Meeting Date: 12/09/22 Lease Number: 3978 Staff: M. Schroeder

Staff Report 29

APPLICANT:

California Resources Production Corporation

PROPOSED ACTION:

Issuance of a General Lease – Right-of-Way Use

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the Suisun Bay, between Pittsburg and Ryer Island, Contra Costa and Solano Counties.

AUTHORIZED USE:

Continued use, maintenance, and operation of a 12-inch-diameter steel natural gas pipeline and a 4-inch-diameter steel condensate pipeline.

TERM:

20 years, beginning December 9, 2022.

CONSIDERATION:

\$21,330 per year, with an annual Consumer Price Index adjustment; the State reserving the right to set a different rent periodically as provided for in the lease; and \$119,685 to compensate for unauthorized occupation of State sovereign land for the period prior to December 9, 2022.

SPECIFIC LEASE PROVISIONS:

- Liability insurance in an amount no less than \$5,000,000 per occurrence.
- Surety bond or other security in the amount of \$1,000,000.
- Lessee shall complete installation of Automatic Emergency Shutdown Device for the 12-inch-diameter steel natural gas pipeline no later than June 30, 2023.
- Lessee shall conduct two burial depth surveys of the 12-inch-diameter steel natural gas pipeline and the 4-inch diameter steel condensate pipeline. The first shall be completed no later than January 31, 2023; the second shall be

completed no later than January 31, 2025. Based on the results of the 2023 and 2025 surveys, Lessee may apply for an amendment to modify the frequency of the surveys. Lessee shall submit Lessor copies of the survey results within 60 days of the survey completion.

- Lessee shall provide Lessor copies of all periodic inspection results of the
 cathodic protection system operation, including pipe to soil potential surveys of
 the pipeline, and reports/test results of all future inspections or integrity
 monitoring tests including but not limited to inline/internal inspections or pressure
 tests conducted on the pipelines.
- Lessee agrees and acknowledges that the hazards associated with climate change may require additional maintenance or protection strategies regarding the improvements on the lease premises.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On June 19, 1968, the Commission authorized a 49-year General Lease - Right-of-Way Use, to Shell Oil Company for the installation of a 12-inch-diameter steel natural gas pipeline and a 4-inch-diameter steel condensate pipeline to remove condensate and water from their production well on Ryer Island in Suisun Bay (Item 41, June 19, 1968). The existing 12-inch-diameter steel natural gas gathering pipeline was constructed in 1968 and transports low-pressure natural gas from two wells located at Ryer Island to a compressor station located at Port Chicago. The pipeline was buried 5 to 10-feet below the bottom of the bay.

On May 28, 1970, the Commission authorized an assignment of an undivided one-half interest in the lease from Shell Oil Company to Standard Oil Company (Standard Oil) (Item 16, May 28, 1970). On October 28, 1976, the Commission authorized an assignment from Standard Oil to Chevron U.S.A., Inc. (Chevron), a wholly-owned subsidiary of Standard Oil (Item 24, October 28, 1976). On May 27, 1982, the Commission authorized an assignment from Shell Oil Company to Shell California Production, Inc., a wholly-owned subsidiary of Shell Oil Company (Item 39, May 27, 1982).

On July12, 1984, the Commission terminated the lease and issued a new lease to Chevron and Shell Production (Item 9, July 12, 1984). On October 26, 1989, the

Commission approved an assignment of 100 percent of Shell California Production, Inc.'s interest to Chevron (<u>Item 15</u>, <u>October 26</u>, <u>1989</u>).

On January 29, 1999, the Commission authorized the assignment of the lease from Chevron to Venoco, Inc., a Delaware Corporation (Item 1, January 29, 1999); and, on April 26, 2013, the Commission authorized an assignment and amendment of lease from Venoco, Inc. to Vintage Production California, LLC (Vintage) (Item 68, April 26, 2013). Vintage is a wholly-owned subsidiary of Oxy USA Inc (Oxy). Occidental Oil and Gas Holding Corporation (OOGHC) provided an unconditional parent guarantee. Occidental Petroleum Corporation (OPC) is the parent company of Oxy and OOGHC.

