Issues (and Supporting Information Sources):		Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact	
VII.	HAZARDS AND HAZARDOUS MATERIALS Would the project:					
	a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
	b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
	c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
	d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
	e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
	f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
	g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
	h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

SETTING

FUEL OIL TRANSPORT

The pipeline was designed to deliver fuel oil between 1,200 to 3,000 gallons per minute (gpm). Fuel oil is more viscous and less flammable than diesel or gasoline, and is often used for heating residential buildings. To allow for efficient transport, the oil is heated to temperatures ranging from 150 to 200 degrees Fahrenheit. Regular transportation of fuel oil through the pipeline ceased in 1982 through the pipelines and Hercules Pump Station continued to contain hazardous liquids. The pipeline was then maintained to operate on a stand-by basis and quantities of oil were occasionally moved through the pipeline to verify its integrity, until the 4,000-foot section

of the pipeline in Martinez was removed in 1998. However, this event did not mark the end of maintenance activities on the remaining 34-miles of pipeline. Instead, cleaning pigs were run through the pipeline in 1998 and 1999 to remove any residual oil. To minimize pipeline corrosion, the pipeline was then filled with an inert gas where the pipeline is above the water table, or in sections below the water table, water treated with corrosion inhibitors. The pipeline is also equipped with cathodic protection devices to protect against rust and corrosion, and cathodic readings on the pipeline are taken weekly. Pipeline control and communications equipment is checked twice a month and the entire pipeline route is inspected at least twice a month. In addition to routine maintenance, the pipeline is hydrostatically tested and checked with a smartpig device every five years. A smart pig can detect pipe-wall deterioration through corrosion by measuring reductions in pipe-wall thickness; the most recent smart-pig test was conducted in 1995. Based on maintenance procedures and the results of the most recent smart-pig test, the integrity of the pipeline is sound and could be re-activated without the need for repair or modification.

A leak detection system was incorporated into the pipeline's design. The system can detect drops in pressure along the pipeline route that indicate a potential fuel oil leak. In the unlikely event of a pipeline leak, remote control isolation valves, located no more than 10 miles apart, are installed along the length of the pipeline. These valves assure rapid response and minimize fuel oil loss. These valves are currently inspected once every six months as required by regulation to insure proper function.

OPERATION OF THE HERCULES PUMPING STATION

Hazardous materials stored at the Hercules Pump Station include fuel oil and cutter stock (a light cycle oil with properties similar to fuel oil) in aboveground storage tanks (ASTs). Diesel fuel is also stored in an AST. The ASTs are built in conformance with National Fire Protection Agency (NFPA), state, and federal standards, and were recently inspected by the Rodeo-Hercules Fire Marshall for regulatory compliance. In addition, a storm water drainage collection system funnels surface water runoff from ASTs and the immediately surrounding area through an oil/water separator and into a holding basin. Facilities at the Hercules pump station are used to move cutter stock through the pipeline prior to fuel oil transport, and to pre-heat fuel oil. Pipeline monitoring and communications systems, such as the leak detection system and remote control isolation valves, are currently operated from the Hercules Pump Station. A firewater pump building and water tank are also located on-site.

A Phase II investigation was conducted in February and March 2000 by Geomatrix at the Hercules Pump Station to determine if soil or groundwater have been impacted by facility operations in anticipation of the PG&E divestiture. Laboratory analytical results indicate low concentrations of petroleum hydrocarbons are present in limited areas of the facility. Specifically, total petroleum hydrocarbons as diesel (TPHd) in soil was detected in concentrations up to 500 milligrams per kilogram (mg/kg). Total petroleum hydrocarbons as oil (TPHo) in soil was detected in concentrations up to 1,100 mg/kg. TPHd and total petroleum hydrocarbons as gasoline (TPHg) were detected in groundwater in concentrations up to 66 micrograms per liter

 $(\mu g/L)$ and 290 $\mu g/L$, respectively. In addition, concentrations of benzene (1.7 $\mu g/L$), toluene (19 $\mu g/L$), ethylbenzene (2.6 $\mu g/L$), and total xylenes (12 $\mu g/L$) were detected in groundwater.

Should the Hercules Pump Station be redeveloped and regraded, constituent concentrations may require that soil generated by these activities be remediated onsite or disposed of at an off-site facility. However, redesign of Hercules Pump Station is not part of the proposed project. Concentrations of constituents in groundwater are below the respective California Department of Health Services Maximum Contaminant Levels (MCLs), with the exception of benzene (MCL for benzene is $1 \mu g/L$).

