#### MITIGATION MONITORING AND REPORTING PROGRAM

### Phillips 66 Rodeo Renewed Project

### Introduction

The California Environmental Quality Act (CEQA) requires a Mitigation Monitoring and Reporting Program (MMRP) for projects where mitigation measures are a condition of project approval and development. The Contra Costa County Conservation and Development Department prepared an Environmental Impact Report in response to Phillips 66 application for a land use permit to modify the existing Rodeo Refinery into a repurposed facility that would process renewable feedstocks into renewable diesel fuel, renewable components for blending with other transportation fuels, and renewable fuel gas.

## **Project Overview**

Repurposing of the Rodeo Refinery would assist California in meeting its stated goals of reducing greenhouse gas emissions and ultimately transitioning to carbon neutrality. It would also provide a mechanism for compliance with California's Low-Carbon Fuel Standard and Cap and Trade programs and the federal Renewable Fuels Standard, while continuing to meet regional market demand for transportation fuels.

The Project would produce up to 55,000 bbrl/d of a variety of renewable transportation fuels from renewable feedstocks. The Rodeo Refinery as a whole post-Project would produce up to 67,000 bbrl/d. To maintain current facility capacity to supply regional market demand for transportation fuels, including renewable and conventional fuels, the post-Project facility configuration could receive, blend, and ship up to 40,000 bbrl/d of gasoline and gasoline blendstocks.

Because the Project would discontinue processing crude oil at the Rodeo Refinery, other sites owned and operated by Phillips 66 located throughout the state would be affected. Therefore, the Project consists of activities at the following four sites:

- Rodeo Site—is within the Rodeo Refinery where the proposed modifications would occur.
- Carbon Plant—is within the Rodeo Refinery in nearby Franklin Canyon and would no longer be necessary. It would be demolished.
- Santa Maria Refinery—is located in San Luis Obispo County and would no longer be necessary to provide semi-refined feedstock to the Rodeo Refinery. It would be demolished.
- Pipeline Sites—these collect crude oil for the Santa Maria Refinery and deliver semi-refined feedstock to the Rodeo Refinery and, therefore, would not be necessary. The pipelines would be cleaned and taken out of service, or sold.

## Purpose of the MMRP

This MMRP has been prepared in conformance with CEQA (Public Resources Code section 21081.6) and CEQA Guidelines section 15097. The MMRP is based on the information and mitigation measures contained in the EIR for the Project. Pursuant to Public Resources Code section 21081.6(b), each of the mitigation measures identified in the MMRP will be included as enforceable permit terms in any permit issued by Contra Costa County. The purpose of this MMRP is to:

- Verify compliance with the mitigation measures identified in the EIR;
- Provide a framework to document implementation of the mitigation measures included in the EIR;
- Provide a record of mitigation requirements;

- Identify monitoring and enforcement agencies;
- Establish and clarify administrative procedures for the clearance of mitigation measures;
- Establish the frequency and duration of monitoring; and
- Utilize the existing agency review processes wherever feasible.

Phillips 66 as the Permittee shall be responsible for implementing each mitigation measure and shall be obligated to provide verification to the appropriate monitoring and enforcement agencies that each mitigation measure has been implemented. The Permittee shall maintain records demonstrating compliance with each mitigation measure. Such records shall be made available to the Contra Costa County Conservation and Development Department upon request.

All documents and other information that constitute the public record for this project shall be maintained by the Contra Costa County Conservation and Development Department and shall be available for public review at the following address:

Contra Costa County
Conservation and Development Department
30 Muir Road, Martinez CA 94553

# Organization

As shown in the following table, each mitigation measure for the Project is listed and categorized by impact area, with identification of:

- Implementation Schedule The phase of the Project during which the mitigation measure shall be monitored; relevant phases include pre-construction, construction, and operation and maintenance.
- Responsible Party The party responsible for implementing each mitigation measure and providing verification of implementation.
- Monitoring/Enforcement The agency, or agencies, responsible for monitoring the compliance and implementation, and enforcement of the mitigation measure.

## **MMRP Modification**

Minor changes and modifications to the MMRP are permitted, subject to Contra Costa County Conservation and Development Department approval. Contra Costa County Conservation and Development Department, in conjunction with appropriate agencies, will determine the adequacy of any proposed change or modification, and whether the change or modification requires additional environmental review. This flexibility is sometimes necessary to protect the environment with a workable program. No changes will be permitted unless the MMRP continues to satisfy the requirements of CEQA, as determined by the Contra Costa County Conservation and Development Department.

