

RESOLUTION NO. 93-08

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RICHMOND
UPHOLDING THE PLANNING COMMISSION CERTIFICATION OF AN
ENVIRONMENTAL IMPACT REPORT, AND ADOPTING FINDINGS AND A
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE CHEVRON
ENERGY AND HYDROGEN RENEWAL PROJECT**

WHEREAS, Chevron Products Company (“Chevron”) submitted an application to the City of Richmond (“City”) on April 6, 2005 for a Conditional Use Permit for the Chevron Energy and Hydrogen Renewal Project (“Project”), for which the environmental review project file was assigned number EID 1101974; and

WHEREAS, the Project consists of the modification, replacement, and installation of various equipment and structures at the Chevron Richmond Refinery (“Refinery”), including the Hydrogen Plant Replacement, Power Plant Replacement, Catalytic Reformer Replacement, Hydrogen Purity Improvements, 10 replacement tanks, eight new tanks, a new central control room, a new maintenance facility, and other equipment and structures such as piping, heat exchangers, instrumentation, catalytic reactors, fractionation equipment, pumps, compressors, furnaces, tanks, hydrogen sulfide absorption capacity, hydrogen generation capacity and their associated facilities, including steam and electrical generation as well as some refinery buildings and infrastructure, all as described in Volume 1, Chapter 3 of the May 2007 Draft Environmental Impact Report for the Chevron Energy and Hydrogen Renewal Project (“Draft EIR”) as amended by the January 2008 Final Environmental Impact Report and the May 2008 Consolidated Volume and errata thereto (State Clearinghouse No. 2005072117) (together, the “Final EIR”), which is a master EIR pursuant to the California Environmental Quality Act (“CEQA”), specifically Public Resources Code section 21157-21157.7 and CEQA Guidelines sections 15175-15179.1; and

WHEREAS, on June 15, 2005, the City issued a Notice of Preparation (“NOP”) of the EIR; and

WHEREAS, the NOP was circulated for comment by responsible and trustee agencies and the public for a total of 71 days, from June 15, 2005 through August 25, 2005, during which time the City held a public scoping meeting on June 23, 2005; and

WHEREAS, the Draft EIR, consisting of Volumes 1 and 2, was issued on May 11, 2007, and was circulated for public review through July 9, 2007, for a total of 59 days, during which time the City held a public hearing on the Draft EIR on June 7, 2007; and

WHEREAS, following the close of the public review period, the Final EIR was prepared, which responds to the written and oral comments received during the public review period; and

WHEREAS, the City received letters following the close of the public review and comments period and, although pursuant to Public Resources Code section 21091(d)(1) and CEQA Guidelines section 15088(a), written responses are not required, the City prepared responses to some of these letters in “Responses to Late Received Comments Letters on the Chevron Energy and Hydrogen Renewal Project,” which was provided to the Planning Commission on March 20, 2008; and

WHEREAS, the “Errata Chevron Energy and Hydrogen Renewal Project Final Environmental Impact Report” was provided to the Planning Commission on March 20, 2008; and

WHEREAS, on January 25, 2008, Final EIR Volumes 3, 4 and 5 were issued for public review; and

WHEREAS, on May 23, 2008, the Consolidated Volume, Volume 6 of the Final EIR, was issued for public review; and

WHEREAS, the “Errata – Consolidated Volume, Chevron Energy and Hydrogen Renewal Project Final Environmental Impact Report” was provided to the Planning Commission on June 5, 2008; and

WHEREAS, the Final EIR, consisting of Volumes 1 through 6 and all documents incorporated therein, was presented to the Planning Commission and the Planning Commission reviewed and considered the information contained in the Final EIR; and

WHEREAS, following publication of Volumes 3 through 5 of the Final EIR the staff of the Bay Area Air Quality Management District suggested changes to Mitigation Measure 4.3-2a, which were incorporated into Mitigation Measure 4.3-2a (revised); and

WHEREAS, following publication of Volumes 3 through 5 of the Final EIR, the Attorney General's Office requested clarification of Mitigation Measure 4.3-5e, which resulted in changes to that mitigation measure; and

WHEREAS, the Planning Commission held duly noticed public hearings on March 20, 2008, April 10, 2008, and June 5, 2008; and

WHEREAS, the Planning Commission reviewed and considered the proposed Conditional Use Permit and Design Review Permit; the proposed Conditions of Approval, including the Design Review Board's recommended conditions of approval; and all information received orally and in writing at or before the public hearings; and

WHEREAS, on June 5, 2008, the Planning Commission approved Planning Commission Resolution 08-02 certifying that the Final EIR for the Project was completed in compliance with the California Environmental Quality Act, Public Resources Code Section 21000 *et seq.*, and the City of Richmond's Guidelines and Procedures for Implementation of CEQA, Resolution No. 125-03 (adopted September 23, 2003), and reflects the independent judgment of the City; adopting the Findings Pursuant to Public Resources Code section 21081 for the Project (Exhibit A to Resolution 08-02); adopting and making conditions of approval all of the mitigation measures for the Project that are within the responsibility and jurisdiction of the City that are identified in the Findings; and adopting the Mitigation Monitoring and Reporting Program for the Project (Exhibit B to Resolution 08-02); and

WHEREAS, an appeal to the certification of the Final EIR was filed on June 16, 2008, by Communities for a Better Environment, Asian Pacific Environmental Network, West County Toxics Coalition, Richmond Greens, Richmond Progressive Alliance and Atchison Village Environmental Committee (CBE, et al.) and amended on June 30, 2008 to state the grounds of the appeal, which include piecemealing of pipeline projects, "crude switch," general plan consistency, cumulative impacts, analysis of significant VOC impacts, and socio-economic impacts; and

WHEREAS, on June 16, 2008, Chevron appealed the adoption of the portion of Mitigation Measure 4.3-5(e) requiring Chevron "to reduce at least 449,000 metric tons per year of GHG emissions . . . on Chevron Richmond property (including the Long Wharf)," stating as its reasons for the appeal that there is "no scientific basis or substantial evidence . . . to justify requiring GHG reductions in this amount, or any other amount, locally on Chevron property, in order to mitigate alleged global-scale climate change impacts from GHG emissions," that there is no substantial evidence that the reductions are "technically and environmentally feasible," and that the mitigation measure is "arbitrary, capricious, and inconsistent with CEQA and the California Global Warming Solutions Act of 2006;" and

