANNING				
IX.1: Construction of the 4,000- foot replacement section of the pipeline in the City of Martinez may temporarily restrict access to the Martinez Regional Shoreline Park.	Implement measures I.1, IV.2.	See measures I.1 and IV.2.	See measures I.1 and IV.2.	See measures I.1 and IV.2.
IX.2: Maintenance of the pipeline could potentially limit access to the San Francisco Bay Trail because of a lack of alternative space.	IX.2: For all maintenance activities that could disrupt use or enjoyment of the San Francisco Bay Trail, SPBPC shall coordinate such maintenance efforts with the Association of Bay Area Governments (ABAG) and the City of Pinole. The purchaser shall assure that access to the Bay Trail remains open to the maximum extent possible, and that if necessary, a clearly marked, comparable alternative route is provided on a temporary basis.	Provide written assurances to the CPUC mitigation monitor of compliance with this measure.	Submittal of annual summary reports to the CPUC mitigation monitor describing any maintenance operations that limited access to the Bay Trail.	Prior to performing maintenance operations that could limit access to the Bay Trail.
IX.3: The pipeline may be located under a portion of the San Francisco Bay Trail.	Implement measure IX.2.	See measure IX.2.	See measure IX.2.	See measure IX.2.
IX.4: Construction of the pipeline replacement section in Martinez has some potential for conflict with a natural community conservation plan.	Implement measure IV.1.	See measure IV.1.	See measure IV.1.	See measure IV.1.

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
NOISE	Measure	Keporung Action	Critcria	Timing
XI.1: Short-term construction-related activities and long-term operation of the pump station would expose persons to or generate noise levels in excess of applicable, established local regulations.  The City of Martinez, in which pipeline replacement would occur, does not have specific construction-related noise standards. However, under the requirements of Mitigation Measure XI.1 below, SPBPC would require its contractors to limit noisy construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday. Potential impacts would be mitigated to a less than significant level and project construction would not expose persons to or generate noise levels in excess of standards established in local general plans or noise ordinances, or applicable standards of other agencies.	<ul> <li>XI.1: During construction of the 4,000-foot replacement section in Martinez, the new owner (SPBPC) will implement the following measures:</li> <li>Require construction contractors to limit noisy construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, or as specified by the City of Martinez.</li> <li>Obtain an encroachment permit from the City of Martinez specifying how construction would be sequenced to minimize potential construction impacts.</li> <li>Conduct regular equipment and maintenance and install mufflers (as appropriate) on all construction equipment to control noise.</li> <li>Shield and orient compressors and other small stationary equipment such that equipment exhaust would face away from noise sensitive buildings and land uses.</li> <li>Use existing natural and manmade features (e.g., landscaping, fences) to shield construction noise whenever possible.</li> <li>The CPUC's mitigation monitor shall ensure compliance with the above measures during construction.</li> </ul>	The CPUC's mitigation monitor shall ensure compliance with the measures during construction.	Verification of mitigation wording in construction plans.	During construction in Martinez, contractors will be required to limit noisy construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday, or as specified by the City of Martinez.
XI.2: Construction-related activities would lead to a substantial temporary or periodic increase in the ambient noise levels in the project vicinity above levels existing without the project.	Implement measure XI.1.	See measure XI.1.	See measure XI.1.	See measure XI.1.

	Mitigation	Monitoring/	Effectiveness	
Impact	Measure	Reporting Action	Criteria	Timing
PUBLIC SERVICES				
XIII.1: The pipeline may require maintenance in public parks, recreation areas or designated open space areas, which may result in temporary alteration of public parks.	Implement measures I.1, IV.2.	See measures I.1 and IV.2.	See measures I.1 and IV.2.	See measures I.1 and IV.2.
TRANSPORTATION / TRAFF	FIC			
XV.1: Pipeline installation activities would temporarily disrupt existing transportation and circulation patterns in the vicinity. Impacts would include direct disruption of traffic flows and street operations. Lane blockages or street closures during pipeline installation would result in a reduction in travel lanes. Thus, the replacement pipeline installation within or across streets would reduce the number of, or the available width of, travel lanes on roads, resulting in temporary disruption of traffic flows and increases in traffic congestion.	XV.1a: Prior to commencing construction activities, SPBPC shall obtain and comply with local and state road encroachment permits, and railroad encroachment permits. SPBPC shall submit all local and state road encroachment permits obtained for the replacement section in Martinez to the CPUC mitigation monitor for review. The CPUC's mitigation monitor shall monitor compliance with these permits during construction activities.	SPBPC shall submit all local and state road encroachment permits required for the replacement section in Martinez to the CPUC mitigation monitor for review.  The CPUC's mitigation monitor shall monitor compliance with these permits during construction activities.	SPBPC shall obtain and comply with local and state road encroachment permits, and railroad encroachment permits.	Prior to commencing construction activities.
mereases in traine congestion.	<ul> <li>XV.1b: Prior to commencing construction activities, the construction contractor shall prepare a traffic control plan in accordance with professional engineering standards prior to construction. As appropriate, traffic control plans shall include the following requirements:</li> <li>Identify all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow.</li> <li>Develop circulation and detour plans to</li> </ul>	The CPUC's mitigation monitor shall monitor compliance with the traffic control plan.	SPBPC shall provide documentation to the CPUC verifying the preparation of a traffic control plan in accordance with professional engineering standards prior to construction.	The traffic control plan shall be submitted to applicable jurisdictions for review and approval prior to the commencement of construction activities.