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Air Quality				
Mitigation Measure AQ-1: Implement BAAQMD Basic Control Measures Construction contractors shall implement the following applicable BAAQMD basic control measures as best management practices (BMPs):  All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.	During construction and demolition	Phillips 66	Contra Costa County Conservation and Development; BAAQMD	
All haul trucks transporting soil, sand, or other loose material offsite shall be covered.				
The permittee shall not cause or allow track-out at any active exit from the site onto an adjacent paved public roadway or shoulder of a paved public roadway that exceeds cumulative 25 linear feet and creates fugitive dust visible emissions. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers within 4 hours of when the owner/operator identifies such excessive track-out on San Pablo Avenue, between the refinery and Interstate 80, and on the access roads between the Carbon Plant and Highway 4. The use of dry power sweeping is prohibited.				
All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.				
<ul> <li>All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> </ul>				
<ul> <li>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 2 minutes as recommended by the BAAQMD, and not to exceed 5 minutes as required by the California airborne toxics control measure Title 13, Section 2485 of the California Code of Regulations (CCR). Clear signage shall be provided for construction workers at all access points.</li> </ul>				
Monitor the extent of the trackout at each active exit from the site onto a paved public road at least twice during each workday, at times when vehicle traffic exiting the site is most likely to create an				

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accumulation of trackout, or as otherwise specified by the Air District.				
<ul> <li>Document the active exit locations monitored each workday.</li> </ul>				
<ul> <li>Document each occasion when the trackout exceeds cumulative 25 linear feet and all trackout control and cleanup actions initiated as a result of the above monitoring.</li> </ul>				
<ul> <li>Maintain these records for at least five years, in electronic, paper hard copy or log book format, and make them available to the Air District upon request.</li> </ul>				
<ul> <li>All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.</li> </ul>				
<ul> <li>All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.</li> </ul>				
<ul> <li>Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.</li> </ul>				
Construction contractors shall implement the following Advanced Construction Mitigation Measures:				
<ul> <li>All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.</li> </ul>				
<ul> <li>All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.</li> </ul>				
<ul> <li>Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.</li> </ul>				
<ul> <li>Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.</li> </ul>				
<ul> <li>The simultaneous occurrence of excavation, grading, and ground- disturbing construction activities on the same area at any one time</li> </ul>				

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shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.				
<ul> <li>All trucks and equipment, including their tires, shall be washed off prior to leaving the site.</li> </ul>				
<ul> <li>Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.</li> </ul>				
<ul> <li>Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</li> </ul>				
Mitigation Measure AQ-2: Implement a NOx Mitigation Plan  Phillips 66 shall prepare a NOx Mitigation Plan (NM Plan) prior to the issuance of construction-related permits for site preparation. The purpose of the NM Plan is to document expected construction and transitional phase NOx emissions in detail; and, if necessary, to identify feasible and practicable contemporaneous measures to reduce aggregated construction and transition NOx emissions to below the BAAQMD's 54 pounds per day threshold of significance.  The NOx emissions estimate for the Project shall include consideration of readily available NOx construction and transition emission reduction measures, and/or other emission reduction actions that shall be implemented during construction and transitional phase of the Project. The NM Plan shall describe the approximate amount of NOx emissions reductions that will be associated with each action and reduction measure	Prior to BAAQMD permit issuance	Phillips 66	Contra Costa County Conservation and Development; BAAQMD	
on a best estimate basis.  The NM Plan shall be submitted to the Contra Costa County Department of Conservation and Development and the BAAQMD for review and approval, or conditional approval based on a determination of whether the NM Plan meets the conditions described below. The NM Plan shall include those recommended measures listed below needed to reduce the Project's construction and transition NOx emissions to less than the BAAQMD's threshold of significance.				
The NM Plan shall include a detailed description of the NOx emissions for all construction and transition activities based on BMPs and use data at the time of Project approval and current estimation protocols and methods. The plan shall, at a minimum, include the following elements:  1. Project Construction and Transition NOx Emissions				

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The Project's construction and transition NOx emission estimates presented in the NM Plan will be based on the emission factors for off-road and on-road mobile sources used during construction and transition, over and above baseline, along with the incorporation of vehicle fleet emission standards. Project construction and transition NOx emission estimates will be based upon the final Project design, Project-specific traffic generation estimates, equipment to be used onsite and during transition, and other emission factors appropriate for the Project prior to construction. The methodology will generally follow the approach used in this Draft EIR and in Appendix B.				
2. NOx Emission Reduction Measures				
The NM Plan shall include feasible and practicable NOx emission reduction measures that reduce or contemporaneously offset the Project's incremental NOx emissions below the threshold of significance. Planned emission reduction measures shall be verifiable and quantifiable during Project construction and transitional phase. The NM Plan shall be consistent with current applicable regulatory requirements. Measures shall be implemented as needed to achieve the significance threshold and considered in the following order: (a) onsite measures, and (b) offsite measures within the San Francisco Bay Area Air Basin. Feasible¹ onsite and offsite measures must be implemented before banked emissions offsets (emission reduction credits) are considered in the NM Plan.				
a. Recommended Onsite Emission Reduction Measures:				
<ul> <li>i. Onsite equipment and vehicle idling and/or daily operating hour curtailments;</li> </ul>				
<ul><li>ii. Construction "clean fleet" using Tier 4 construction equipment to the maximum extent practicable;</li></ul>				
iii. Reductions in Vessel and/or Rail Traffic;				
<ul> <li>iv. Other onsite NOx reduction measures (e.g., add-on NOx emission controls); or</li> </ul>				
v. Avoid the use of Suezmax vessels to the maximum extent practicable.				