WHEREAS, the City Council conducted a duly notice public hearing on July 15, 2008 on the appeal of the Planning Commission's decision to certify the Final EIR, which was continued to July 16, 2008 and ended on the morning of July 17, 2008; and

WHEREAS, after consideration of the Final EIR and the record of proceedings before the Planning Commission and Design Review Board, and oral and written public testimony.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF RICHMOND, having independently considered the environmental effects of the Chevron Energy and Hydrogen Renewal Project as shown in the Final EIR:

1. The City Council denies the appeals of CBE, et al. and Chevron, and upholds the Planning Commission decision to certify the Final EIR for the Chevron Energy and Hydrogen Renewal Project.
2. The City Council hereby certifies that the Final EIR for the Project has been completed in compliance with the California Environmental Quality Act, Public Resources Code Section 21000 *et seq.* and the City of Richmond's Guidelines and Procedures for Implementation of CEQA, Resolution No. 125-03 (adopted September 23, 2003), and reflects the independent judgment of the City.
3. The City Council hereby adopts the Findings Pursuant to Public Resources Code section 21081 for the Chevron Energy and Hydrogen Renewal Project ("Findings"), attached hereto as "Exhibit A."
4. The City Council finds that Mitigation Measure 4.3-5(e) is reasonably related to the City's interest in complying with the California Global Warming Solutions Act of 2006 (AB32) and in reducing local air pollution levels, is consistent with AB32 and CEQA, and is within the authority of the City, all as explained in the Staff Report to the City Council dated July 15, 2008 and the Attachments thereto; and
5. The City Council further finds that recirculation of the EIR is not required in response to the appeals of CBE, et al. and Chevron because, as explained in the Staff Report to the City Council dated July 15, 2008 and the Attachments thereto, the two appeals do not contain significant new information which discloses that a new significant environmental impact would result from the Project or from a new mitigation measure proposed to be implemented, that a substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance, that a feasible mitigation measure or alternative considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the Project but the City declines to adopt it, or that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.
6. The City Council hereby amends Mitigation Measure 4.3-5e, and adopts and makes conditions of approval of the Chevron Energy and Hydrogen Renewal Project all of the mitigation measures for the Project that are within the responsibility and jurisdiction of the City that are identified in the Findings.
7. The City Council hereby adopts the Mitigation Monitoring and Reporting Program for the Chevron Energy and Hydrogen Renewal Project, attached hereto as "Exhibit B."

I HEREBY CERTIFY that the foregoing resolution was passed and adopted by the City Council of the City of Richmond at a regular meeting held on July 17, 2008.

Ayes: Councilmembers Bates, Lopez, Marquez, Sandhu, Thurmond, and Viramontes

Noes: Councilmembers Butt, Rogers, and Mayor McLaughlin

Abstain: None

Absent: None

DIANE HOLMES
Clerk of the City of Richmond

(Seal)

Approved:

GAYLE McLAUGHLIN
Mayor

Approved as to form:

LOUISE RENNE
City Attorney

State of California }
County of Contra Costa : ss.
City of Richmond }

I certify that the foregoing is a true copy of Resolution No. 93-08, finally passed and adopted by the Council of the City of Richmond at a meeting held on July 17, 2008.

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
AIR QUALITY					
IMPACT 4.3-1: Activities associated with Proposed Project construction would generate short-term emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions, during the term of construction.					
<p>4.3-1a: During construction, Chevron Richmond shall require the construction contractor to implement the following dust control procedures to maintain project construction-related impacts at acceptable levels.</p> <p>Construction contractors shall implement the following dust abatement program to reduce the contribution of Proposed Project construction to local PM10 concentrations. Elements of this program (in compliance with BAAQMD CEQA Guidelines) shall be implemented on days in which the ground is not otherwise damp and shall include the following:</p>	Environmental Field Monitor to monitor continual compliance during construction, keep required records and report status to the City of Richmond annually by the anniversary of permit approval. Chevron shall submit documentation of the compliance with Mitigation Measure 4.3-1a to the Planning Department prior to grading plan approval and subsequent building permit approvals. This applies to all portions of Mitigation Measure 4.3-1a, below.	Prior to and during construction	After disturbed areas have been stabilized	City of Richmond	—
Water all active construction areas at least twice daily.	Driver shall keep a log of all watering conducted at each site.	During construction	After areas are stabilized	City of Richmond	—
Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.	Send instruction to contractors involved with hauling. Follow up with spot field checks.	During construction	After areas are stabilized	City of Richmond	—
Pave, gravel-cover, and apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.	Maintain a map of affected sites and method of dust control.	During construction	After areas are stabilized	City of Richmond	—
Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.	Driver shall keep a log of all sweeping for each site.	During construction	After areas are stabilized	City of Richmond	—
Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.	Inspect public streets weekly. If soil materials are found, driver shall keep a log of subsequent sweeping for each site.	During construction	After areas are stabilized	City of Richmond	—
Dry mechanical pavement sweeping shall not be allowed.	Inform contractors that dry mechanical pavement sweeping not allowed. Perform spot checks to ensure compliance.	During construction	After areas are stabilized	City of Richmond	—
Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas and previously graded areas inactive for ten days or more.	Maintain a map and log of affected sites and method of dust control	During construction	After areas are stabilized	City of Richmond	—
Enclose and cover and water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)	Maintain coverage of piles.	During construction	After areas are stabilized	City of Richmond	—
Limit traffic speeds on unpaved roads to 15 mph.	Post speed limit signs.	During construction	After areas are stabilized	City of Richmond	—
Install sandbags or other erosion control measures to prevent silt runoff to public roadways.	Follow requirements of SWPPP.	During construction	After areas are stabilized	City of Richmond	—
Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.	Set up anemometer, record readings twice per day.	During construction	After areas are stabilized	City of Richmond	—
Limit the area subject to excavation, grading and other construction activity at any one time.	Maintain a map of excavation/ grading areas and schedule	During construction	After areas are stabilized	City of Richmond	—
Install wheel-washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the construction site.	Report completion of installation of wheel washing facility. Perform spot checks to ensure wheels are being washed as required.	During construction	After areas are stabilized	City of Richmond	—
For backfilling during earthmoving operations, water backfill material or apply dust palliative to maintain material moisture or form crust when not actively handling; cover or enclose backfill material when not actively handling; mix backfill soil with water prior to moving; dedicate water truck or large hose to backfilling equipment and apply water as needed; water to form crust on soil immediately following backfilling; empty loader bucket slowly and minimize drop height from loader bucket.	Perform spot checks to confirm watering of backfill material and covering of inactive storage of backfill material.	During construction	After areas are stabilized	City of Richmond	—
While clearing forms, use water spray to clear forms; use sweeping and water spray to clear forms; use industrial shop vacuum to clear forms; and avoid use of high pressure air to blow soil and debris from forms.	Perform spot checks to confirm water spraying or vacuuming to clear forms.	During construction	After areas are stabilized	City of Richmond	—
4.3-1b: To mitigate equipment exhaust emissions, Chevron Richmond shall require its construction contractors to comply with the following requirements:	Environmental Field Monitor to monitor continual compliance during construction, keep required records and report status to the City of Richmond annually by the anniversary date of Project approval. Chevron shall submit documentation of the compliance with Mitigation Measure 4.3-1b to the Planning Department prior to grading plan approval and subsequent building permit approvals. This applies to all portions of Mitigation Measure 4.3-1b, below.	Prior to and during construction	At the end of construction	City of Richmond	—
Prohibit the use of conventional cut back asphalt for paving to restrict the maximum VOC content of asphalt emulsion.	Perform spot checks to ensure no conventional cutback asphalt.	During construction	At the end of construction	City of Richmond	—
All diesel-fueled engines used for on- and off-site construction activities shall be fueled only with ultra-low sulfur diesel, which contains no more than 15 ppm sulfur.	Perform spot checks to ensure compliance with fuel standards.	During construction	At the end of construction	City of Richmond	—

