SECTION 1
DESCRIPTION OF THE PROPOSED PROJECT

1.1 INTRODUCTION

Pacific Gas and Electric Company (PG&E)'s Application (No. A.00-05-035) seeks authority, pursuant to Section 851 of the Public Utilities Code[1] from the California Public Utilities Commission (CPUC), to sell its heated[2] Richmond-to-Pittsburg Fuel Oil Pipeline (the "Pipeline") to a new owner, the San Pablo Bay Pipeline Company (SPBPC), currently a subsidiary of ConocoPhillips Company. In a separate application (A.00-12-008) (also analyzed as part of this project), SPBPC seeks authority from the CPUC under Sections 216 and 228[3] of the Public Utilities Code to own and operate the Pipeline as a common carrier pipeline corporation and to amend the Certificate of Public Convenience and Necessity (CPCN) to restrict the products that could be transported in the Pipeline to crude oil[4], black oils, and refined petroleum products (PG&E et al, 2004a).

The proposed sale would transfer ownership of PG&E's Hercules Pump Station (the "Pump Station") and its associated 44.2 acres of property, located in the city of Hercules, and the Pipeline from its point of origin in Castro Street (adjacent to the General Chemical facility) in the city of Richmond to the Mirant Pittsburg Power Plant in the city of Pittsburg. The Pipeline and Pump Station, collectively referred to herein as the "Assets," would be sold in their current "as-is, where-is, with all faults" condition to SPBPC. Subsequent to the Commission's decision authorizing the sale of the Assets, but prior to the actual sale by PG&E, ConocoPhillips has indicated that it intends to sell its sole ownership interest in SPBPC to the Santa Clara Valley Housing Group (SCVHG). SPBPC has indicated that upon completion of the sale by PG&E, it would then abandon[5] the Pump Station and remove it from public utility service. SCVHG would then sell SPBPC to Shell and would retain the Pump Station and its associated 44.2 acres of property. SCVHG would demolish the Pump Station and likely remediate the land on which the

[1] Section 851 of the Public Utilities Code requires public utilities to obtain Commission approval before selling utility property that is necessary and useful in serving the public.

[2] A heated pipeline is an insulated pipeline with an inline heating system to heat the product in order to speed the flow of product through the pipeline.

[3] Public Utilities Code Sections 216 and 228 define pipeline corporations as public utilities.

[4] Crude oil refers to the naturally-occurring petroleum mixtures that are pumped from wells. Crude oil is the basic petroleum feedstock that is processed at a refinery and contains many different hydrocarbon molecules which represent many potential products such as propane, butane, gasoline, jet fuel, diesel oil, fuel oil, wax, and asphalt. Because crude oil is a natural product, there is a wide variation in the characteristics of a crude depending mostly on the wells from which it is obtained. To contrast crude oil with fuel oil, the product historically transported by the Pipeline, fuel oil is a residual oil derived from crude oil after various other oils have been removed.

[5] Abandonment of the Pump Station would not involve any physical changes to the Pump Station property; rather abandonment simply means that SPBPC would no longer operate the Pump Station now, which would be removed from public utility service.

Pump Station is located in order to reuse it for residential and/or commercial uses. Any action proposed for the Pump Station property by SCVHG would be subject to a separate environmental review by the City of Hercules. Ultimately, the Pipeline would be owned and operated by SPBPC, which would, per A.00-12-008, be operated as a subsidiary of Shell.

This Draft Mitigated Negative Declaration (Draft MND) analyzes the potential impacts to the environment that would result from PG&E's sale of the Assets. Specifically, the focus of this analysis is on the potential environmental impacts associated with SPBPC's future operation and maintenance of the Pipeline and the reconstruction of a 5,500-foot replacement pipeline segment to replace an isolated 4,000-foot pipeline section in Martinez, California. As of the publication date of this document, no application or plans have been submitted to the City of Hercules for development of the Pump Station property, which is currently zoned for industrial land uses. The specific future use of each portion of the property is unclear at this time as it could be used for industrial purposes as currently zoned, or it could be used for residential or commercial purposes, or a combination of both, if the zoning and General Plan designations are amended. In addition, it would be speculative to determine the density and configuration of any future development on the property and therefore, it would be speculative to analyze the environmental impacts that could result from the unknown potential future development of the Pump Station property. As such, this analysis does not analyze the potential impacts associated with development of the Pump Station property. When SCVHG submits an application to the City of Hercules to develop the Pump Station property, that future development would be subject to environmental review, pursuant to CEQA.[6] In addition, the California Department of Toxic Substances Control (DTSC) would have regulatory oversight over the environmental remediation of the Pump Station property that would be a necessary predicate for use of the land.

Although some oil was moved through parts of the Pipeline as recently as 1991, PG&E ceased using the Assets for moving fuel oil to its Pittsburg Power Plant (currently the Mirant Pittsburg Power Plan) in 1982. However, these Assets are still considered to be operational because PG&E has maintained all required permits and approvals and conducted all maintenance and inspections that are required for an operating system. Nevertheless, the State Fire Marshal classifies the Pipeline as "inactive" based on the history of use of the Pipeline in the 1990s and would require SPBPC, as the new owner, to submit a request to change the status of the Pipeline segments from "inactive" to "active" in order to use the Pipeline to transport petroleum products.