For the purposes of this mitigation measure, "feasible" shall mean as defined under CEQA "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

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	vi. To the maximum extent practicable, all off-road equipment shall use the highest tier engines available when zero emissions equipment is not available (e.g., Tier 4 construction, rail, marine vessels and equipment, including for any dredging activities). In place of Tier 4 engines, offroad equipment can incorporate retrofits such that emission reductions achieved equal or exceed that of a Tier 4 engine.				
	Contra Costa County Department of Conservation and Development in its consideration of the NM Plan shall have the option to require daily NOx reductions at the Carbon Plant necessary to achieve the NOx daily emissions significance threshold. Daily idling of one kiln would provide sufficient NOx reductions to offset the Project's incremental NOx emissions to below the NOx daily emissions threshold of significance on individual days that construction emissions are estimated to potentially be above the daily NOx significance threshold.				
	Additional measures and technology to reduce NOx emissions may become available during the Project construction and operation period. Such measures may include new energy systems (such as battery storage) to replace natural gas use, new transportation systems (such as electric vehicles or equipment) to reduce fossilfueled vehicles, or other technology (such as alternatively-fueled emergency generators or renewable backup energy supply) that is not currently available at the project-level. As provided in the NM Plan, should such measures and technology become available and be necessary to further reduce emissions to below significance thresholds, Phillips 66 shall demonstrate to the Contra Costa County Department of Conservation and Development and BAAQMD satisfaction that such measures are as, or more, effective as the existing measures described above.				
b.	Recommended Offsite Emission Reduction Measures:  Phillips 66, with the oversight of the Contra Costa County  Department of Conservation and Development and BAAQMD, shall reduce emissions of NOx by directly funding or implementing a NOx control project (program) within the San Francisco Bay Area Air Basin to achieve an annual reduction equivalent to the total estimated construction NOx emission reductions needed to lower				

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the Project's NOx impact below the 54 pound per day significance threshold. The offsite measures will be based on the NOx reductions necessary after consideration of onsite measures.				
To qualify under this mitigation measure, the NOx control project must result in emission reductions within the San Francisco Bay Area Air Basin that would not otherwise be achieved through compliance with existing regulatory requirements or other program participation. Phillips 66 shall notify Contra Costa County within six months of completion of the NOx control project for verification.				
3. Quarterly Verification Reports				
Phillips 66 shall prepare and submit NM Verification Reports quarterly during the construction or transitional phase activities, while project construction or transitional phase activities at the site are ongoing. The reporting period will extend through the last year of construction. The purpose of the report is to verify and document that the total project construction and transitional phase NOx emissions for the previous year, based on appropriate emissions factors for that year and the effectiveness of emission reduction measures, were implemented.				
The report shall also show whether additional onsite and offsite emission reduction measures, or additional NOx controls, would be needed to bring the project below the threshold of significance for the current year. The report shall be prepared by Phillips 66 and submitted to the Contra Costa County Department of Conservation and Development and the BAAQMD for review and verification. NOx offsets for the previous year, if required, shall be in place by the end of the subsequent reporting year. If Contra Costa County and the BAAQMD determine the report is reasonably accurate, they can approve the report; otherwise, Contra Costa County and/or the BAAQMD shall identify deficiencies and direct Phillips 66 to correct and re-submit the report for approval.				
Mitigation Measure AQ-4: Odor Prevention & Management Plan Phillips 66 shall develop and implement an Odor Prevention & Management Plan (OPMP). The OPMP shall be an integrated part of daily operations at the Rodeo Site, to effect diligent identification and remediation of any potential odors generated by the Facility.	Obtain approval of OMP prior to Project operation; ongoing	Phillips 66	Contra Costa County Conservation and Development; BAAQMD	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
<ul> <li>The OPMP shall be developed and reviewed by the County in consultation with the BAAQMD prior to operation of the Project, and implemented upon commencement of the renewable fuels processes.</li> </ul>				
<ul> <li>The OPMP shall be an "evergreen" document that provides continuous evaluation of the overall system performance, identifying any trends to provide an opportunity for improvements to the plan, and updating the odor management and control strategies as necessary.</li> </ul>				
<ul> <li>The OPMP shall include guidance for the proactive identification and documentation of odors through routine employee observations, routine operational inspections, and odor compliant investigations.</li> </ul>				
<ul> <li>All odor complaints received by the facility shall be investigated as soon as is practical within the confines of proper safety protocols and site logistics. The goal of the investigation will be to determine if an odor originates from the facility and, if so, to determine the specific source and cause of the odor, and then to remediate the odor.</li> </ul>				
<ul> <li>The OPMP shall be retained at the facility for Contra Costa County, the BAAQMD, or other government agency inspection upon request.</li> </ul>				