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All construction diesel engines used for on- and off-site activities that have a rating of 100 hp or more shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless it is certified by the construction contractor that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be a Tier 1 engine. In the event a Tier 1 or Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a CARB Level 3-verified diesel emission control device (e.g., catalyzed diesel particulate filter), unless the engine manufacturer or the construction contractor certifies that the use of such devices is not practical for specific engine types. In the event that a CARB Level 3 verified diesel emission control device is not practical for the specific engine type, then the engine shall be equipped with a CARB Level 1- or 2-verified control device (e.g., diesel oxidation catalyst), unless the engine manufacturer or the construction contractor certifies that such devices are not available for the engine in question. For purposes of this condition, the use of such devices is "not practical" if, among other reasons: 1. There is no available diesel emission control device that has been verified/certified by either the California Air Resources Board or U.S. Environmental Protection Agency for the engine in question; or 2. The construction equipment is intended to be on-site for ten (10) days or less. 3. This requirement may be waived if the construction contractor can demonstrate that it has made a good faith effort to comply with this requirement and that compliance is not possible.	Maintain log of all equipment over 100 hp. Provide documentation demonstrating compliance with requirements. Document how any particular type of equipment is not available or "not practical" for use.	During construction	At the end of construction	City of Richmond	—
The use of a diesel emission control device may be terminated immediately if one of the following conditions exists, provided that the City is informed within ten (10) working days of the termination: 1. The use of the diesel emission control device is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure. 2. The diesel emission control device is causing or is reasonably expected to cause significant engine damage. 3. The diesel emission control device is causing or is reasonably expected to cause a significant risk to workers or the public. 4. Any other seriously detrimental cause which has the approval of the City prior to the termination being implemented.	Provide supporting documentation to demonstrate existence of condition justifying termination of use of diesel control device.	During construction	At the end of construction	City of Richmond	—
Diesel portable generators less than 50 horsepower shall not be allowed at the construction site, except for those used by welders. (Welding trucks have self-contained units with generators less than 50 horsepower.)	Perform spot checks to ensure no use of generators under 50 horsepower.	During construction	At the end of construction	City of Richmond	—
Construction equipment shall be properly tuned and maintained in accordance with manufacturers' specifications.	Keep a current maintenance log for each piece of construction equipment.	During construction	At the end of construction	City of Richmond	—
Best management construction practices shall be used to avoid (or limit) unnecessary emissions (e.g., trucks and vehicles in loading and unloading queues would turn their engines off when not in use, and to the extent practical, all diesel heavy construction equipment shall not remain running at idle for more than five minutes)	Provide all construction crew members with information about best management construction practices to avoid or limit unnecessary air emissions and perform and document monthly audits.	During construction	At the end of construction	City of Richmond	—
Use alternative fueled equipment when feasible (such as ULSD, CNG, biodiesel, water emulsion fuel, and electric). The construction contracts shall require each contractor and subcontractor to consider this measure and adopt it for their work unless they can demonstrate to Chevron the inapplicability or infeasibility of the measure to their specific work, or can provide mitigation measures with equivalent or better effectiveness. Chevron shall report this information to the City as part of the Mitigation Monitoring Reporting and Compliance Program.	Construction contractors shall verify use of alternative fueled equipment, or provide documentation explaining why infeasible.	During construction	At the end of construction	City of Richmond	—
Use on-site power when feasible to reduce reliance on portable generators. The construction contracts shall require each contractor and subcontractor to consider this measure and adopt it for their work unless they can demonstrate to Chevron the inapplicability or infeasibility of the measure to their specific work, or can provide mitigation measures with equivalent or better effectiveness. Chevron shall report this information to the City as part of the Mitigation Monitoring Reporting and Compliance Program.	Provide log of power source of all equipment. Provide justification for necessity of using portable generators.	During construction	At the end of construction	City of Richmond	—
Mitigation Measure 4.3-1b shall be included in the construction bid documents and contracts.	Review construction bid documents to confirm entire content of Mitigation Measure 4.3-1b is included.	Prior to and during construction	At the end of construction	City of Richmond	—
4.3-1c: To mitigate on-road vehicle exhaust emissions, Chevron Richmond shall require its construction contractors to comply with the following requirements:	Environmental Monitor to monitor continual compliance during construction, keep required records and report status to the City of Richmond annually by the anniversary date of Project permit approval. This applies to all portions of Mitigation Measure 4.3-1c, below.	During construction	At the end of construction	City of Richmond	—
Construction worker commuters shall be encouraged to carpool or employ other means to reduce trip generation.	EM will report on efforts to encourage trip-reduction measures.	During construction	At the end of construction	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