Because the CPUC must decide whether or not to approve the PG&E and SPBPC applications and because the applications may cause either direct or reasonably foreseeable indirect effects on the environment, the California Environmental Quality Act (CEQA) requires the Commission to consider the potential environmental impacts that could occur as the result of its decisions and to consider mitigation for any identified significant environmental impacts.

[6] The City of Hercules has indicated that it would prepare an Environmental Impact Report (EIR) for that proposed future development.

For purposes of this CEQA analysis, the appropriate baseline (or environmental setting) is PG&E's historical use of the Pipeline for the transport of fuel oil[7] and cutter stock. Using this baseline, this Draft MND examines the change in environmental conditions from using the Pipeline for transport of fuel oil and cutter stock (per PG&E's historical use of the Pipeline) to the proposed more expansive use of the Pipeline for the transport of crude oil, black oils, and refined petroleum products (PG&E et al, 2004a). SPBPC could not use the Pipeline to transport products other than crude oil, black oils and refined petroleum products without seeking further approval and environmental review, if necessary, from the Commission and/or any other relevant agencies.

This document analyzes the potential environmental impacts that could occur as a result of approval of the PG&E and SPBPC applications, compared to the above baseline.

This Draft MND examines PG&E's Proponent's Environmental Assessment and the environmental information supplied by PG&E and SPBPC in their applications and their other filings, as well as information gained from interviews with agency personnel and from other available documents. SPBPC did not file a separate PEA for its application, but noted in its January 26, 2001 reply to protests that the environmental review of its application is being performed as part of PG&E's companion application, A.00-05-035. Furthermore, as noted in the first amendment to A.00-05-035 and A.00-12-008, the CPUC combined the two applications into one consolidated project.

This Draft MND analyzes potential environmental impacts that could result from [1] the transfer of ownership of the Assets, [2] future operation of the Pipeline for the transport of crude oil, black oils, and refined petroleum products, and [3] construction of a 5,500-foot replacement pipeline segment in the city of Martinez to replace a 4,000-foot segment that was removed in 1998 to allow construction of the Martinez Intermodal Rail Station. PG&E has secured the necessary permanent easements for the 5,500-foot replacement pipeline segment in Martinez, but SPBPC would be responsible for constructing the planned 5,500-foot replacement section and for obtaining the requisite permits and approvals, including obtaining any necessary temporary construction easements. Neither PG&E nor SPBPC has submitted detailed plans for the construction of the 5,500-foot segment; however, the construction activities associated with that replacement segment are reasonably foreseeable activities that would occur as a result of the CPUC's approval of these two applications, and therefore it is analyzed in this Draft MND.

If the CPUC approves SPBPC's, application for authority to own and operate the Pipeline, SPBPC would be responsible for implementation of any mitigation measures governing both construction of the 5,500-foot replacement segment in Martinez and future operation of the Pipeline. Though other state and local agencies[8] would have permit and approval authority over the construction of the 5,500-foot replacement pipeline segment, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by this Draft

[7] Fuel oil is a residual oil derived from crude oil after various other oils have been removed. PG&E typically used low sulfur fuel oil in its historical operations of the Pipeline.

[8] Including the East Bay Regional Park District, the City of Martinez during construction, and the State Fire Marshal when the entire pipeline is ready to be placed in service.

MND. All approvals and permits obtained by SPBPC would be submitted to the CPUC for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

1.2 PROJECT LOCATION

The approximately 35-mile[9] pipeline[10] is located in Contra Costa County, California, and primarily follows the San Francisco Bay shoreline between the city of Richmond and the city of Pittsburg (see **Figure 1-1**). The Pipeline originates west of Castro Street immediately adjacent to the General Chemical facility in Richmond. It travels northeast from the facility for approximately 2.5 miles, along Castro Street to approximately the Richmond Parkway, then crosses Castro Street and enters the Union Pacific Railroad (UPRR) corridor. The Pipeline follows the UPRR corridor north and east, crossing Wildcat Creek, San Pablo Creek and Rheem Creek. Before exiting the Richmond city limits, the Pipeline leaves the UPRR corridor and parallels Cypress Avenue for about 1 mile, just west of Pinole. It re-enters the UPRR corridor just east of Wilson Point and continues east for approximately 4.5 miles through Pinole and into the city of Hercules. Approximately 1.5 miles east of the Hercules/Pinole city limits, the Pipeline exits the UPRR corridor once again, traveling southeast directly to the Hercules Pump Station. The Pipeline leaves the northeast corner of the Pump Station (see **Figure 1-2**) and follows San Pablo Avenue through Rodeo, near the ConocoPhillips refinery, to Crockett. At Crockett, the pipeline continues through city streets for approximately 3.5 miles, passing under Interstate 80 (I-80) at the Carquinez Bridge before re-entering the UPRR corridor just east of Crockett. The Pipeline then continues east along the UPRR corridor for approximately 10.5 miles through the city of Martinez, passing by the Shell Martinez refinery, under Interstate 680 at the Benicia Bridge, and across Pacheco Slough. From there, the Pipeline extends just north of the limits of the city of Pittsburg into Contra Costa County, where it terminates just west of the Mirant Pittsburg Power Plant.

The Pump Station is located at 4200 San Pablo Avenue in the city of Hercules. The Pump Station is located on the north side of I-80 in the vicinity of the ConocoPhillips refinery (see **Figure 1-2**).