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Biological Resources				
<ul> <li>Mitigation Measure BIO-1a: Update Pre-Arrival Documents</li> <li>Phillips 66 shall update pre-arrival document materials and instructions sent to tank vessels agents/operators scheduled to arrive at the Marine Terminal with the following information and requests: <ul> <li>Available outreach materials regarding the Blue Whales and Blue Skies incentive program;</li> <li>Whale strike outreach materials and collision reporting from NMFS;</li> <li>Request extra vigilance by ship crews upon entering the Traffic Separation Scheme shipping lanes approaching San Francisco Bay and departing San Francisco Bay to aid in detection and avoidance of ship strike collisions with whales;</li> <li>Request compliance to the maximum extent feasible (based on vessel safety) with the 10 knot voluntary speed reduction zone.</li> <li>Encourage participation in the Blue Whales and Blue Skies</li> </ul> </li></ul>	Prior to the commencement of transitional phase; ongoing	Phillips 66	Contra Costa County Conservation and Development	
incentive program.  Mitigation Measure BIO-1b: California Department of Fish and Wildlife (CDFW) and Research Sturgeon Support  Phillips 66 will conduct and support the following activities to further the understanding of vessel strike vulnerability of sturgeon in San Francisco and San Pablo Bay.  Coordinate with CDFW and Research Sturgeon to ensure appropriate messaging on information flyers suitable for display at bait and tackle shops, boat rentals, fuel docks, fishing piers, ferry stations, dockside businesses, etc. to briefly introduce interesting facts about the sturgeon and research being conducted to learn more about its requirements and how the public's observations can inform strategies being developed to improve fisheries habitat within the estuary.	Prior to the commencement of transitional phase; ongoing	Phillips 66	Contra Costa County Conservation and Development	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
<ul> <li>Mitigation Measure BIO-3: Update and Review Facility Response Plan and Spill Prevention, Control, and Countermeasure Plan with OSPR</li> <li>The Facility Response Plan and Spill Prevention, Control, and Countermeasure (SPCC) Plan shall be updated to address the Project operational changes, including changes in proposed feedstocks and types of vessels and trips. The SPCC shall address the operational changes of the Transitional Phase and post-Project. Phillips 66 will consult with OSPR during update of the SPCC Plan, especially adequacy of booms at the Marine Terminal to quickly contain a spill of renewable feedstocks</li> <li>In accordance with CCR Title 14, Chapter 3, Subchapter 3, several types of drills are required at specified intervals. Due to the potential for rapid dispersion of biofuels and oils under high energy conditions, Phillips 66 shall increase the frequency of the following drills to increase preparedness for quick response and site-specific deployment of equipment under different environmental conditions.</li> <li>Semi-annual equipment deployment drills to test the deployment of facility-owned equipment, which shall include immediate containment strategies, are required on a</li> </ul>	Prior to the commencement of transitional phase; ongoing	Phillips 66	Contra Costa County Conservation and Development	
semiannual pass/fail basis – if there is fail during first six months, then another drill is required. Phillips 66 will require that both semi-annual drills are conducted and schedule them under different tide conditions.				
<ul> <li>An OSRO field equipment deployment drill for on-water recovery is required at least once every three years. Phillips will increase the frequency of this drill to annual.</li> </ul>				
<ul> <li>CDFW-OSPR shall be provided an opportunity to help design, attend and evaluate all equipment deployment drills and tabletop exercises. To ensure this, Phillips 66 shall schedule annual drills during the first quarter of each year to ensure a spot on OSPR's calendar.</li> </ul>				
Mitigation Measure BIO-4a: Prohibit Ballast Water Exchange Phillips 66 shall prohibit vessels from ballast water exchange at the Marine Terminal.	During operation and maintenance; ongoing	Phillips 66	Contra Costa County Conservation and Development	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Mitigation Measure BIO-4b: Update Pre-Arrival Documentation Phillips 66 shall update pre-arrival document materials and instructions sent to tank vessels agents/operators to ensure they are advised prior to vessel departure of California's Marine Invasive Species Act and implementing regulations pertinent to (1) ballast water management, and (2) biofouling management. Additionally, Phillips 66 will request that vessel operations provide documentation of compliance with regulatory requirements (e.g., copy of ballast water management forms and logs of hull husbandry cleaning/inspections).	Prior to the commencement of transitional phase; ongoing	Phillips 66	Contra Costa County Conservation and Development	
Cultural Resources				
Mitigation Measure CUL-1: Inadvertent Discovery of Archaeological Resources  • Pursuant to CEQA Guidelines Section 15064.5(f), "provisions for historical or unique archaeological resources accidentally discovered during construction" shall be instituted. In the event that any cultural resources are discovered during ground-disturbing activities, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the County and a qualified archaeologist (as approved by the County) to assess the significance of the find pursuant to CEQA Guidelines Section 15064.5. If cultural resources are recovered on State lands, submerged or tidal lands, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the California State Lands Commission. If any find is determined to be significant, representatives of the County and the qualified archaeologist would meet to determine the appropriate course of action.  • Avoidance is always the preferred course of action for archaeological sites. In considering any suggestion proposed by the consulting archaeologist to reduce impacts to archaeological	During construction and demolition	Phillips 66	Contra Costa County Conservation and Development	
resources, the County would determine whether avoidance is feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery, interpretation of finds in a public venue) would be instituted. Work may proceed on other parts of the Project site while mitigation for archaeological resources is carried out. All significant cultural materials recovered shall be, at the discretion of the consulting archaeologist, subject to				