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Shifts shall be staggered to reduce the number of workers arriving and departing the work site at the same time.	EM will report shift schedules showing compliance with Mitigation Measure when traffic levels trigger need for mitigation.	During construction	At the end of construction	City of Richmond	—
A substantial portion of the construction workforce shall be allowed to avoid the morning peak traffic periods and to stagger departures through the afternoon peak period, in accordance with Mitigation Measures 4.16-1 and 4.16-2.	See previous item.	During construction	At the end of construction	City of Richmond	—
IMPACT 4.3-2: Operational activities associated with the implementation of the Proposed Project could increase air pollutant emissions. Operational emissions from the Proposed Project would be less than significant with the exception of project-related VOC pollutant emissions, which would be significant.					
4.3-2a: Tanks T-954 and T-3228 shall be covered by a dome or fixed roof, and equipped with a floating roof meeting the requirements of BAAQMD Regulation 8, Rule 5, Section 305, and shall be inspected in accordance with Section 402, which requires secondary seal visual inspection twice per year at 4-to-8-month intervals, tank fitting inspection twice per year at 4 to 8-month intervals, and a physical measurement of seal gaps at least every 10 years. In addition Chevron shall ensure that the concentration of organic vapor in the vapor space shall not exceed 30 percent of its lower explosive limit (LEL). Chevron shall sample the vapor space with a Gastech analyzer at least once during each calendar quarter at 2 to 4 month intervals. Any situation causing a concentration in excess of 30 percent of LEL shall be immediately corrected or the tank shall be removed from service. To ensure ongoing compliance, these requirements shall be included as permit conditions in the BAAQMD Authority to Construct and Permit to Operate for each tank.	Prior to construction of Tanks T-954 and T-3228, Chevron shall confirm permit conditions to the City which require twice yearly inspections and corrections or removal of tanks with an excess of 30 percent of LEL.	Prior to construction	Throughout project life	City of Richmond	—
4.3-2b: Prior to operating the following Proposed Project equipment, Chevron shall confirm to the City that the permit conditions for the Renewal Project BAAQMD Authority to Construct contain the following firing rate limits: <ul style="list-style-type: none"> • For each new Hydrogen Plant furnace (BAAQMD Source Nos. S-4471, S-4472): 920 million BTU per hour rolling twelve-month average. • For the new CCR furnaces combined total (BAAQMD Source Nos. S-4477, S-4478, S-4479, S-4480): 500 million BTU per hour rolling twelve-month average. • For the new Cogeneration gas turbine generator and duct burner combined total (BAAQMD Source Nos. S-4473, S-4474): 840 million BTU per hour rolling twelve-month average. 	Prior to construction of new Hydrogen Plant furnace and CCR furnace, Chevron shall confirm permit conditions to the City which require the specified firing rate limits.	Prior to construction	Throughout project life	City of Richmond	—
IMPACT 4.3-3: Alternate phasing of the Proposed Project components could lead to temporary increases in PM emissions greater than significance thresholds.					
4.3-3: Chevron shall commence operations of at least one of the new hydrogen trains before initiating operation of the Power Plant, Catalytic Reformer, Hydrogen Purity Improvements, and the New and Replacement Storage Tanks to ensure that the offsetting emissions reductions associated with these Proposed Project components are achieved. This shall not preclude the dual operations of the old and new hydrogen plants, or the dual operations of any of the Proposed Project components, as long as the combined throughput of the old and replacement units remain within present or future permitted levels when operated simultaneously during initial commissioning of the replacement units. Chevron shall prepare periodic reports to the City and shall provide at least 30 days notice on the completion of construction and change in operational status for the new and old Hydrogen Plants, the Power Plant, the Catalytic Reformer, the Hydrogen Purity Improvements, and the New and Replacement Storage Tanks. Initiating operation of the Hydrogen Purity Improvements means operating any combination of the sulfur recovery units above the sum of their present throughput limits, and initiating operation of Replacement Storage Tanks means operating any replacement tank above the capacity of the tank it replaces.	Chevron shall prepare periodic reports to the City and shall provide at least 30 days notice on the completion of construction and change in operational status for the new and old Hydrogen Plants, the Power Plant, the Catalytic Reformer, the Hydrogen Purity Improvements, and the New and Replacement Storage Tanks.	Start of construction	Before operations of the Power Plant, Catalytic Reformer, Hydrogen Purity Improvements, and the New and Replacement Storage Tanks are initiated, to ensure that the offsetting emissions reductions associated with the new hydrogen plant are achieved	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
IMPACT 4.3-5: Operation of the Proposed Project has the potential to increase the Refinery's output of greenhouse gases by 898,000 metric tons CO ₂ e.					
<p>4.3-5a: Within one (1) year of approval of the Conditional Use Permit, the City shall hire, and Chevron shall fully fund, a qualified independent expert ("Expert") to complete an inventory of greenhouse gas or greenhouse gases ("GHG") emitted from the Refinery. The Expert shall prepare an inventory protocol, subject to the City's approval. The City shall provide a copy of the proposed protocol to Chevron for review and comment prior to its approval. The inventory shall be calculated in accordance with the methodology set forth in the California Air Resources Board's ("CARB") Proposed Mandatory Greenhouse Gas Reporting Regulation (at the present time this shall be the October 19, 2007 version; however, the most current version shall be used including any subsequently adopted final regulation, as applicable at the time the inventory is conducted). Chevron and the City shall reasonably agree upon the selection of the Expert. If agreement cannot be reached, the Executive Officer of the Bay Area Air Quality Management District ("BAAQMD") shall select the Expert.</p> <p>As used in Mitigation Measures 4.3-5a through 4.3-5g, GHG emissions shall include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, as defined in Health and Safety Code section 38505(g). GHG may be expressed as individual gases or as CO₂ equivalent ("CO₂e"). The inventory shall be conducted to identify and quantify sources of these emissions and to identify potential emissions reduction opportunities at the Refinery. Chevron shall take the inventory information into consideration as part of its strategy to implement mitigation measures 4.3-5b through 4.3-5f, California Health & Safety Code, Division 25.5, sections 38500, et seq., the California Global Warming Solutions Act (AB 32), and regulations, polices and guidance implementing AB 32. The inventory quantities of GHG shall be expressed in units of metric tons or metric tons per year.</p>	Chevron funds and City hires qualified independent expert (Expert) and obtains an inventory protocol prepared by the Expert.	Within one (1) year of the approval of the Conditional Use Permit Expert will be hired.	After City selection of independent expert	City of Richmond	—
<p>4.3-5b: The operation of the Proposed Project shall result in no net increase in GHG emissions over the Proposed Project baseline. The Proposed Project GHG baseline emission level is defined as the annual emissions of GHG from all existing process units of the Refinery that will be modified or replaced under the Proposed Project, determined in the Master EIR to be 1,731,000 metric tons CO₂e per year as set forth on Table 4.3-11 (Revised) of the Final EIR. The Expert hired pursuant to Mitigation Measure 4.3-5a shall prepare, subject to approval by the City, protocols for Chevron's annual reporting of GHG emissions from Proposed Project sources for purposes of determining any net increase in GHG emissions over the baseline and for purposes of complying with Mitigation Measures 4.3-5f and 4.3-5g. In developing these protocols, the expert shall consider factors such as proposed emissions sources, flow meters and fuel compositions for combustion sources, and process variables for process emissions. The City shall provide a copy of the proposed protocols to Chevron for review and comment prior to City approval.</p>	Chevron makes available the information needed to determine GHG emissions from Proposed Project sources. City obtains an inventory protocol for Chevron's annual reporting of GHG emissions from Proposed Project sources over the baseline.	After City hires independent expert.	After City approval of inventory protocol	City of Richmond	—
<p>4.3-5c: To ensure no net increase of GHG emissions over the annual baseline identified in Mitigation Measure 4.3-5b, GHG reductions shall be achieved prior to the time that GHG emissions from the Proposed Project would exceed the Proposed Project GHG baseline in an amount equal to or exceeding the amount such GHG emissions would exceed the baseline, and shall conform to the GHG reduction plan approved by the City pursuant to Mitigation Measure 4.3-5e. Chevron shall demonstrate that the GHG reductions undertaken to achieve no net increase over the Proposed Project GHG baseline are real, permanent, quantifiable, verifiable, and enforceable consistent with Health and Safety Code section 38562. CO₂e emissions from sources that are displaced to another geographic location shall not be considered reductions for purposes of Mitigation Measures 4.3-5a through 4.3-5g. Emission increases and emission reductions shall be calculated in accordance with the methodology set forth in the CARB Proposed Mandatory Greenhouse Gas Reporting Regulation (the October 19, 2007 version, the then current draft, or any subsequently adopted final regulation, as applicable at the time the calculations are made).</p>	Chevron demonstrates that GHG reductions from the Proposed Project occur prior to emission increases exceeding the baseline and that the reductions are real, permanent, quantifiable, verifiable, and enforceable.	Prior to such time as when GHG emissions from the Proposed Project would exceed the GHG baseline (898,000 metric tons per year as set forth in Table 4.3-11 (Revised) of the Final EIR).	Throughout life of project	City of Richmond	—