PIPELINE REPLACEMENT

PG&E has obtained a 20-foot permanent easement from the City of Martinez and East Bay Regional Park System to allow for the installation of the replacement section. According to information supplied by PG&E (PEA, pg. 3-7), the 4,000-foot replacement section will be designed to the latest American Petroleum Institute Standard (APIS) and the size and grade of the pipe would be consistent with the extant section (16-inch outside diameter, 0.281-inch wall thickness, material grade X-46). To minimize potential disturbance by the general public, the pipeline would be located a minimum of 42-inches below ground. SPBPC would follow standard construction procedures for below ground utility work, such as notifying Underground Service Alert (USA) to minimize the potential for damage to existing underground utilities, and obtain encroachment permits from both the City of Martinez and the East Bay Regional Park System for construction activities.

The proposed pipeline route has not been assessed for the potential to encounter hazardous materials during construction, although a portion of the pipeline would be located near the recently constructed Martinez Intermodal Station, which was previously assessed prior to construction. There are several contaminated areas within the vicinity of the Martinez Intermodal Station, as noted in the Martinez Intermodal Station Project Final Environmental Assessment. These included the Union Pacific Railroad (UPRR) Corporation Yard, which is contaminated from a diesel tank removal in 1987 and the City of Martinez Corporation Yard (underground waste oil contamination in 1987). However, both of these locations are south of the UPRR tracks and are not directly adjacent to the proposed 4,000-foot replacement section (Pacific Gas and Electric Company, November 2000).

DEFINITIONS

Hazardous Materials Hazardous materials are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties: toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), and reactive (causes explosions or generates toxic gases). Hazardous materials have been and are commonly

used in commercial, agricultural, and industrial applications as well as in residential areas to a limited extent.

Hazardous Waste A hazardous waste is any hazardous material that is discarded, abandoned, or is to be recycled. The criteria that render a material hazardous also make a waste hazardous (California Health and Safety Code, Section 25151). If improperly handled, hazardous materials and wastes can result in public health hazards if released to the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of constituents higher than certain regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of characteristics that could cause soil or groundwater to be classified as hazardous waste.

REGULATORY SETTING

HAZARDOUS WASTE HANDLING

The California Environmental Protection Agency (Cal EPA), Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous waste. In Contra Costa County, investigation or remediation of contaminated sites is performed under the direction of the local oversight program (LOP), the Contra Costa County Health Department. The LOP oversees sites in cooperation with the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), and Cal EPA.

Site remediation or development may also be subject to regulation by other agencies. For example, if dewatering of a site were required during construction associated with pipeline replacement, subsequent discharge to the stormwater system or sewer system could require a permit from the San Francisco Bay Region (RWQCB), or Contra Costa Sanitary District, respectively.

WORKER SAFETY

Occupational safety standards exist in federal and state laws to minimize worker safety risks from both physical and chemical hazards in the work place. The California Division of Occupational Safety and Health (Cal OSHA) and the federal Occupational Safety and Health Administration are the agencies responsible for assuring worker safety in the workplace. Cal OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. At sites known to be contaminated, a Site Safety Plan must be prepared to protect workers. The Site Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site (National Institute for Occupational Safety and Health, 1985).

CONTRA COSTA COUNTY AND CITY HAZARDOUS MATERIALS POLICIES

The Contra Costa County General Plan contains hazardous materials policies, as does the City of Pinole. Although other cities along the pipeline's route do not contain specific hazardous materials policies in the respective General Plans, many have Hazardous Waste Management Plans containing implementation measures in the event of a hazardous materials spill.

