Mitigation Monitoring and Reporting Program

INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA), the City of Richmond Community Development Department (City) has prepared this Mitigation Monitoring and Reporting Program (MMRP) based on the Bay Area Air District's 2018 Environmental Impact Report (EIR) for the Assembly Bill (AB) 617 Expedited Best Available Retrofit Control Technology (BARCT) Implementation Schedule and the findings of the EIR Addendum prepared for the Chevron Wet Gas Scrubber (WGS) Project (Proposed Project). This MMRP complies with CEQA Guidelines section 15097, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The MMRP lists mitigation measures and identifies mitigation monitoring requirements from the EIR Addendum, as incorporated from the 2018 BARCT EIR. As described and analyzed in the EIR Addendum (see EIR Addendum Section 3.1.2), two of the original 2018 BARCT EIR mitigation measures, HWQ-1 and HWQ-2, have been updated. HWQ-1 has been updated to allow the option to use recycled water in the Refinery's Isomax Cooling Water Tower (CWT) to offset potable water demand from the proposed operation of the WGS, while HWQ-2 has been updated to address documentation requirements if recycled water cannot be supplied at the quantity or quality needed for the WGS operation and to require evidence of the Isomax CWT conversion if implemented.

PURPOSE OF THE MMRP

This MMRP has been prepared to ensure that all required, applicable mitigation measures are implemented and completed according to the schedule and maintained in a satisfactory manner during Project construction and operation, as applicable. **Table 1** has been prepared to assist the responsible parties in implementing the MMRP. The table identifies individual mitigation numbers and mitigation measures. The numbering of mitigation measures follows the numbering sequence found in the EIR Addendum.

The MMRP is presented in tabular format. The table columns contain the following information:

- **Mitigation Measure:** Lists the mitigation measures by number, as designated in the EIR Addendum, and provides the text of the mitigation measures, each of which has been adopted and incorporated into the Project.
- **Implemented By:** Lists the party responsible for implementation of the mitigation measure.
- **Monitored By:** Lists the party responsible for monitoring the implementation of the mitigation measure.
- **Monitoring and Reporting Action:** Describes the action(s) that are required to be completed by the parties listed in the "Implemented By" and "Monitored By" columns.
- **Monitoring Schedule:** Lists the time frame in which the monitoring for the mitigation measure is required to take place.
- **Verification of Compliance:** The City is responsible for reporting on implementation of the mitigation measures. This column is to be used by the City to indicate when implementation of a mitigation measure has been completed. The City, at its discretion, may delegate monitoring responsibility, or portions thereof, to qualified consultants or contractors.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
Air Quality					
A-1: Implement measures to minimize emissions from vehicles including, but not limited to, consolidating truck deliveries, prohibiting truck idling in excess of five minutes as contract conditions with carriers and by posting signs onsite, specifying truck routing to minimize congestion emissions, specifying hours of delivery to avoid peak rush-hour traffic, allowing ingress/egress only at specified entry/exit points to avoid heavily congested traffic intersections and streets, and specifying allowable locations of onsite parking.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	Verify inclusion of all dust-control and emissions mitigation measures in applicable construction plans, contract conditions with carriers, and specifications submitted before construction. Make regular visits to the project site to ensure that all dust-control and emissions mitigation measures are implemented.	Prior to any earthwork. Regular field inspections during construction.	*Verified by:* *Date:*
A-2: Prohibit construction equipment from idling longer than five minutes at the facility under consideration as contract conditions with construction companies and by posting signs onsite.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	Verify inclusion of all emissions mitigation measures in applicable construction plans and specifications submitted before construction. Make regular visits to the project site to ensure that all emissions mitigation measures are implemented.	Prior to any earthwork. Regular field inspections during construction.	*Verified by:* *Date:*
A-3: Maintain construction equipment tuned up and with two- to four-degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	Verify inclusion of all emissions mitigation measures in applicable construction plans and specifications submitted before construction. Make regular visits to the project site to ensure that all emissions mitigation measures are implemented.	Prior to any earthwork. Regular field inspections during construction or written proof of maintenance.	*Verified by:* *Date:*

Mitigation Measure	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
A-4: The facility operator shall survey and document the locations of construction areas and identify all construction areas that are served by electricity. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	Verify inclusion of all emissions mitigation measures in applicable construction plans and specifications submitted before construction. Make regular visits to the project site to ensure that all emissions mitigation measures are implemented.	Prior to any earthwork. Regular field inspections during construction.	*Verified by:* *Date:*
A-5: If cranes are required for construction, cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines shall be used. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting cranes rated 200 hp or greater with PM and NOx control devices must occur before the start of construction. If cranes rated 200 hp or greater equipped with Tier 4 engines are not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation as information becomes available that cranes rated 200 hp or greater equipped with Tier 4 or equivalent engines are not available.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	If cranes are required for construction, verify crane type and engine tier and inclusion of all emissions mitigation measures in applicable construction plans and specifications submitted before construction. Make regular visits to the project site to ensure that all emissions mitigation measures are implemented.	Prior to use of cranes during construction. Regular field inspections during construction to confirm approved cranes are being used or written proof of use of NOx control equipment.	*Verified by:* *Date:*