<p>4.3-5d: Chevron shall notify the Planning Department six (6) months in advance of the time that GHG emissions from hydrogen production are anticipated to exceed 921,000 metric tons CO₂e per year as set forth in the Expected Utilization case in unrevised Table 4.3-11 of the Draft EIR, Volume 1. The Expert hired pursuant to Mitigation Measure 4.3-5a shall recommend a method for determining when this report must be made. The Expert shall consider factors such as those listed in Mitigation Measure 4.3-5b for the annual reporting protocol.</p>	Chevron monitors GHG emissions from hydrogen production and notifies City in advance of emission rate from hydrogen production exceeding 921,000 metric tons CO ₂ e annually according to method approved by City.	Prior to such time as when GHG emissions from hydrogen production would exceed 921,000 metric tons CO ₂ e per year.	After notification is provided to the City of Richmond	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
<p>4.3-5e: No later than one (1) year after approval of this Conditional Use Permit, Chevron shall submit to the City, for approval by the City Council, a plan for achieving complete reduction of GHG emissions up to the maximum estimated Renewal Project GHG emissions increase over the baseline (898,000 metric tons per year as set forth in Table 4.3-11 [Revised] of the Final EIR). The plan shall identify “local” GHG reductions before considering other reductions. At least fifty percent (50%) of the reductions (449,000 metric tons per year) shall be taken in the following order of priority:</p> <ul style="list-style-type: none"> • The earliest reductions (first priority) shall be taken on Chevron Richmond property, including the Long Wharf. • The next reductions (second priority) shall be taken within low income communities near the Richmond Refinery. • The next reductions (third priority) shall be taken within the City of Richmond. • The next reductions (fourth priority) shall be taken within West Contra Costa County, which area is defined as the area within the jurisdiction of the West Contra Costa Transportation Advisory Committee. <p>The remaining actions may be taken within the State of California or consistent with (CARB) requirements for GHG emissions reductions.</p> <p>In the event that the City Council does not approve the plan, the City Planning Director shall, within sixty (60) days, propose an alternative GHG reduction plan, or portion thereof, that will achieve a substantially similar reduction, as measured by number of tons and at an equal or lesser cost per metric ton of GHG reduced, within the local priority areas.</p> <p>No actions approved as part of this reduction plan shall increase emissions of criteria pollutants or toxic air contaminants. The plan shall consider implementation of measures that achieve GHG reductions including, but not limited to, the following measures:</p> <ul style="list-style-type: none"> • GHG reduction measures recommended by the CARB for California refineries. • Engage energy efficiency engineers to conduct a thorough audit of fuel, electricity and natural gas use at the Refinery to identify potential energy savings and energy efficiency improvements, and implement those feasible measures identified. • Replace stationary, non-emergency diesel internal combustion engines. • Retrofit or replace old process heaters to use new high efficiency burners, oxyfuel (use of oxygen instead of air), advanced controls, and/or more heat recovery. • Add/improve heat exchangers. • Replace existing CoGens with higher-efficiency units, or add CoGen units. • Replace stationary, non-emergency internal combustion engines with high efficiency electric motors. • Implement process efficiencies (e.g., control fouling in crude unit pre-heater train). • Install cold ironing facility at Chevron Long Wharf and/or Port of Richmond. • Initiate carbon sequestration, capture and export. • Reduce mobile emission sources through “transportation smart” development such as Greenprint. 	Chevron submits plan for achieving GHG reduction for Proposed Project GHG emissions over the baseline.	Within one (1) year of the approval of the Conditional Use Permit GHG emission reduction plan will be filed.	After City approval of GHG emission reduction plan	City of Richmond	—
<p>4.3-5f: Chevron shall submit to the City an annual report on Proposed Project GHG emissions for the preceding calendar year on or before March 15 of the following year, and a copy of the mandatory GHG emissions report submitted annually to CARB, at the same time it is submitted to CARB, so that the City can monitor Chevron’s compliance with the foregoing mitigation measures.</p>	Chevron submits annual report of Proposed Project GHG emissions and copy of CARB report.	Annually on or before March 15.	Throughout life of project	City of Richmond	—
<p>4.3-5g: On or before March 15 of each year, Chevron shall file a written report with the Planning Department describing its progress in achieving GHG reductions consistent with AB 32 requirements, as they are promulgated, for achieving future reductions. With prior approval from the City, a copy of state-required reporting under AB 32 may satisfy this condition.</p>	Chevron submits annual report of progress in achieving GHG reductions mandated by AB 32 requirements.	Annually on or before March 15.	Throughout life of project	City of Richmond	—
<p>IMPACT 5-3: Short term criteria pollutant emissions associated with the construction of the Proposed Project could result in elevated pollutant concentrations when combined with emissions from other construction projects.</p>					
Implement Mitigation Measures 4.3-1a, 4.3-1b, and 4.3-1c.	See 4.3-1a, 4.3-1b, and 4.3-1c	See 4.3-1a, 4.3-1b, and 4.3-1c	See 4.3-1a, 4.3-1b, and 4.3-1c	See 4.3-1a, 4.3-1b, and 4.3-1c	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
IMPACT 5-4: Operational emissions of Proposed Project-related VOC pollutants could be cumulatively significant.					
Implement Mitigation Measures 4.3-2a and 4.3-2b.	See 4.3-2a and 4.3-2b.	See 4.3-2a and 4.3-2b.	See 4.3-2a and 4.3-2b	See 4.3-2a and 4.3-2b.	—
IMPACT 5-GHG NEW: Operational emissions of greenhouse gases from the Proposed Project and from other projects in the area would have the potential to increase emissions of greenhouse gases.					
Implement Mitigation Measures 4.3-5a through 4.3-5g.	See 4.3-5a through 4.3-5g.	See 4.3-5a through 4.3-5g.	See 4.3-5a through 4.3-5g.	See 4.3-5a through 4.3-5g.	—
CULTURAL RESOURCES					
IMPACT 4.5-1: If construction of the Proposed Project were to encounter currently unknown historical resources, including unique archaeological resources, this could cause substantial adverse changes to the significance of the resource.					
<p>4.5-1: In the event that any prehistoric or historic subsurface cultural resources are discovered, such as structural features or unusual amounts of bone or shell, artifacts, human remains, architectural remains (such as bricks or other foundation elements), or historic archaeological artifacts (such as antique glass bottles, ceramics, horseshoes, etc.) during ground disturbing activities, all work within 50 feet of the resources shall be halted and Chevron and/or the lead agency shall consult with a qualified archaeologist to assess the significance of the find per CEQA Guidelines Section 15064.5. If any find is determined to be significant, representatives of Chevron and/or the lead agency and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the lead agency. All significant cultural materials recovered shall be, as necessary and at the discretion of the consulting archaeologist, subject to scientific analysis, professional museum curation, and documented according to current professional standards.</p> <p>As part of the Mitigation Monitoring and Reporting Program for the EIR, Chevron shall have environmental monitors onsite during construction of the Proposed Project. The construction workers shall be trained by the monitors on environmental sensitivity and the identification of prehistoric or historic subsurface cultural resources.</p> <p>In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the lead agency shall determine whether avoidance is necessary and 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) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out.</p>	Environmental Field Monitor to monitor continual compliance during ground disturbing activities, maintain training log to confirm construction worker training, and gather records of data recovery if avoidance is infeasible.	Before and during construction	At the completion of ground disturbing activities	City of Richmond	—
IMPACT 4.5-2: The Proposed Project could adversely affect unique paleontologic resources.					
<p>4.5-2: In the event of unanticipated paleontologic discoveries, such as large deposits of fossil remains Chevron shall notify a qualified paleontologist who shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. In the event of an unanticipated discovery of a breas, true, and/or trace fossil during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP, 1995).</p> <p>The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the lead agency determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the lead agency for review and approval.</p> <p>As part of the Mitigation Monitoring and Reporting Program for the EIR, Chevron shall have environmental monitors onsite during construction of the Proposed Project. The construction workers shall be trained by the monitors on environmental sensitivity and the identification of prehistoric or historic subsurface cultural resources.</p>	Environmental Field Monitors to monitor continual compliance during ground disturbing activities, maintain training log to confirm construction worker training, and review and approve resource excavation plan if avoidance is not feasible.	During construction	At the completion of ground disturbing activities	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
IMPACT 4.5-3: Project construction could result in damage to human remains.					
4.5-3: In the event that human skeletal remains are uncovered during construction activities for the Proposed Project, Chevron shall immediately halt work, contact the Contra Costa County Coroner to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County coroner determines that the remains are Native American, the project proponent will contact the NAHC, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by AB 2641). Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	As part of the Mitigation Monitoring and Reporting Program for the EIR, Chevron shall have environmental monitors onsite during construction of the Proposed Project. The construction workers shall be trained by the monitors on environmental sensitivity and the identification of prehistoric or historic subsurface cultural resources, and environmental monitor shall maintain training log. Environmental Field Monitors to monitor continual compliance during ground disturbing activities.	During construction	At the completion of ground disturbing activities	City of Richmond	—