1.3 PROJECT BACKGROUND

The CPUC authorized construction of the Pipeline pursuant to a CPCN issued on May 20, 1975. The CPCN authorized PG&E to construct the Pipeline assets for the purpose of transporting "oil, petroleum, or products thereof" to its former Pittsburg and Contra Costa Power Plants. PG&E constructed the Pipeline and Pump Station in 1975 as part of a 42-mile long pipeline extending from the Chevron Refinery in the city of Richmond to the Pittsburg and Contra Costa Power Plants. From 1976 to 1982, PG&E used the Pipeline to transport low sulfur fuel oil from the

[9] As originally constructed, the PG&E pipeline was 42-miles long. However, in 1999, as part of the sale of its Pittsburg and Contra Costa power plants, PG&E sold the approximately 8-mile pipeline segment between the Pittsburg and Contra Costa power plants to Mirant.

[10] The Pipeline is mostly located below ground and consists of two segments: [1] a 10-mile 12-inch in diameter segment between Richmond and the Hercules Pump Station and [2] an approximately 25-mile 16-inch in diameter segment between the Hercules Pump Station and the Mirant Pittsburg Power Plant.

INSERT FIGURE 1-1

INSERT FIGURE 1-2

refinery to the power plants which was used to generate electricity. Beginning in 1982, PG&E reduced its use of fuel oil due to increased expenses and regulatory requirements and thus ceased its permanent use of the Assets. Since 1982, PG&E has maintained the Pipeline to provide stand-by capability in case of natural gas supply interruptions or similar circumstances. Since its regular operations ceased, oil has moved through the pipeline as necessary to maintain the integrity of the pipeline; however, the last major movement of oil through the pipeline was in 1991.

In 1998, at the request of UPRR, PG&E isolated an approximately 4,000-foot long section of the Pipeline in the city of Martinez to allow for installation of two additional railroad tracks and relocation of the Martinez Intermodal Rail Station. The isolated section of the Pipeline was capped and filled with a sand/cement slurry mix. This isolated section remains capped and filled beneath the new railroad tracks and Martinez Intermodal Rail Station. The remaining ends of the Pipeline were capped and were then extended to the north beyond the location of the new railroad tracks for future reconnection.

In 1999, PG&E sold its Pittsburg and Contra Costa Power Plants, including the 7-mile portion of pipeline between these two plants and associated pumping stations located at the plant sites to Mirant. Since the sale of these power plants, PG&E has not used the remaining 35 miles of the Pipeline and the Pump Station in its daily operations.

PG&E initially proposed selling the Assets as a result of Assembly Bill (AB) 1890, which required PG&E to establish the market value of its non-nuclear generation-related assets by December 31, 2001. In addition, CPUC Decision No. 00-03-019, ordered PG&E to file a Section 851 application by May 15, 2000, to establish the market value of its remaining non-nuclear generation-related assets.

In an earlier iteration of the project, PG&E submitted an application (A.00-05-035) to the CPUC seeking authority under Section 851 to sell its pipeline assets to SPBPC, then a subsidiary of Tosco Corporation. SPBPC submitted a separate Application (A.00-12-008) seeking authority under Section 216 and 228 to own and operate the Pipeline and Pump Station. The CPUC began an environmental review of both applications. On October 30, 2001, the CPUC published a Draft Mitigated Negative Declaration (SCH# 2001102139) (DMND) for the applications. On April 23, 2002, the CPUC published a Final Mitigated Negative Declaration (FMND) responding to comments received during the 30-day comment period on the DMND. During the summer and fall of 2002, motions filed by PG&E, SPBPC, and SCVHG regarding the applicability of Section 377 of the Public Utilities Code to allow or preclude the sale of the Assets, as well as additional environmental concerns, resulted in a project delay. The CPUC never formally adopted the FMND for the applications and never acted on the applications.

Since 2002 outstanding questions regarding the applicability of Section 377 to the proposed sale of the Assets have been resolved.[11] While the repeal of relevant parts of AB 1890 eliminated the requirement that PG&E value and sell its non-nuclear generation assets, in PG&E's application, it

[11] See CPUC decision, D.03-07-031, D.03-06-028 and D.03-06-029.

contends that proposed sale is justified because PG&E no longer owns the generation facility that the Pipeline was intended to serve and because the Bay Area Air Quality Management District does not allow the burning of fuel oil for electric generation except in an emergency and, even in the case of such a declared emergency, the supply of fuel oil would be transported by barge rather than pipeline. In this context, PG&E asserts that the Assets are no longer necessary or useful directly or indirectly for electric generation purposes in the performance of its duties to the public. Whether or not these Assets are necessary and/or useful in serving the public will ultimately be decided by the CPUC as part of its review of this project. On May 6, 2004, PG&E, SCVHG, and SPBPC filed an amendment to the proposed project that describes a revised asset transfer process (described below in Section 1.5, *Project Components*).

1.4 PROJECT SETTING

RICHMOND-TO-HERCULES PIPELINE SEGMENT

EXISTING CONDITIONS

The Richmond-to-Hercules section of the Pipeline is an insulated, 12-inch diameter fuel oil pipeline, approximately 10 miles in length that extends from its point of origin in Castro Street on the property of the Chevron Refinery immediately adjacent to General Chemical's Richmond facility to the Pump Station. According to PG&E, its records indicate that there are no known locations along the Richmond-to-Hercules pipeline segment that require repair.