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scientific analysis, professional museum curation, and documented according to current professional standards.				
<ul> <li>Mitigation Measure CUL-2: Inadvertent Discovery of Human Remains</li> <li>The treatment of human remains and associated or unassociated funerary objects discovered during any ground-disturbing activity shall comply with applicable state law. Project personnel shall be alerted to the possibility of encountering human remains during Project implementation, and apprised of the proper procedures to follow in the event they are found. State law requires immediate notification of the County coroner, in the event of the coroner's determination that the human remains are Native American, notification of the California Native American Heritage Commission (NAHC), which would appoint a Most Likely Descendent (MLD) (PRC Section 5097.98). The MLD would make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]).</li> </ul>	During construction and demolition	Phillips 66	Contra Costa County Conservation and Development	
• The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. The PRC allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the treatment and disposition of the remains and funerary objects, Phillips 66 shall follow PRC Section 5097.98(b), which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."				

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Geology and Soils				
Mitigation Measure GEO-1: Comply with Geotechnical Report Phillips 66 shall comply with and implement all of the following measures designed to reduce potential substantial adverse effects resulting from strong seismic ground shaking:	Prior to Contra Costa County Building Permit Issuance	Phillips 66	Contra Costa County Conservation and Development	
• A California licensed geotechnical engineer or engineering geologist shall perform a comprehensive geotechnical investigation of all Project facilities based on adequate subsurface exploration, laboratory testing of selected samples, and engineering/geologic analysis of the data gathered. The information shall be compiled and presented as a geotechnical report that provides an evaluation of potential seismic and geologic hazards, including secondary seismic ground failures, and other geologic hazards, such as landslides, expansive and corrosive soils, and provides current California Building Code seismic design parameters, along with providing specific standards and criteria for site grading, drainage, berm, and foundation design.				
<ul> <li>For construction requiring excavations, such as foundations, appropriate support and protection measures shall be implemented to maintain the stability of excavations and to protect construction worker safety. Where excavations are adjacent to existing structures, utilities, or other features that may be adversely affected by potential ground movements, bracing, underpinning, or other methods of support for the affected facilities shall be implemented.</li> </ul>				
<ul> <li>Recommendations in the approved geotechnical report shall be incorporated into the design and construction specifications and shall be implemented during build-out of the Project.</li> </ul>				
The Project geotechnical engineer shall provide observation and testing services during grading and foundation-related work, and shall submit a grading completion report to the County prior to requesting the final inspection. This report shall provide full documentation of the geotechnical monitoring services provided during construction, including the testing results of the American Society for Testing and Materials. The Final Grading Report shall				

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also certify compliance of the as-built Project with the recommendations in the approved geotechnical report.				
Hazards Materials and Water Quality				
Mitigation Measure HAZ-1: Implement Release, Monitoring and Avoidance Systems  The following actions shall be completed by Phillips 66 prior to Project operations, including the transitional phase, and shall include routine inspection, testing and maintenance of all equipment and systems conducted in accordance with manufacturers' recommendations and industry guidance for effective maintenance of critical equipment at the Marine Terminal.  Feedstocks handled at the Marine Terminal are not regulated under the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) (e.g. renewable feedstocks such as soybean oil and tallow) and therefore not subject to OSPR oversight, and are also not subject to the CSLC oversight efforts (MOTEMS, Article 5, Article 5.3 and Article 5.5, depending on the materials handled). Yet materials may be detrimental to the environment if spilled.  Regulated products (i.e. "Oil" and "Renewable Fuels" defined in Pub. Resources Code sec. 8750) will continue to be transferred at the Marine Terminal, which do require MOTEMS-compliant Terminal Operating Limits for those products that reside within the jurisdiction of the CSLC. To ensure that Project operation continues to meet those standards, the following measures are required.	Prior to the commencement of transitional phase; ongoing	Phillips 66	California State Lands Commission	
Applicability of MOTEMS, Article 5, 5.3, 5.5 and Spill Prevention Requirements  As some materials transferred at the terminal may be feedstocks or other non-regulated materials/feedstocks/products, Phillips 66 shall comply with the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (LKS Act) for all vessels calling at the Marine Terminal regardless of feedstock/material type. In addition, MOTEMs operational regulations, as codified in Article 5. Marine Terminals Inspection and Monitoring (2CCR §2300 et seq), Article 5.3 Marine Terminals Personnel Training and Certification (2CCR §2540 et seq), and Article 5.5 Marine Terminals Oil Pipelines (2CCR §2560 et seq), including items such as static liquid pressure testing of pipelines, shall be implemented for all operations at the Marine Terminal regardless of feedstock/material type and LKS Act regulatory status.				