HYDROLOGY AND WATER RESOURCES					
IMPACT 4.8-2: Rainwater runoff from stockpiles of contaminated soils excavated during site preparation of the building sites for the Hydrogen Plant and the CCR Reformer could introduce additional contaminant loading into the waste stream.					
4.8-2: All stockpiles of contaminated soil shall be located in areas that drain to a wastewater treatment plant.	Environmental Field Monitors to inspect stockpile areas for drainage to wastewater treatment plant.	During construction	At the completion of soil handling activities	City of Richmond	—
NOISE					
IMPACT 4.10-1: Construction activities associated with the Proposed Project would intermittently and temporarily generate noise levels above existing ambient levels in the project vicinity over the duration of the construction period.					
4.10-1a: Over the duration of construction activities, Chevron shall require the construction contractor to implement the following mitigation measures: <ul style="list-style-type: none"> Pile driving activities shall be limited to daytime hours between 7:00 a.m. and 6:00 p.m. on weekdays and between 9:30 a.m. and 5:30 p.m. on weekends and holidays. Pile driving shall be prohibited at night. 	Maintain daily log of pile driving. Construction schedule will be planned to concentrate activity between 7 a.m. and 6 p.m.	Over the duration of construction	At the end of construction	City of Richmond	—
Chevron shall designate a construction compliance and complaint manager(s) for the project for the duration of the construction activities. The City of Richmond shall mail telephone contact information of the compliance and complaint manager(s) and designated City of Richmond staff to business persons and residents situated within the MFR-1 Multi-family Residential Zone and C-2 General Commercial Zone located North of Golden Gate Avenue. The manager shall act as a liaison between Chevron and its neighbors. The manager's responsibilities and authority shall include the following: <ul style="list-style-type: none"> Familiarity with the project and construction schedule; An active role in monitoring project compliance with respect to noise; Ability to reschedule noisy construction activities to reduce effects on surrounding noise sensitive receivers, when feasible; Site supervision of all potential sources of noise (e.g., material delivery, shouting, debris box pick-up and delivery) for all trades; and Authority to intervene or to discuss mitigation options with contractors. 	Create map of all residences and commercial sites within 2,500 feet of construction site. Maintain log of monitoring results.	Before and during construction	At the end of construction	City of Richmond	—
Throughout the duration of the construction period, Chevron and designated City of Richmond staff shall monitor sound levels at the perimeter of the Chevron site and nearest residential and commercial sites, to be selected by the City, to determine if noise from project construction causes the City's noise impact significance levels to be exceeded.	Identify perimeter of construction sites and select nearest residential and commercial sites for each construction area.	Over the duration of construction	At the end of construction	City of Richmond	—
Baseline ambient noise monitoring shall begin at least 2 weeks prior to the commencement of construction activities to establish the baseline ambient noise environment at each of the selected monitoring sites. Noise monitoring data, noise complaints and construction solutions implemented in response to complaints shall be reported to the City on a monthly basis.	Review measured baseline ambient noise levels at selected receptors and records of monitored noise data, noise complaints, and noise reducing solutions during construction.	Before and during construction	At the end of construction	City of Richmond	—
If noise monitoring determines that noise from project construction causes the maximum allowable receiving noise standards for construction activities (as specified in Section 9.52.110 of the City's Community Noise Ordinance) to be exceeded, the designated City staff representative shall be notified within 24 hours of the exceedance and Chevron shall implement all feasible measures needed to reduce construction noise to levels below the City's maximum permitted sound levels.	Review measured noise levels during construction.	Over the duration of construction	At the end of construction	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
For single-family residential uses, the City standards are 60 dBA for weekday daytime (7 a.m. to 7 p.m.) and 55 dBA for weekend and holiday daytime hours (9 a.m. to 8 p.m.). For multifamily residential receptors, the standards are 65 dBA for weekday daytime and 60 dBA for weekend and holiday daytime hours. For commercial and industrial uses, the standards are 70 dBA for weekday daytime and 65 dBA for weekend and holiday daytime hours. During nighttime hours, noise from construction activity shall not exceed 50 dBA at the nearest residential use. If the measured baseline ambient noise levels at noise monitoring sites already exceed these City standards, the monitored data during construction shall be compared to the measured baseline ambient noise level rather than the Community Noise Ordinance standards.	Review measured baseline ambient noise levels at residential uses and monitored noise data during construction.	Before and during construction	At the end of construction	City of Richmond	—
4.10-1b: To reduce noise generated from construction equipment, the following measures shall be implemented and shall be made standard specifications of all Project construction contracts: 1. Construction contractors shall be required to ensure that construction equipment is well tuned and maintained according to the manufacturer's specifications, and that the equipment's standard noise reduction devices are in good working order. 2. Impact tools used for project construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, tools with an exhaust muffler on the compressed air exhaust shall be used. 3. If the City of Richmond or the construction compliance and complaint manager receive verified complaints due to noise from the use of backup alarm bells, Chevron shall implement feasible measures to reduce this noise at the Refinery boundary. Measures may include the use of alarms with broadband technology instead of the traditional narrowband alarms and the use of administrative controls such as using a spotter or flagger and prohibiting all foot traffic in the work area.	Environmental Field Monitor to monitor continual compliance during construction. Keep a current maintenance log of all construction equipment	During construction	At the end of construction	City of Richmond	—
IMPACT 5-12: Operation and construction of the Proposed Project, together with proposed and planned future development at the Refinery and in the City of Richmond, could result in a cumulative increase in noise levels.					
Implement Mitigation Measures 4.10-1a and 4.10-1b.	See 4.10-1a and 4.10-1b.	See 4.10-1a and 4.10-1b	See 4.10-1a and 4.10-1b	See 4.10-1a and 4.10-1b	—
PUBLIC SERVICES					
IMPACT 4.14-1: Police Protection. During the construction phase, the Proposed Project could result in an increase in the number of incidents necessitating calls to the Richmond Police Department and an increased need for the Richmond Police Department to deploy traffic control personnel.					
4.14-1a: During the construction phase, Chevron shall hire additional contract security officers as necessary to compensate for the increase in personnel on site. The addition of these security officers would offset any additional demand for police services that would be created by the Proposed Project.	Chevron shall secure approval of the plan for hiring contract security officers with the Richmond Police Department	During construction	At the end of construction	City of Richmond	—
4.14-1b: Chevron shall impose rules and regulations with respect to the conduct of their personnel who will be involved in the Proposed Project. These rules shall be designed to reduce the need for calls to the Richmond Police Department. Staff from the Richmond Police Department have indicated that Chevron is typically quite strict in its rules and regulations that must be followed by employees with respect to such activities as speeding and drinking. Chevron shall impose these same requirements on the contractors who would be involved in the Proposed Project. Chevron shall continue to work with the Richmond Police Department as it has done in the past (McBride, 2007).	Chevron shall provide the City of Richmond a copy of the Rules and Regulations that will be imposed on Renewal Project construction activities and will include in the training of contractors the requirement to follow all rules of the road both in the facility and on all city streets in and around the Richmond Refinery.	During construction	At the end of construction	City of Richmond	—
4.14-1c: Chevron shall implement Mitigation Measures 4.16-1 through 4.16-4 (See Section 4.16, Traffic/Transportation) to reduce the demand for help from the Richmond Police Department for traffic-related issues.	See 4.16-1 through 4.16-4	See 4.16-1 through 4.16-4	See 4.16-1 through 4.16-4	See 4.16-1 through 4.16-4	—
IMPACT 4.14-2: Fire Protection and Prevention. The Proposed Project would contribute to the ongoing need for the Richmond Fire Department to provide mutual aid to the Refinery. Mutual aid assistance by the Richmond Fire Department could reduce the duration of fires and thus reduce emissions releases from those fires. To effectively provide mutual aid, the Richmond Fire Department needs heavy rescue training and heavy rescue equipment to respond to fires and their associated environmental impacts, including emissions of air pollutants and hazardous materials releases.					
4.14-2: Chevron and the City's Fire Department shall establish an agreement to address the extent of training in the area of industrial firefighting as part of the Proposed Project. This agreement shall cover 1) Training, Travel and per diem costs for Richmond Fire Department personnel to attend the Chevron Corporate Fire Training program at either Texas A&M University, the University of Nevada, Reno or equivalent. Training shall be conducted annually. Chevron shall commit to training 6-12 RFD members per year. This will allow for the training of each RFD member on a rotation basis. Chevron and RFD will continue their mutual training programs on an annual basis at both the Richmond Refinery and Richmond Fire Training Facility.	Chevron will submit to the City an amended Mutual Aid Agreement that includes the commitment to train 6-12 RFD members per year while the Renewal Project is under construction.	For the life of the project	Training shall be conducted annually	City of Richmond	—