	Mitigation	Monitoring/	Effectiveness	
Impact	Measure	Reporting Action	Criteria	Timing
	minimize impacts to local street circulation.  This may include the use of signing and flagging to guide vehicles through and/or around the construction zone.			
	Schedule truck trips outside of peak morning and evening commute hours.			
	• Limit lane closures during peak hours to the extent possible.			
	Use haul routes minimizing truck traffic on local roadways to the extent possible.			
	Include detours for bicycles and pedestrians in all areas potentially affected by project construction.			
	Open trenches subject to vehicular or pedestrian traffic would be covered at the end of each workday with metal plates capable of accommodating traffic.			
	Install traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones.			
	Safety fencing would be installed, where needed, to protect pedestrians from construction areas.			
	At a minimum, the UPRR safety and engineering guidelines would be maintained when installing pipeline within the railroad right-of-way. All construction crews and project personnel would be trained on UPRR safety guidelines prior to commencing work in the railroad right-of-			

Impact	Mitigation	Monitoring/	Effectiveness	Timina
Impact	Measure	Reporting Action	Criteria	Timing
	<ul> <li>Construction vehicles and equipment would not cross the tracks except at established public crossings or as specified by UPRR.</li> </ul>			
	Develop and implement access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, ask affected jurisdictions to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures.			
	Store construction materials only in designated areas.			
	Coordinate with local transit agencies for temporary relocation of routes or bus stops in works zones, as necessary.			
	All roads disturbed during construction would be restored to their preconstruction condition pursuant to franchise agreements with the City of Martinez.			
	The traffic control plan shall be submitted to applicable jurisdictions for review and approval.			
XV.2: Construction-generated traffic could cause a temporary impact to operating conditions or level of service on local roadways.	Implement measures XV.1a and XV.1b.	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b

Impact	Mitigation Measure	Monitoring/ Reporting Action	Effectiveness Criteria	Timing
XV.3: Heavy equipment operating adjacent to or within a road right-of-way could increase the risk of accidents.	Implement measures XV.1a and XV.1b.	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b
XV.4: Pipeline installation within or across streets and temporary reduction in travel lanes could result in delays for emergency vehicle access in the vicinity of the work sites.	Implement measures XV.1a and XV.1b.	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b
XV.5: Construction of the 4,000-foot replacement section could temporarily prevent access to offstreet parking adjacent to the alignment, including Waterfront Park and Joe DiMaggio Fields.	Implement measures XV.1a and XV.1b.	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b
XV.6: Pipeline construction could disrupt access to bus stops along the alignment, and slow bus movements, including for County Connection Route 128 which travels along Ferry Street, North Court Street and Joe DiMaggio Drive. Bus routes on streets may need to be temporarily detoured, and bus stops temporarily relocated.		See measures XV.1a and XV.1b	See measures XV.1a and XV.1b	See measures XV.1a and XV.1b
UTILITIES AND SERVICE SY	YSTEMS			
XVI.1: Construction activities could inadvertently contact underground facilities during underground construction, possibly leading to short-term service interruptions.	XVI.1: Insure that USA is notified at least 48 hours before initiating construction of the proposed pipeline replacement. USA verifies the location of all existing underground utilities, in order to ensure that they are avoided, and alerts the other utilities to mark their facilities in the area of construction.  Where the replacement section crosses or is adjacent to live, overhead electric lines, install signs warning equipment operators of the presence of the line.	The SPBPC shall ensure that the USA verifies the location of all existing underground utilities, in order to ensure that they are avoided, and alerts the other utilities to mark their facilities in the area of construction.	Receipt by the CPUC mitigation monitor of a letter from SPBPC describing the incident.	The SPBPC will ensure that USA is notified at least 48 hours before initiating construction of the proposed pipeline replacement.

	Mitigation	Monitoring/	Effectiveness	
Impact	Measure	Reporting Action	Criteria	Timing
	Dispose of construction debris at an approved			
	waste disposal site.			
	Obtain hydrostatic test water from existing municipal sources. Hydrostatic test water would be discharged into a public-owned treatment works or to upland areas (grasslands) using a dewatering structure that would prevent erosion and movement of soil. Test water would not be directly discharged into any stream or wetland.			