Mitigation Measure	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
A-6: For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines. Engines equivalent to Tier 4 may consist of Tier 3 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting equipment rated 50 to 200 hp with PM and NOx control devices must occur before the start of construction. If equipment rated 50 to 200 hp equipped with Tier 4 engines is not available or cannot be retrofitted with PM and NOx control devices, the facility operator shall use equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines. The facility operator shall provide documentation as information becomes available that equipment rated 50 to 200 hp equipped with Tier 4 or equivalent engines are not available.	Chevron, Construction Contractor	City of Richmond Planning and Building Divisions, and Bay Area Air District	Verify inclusion of all emissions mitigation measures in applicable construction plans and specifications submitted before construction. Make regular visits to the project site to ensure that all emissions mitigation measures are implemented.	Prior to any earthwork. Regular field inspections during construction to confirm approved equipment is being used or written proof of engine rating.	*Verified by:* *Date:*
Hydrology and Water Quality					
HWQ-1: When air pollution control equipment (i.e., wet gas scrubber) is installed and water is required for its operation, the facility is required to use recirculated, reclaimed, or recycled water, if available, to satisfy the water demand for the wet gas scrubber. Alternatively, if recirculated, reclaimed, or recycled water is not available in the quantity or at the quality necessary to	Chevron	City of Richmond Planning Division and Bay Area Air District	Verify 1) whether the NRWRP, which is owned and operated by East Bay Municipal Utility District (EBMUD), has appropriate quantities and quality of recirculated, reclaimed, or recycled water available and, if so, that it is used to satisfy the water demand for the wet gas scrubber; or 2) if Chevron elects to pursue the recycled water alternative at the Isomax Cooling	Prior to Wet Gas Scrubber operations	*Verified by:* *Date:*

Mitigation Measure	Implemented By	Monitored By	Monitoring and Reporting Action	Monitoring Schedule	Verification of Compliance
operate the wet gas scrubber, Chevron U.S.A., (Chevron) shall consider applying to the Bay Area Air District for approval to operate the Isomax Cooling Water Tower at Chevron's refinery in Richmond, CA, with recycled water in lieu of the potable water currently used there. If the Air District approves that application and issues a permit with terms and conditions acceptable to Chevron, Chevron shall convert and operate the Isomax Cooling Water Tower (CWT) with recycled water when available from the North Richmond Water Reclamation Plant (NRWRP).			Water Tower (CWT), that the Bay Area Air District has approved operation of the Isomax Cooling Water Tower at Chevron's Richmond Refinery , using recycled water in lieu of the potable water currently used there. If neither of these occur, implement Mitigation Measure HWQ-2.		
HWQ-2: In the event that reclaimed or recycled water cannot be delivered in the quantity or at the quality necessary to operate the wet gas scrubber, Chevron shall submit a written declaration signed by an official of the water purveyor indicating the reason(s) why reclaimed or recycled water cannot be supplied in the quantity and/or quality needed for use in the wet gas scrubber to the City and to the Air District as part of its application for a Permit to Construct the wet gas scrubber and, should Chevron proceed with the conversion of the Isomax Cooling Water Tower to recycled water pursuant to Mitigation Measure HWQ-1, Chevron shall provide evidence of that conversion to the City and the Air District.	Chevron	City of Richmond Planning Division and Bay Area Air District	Verify whether Chevron has submitted a written declaration signed by an official of the water purveyor (EBMUD) indicating the reason(s) why reclaimed or recycled water cannot be supplied in the quantity and/or quality needed for use in the wet gas scrubber to the City and to the Air District as part of its application for a Permit to Construct the wet gas scrubber. Should Chevron proceed with the conversion of the Isomax CWT to recycled water pursuant to Mitigation Measure HWQ-1, verify that Chevron has provided evidence of that conversion to the City and the Air District prior to operation.	Verification that Chevron has submitted a written declaration shall occur prior to construction. If approved by the Bay Area Air District pursuant to Mitigation Measure HWQ-1, verification that Chevron has converted the Isomax CWT to recycled water and the Isomax CWT is operational prior to Wet Gas Scrubber operations.	*Verified by:* *Date:*