Appendix A-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Method of Verification of Compliance	Timing of Mitigation	Timing of Completion	Entity Responsible for Verifying Compliance	Status
TRANSPORTATION					
IMPACT 4.16-1: Proposed Project-generated increases in traffic volumes would result in a significant impact to p.m. peak-hour traffic operations at the signalized study intersection of Castro Street / General Chemical Access (Gate 91).					
<p>4.16-1: Implement the following measures at the intersection of Castro Street / General Chemical Access:</p> <ul style="list-style-type: none"> Chevron shall reconfigure the eastbound (General Chemical Access) approach to the intersection to provide two exclusive left-turn lanes, and one exclusive right-turn lane (this would be a permanent change). Chevron shall work with the City of Richmond's Director of Public Works Department (or the Director's designated representative) to provide modified traffic control during peak arrival and departure times in the p.m. peak hour. The modified traffic control shall be accomplished by one or more of the following methods: (1) posting a technician at the intersection to manually operate signal controls (using the police key feature of standard traffic signal controllers), (2) programming an alternate signal timing plan that would be in operation during specified peak commute periods, and/or (3) posting traffic control officers at the intersection to manually control traffic movements. Chevron shall pay the full cost of this measure, including costs for sheriff's deputies or other law enforcement personnel to provide the traffic control under above-cited methods (1) or (3). 	Environmental Monitor to monitor continual compliance during construction.	Prior to and during construction	At the end of construction	City of Richmond Director of Public Works (or the Director's designated representative)	—
IMPACT 4.16-2: Proposed Project-generated increases in traffic volumes would result in a significant impact to peak-hour traffic operations at the signalized study intersection of Richmond Parkway / Gertrude Avenue.					
<p>4.16-2: Implement the following measures at the intersection of Richmond Parkway/Gertrude Avenue:</p> <ul style="list-style-type: none"> Chevron shall work with the City of Richmond's Director of Public Works Department (or the Director's designated representative) to provide modified traffic control during peak arrival and departure times in the a.m. and p.m. peak hours. The modified traffic control shall be accomplished by one or more of the following methods: (1) posting a technician at the intersection to manually operate signal controls (using the police key feature of standard traffic signal controllers), (2) programming an alternate signal timing plan that would be in operation during specified peak commute periods, and/or (3) posting traffic control officers at the intersection to manually control traffic movements. Chevron shall pay the full cost of this measure, including costs for sheriff's deputies or other law enforcement personnel to provide the traffic control under above-cited methods (1) or (3). During the a.m. peak hour, through the use of traffic cones (and flaggers as needed), Chevron shall reconfigure the southbound (Richmond Parkway) approach to the intersection to provide one shared left-through lane, one through lane, and one shared right-through lane. 	Environmental Monitor to monitor continual compliance during construction.	During construction	At the end of construction	City of Richmond Director of Public Works (or the Director's designated representative)	—
IMPACT 4.16-3: Proposed Project-generated increases in heavy truck traffic on area roadways could result in substantial damage or wear of public roadways.					
<p>4.16-3: Chevron shall repair any roads damaged by Project construction to a structural condition equal to that which existed prior to construction activity. Prior to project construction, City of Richmond Public Services Department would document road conditions for all routes that would be used by project-related vehicles. The City would also document road conditions after project construction is completed. The pre- and post-construction conditions of the haul routes shall be reviewed, and Chevron or contractor(s), and staff of the Public Services Department, would enter into an agreement prior to construction that details the pre-construction conditions and the post-construction requirements of a rehabilitation program. Fees shall be determined by the City of Richmond Construction Road Traffic Fee, which went into effect October 1, 2006.</p>	Prior to project construction, City of Richmond Public Services Department would document road conditions for all routes that would be used by project-related vehicles. The City would also document road conditions after project construction is completed.	Prior to, during and after construction	After construction, once any damaged roads have been repaired	City of Richmond Public Services Department	—