On February 13, 2014, the Board of Directors of OPC authorized the separation of OPC's California business into separate and independent publicly traded companies including the Applicant. On June 19, 2014, the Commission authorized an amendment of lease to Vintage Production California, LLC to amend the acceptance of a parent guaranty from OOGHC to California Resources Corporation (Item 24, June 19, 2014). The lease expired on April 30, 2017. The Applicant is now applying for a new lease. Staff verified with the Applicant the correct entity name is California Resources Production Corporation.

Staff recommends that the Commission accept compensation from the Applicant for the unauthorized occupation of State land in the amount of \$119,685 for the period prior to December 9, 2022, the day the proposed new lease would become effective. The proposed lease will require the Applicant to indemnify the State for the entire period of occupation from May 1, 2017 to December 8, 2022, ensuring the State is protected.

The gas pipeline had a depth-of-burial survey conducted in 2018. Results of the survey indicated that segments of the pipeline had less than 5 feet of cover; a segment was exposed; and another segment had free spanning (the segment was not supported by the bottom of the bay). The operations of the pipelines are supervised 24 hours a day, 7 days a week. The system also includes low and high-pressure alarms that the operations respond to. The free span segment is located through the deep-water shipping channel navigable by large ships. The deep-water shipping channel is dredged periodically, and the free span segment of pipeline is below the maximum dredge of the channel. To mitigate for the loss of cover, pipeline exposure, and free spanning, the lessee will install an automated shut down valve on the pipeline. As part of the installation of the automatic shut down valve and associate control system, the operating procedure for the pipeline will be updated. The use of the pipeline cycles from active to inactive. The line is activated when gas volumes and pressures at the wellheads on Ryer Island are

sufficient to send gas into the pipeline. After the pressure is alleviated, the pipeline returns to the inactive state. Manual shut down valves exist on either side of the pipeline. Installation of automated shut down valves on the pipeline would allow for immediate shut down of the pipeline mitigating delays that may result from manual shut down valves. The wells on Ryer Island are outfitted with real time pressure monitoring and automated control valves at the wellhead. In addition, the Lessee will conduct a burial depth survey no later than January 31, 2023 and a second burial depth survey no later than January 31, 2025. Based on the results of the 2023 and 2025 surveys, an application may be submitted to amend the lease and modify the frequency of the subsequent surveys.

As a result of the gas pipeline's loss of cover, exposure, and free spanning, staff requested the Applicant conduct outreach to the regulatory agencies with jurisdiction over the pipeline. Subsequently, the Applicant sent letters in February 2022 to U.S. Army Corps of Engineers, U.S. Coast Guard, San Francisco Bay Regional Water Quality Control Board, U.S. Department of Transportation, County of Contra Costa, County of Solano, and California Public Utilities Commission. The letter provided notification to the various agencies that segments of the pipeline had depth of cover of less than 5 feet, that a segment of the pipeline is exposed, and that agencies could contact the Applicant. From the several agencies contacted, three agencies (U.S. Army Corps, California Public Utilities Commission, and Contra Costa County) responded to the letter. In response to U.S. Army Corps and Contra Costa County, the Applicant provided additional information. California Public Utilities Commission acknowledged the letter from the Applicant.

The Applicant will submit surveys, inspections, and pressure tests and maintain the pipeline. The proposed lease includes terms requiring periodic depth-of-burial surveys to maintain an accurate record of pipeline location and depth of burial, and to monitor potential exposure and vulnerabilities of the pipeline for hazards. In addition, the proposed lease requires periodic inspections of the cathodic protection system operation, including pipe-to-soil potential surveys. Furthermore, the proposed lease requires submittal of internal pipeline inspections or pressure tests conducted on the pipeline. The surveys, inspections, and pressure tests will reduce the likelihood of structural pipeline degradation and potential hazards.