The Contra Costa County Hazardous Waste Management Plan is the primary planning document for hazardous waste produced by facilities within the county. This plan outlines the procedures that county regulatory and response agencies use for managing, monitoring, containing, and removing hazardous materials from the site of an actual or threatened accidental release. The plan also identifies the agencies within the county responsible for the effective management of hazardous materials produced or generated. In addition, the County Office of Emergency Services (OES) has prepared emergency and disaster plans and procedures. Relevant Contra Costa County General Plan policies regarding hazardous materials include:

- 10-61 Hazardous waste releases from both private companies and from public agencies shall be identified and eliminated.
- 10-62 Storage of hazardous material and wastes shall be strictly regulated.
- 10-64 Industrial facilities shall be constructed and operated in accordance with up-to-date safety and environmental protection standards.
- 10-67 To the greatest possible extent, new fuel pipelines should not be routed through centers of population nor should they cross major disaster evacuation routes.
- 10-68 When an emergency occurs in the transportation of hazardous materials, the OES shall be notified as soon as possible.
- 10-69 Industry should be encouraged to utilize underground pipelines, rail, and water transportation of hazardous materials to the greatest extent feasible to take advantage of the greater separation from the general public provided by these modes of transportation.

Policies set forth for hazardous materials by the City of Pinole require:

- proper storage and disposal of hazardous materials,
- evaluation of new development sites which may have involved hazardous materials prior to development, and
- support measures to responsibly manage hazardous waste to protect public health, safety, and the environment.

SCHOOLS

Existing schools near the existing pipeline route were built either prior to construction of the Richmond to Pittsburg Fuel Oil Pipeline and Hercules Pump Station or while the pipeline and pump station were operating. There are no schools within 0.25 miles of the proposed route for the replacement section in Martinez. Therefore, the only known school that could be affected by the project is a proposed school near the Hercules Pump Station. Construction of that school would be subject to the state's school siting regulations and policies in the City of Hercules General Plan's Waste Management Plan. These would include:

CALIFORNIA CODE OF REGULATIONS, TITLE 5

The site (school) shall not be near an above-ground water or fuel storage tank or within 1,500 feet of the easement for an above or below-ground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission.

CITY OF HERCULES GENERAL PLAN, HAZARDOUS WASTE MANAGEMENT PLAN

Prior to the start of any construction on any parcel that is bordered by a pipeline right-of-way or easement, the City shall consult with the Rodeo-Hercules Fire Protection District and the operator(s) of the affected pipeline(s) regarding the adequacy of safety procedures for pipeline accidents.

The proposed school would comply with state and local regulations, reducing potential hazards associated with operations at the Hercules Pump Station to a less than significant impact.

HAZARDS AND HAZARDOUS MATERIALS IMPACTS DISCUSSION

- a,b) Pipeline construction activities would require the use of certain hazardous materials such as fuels, oils, solvents and glues. Inadvertent release of large quantities of these materials into the environmental could adversely impact soil, surface waters, or groundwater quality. However, the on-site storage and/or use of large quantities of materials capable of impacting soil and groundwater are not typically required for a project of proposed size and type. The use of construction best management practices typically implemented as a condition of building and encroachment permits issued by local jurisdictions for construction would minimize the potential negative effects to groundwater and soils. These could include the following:
 - Follow manufacturer's recommendations on use, storage and disposal of chemical products used in construction;
 - Avoid overtopping construction equipment fuel gas tanks;

- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

Current and future fuel oil storage and transport utilizing the Hercules Pump Station would be conducted in accordance with federal, state, and local rules, regulations, and policies. The US Department of Transportation Office of Pipeline Safety (OPS) would be the agency primarily responsible for safety oversight of the operations of the pipeline. In California, OPS has delegated the responsibility for conducting periodic safety inspections of oil pipelines to the state Office of the Fire Marshal. With this safety oversight regime in place, potential hazards to the public caused by any future operation of the project would be reduced to a less than significant level.

c) Impacts on Local Schools.

Pipeline Replacement

There are no schools within 0.25 miles of the 4,000-foot replacement route in Martinez.

Fuel Oil Transport

The pipeline is located within 0.25 miles of one school in Richmond (Verde Elementary), two schools in Crockett (John Swett High and Carquinez Middle), two schools in San Pablo (Lake Elementary and Seaview Elementary), and two schools in Rodeo (Garretson Heights and St. Patrick's). The proposed project does not include changing the type of material to be transported through the pipeline, which began operation in the late 1970s, and transportation of fuel oil through the pipeline would comply with Contra Costa County hazardous materials policies. Potential impacts are therefore considered less than significant.

Operation of the Hercules Pump Station

The Hercules Pump Station is within approximately 1,000-feet of a proposed 8-acre school site. The school is called for in the City of Hercules' General Plan, but has not yet received its needed approvals by the Hercules School District and the city's Planning Commission or City Council. However, the proposed school would comply with school siting restrictions in the California Code of Regulations as described below, and applicable policies in the City of Hercules General Plan's Waste Management Plan, as described above.