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Upon request, Phillips 66 shall provide evidence to relevant regulatory agencies that these facilities, operational response plans, and other applicable measures have been inspected and approved by CSLC and OSPR and determined to be in compliance.				
If terminal operations do not allow for regular compliance and inspection of LKS and MOTEMS requirements by the CSLC and OSPR, Philips 66 shall employ a CSLC-approved third-party to provide oversight as needed to ensure the same level of compliance as a petroleum-handling facility, and to ensure maximum protection of the environment from potential spills and resulting impacts. Phillips 66 shall provide evidence of compliance upon request of relevant regulatory agencies.				
Remote Release Systems				
The Marine Terminal has a remote release system that can be activated from a single control panel or at each quick-release mooring hook set. The central control system can be switched on in case of an emergency necessitating a single release of all mooring lines. However, to further minimize the potential for accident releases the following is required:				
<ul> <li>Provide and maintain mooring line quick release devices that shall have the ability to be activated within 60 seconds.</li> </ul>				
<ul> <li>These devices shall be capable of being engaged by electric/push button release mechanism and by integrated remotely-operated release system.</li> </ul>				
<ul> <li>Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).</li> </ul>				
<ul> <li>Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.</li> </ul>				
<ul> <li>In consultation with the CSLC and prior to Project operation,         Phillips 66 shall provide a written evaluation of their existing         equipment and provide recommendations for upgrading equipment         to meet up-to-date best achievable technology standards and best         industry practices, including but not limited to consideration of         equipment updates and operational effectiveness (e.g. visual and     </li> </ul>				

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audible alarm options, data display location and functionality, optional system features). Phillips 66 shall follow guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4.				
Best achievable technology shall address:				
<ul> <li>Functionality – Controlled release of the mooring lines (i.e. a single control system where each line can be remotely released individually in a controlled order and succession) vs. release all (i.e. a single control system where all lines are released simultaneously via a single push button). See SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.2.1.</li> </ul>				
<ul> <li>Layout – The location(s) of the single control panel and/or central control system to validate that it is operationally manned such that the remote release systems can actually be activated within 60 seconds.</li> </ul>				
This measure would allow a vessel to leave the Marine Terminal as quickly as possible in the event of an emergency (fire, explosion, accident, or tsunami that could lead to a spill). In the event of a fire, tsunami, explosion, or other emergency, quick release of the mooring lines within 60 seconds would allow the vessel to quickly leave the Marine Terminal, which could help prevent damage to the Marine Terminal and vessel and avoid and/or minimize spills. This may also help isolate an emergency situation, such as a fire or explosion, from spreading between the Marine Terminal and vessel, thereby reducing spill potential. The above would only be performed in a situation where transfer connections were already removed and immediate release would not further endanger terminal, vessel and personnel.				
Tension Monitoring Systems				
<ul> <li>Provide and maintain Tension Monitoring Systems to effectively monitor all mooring line and environmental loads, and avoid excessive tension or slack line conditions that could result in damage to the Marine Terminal structure and/or equipment and/or vessel mooring line failures.</li> </ul>				
<ul> <li>Line tensions and environmental data shall be integrated into systems that record and relay all critical data in real time to the control room, Marine Terminal operator(s) and vessel operator(s).</li> </ul>				

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM (e.g. vessels are berthing within the MOTEMS compliant speed and angle requirements), and (2) post-event investigation and root-cause analysis (e.g. vessel allision during berthing).				
<ul> <li>System shall include, but not be limited to, quick release hooks only (with load cells), site-specific current meter(s), site-specific anemometer(s), and visual and audible alarms that can support effective preset limits and shall be able to record and store monitoring data.</li> </ul>				
<ul> <li>Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).</li> </ul>				
<ul> <li>Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide" Section 2.3.1.1, 2.3.1.2 and 2.3.1.4, are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.</li> </ul>				
<ul> <li>Install alternate technology that provides an equivalent level of protection.</li> </ul>				
<ul> <li>All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post- event investigation and root-cause analysis.</li> </ul>				
The Marine Terminal is located in a high-velocity current area and currently has only limited devices to monitor mooring line strain and integrated environmental conditions. Updated MOTEMS Terminal Operating Limits (TOLs), including breasting and mooring, provide mooring requirements and operability limits that account for the conditions at the terminal. The upgrade to devices with monitoring capabilities can warn operators of the development of dangerous mooring situations, allowing time to take corrective action and minimize the potential for the parting of mooring lines, which can quickly escalate to the breaking of hose connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a petroleum product spill. Backed up by an alarm system,				