SURROUNDING LAND USES

Land use in the vicinity of the Richmond-to-Hercules Pipeline Segment is primarily industrial, including research and development business parks. The pipeline segment terminates at the Pump Station. Also, along this pipeline segment, the Pipeline is located within 1/4 mile of four schools (John Verde Elementary in Richmond and Montalvin Manor Elementary, Seaview Elementary, and Lake Elementary in San Pablo).

HERCULES-TO-PITTSBURG PIPELINE SEGMENT

EXISTING CONDITIONS

The Hercules-to-Pittsburg section of the Pipeline is an insulated, 16-inch diameter fuel oil pipeline, approximately 25 miles in length, extending from the Hercules Pump Station to the Mirant Pittsburg Power Plant. If the CPUC approves the joint applications, SPBPC would be unable to use and operate this section of the pipeline because a 4,000-foot portion of the pipeline was isolated and removed from service in 1998 to accommodate the construction of the Martinez Intermodal Rail Station (see **Figures 1-3 through 1-7**). PG&E currently has 20-foot wide permanent easements from the city of Martinez and the East Bay Regional Park District to allow for construction of a 5,500-foot replacement segment of the pipeline. According to PG&E**,** there are no known other locations along the Hercules-to-Pittsburg pipeline segment that require repair.

INSERT FIGURE 1-3

INSERT FIGURE 1-4

11x 17 - COLOR

INSERT FIGURE 1-5

11x 17 - COLOR

INSERT FIGURE 1-6

11x 17 - COLOR

INSERT FIGURE 1-7

11x 17 - COLOR

SURROUNDING LAND USES

Land use in the vicinity of the Hercules-to-Pittsburg pipeline segment varies widely along the segment route. Generally, land uses in the Hercules area are characterized by recently-constructed single-family housing developments; land uses along the Martinez portion of the segment consist of open space and parks and the Martinez Intermodal Rail Station and land uses in the Pittsburg portion of the segment primarily consist of industrial uses, although some residential uses are present. The pipeline segment terminates at the Mirant Pittsburg Power Plant. Also, along this pipeline segment, the Pipeline is located within 1/4 mile of four schools (John Swett High School and Carquinez Middle School in Crockett and Garretson Heights and St. Patrick School in Rodeo, see **Figure 1-2**).

HERCULES PUMP STATION

EXISTING CONDITIONS

The Hercules Pump Station is located on an approximately 44.2-acre parcel (APN 135-7-110) and includes the following components:

- a control building;
- a fire water pump building and tank;
- an equipment pad with pumps and fuel heating units;
- a facility drainage collection and treatment system;
- above-ground storage tanks;
- a two-thousand gallon underground containment tank;
- transformers;
- impounding basin; and
- water-holding evaporation ponds (see **Figure 1-8**).

SURROUNDING LAND USES

The Hercules Pump Station site is generally surrounded by I-80 to the southeast; retail uses to the south and southeast; light industrial uses to the west; and residential uses to the north and northeast.

1.5 PROJECT COMPONENTS

TERMS OF THE DIVESTITURE

PG&E contends that the proposed sale is justified because: [1] PG&E no longer owns the generation facility that the pipeline was intended to serve; and [2] the Bay Area Air Quality Management District (BAAQMD) does not allow the burning of fuel oil for electric generation except in an emergency and, even in the case of such a declared emergency, the supply of fuel oil would be transported by barge rather than pipeline. In this context, PG&E contends that the Assets are no longer necessary or useful directly or indirectly for electric generation purposes to

FIGURE 1-8

PG&E in the performance of its duties to the public.[12] Whether or not these Assets are determined to be necessary and/or useful in serving the public will ultimately be decided by the CPUC as part of its actions on this project.

To assure continuity of public use and thereby avoid any potential termination of the private grants of easements, the Pipeline would be sold to a regulated public utility pipeline corporation (SPBPC, which is currently owned by ConocoPhillips), but would be transferred to SCVHG prior to closure of the sale of the Assets by PG&E . Some of the land rights documents[13] that would accompany the sale contain a variety of restrictions, including: restrictions on the number and the size of the permitted pipeline(s); the restriction to only transport "fuel oil" or "hot oil" through the pipeline; and, for the portions of the Pipeline that traverse through an easement, the requirement of the fee owner's consent to a transfer of the rights granted in the easement. SPBPC would need to negotiate amendments to easements and rights-of-way with numerous landowners before it could make full use of the Pipeline.

TRANSFER OF OWNERSHIP

As shown in **Figure 1-9,** SPBPC's Application 00-12-008, in combination with A.00-05-035 expects the following sequence of transactions after the CPUC approves the consolidated applications:

1) ConocoPhillips would assign its right to purchase the Assets to SPBPC;

2) ConocoPhillips would transfer its ownership of SPBPC to SCVHG;

3) SPBPC would acquire the Pipeline and Pump Station from PG&E;

4) SPBPC would abandon the Pump Station and remove it from public utility service;

5) SPBPC would transfer the Pump Station and related property to SCVHG;

6) SCVHG would transfer control of SPBPC along with the Pipeline to Shell pursuant to Public Utilities Code Section 854;

7) Under a separate application to the City of Hercules, SCVHG would demolish the Pump Station, remediate the 44.2-acre Pump Station property, and with approval of zoning changes by the City of Hercules, develop the property; and

8) SPBPC, as a subsidiary of Shell and as a common carrier pipeline corporation, would own and operate the Pipeline to transport crude oil, black oils, and refined petroleum

[12] Ibid.