 The existing pipeline passes through or adjacent to sites that are included on the list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Cortese list), and one Cortese site is found in the easement for the UPRR and Ferry Street in Martinez, directly along the alignment of the future 4,000-foot replacement section of the pipeline.

A search of the 1994 list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Cortese list) found the following sites that were on properties along the alignment or adjacent to the alignment of the existing Richmond-Pittsburg pipeline:

Southern Pacific Pipelines, Castro & Hensley, Richmond
Rheem Pacific Packaging Corporation, 801 Chesley Avenue, Richmond
Richmond Maintenance Yard, 845 Brookside Avenue, Richmond
Hercules Properties, Ltd., 560 Railroad Avenue, Hercules 94547
Chevron, 400 Parker Avenue, Rodeo
Unocal, 401 Parker Avenue, Rodeo
Mannon Estate, Rodeo Muffler, 650 Parker Avenue, Rodeo
Fire Station #2, 679 Parker Avenue, Rodeo 94572
Creative Fencing, 670 San Pablo Avenue, Rodeo
C & H Sugar Company, 830 Loring Avenue, Crockett 94523
Southern Pacific, 401 Ferry Street, Martinez
Shell Oil Company, 1800 Marina Vista Way, Martinez 94553
Shell, Kantor's Furniture, 1801 Marina Vista Way, Martinez
Shell Martinez Pump Station, Marina Vista Way
Landsea Terminals, Inc., 2801 Waterfront Road, Martinez 94533

Movement of oil through the existing pipeline would not affect any contaminated materials reported properties in the vicinity of the pipeline, and the approval of the project would not create a hazard to the public or the environment from materials that may still be present at these listed sites.

The site at 401 Ferry Street in Martinez is at a location that could be disturbed by the construction of the replacement section for the pipeline. The site was listed for the presence of gasoline. The site was reviewed January 23, 1997, and no remediation was deemed necessary.

A search of available environmental records (out to a two-mile radius) on hazardous materials around the Cortese site at 401 Ferry Street in Martinez identified only one other site within the 20-foot easement along the future location of the replacement section. This site at 209 Berrellesa Street, appeared on the Haznet List for waste oil and mixed oil from Al's Auto Retail. The site is now inactive. A site from the Leaking Underground Storage Tank (LUST) Incident Reports lies approximately 200-feet north of the railroad. Remedial action has been completed and contaminated soil has been excavated. The site was closed on the LUST Reports in 1999.

There is the potential for pipeline replacement trenching or boring construction activities to encounter impacted soil or groundwater, as the pipeline route is located adjacent to areas with previously identified contamination, such as in the vicinity of the Martinez Intermodal Station..

Impact 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.

Mitigation Measure 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:

Mitigation Measure 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 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.

Mitigation Measure 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.

Significance after mitigation: Less than significant.

- e,f) The project is not located within two miles of a public airport or public use airport, and is not located in the vicinity of a private airstrip.
- g) No emergency response plan or evacuation plan has been identified for the project area, but construction of the 4,000-foot pipeline sections could restrict exit routes from the adjacent Martinez Regional Shoreline Park. According to materials supplied by PG&E, SPBPC would obtain necessary encroachment permits from the City of Martinez prior to the onset of construction associated with pipeline installation activities. In addition, SPBPC would consult with the City of Martinez Fire Department regarding any proposed road closures or detours to minimize access disruption, as discussed in Traffic and Transportation.

Impact 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.

Mitigation Measure: Implement Mitigation Measure XV.1.

Significance after mitigation: Less than significant.

h) Construction associated with pipeline replacement would occur within an urbanized area of Martinez. Operation of the Richmond to Pittsburg Fuel Oil Pipeline and Hercules Pump Station would comply with Contra Costa hazardous materials policies, and not expose people or structures to wildland fires.

REFERENCES

Biagi, Allen, Fire Marshall, Rodeo-Hercules Fire Department, telephone conversation, March 15, 2001.

California Code of Regulations, Title 5.

National Institute for Occupational Safety and Health and Occupational Safety and Health Administration, *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities*, October 1985.

Pacific Gas and Electric Company, Richmond to Pittsburg Pipeline and Hercules Pump Station Proponent's Environmental Assessment, November 8, 2000.