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real-time data monitoring and control room information would provide the Terminal Person-In-Charge with immediate knowledge of whether safe operating limits of the moorings are being exceeded. Mooring adjustments can be then made to reduce the risk of damage and accidental conditions.				
Allision Avoidance Systems				
<ul> <li>Provide and maintain Allision Avoidance Systems (AASs) at the Marine Terminal to prevent damage to the pier/wharf and/or vessel during docking and berthing operations. Integrate AASs with Tension Monitoring Systems such that all data collected are available in the Control Room and to Marine Terminal operator(s) at all times and vessel operator(s) during berthing operations. The AASs shall also be able to record and store monitoring data.</li> </ul>				
<ul> <li>All systems data shall be required to be recorded and readily accessible to enable tasks such as: (1) verification that systems are routinely operated in compliance with the MM, and (2) post- event investigation and root-cause analysis (e.g. vessel allision during berthing).</li> </ul>				
<ul> <li>Document procedures and training for systems use and communications between Marine Terminal and vessel operator(s).</li> </ul>				
Routine inspection, testing and maintenance of all equipment and systems in accordance with manufacturers' recommendations and necessity, as well as guidance provided by SIGTTO/OCIMF 2008 "Jetty Maintenance and Inspection Guide", are required to ensure safety and reliability. The inspections, testing, and maintenance will be performed by Phillips 66 or its designated representatives.				
<ul> <li>Velocity monitoring equipment is required to monitor reduced berthing velocities until permanent MOTEMS-compliant corrective actions are implemented.</li> </ul>				
<ul> <li>The systems shall also be utilized to monitor for vessel motion (i.e. surge and sway) during breasting/mooring operations to ensure excessive surge and sway are not incurred.</li> </ul>				
The Marine Terminal has a continuously manned marine interface operation monitoring all aspects of the marine interface. The Automatic Identification System is monitored through TerminalSmart and provides a record of vessel movements. Pursuant to the CSLC January 26, 2022 letter entitled Phillips 66 (P66) Rodeo Marine Terminal – Review of New September 2021				

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Mooring & Berthing Analyses and Terminal Operating Limits (TOLS), the single cone fenders shall not be used as the first point of contact during berthing operations. Therefore, all berthing operations shall utilize the double cone fenders. P66 shall incorporate TOL diagrams with landing point statements in the Terminal Information Booklet. For all vessels, a Phillips 66 Marine Advisor is in attendance and is in radio contact with the vessel master and pilot prior to berthing, reviewing initial contact point and then monitoring.  Excessive surge or sway of vessels (motion parallel or perpendicular to the wharf, respectively), and/or passing vessel forces may result in sudden shifts/redistribution of mooring forces through the mooring lines. This can quickly escalate to the failure of mooring lines, breaking of loading arm connections, the breakaway of a vessel, and/or other unsafe mooring conditions that could ultimately lead to a spill. Monitoring these factors will ensure that all vessels can safely berth at the Marine Terminal and comply				
with the standards required in the MOTEMS.  Transportation and Traffic				
Mitigation Measure TRA-1: Implement a Traffic Management Plan.	Prior to Contra	Phillips 66	Contra Costa	
Prior to issuance of grading and building permits, Phillips 66 shall submit a Traffic Management Plan for review and approval by the Contra Costa County Public Works Department. At a minimum the following shall be included:	Costa County Building Permit Issuance	Primips 66	County Conservation and Development	
The Traffic Management Plan shall be prepared in accordance with the most current California Manual on Uniform Traffic Control Devices, and will be subject to periodic review by the Contra Costa County Public Works Department throughout the life of all construction and demolition phases.				
<ul> <li>Truck drivers shall be notified of and required to use the most direct route between the site and the freeway;</li> </ul>				
<ul> <li>All site ingress and egress shall occur only at the main driveways to the Project site;</li> </ul>				
<ul> <li>Construction vehicles shall be monitored and controlled by flaggers;</li> </ul>				
If during periodic review the Contra Costa County Public Works     Department, or the Department of Conservation and Development,     determines the Traffic Management Plan requires modification,     Phillips 66 shall revise the Traffic Management Plan to meet the				

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
specifications of Contra Costa County to address any identified issues. This may include such actions as traffic signal modifications, staggered work hours, or other measures deemed appropriate by the Public Works Department.				
<ul> <li>If required, Phillips 66 shall obtain the appropriate permits from Caltrans and the Contra Costa County Public Works Department for the movement of oversized or excessive load vehicles on state- administered highways or County maintained roads respectively.</li> </ul>				
Tribal Cultural Resources				
A consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed by Phillips 66 in coordination with interested Native American Tribes (i.e. Wilton Rancheria). The brochure will be distributed and the training will be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the Project site. The program will include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the Project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values.	Prior to Contra Costa County Building Permit Issuance; ongoing	Phillips 66	Contra Costa County Conservation and Development	
Mitigation Measure TCR -2: Monitoring  To minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological and tribal cultural resources and to identify any such resources at the earliest possible time during	During construction and demolition	Phillips 66	Contra Costa County Conservation and Development	