The pipelines are located on or beneath the bed of the bay and do not impede surface use or interfere with Public Trust needs and values at this location, at this time, nor for the foreseeable term of the proposed lease. The proposed lease does not alienate the State's fee simple interest or permanently impair public rights. The lease is limited to a 20-year term and does not grant the lessee exclusive rights to the lease premises.

Upon termination of the lease, the lessee may be required to remove all improvements and restore the lease premises to their original condition. Additionally, the proposed lease requires the lessee to maintain a surety bond in the amount of \$1,000,000, and to insure the lease premises. The lease also requires the payment of annual rent to compensate the people of the State for the use of public land. Additionally, the proposed lease requires the lessee to indemnify the State for any liability incurred as a result of the lessee's activities thereon.

CLIMATE CHANGE:

California is in the midst of the climate crisis, caused by cumulative greenhouse gas emissions from the production of fossil fuels and their subsequent use. According to the state's Fourth Climate Change Assessment (Governor's Office of Planning and Research 2018), climate change is making extreme conditions in California more frequent and severe. For example, an estimated 4.2 million acres of land burned in wildfires in California in 2020, more than the previous four years combined, and 2022 is currently the driest year on record (California Department of Forestry and Fire Protection, in 2021 SB 100 Joint Agency Report, California Energy Commission; National Integrated Drought Information System 2022). Average annual temperatures are on the rise in California, and if greenhouse gas emissions are not lowered substantially, air temperatures could increase by an average of 5.8°F by 2050 and 8.8°F by 2100 (California Natural Resources Agency 2022). These impacts endanger natural resources and public health.

The most effective way to prevent the worst impacts of the climate crisis is to reduce greenhouse gas emissions by transitioning the State's energy portfolio from fossil fuels to renewable, non-emitting sources such as solar, wind, and geothermal. The State is already on its way, securing 33 percent of its energy from renewable sources in 2020 (2021 SB 100 Joint Agency Report, California Energy Commission). Effective January 1, 2023, SB 1020 (Laird) requires that at least 90 percent of California's energy come from renewable, zero-carbon sources by 2030. This target increases to 95 percent by 2035 and to 100 percent by 2045. The primary action to achieve these targets is to reduce and eliminate the use of fossil fuels in the state, including oil and natural gas.¹

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¹ There are many additional ongoing and planned actions that have to co-occur in order to achieve these goals and reduce harms to the people and natural resources of California. These include increasing energy efficiency, transforming the electrical grid to have more load flexibility, decarbonizing buildings, and electrifying the transportation sector. Learn more in the 2021 SB 100 Joint Agency Summary Report: https://www.energy.ca.gov/publications/2021/2021-sb-100-jointagency-report-achieving-100-percent-clean-electricity.

This lease authorizes the temporary occupation of State lands for an existing pipeline that transports natural gas from two wells located at Ryer Island to a compressor station located at Port Chicago. Methane leaks are the most common emission from the transportation of natural gas through pipelines. Methane is the primary contributor to the formation of ground-level ozone, a hazardous air pollutant and greenhouse gas. It is also a major driver of global warming – it is 80 times more potent at warming the planet than carbon dioxide.

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The facilities are located in Suisun Bay, in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

The California Ocean Protection Council updated the *State of California Sea-Level Rise Guidance* in 2018 to provide a synthesis of the best available science on sealevel rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the lease location and structures. The San Francisco tide gauge was used for the projected sea level rise scenario for the region as listed in Table 1.

Table 1. Projected Sea Level Rise for San Francisco

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	6.9

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update Note: Projections are with respect to a 1991 to 2009 baseline.

This effect could increase Suisun Bay's inundation levels within the lease area. In addition, as stated in Safeguarding California Plan: 2018 Update (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea level rise). In tidally influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Conversely, climate change induced droughts could decrease bay levels and flow for extended periods of time.