[13] In August 1976, in association with the Pipeline construction and use, the City of Hercules issued a limited use permit for the Pump Station. The permit states that "[s]torage of liquids other than residual fuel oil and displacement oil as described in the project Environmental Impact Report must be approved by the City Council of the City of Hercules" (City Council Resolution, August 9, 1976). This limit on the types of liquids permitted for transport applied to the Pump Station only, the future operation of which is no longer part of this proposed project.

FIGURE 1-9

products (PG&E et al, 2004). Unless SPBPC seeks and gains approval (after undergoing additional environmental review) from the Commission and/or any other relevant agencies, it would not be permitted to use the Pipeline to transport products other than crude oil, black oils, and refined petroleum products.

RICHMOND-TO-PITTSBURG PIPELINE

Inspection

According to PG&E, there are no known locations along the Pipeline segment that require repair, with the exception of replacement of the 4,000-foot section with a 5,500-foot replacement pipeline segment in Martinez. However, prior to operation of the Pipeline, SPBPC would review all inspection records for the pipeline facilities and would conduct its own inspections to ensure the integrity of the Pipeline. As further discussed below, the State Fire Marshal will require documentation of all testing and inspections prior to approving a return of the Pipeline to active service.

One method of inspection involves running an electric tool, called a "smart pig," inside the Pipeline. The "smart pig" can detect pipe-wall deterioration that has resulted from corrosion. Indications of reductions of wall thickness would be graded for severity and appropriate necessary maintenance actions would be taken. The current launcher/receiver sites from which "smart pigs" could be run in the Pipeline are located at the Pittsburg Pumping Station (owned by Southern Energy), the Pump Station, and at the Richmond Metering Station (owned by Chevron).

Other potential inspection methods could include performing a "hydrotest" of the Pipeline (testing the Pipeline with water at pressures exceeding the proposed operating pressure), and conducting a "close interval survey" in which electronic readings are taken every three feet along the pipeline to verify the effectiveness of the cathodic protection system to assure that the possibility of external corrosion is minimized. Any problems identified as a result of testing would be addressed immediately.

Operation

The State Fire Marshal currently classifies the Pipeline as "inactive." For SPBPC to use the Pipeline to transport petroleum products (crude oil, black oils and refined petroleum products), the State Fire Marshal will require SPBPC to submit a request to change the status of the pipeline segments from "inactive" to "active." Although the Pipeline currently appears to be adequate for the proposed uses of the Pipeline, the State Fire Marshal will verify that the Pipeline material is chemically compatible with the petroleum products to be transported based on documentation submitted by SPBPC. The State Fire Marshal will require documentation of pipeline testing and inspection reports as well as updated documents required by State Code, such as a filing describing the SPBPC's inspection, maintenance, improvement, and replacement assessment for the Pipeline.

Transport of product through the entire length of the Pipeline is currently not possible due to the 4,000-foot gap that exists in the Pipeline. Prior to replacement of the 4,000-foot gap, segments of

the Pipeline may be used by SPBPC to transport product between future tie-in points and future pumping station(s). In order to operate the entire pipeline, SPBPC would need to replace the existing 4,000-foot gap along a 5,500-foot realignment as shown in **Figures 1-3 through 1-7**. PG&E currently has 20-foot wide permanent easements from the City of Martinez and the East Bay Regional Park District to allow for construction of this replacement pipeline segment. SPBPC would be responsible, at its expense, for the construction and reconnection of the new section of pipeline and for obtaining any additional temporary easements or encroachment permits from the City of Martinez and the East Bay Regional Park District that would be required for construction.

Once SPBPC has completed the necessary improvements to the Pipeline and the Pipeline is placed into service, it would be operated in compliance with all applicable federal and state laws and regulations governing pipelines used in the transportation of hazardous materials. The Pipeline would be operated from a control center that would monitor pipeline operations on a continual basis (24 hours per day, 7 days per week, 365 days per year) using a computer-based Supervisory Control and Data Acquisition (SCADA) system. Currently, all of Shell's pipelines are operated from a control center in Houston, Texas. The comprehensive electronic surveillance SCADA system includes collection of pressure readings, volume and flow rates, and the ability to remotely start and stop all pumps and to open and close all motor-operated valves.

If the controllers were to receive information from the SCADA system of any activity that may have impacted, or may impact, the safe operation of a pipeline, then the controllers would have the ability to immediately shut down and isolate the entire pipeline system. Depending on the circumstances, the pipeline controller may perform a "stand-up" integrity test to verify that the pipeline is not leaking. A "stand-up" test means that the pipeline is shut down and mainline block valves are closed so the pipeline can be isolated into individual segments. Once the pressure is stabilized, the controller would record the time and pressure of each segment so that it can be verified that each pipeline segment is holding its pressure. If the controller suspects a problem, local personnel would perform ground surveillance to verify conditions along the Pipeline.

SPBPC would use the Pipeline to transport crude oil, black oils, and refined petroleum products (PG&E et al, 2004). Unless SPBPC seeks and gains approval (after undergoing environmental review) from the CPUC and/or any other relevant agencies, it would not be permitted to use the Pipeline to transport products other than crude oil, black oils, and refined petroleum products.