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
project-related earthmoving activities, Phillips 66 and its construction contractor(s) will implement the following measures:				
<ul> <li>Paid Native American monitors from culturally affiliated Native         American Tribes will be invited to monitor the vegetation grubbing,         stripping, grading or other ground-disturbing activities in the project         area to determine the presence or absence of any cultural         resources. Native American representatives from cultural affiliated         Native American Tribes act as a representative of their Tribal         government and shall be consulted before any cultural studies or         ground-disturbing activities begin.</li> </ul>				
<ul> <li>Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative can recommend appropriate treatment of such sites or objects.</li> </ul>				
<ul> <li>If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or bone, are discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until an archaeologist who meets the Secretary of the Interior's qualification standards can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the California Department of Transportation, the State Historic Preservation Office, and other appropriate agencies. Appropriate treatment measures may include development of avoidance or protection methods, archaeological excavations to recover important information about the resource, research, or other actions determined during consultation.</li> </ul>				
• In accordance with the California Health and Safety Code, if human remains are uncovered during ground disturbing activities, the construction contractor or the County, or both, shall immediately halt potentially damaging excavation in the area of the burial and notify the County coroner and a qualified professional archaeologist to determine the nature of the remains. The coroner shall examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands, in accordance with Section 7050(b) of the Health and Safety Code. If the coroner determines				

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that the remains are those of a Native American, they shall contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). After the coroner's findings are presented, the County, the archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed.				
Mitigation Measure TCR -3: Inadvertent Discoveries	During	Phillips 66	Contra Costa	
<ul> <li>Phillips 66 shall develop a standard operating procedure, or ensure any existing procedure, to include points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.</li> </ul>	construction and demolition		County Conservation and Development	
• If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other Project personnel during construction activities, work will cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations will be documented in the project record. For any recommendations made by interested Native American Tribes which are not implemented, a justification for why the recommendation was not followed will be provided in the project record.				
<ul> <li>If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code sections 21084.3(a) and (b) and CEQA Guidelines section 15370 should occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.</li> </ul>				

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
<ul> <li>If cultural resources are recovered on State lands, submerged or tidal lands, all work within 100 feet of the find shall be halted and Phillips 66 shall consult with the California State Lands Commission.</li> </ul>				
Mitigation Measure TCR-4: Avoidance and Preservation	During	Phillips 66	Contra Costa	
Avoidance and preservation in place is the preferred manner of mitigating impacts to tribal cultural resources and shall be accomplished by several means, including:	construction and demolition		County Conservation and Development	
<ul> <li>Planning construction to avoid tribal cultural resources, archaeological sites and/ or other resources; incorporating sites within parks, green-space or other open space; covering archaeological sites; deeding a site to a permanent conservation easement; or other preservation and protection methods agreeable to consulting parties and regulatory authorities with jurisdiction over the activity. Recommendations for avoidance of cultural resources will be reviewed by the CEQA lead agency representative, interested Native American Tribes and the appropriate agencies, in light of factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project area to avoid cultural resources, modification of the design to eliminate or reduce impacts to cultural resources or modification or realignment to avoid highly significant features within a cultural resource. Native American Representatives from interested Native American Tribes will be allowed to review and comment on these analyses and shall have the opportunity to meet with the CEQA lead agency representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.</li> <li>If the resource can be avoided, the construction contractor(s), with paid Native American monitors from culturally affiliated Native American Tribes present, will install protective fencing outside the site boundary, including a buffer area, before construction restarts. The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining</li> </ul>				

Mitigation Measure	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
phases of construction. The area will be demarcated as an				
"Environmentally Sensitive Area." Native American representatives				
from interested Native American Tribes and the CEQA lead agency				
representative will also consult to develop measures for long term				
management of the resource and routine operation and				
maintenance within culturally sensitive areas that retain resource				
integrity, including tribal cultural integrity, and including				
archaeological material, Traditional Cultural Properties and cultural				
landscapes, in accordance with state and federal guidance				
including National Register Bulletin 30 (Guidelines for Evaluating				
and Documenting Rural Historic Landscapes), Bulletin 36				
(Guidelines for Evaluating and Registering Archaeological				
Properties), and Bulletin 38 (Guidelines for Evaluating and				
Documenting Traditional Cultural Properties); National Park				
Service Preservation Brief 36 (Protecting Cultural Landscapes:				
Planning, Treatment and Management of Historic Landscapes) and				
using the Advisory Council on Historic Preservation's Native				
American Traditional Cultural Landscapes Action Plan for further				
guidance. Use of temporary and permanent forms of protective				
fencing will be determined in consultation with Native American				
representatives from interested Native American Tribes.				