The existing pipeline is buried below the bed of the bay at variable levels, as influenced by bathymetry and sedimentation processes. For the most part, the existing pipelines lie underneath the bed of Suisun Bay; however, the headwall and portions of the pipelines appear to be exposed at various locations and elevations. The pipelines at greater depth are unlikely to be affected by flooding or drought conditions that may occur within the lease area given future projected scenarios of sea level rise; however, the shoreline pipeline connections may be affected by these scenarios, becoming more exposed and, therefore, potentially hazardous. The subject lease will require periodic depth-of-burial surveys to maintain an accurate record of pipeline location and depth-of-burial, and to monitor potential exposure and vulnerabilities of the pipeline for hazards (among other required inspections).

The Lessee acknowledges the contribution of methane leaks to climate change. Regular pipeline inspections, monitoring, and maintenance, as referenced in the lease, may reduce the likelihood of severe structural degradation or dislodgement and the potential for methane leaks and associated atmospheric impacts. Pursuant to the proposed lease, the Applicant acknowledges that the lease premises are located in an area that is subject to the effects of climate change, including sea level rise.

ENVIRONMENTAL JUSTICE:

Staff reviewed environmental justice data that indicated high pollution burdens to the surrounding communities. These burdens may result in impacts to health such as asthma and cardiovascular disease. In addition, the same data showed groundwater threats. As part of an environmental justice outreach and engagement effort, staff sent letters on October 17, 2022 to environmental justice organizations in Contra Costa County, providing notification of the proposed lease and requesting input. The letters included a brief description of the lease and conveyed a desire to learn from the perspectives of the local community.. Commission staff met with Groundwork Richmond, an environmental and youth serving organization. The representative expressed interest in learning more about the Commission's jurisdiction, lease provisions, and also expressed gratitude to staff for seeking input. Staff provided the requested information. No other comments were received.

CONCLUSION:

For all the reasons above, staff believes the proposed lease will not substantially impair the public rights to navigation, fishing, and commerce; or substantially

interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

- Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law. The lessee has no right to a new lease or to renewal of any previous lease.
- 2. This action is consistent with the "Leading Climate Activism," "Meeting Evolving Public Trust Needs," and "Prioritizing Social, Economic, and Environmental Justice" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
- 3. The proposed lease includes a lease maintenance agreement to cover staff costs to comply with the lease terms.
- 4. Staff recommends that the Commission find that this activity is exempt from the requirements of the California Environmental Quality Act (CEQA) as a categorically exempt project. The project is exempt under Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

Authority: Public Resources Code section 21084 and California Code of Regulations, title 14, section 15300 and California Code of Regulations, title 2, section 2905.

EXHIBITS:

- A. Land Description
- B. Site and Location Map

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that the activity is exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15061 as a categorically exempt

project, Class 1, Existing Facilities; California Code of Regulations, title 2, section 2905, subdivision (a)(2).

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that issuance of the proposed lease will not substantially impair the public rights to navigation and fishing or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the lease, and is in the best interests of the State.

AUTHORIZATION:

- 1. Authorize acceptance of compensation in the amount of \$119,685 for unauthorized occupation of State lands for the period prior to December 9, 2022, from the Applicant.
- 2. Authorize issuance of a General Lease Right-of-Way Use to the Applicant beginning December 9, 2022, for a term of 20 years, for the use, maintenance, and operation of a 12-inch-diameter steel natural gas pipeline and a 4-inch-diameter steel condensate pipeline, as described in Exhibit A and as shown on Exhibit B (for reference purposes only) attached and by this reference made a part hereof, annual rent in the amount of \$21,330 with an annual Consumer Price Index adjustment, with the State reserving the right to fix a different rent periodically during the lease term, as provided for in the lease; liability insurance in an amount no less than \$5,000,000 per occurrence; and \$1,000,000 bond.