Maintenance

Once the Pipeline is placed into service, it would be maintained by SPBPC to ensure protection of the public, property, and the environment as required by the Code of Federal Regulations and the California Health and Safety Code which require periodic testing of pipelines. In California, the State Fire Marshal inspects all active-status pipelines, although the exact period between inspections depend on staffing schedule and on the priority placed on the pipeline. The State Fire Marshal would require SPBPC to keep accurate records of the materials transported in the Pipeline and records of routine and special maintenance. These records would be audited during the inspections. Ongoing maintenance activities would include activities such as:

- **Corrosion Monitoring** – To monitor and control the external and internal corrosion of the Pipeline;

- **Right-of-Way Surveillance** – Surveillance by aerial patrol would be utilized to inspect long distances of the Pipeline to ensure the safe operation of the Pipeline and necessary protection to ensure public safety;

- **Temporary Pipeline Locating and Marking for Excavation** – To reduce the likelihood of accidental third party damage caused from excavation activity, the Pipeline would be marked according to the requirements of the Underground Service Alert; SPBPC would comply with local laws governing underground facility damage prevention;

- **Other Equipment Maintenance** – Other equipment that would be connected to the Pipeline, such as any pumps, valves, electronic equipment and telecommunications equipment, would be maintained on a regular basis.

Maintenance and repair activities on the Pipeline could range from removal of insulation to locate leaks, which could also include welding a full encirclement weld sleeve over impacted areas of the Pipeline and reinsulation of the Pipeline, to replacement of entire sections of the Pipeline.

HERCULES PUMP STATION

Under SPBPC's application, SPBPC would abandon the Pump Station and remove it from public utility service. While "abandonment" of the Pump Station would not involve any physical change to the Pump Station or its property, SPBPC's abandonment of the Pump Station would indicate that it would no longer use the Pump Station and it would be removed from the public utility service. SPBPC would then transfer ownership of the Pump Station to SCVHG. SCVHG would be responsible for the demolition and removal of the Pump Station facilities in compliance with applicable environmental laws and regulations governing facility removal and remediation of the Pump Station property. Potential environmental impacts that could result from the demolition, removal and remediation of the Pump Station will be considered in a future CEQA document prepared by the City of Hercules as part of the approval of SCVHG's application to demolish the Pump Station and develop the former Pump Station's 44.2-acre property. After the Pump Station is demolished, environmental site remediation would likely occur under the regulatory oversight of the DTSC.

It is anticipated that SCVHG would apply for a zoning and general plan amendment to develop the Pump Station site with residential and/or commercial uses following remediation. As stated above, at this time, SCVHG has not sought authority from the City of Hercules for future development of the Pump Station property. If and when SCVHG submits an application to develop the property, the City of Hercules will act as the Lead Agency for the environmental review process of any proposed future development on that site and an EIR would likely be

prepared.[14] This Draft MND does not analyze the potential environmental effects that could result from any development at the Pump Station property.

REASONABLY FORESEEABLE USES AND FUTURE DEVELOPMENT

If the CPUC approves PG&E's and SPBPC's applications, SPBPC would operate as a common carrier pipeline corporation regulated by the CPUC. Although the Pipeline was originally constructed specifically for the purpose of transporting fuel oil, it has the capability to transport other products and was granted a license per its 1975 CPCN to transport "oil, petroleum, and products thereof" (Decision No. 84448 [May 20, 1975]). In this application, SPBPC seeks authority to transport crude oil, black oils, and refined petroleum products (PG&E et al, 2004a). Unless SPBPC seeks and gains approval (after undergoing environmental review) from the CPUC and/or any other relevant agencies, it could not use the Pipeline to transport products other than crude oil, black oils, and refined petroleum products. Fuel oil and cutter stock, which were previously transported through the Pipeline, fall under this definition, along with a wide range of other petroleum products.

SPBPC would not use the Pipeline to supply any of the nearby electrical power generating facilities with fuel oil. The BAAQMD has prohibited the use of fuel oil in power plants except during an emergency or fuel oil testing due to air quality impacts. Since any fuel oil that would be needed in an emergency would be supplied by barge or tanker, the Pipeline is not and would not be used to supply fuel oil to Mirant's Pittsburg or Contra Costa Power Plants.

Under the proposed sale, SPBPC, which would be transferred to SCVHG, which after acquisition of the Assets from PG&E, would abandon the Pump Station and remove it from public utility service. Then, it is expected that SCVHG would demolish and remediate the Pump Station property and develop the Pump Station property with residential and/or commercial uses. The City of Hercules would act as the lead agency for the environmental review process for any redevelopment of the Pump Station property. After the transfer of ownership of the Assets to SPBPC, and after transfer of SPBPC to Shell, SPBPC would determine how to adapt and use the Pipeline and which product(s) would be transported through the Pipeline with oversight from the State Fire Marshal prior to returning the Pipeline to active operations. SPBPC has indicated that this process would involve the following steps:

1) Identification of potential uses for the Pipeline;

2) Selection of an engineering team to work on technical issues;

3) Collection of data to analyze the physical status of the assets;

4) Collection of data to evaluate the potential markets of possible uses;

5) Evaluation of the technical feasibility of each option;

[14] Based on notes from June 17, 2004 meeting with city of Hercules and CPUC.

6) Design of technical modifications to the Pipeline required for each option;

7) Estimation of costs to build and operate the complete system for each option;

8) Identification of potential customers for each option;

9) Evaluation of required tariffs or other fees required for the economic feasibility of each option;

10) Solicitation of interest from potential customers for each option;

11) Negotiation of commitments from potential customers;

12) Comparison of the overall technical, economic, and commercial feasibility of all the options considered; and

13) Adoption of a decision on the proposed use for the Pipeline.