EXHIBIT A

LEASE 3978

LAND DESCRIPTION

A strip of tide and submerged land 25 feet wide lying in the bed of the Suisun Bay, Counties of Solano and Contra Costa, State of California, lying 12.5 feet on each side of the following described centerline:

BEGINNING at a rebar with a cap having CCS 83 Zone 2 coordinates of Northing 1780754.76 feet, Easting 6565043.27 feet which bears North 50° 59' 29" West, 17298.63 feet from the NGS monument "P3716+33.00 EBMUD" (PID AA3823) having CCS 83 Zone 2 coordinates of Northing 1769866.39 feet, Easting 6578485.22 feet (Published CCS 83 Zone 3 coordinates of Northing 2197825.63 feet, Easting 6146409.14 feet (Epoch 2010.00)); thence the following eighteen (18) courses:

- 1. North 04° 01' 53" East 163.52 feet;
- 2. North 47° 18' 34" West 999.39 feet;
- 3. North 43° 19' 33" West 599.80 feet:
- 4. North 50° 27' 07" West 199.38 feet;
- 5. North 44° 52' 26" West 996.64 feet:
- 6. North 39° 51' 02" West 200.82 feet;
- 7. North 46° 17' 27" West 1195.96 feet;
- 8. North 58° 35' 44" West 197.51 feet;
- 9. North 87° 26' 09" West 194.91 feet;
- 10. North 77° 41' 34" West 199.58 feet;
- 11. North 82° 58' 27" West 491.77 feet;
- 12. North 75° 31' 45" West 707.64 feet;
- 13. North 63° 00' 55" West 199.03 feet;
- 14. North 35° 43' 21" West 197.94 feet:
- 15. North 29° 00' 06" West 199.86 feet;
- 16. North 22° 18' 00" West 2791.57 feet;
- 17. North 21° 40' 36" West 1602.57 feet;
- 18, North 05° 36' 13" West 328, 13 feet to the terminus of said centerline.

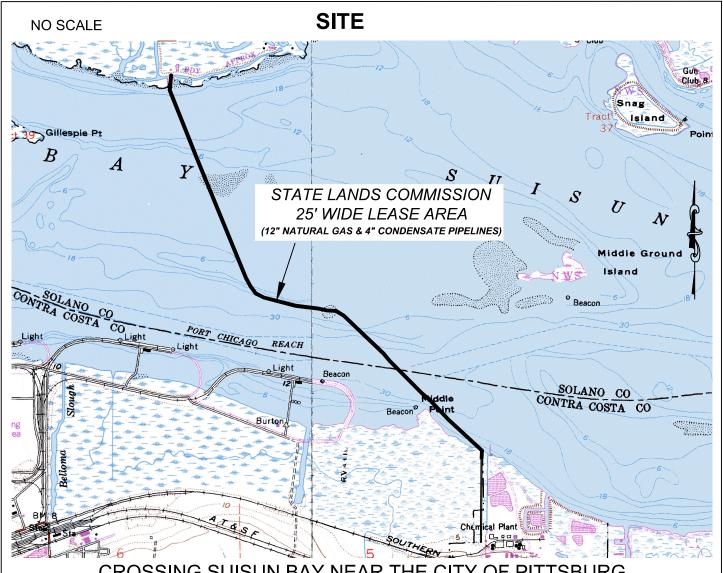
The sidelines of said strip to be lengthened or shortened as to terminate at the ordinary high water mark of Suisun Bay.

EXCEPTING THEREFROM any portion lying landward of the ordinary high water mark of said Suisun Bay.

END OF DESCRIPTION

Revised 08/18/2021 by the California State Lands Commission Boundary Unit





CROSSING SUISUN BAY NEAR THE CITY OF PITTSBURG

LOCATION **NO SCALE**

MAP SOURCE: USGS QUAD

THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

Exhibit B

LEASE 3978 CALIFORNIA RESOURCES PRODUCTION CORPORATION **GENERAL LEASE -RIGHT-OF-WAY USE** CONTRA COSTA AND **SOLANO COUNTIES**