Until SPBPC's evaluation and decision process has been completed, tie-in points, future pump station(s), if any, and pig launcher station locations are unknown, so analysis of any required construction would be too speculative to evaluate under CEQA. Although the timing is unknown at this time, it is reasonably foreseeable that SPBPC would construct the 5,500-foot replacement pipeline segment in the city of Martinez in order to allow full operation of the Pipeline. Consequently, this Draft MND analysis considers and analyzes potential environmental impacts that would result from the construction of the 5,500-foot replacement pipeline segment and future operation of the Pipeline with the transport of crude oil, black oils, and refined petroleum products as proposed by SPBPC.

1.6 PROJECT CONSTRUCTION

No construction on the pipeline is expected to occur except for the 5,500-foot replacement pipeline segment in Martinez between Hercules and Pittsburg.

HERCULES-TO-PITTSBURG PIPELINE (INCLUDES 5,500-FOOT REPLACEMENT PIPELINE)

CONSTRUCTION COMPONENTS

Pipeline Replacement

The 5,500-foot replacement pipeline section would be constructed using standard trenching and boring methods. The estimated construction right-of-way width, within which all construction activity would occur, would be 50 feet (a 15-to 20-foot permanent easement plus an additional 30-foot temporary easement). The Pipeline would be located a minimum of 36 inches underground. Material excavated from the trench would be stockpiled and used as backfill. Unsuitable materials from the excavation would be removed for disposal at an approved facility.

To comply with applicable state and federal regulations governing the construction and operation of "hazardous liquid" pipelines, which include oil pipelines, the 5,500-foot replacement pipeline segment would be designed to the latest-accepted industry standards for pipeline construction and safety such as American Society of Mechanical Engineers (ASME), American Petroleum Institute Standard (APIS), and the U.S. Department of Transportation Office of Pipeline Safety Regulations. 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). The lengths of the pipe sections could vary based on construction needs. It is anticipated that the pipe would be purchased and installed in standard 40-foot long, pre-insulated sections.

Road Crossings

In accordance with the easements obtained by PG&E, the new section would parallel Joe DiMaggio Drive east of Ferry Street and would parallel or be constructed in Embarcadero, west of Berrellesa Street. It would cross three roadways: Berrellesa Street, Ferry Street, and Joe DiMaggio Drive. The work would be completed using open trenching construction. The major construction activities associated with the installation are as include:

- Saw-cut the pavement for the trench;
- Excavate a trench for the pipeline;
- Haul away and dispose of trenched and excavated spoils, if necessary to achieve compaction requirements, or stockpile excavated spoils;
- Install the pipe;
- Backfill the trench with either imported backfill or native backfill, and achieve compaction requirements for the road base; and
- Restore all paved surfaces and clean up the job site.

Creek Crossings

Two creeks would be crossed for the installation of the 5,500-foot replacement section: Alhambra Creek and an unnamed drainage near Ferry Street. SPBPC's application proposes that both creeks be crossed below the grade of the creek bed using auger boring or directional drilling techniques. These methods are described in more detail below. If SPBPC obtains ownership of the Pipeline, as proposed, it would design and construct the creek crossing and would obtain all relevant permits and agency approvals from the City of Martinez, East Bay Regional Parks District, the U.S. Army Corp of Engineers, the San Francisco Bay Conservation and Development Commission (BCDC), and the California Department of Fish and Game prior to construction.

CONSTRUCTION METHODS

Auger Boring

Auger boring involves excavating a bore pit on one side of the crossing and excavating a receiving pit on the other side. Boring utilizes an auger and power unit mounted on rails or a sideboom-suspended boring machine attached to a deadman (anchor). The power unit drives the auger inside a heavy-wall pipe casing until the power unit reaches the leading edge of the bore

pit. The power unit is disconnected from the auger, backed up, and a segment of the carrier pipe is welded to the casing segment already driven. Additional auger and carrier pipe segments are added successively until the bore reaches the other side of the crossing in the receiving pit. Soil excavated by the auger is removed from the pit by a backhoe. Once through, the power unit backs out the auger one segment at a time, leaving the pipeline in place under the crossing. In the receiving pit, the casing is removed.

Directional Boring

Directional drilling involves boring a small-diameter pilot pipeline through to the receiving point. Drill bits are then dragged through the pilot hole using the pilot pipeline to increase the diameter of the bore to the size of the pipe required. High-pressure bentonite or polymer would be used, depending on the soil type, to cool the drill head, and either help lubricate the hole or help stiffen the soil. The pipe would be pulled back through the bored opening. Extra temporary workspace would be required on either side of the creek to accommodate drilling activities. If conducted properly, neither the creek nor the adjacent streamside vegetation would be disturbed during this procedure.

Spoils from the drilling operations would be in the form of mud and asphalt. During directional drilling, the lubricating fluid would be stored in containment tanks on the drilling machine. The fluid that emerges at the end of the borehole would be sucked up and pumped into trucks to be reused in the process. Spoils and asphalt would be loaded straight from the bore area onto trucks for removal or would be stored on site for future removal.

CONSTRUCTION EQUIPMENT

The 5,500-foot replacement pipeline segment would likely require the following equipment during the course of the construction cycle:

- One to two backhoes;
- One bulldozer;
- One to two sideboom tractors;
- One water truck;
- One front-end loader;
- Tractor-trailer rigs for delivery of the pipe to the right-of-way; and
- Pickup trucks for welders, surveyors, construction crews, x-ray technicians, and SPBPC inspectors.

CONSTRUCTION INSPECTION

Work would be completed according to SPBPC plans and project specifications. Local agency construction inspectors, as well as SPBPC construction monitors would be present to enforce the plans and project specifications. A CPUC mitigation monitor(s) would also be present to ensure compliance with all the mitigation measures identified in this Draft MND

CONSTRUCTION STAGING AND ACCESS

Access to the 5,500-foot replacement pipeline segment route would be on existing dirt and paved roads, including Berrellesa Street, Ferry Street, Joe DiMaggio Drive, and the UPRR right-of-way. Widening or other improvements to these roads would not be required. Equipment, pipe, and other supplies needed for the work on this section would be stored either on the right-of-way or at staging areas close to the right-of-way. Permits and easements required for staging areas would be the responsibility of SPBPC to secure.

CONSTRUCTION SCHEDULE

Construction of the replacement of the 4,000-foot pipeline gap with a new 5,500-foot replacement section would be expected to last approximately four to six weeks (depending on the time of year and weather conditions). The likely sequence of events for the replacement pipeline project is as follows:

- Obtain permits prior to construction commencement from the City of Martinez, East Bay Regional Parks District, the U.S. Army Corp of Engineers, the San Francisco Bay Conservation and Development Commission (BCDC), and the California Department of Fish and Game.
- Mark construction corridor limits.
- Contractor to notify Underground Service Alert (USA) 48 hours prior to construction commencement.
- Contractor to clear the right-of-way of vegetation and spray water on unpaved surfaces to control dust.
- Grade right-of-way to remove the topsoil and surface rock, where needed, and stockpile soil along the edge of the right-of-way for redistribution following construction.
- Tractor-trailer trucks to deliver the insulated pipe sections to the project site and hydrocrane or sideboom to unload and place the pipe sections along the cleared right-of-way.
- Backhoes to dig the pipe trench and store the spoil material within the right-of-way (workers to hand-dig when necessary, to prevent damage to underground utilities).
- To fit the pipe to the right-of-way, hydraulic pipe bending machines would be used to bend the pipe to the contour of the trench.
- Weld individual joints of pipe alongside the trench.
- Pad the bottom of the trench with backfill material if sharp angular rocks or other hard objects are encountered during excavation.

- Lower the pipe into the ditch with sidebooms.
- Before the trench is backfilled, locate the final horizontal and vertical position (to be performed by surveyors).
- Cover the new pipeline with stockpiled spoil material or imported backfill; then compact the backfilled soil.
- Continue construction of the replacement line until it is ready for tie-in to the existing pipeline at either end of the severed 4,000-foot section.
- Send cleaning devices, known as "pigs," through the new section to clean out welding slag, dirt, debris, and other items that may have accumulated in the pipeline during construction. After hydrostatic testing, send the pig back through the line to purge the water used for the testing.
- Hydrostatically pressure-test the entire length of the new pipeline section with clean water.
- Make tie-in welds between the new pipeline and the existing section of pipeline after a successful hydrostatic pressure test (to be performed by contractor).
- Clean up the entire right-of-way after backfilling, compaction, hydrostatic testing, and tie-ins are completed. Return the right-of-way to its original contours and grading. Reseed the entire right-of-way.

1.7 REQUIRED PERMITS AND APPROVALS

As a result of the proposed sale, construction of the 5,500-foot replacement pipeline segment and future operations of the Pipeline, the following permits and approvals will be required:

5,500-Foot Replacement Section

- State Historic Preservation Office Section 106 review;
- Regional Water Quality Control Board Appropriation of and disposal of hydrostatic test water/storm water runoff during construction / NPDES Permit;
- U.S. Army Corps of Engineers Section 404 permit;
- San Francisco Bay Conservation and Development Commission permit;
- Streambed Alteration Agreement, California Fish and Game;
- Bay Area Air Quality Management District welding permit;

- Encroachment permits from the East Bay Regional Park District, and the City of Martinez; and

- Union Pacific Railroad work permit.

Other Permits for Resumption of Pipeline Operations by SPBPC

- Prior to restarting operations of the Pipeline, verification of chemical compatibility of the Pipeline with its proposed uses by the State Fire Marshal and approval by the State Fire Marshal to return the Pipeline to "active" pipeline status;

- Department of Fish and Game, Office of Spill Prevention and Response approval of SPBPC spill prevention and countermeasure plan;

- Encroachment permits from the East Bay Regional Park District, City of Richmond, City of San Pablo, City of Pinole, City of Martinez, City of Pittsburg, and Contra Costa County; and

- Modifications of Franchise Agreements from Contra Costa County, City of Richmond, City of Pinole, City of Hercules, and City of Martinez.

REFERENCES – Project Description

Hercules City Council, *City Council Resolution.* August 9, 1976.

Pacific Gas and Electric Company (PG&E) et al, *First Amendment to A.00-05-035 AND 00-12-008,* May 6, 2004.

Pacific Gas and Electric Company (PG&E) et al, *Second Amendment to A.00-05-035 AND 00-12-008,* September 9, 2004a.