Exhibit B

1.0 Mitigation Monitoring and Reporting Program

As the Lead Agency under the CEQA, the City of Richmond is required to adopt a program for reporting and monitoring that the adopted mitigation measures are implemented as defined in the certified Environmental Impact Report (EIR). This Lead Agency responsibility is found in Public Resources Code Section 21081.6(a) and CEQA Guidelines Sections 15091(d) and 15097.

The purpose of this Mitigation Monitoring and Reporting Program (MMRP) is to ensure that reporting and monitoring of the adopted mitigation measures is implemented as defined in the certified EIR.

The MMRP establishes protocols for documenting compliance with the adopted mitigation measures. These protocols include review and approval of pre-construction design, operation, and mitigation plans or programs by the City, review by the City of permits issued by other agencies and jurisdictions, and daily field monitoring of the Renewal Project site by the City and/or its designee. The Renewal Project site includes the areas affected by the proposed Energy and Hydrogen Renewal Project (Renewal Project or project) at the Chevron Richmond Refinery (the Refinery)

1.1 Pre-Construction Activities

The adopted mitigation measures, and the timing and method for verification of compliance, are provided in Appendix A to this MMRP.

The EIR identified a list of permits required by the Renewal Project that is provided in Appendix B to this MMRP. These permits shall be obtained, as needed, by Chevron prior to the City issuance of a building or grading permit for each project component.

Any study, protocol, plan, or report required by a mitigation measure, and that is subject to approval by the City, must be provided in final form to the City at least 10 days in advance of beginning construction. Other agencies and jurisdictions may require additional review time. Compliance with all preconstruction mitigation measures presented in Appendix A will be verified prior to construction of each major Project component of the Renewal Project. Construction on any part of the Renewal Project may not start before Chevron receives required building permits from the City. Chevron may request, and the City may issue, a Building Permit for any portion of the project to allow construction while other portions undergo permitting or pre-construction review.

1.2 Monitoring Authority

The Planning and Building Services Department Director or his/her designee may delegate duties and responsibilities for monitoring to field monitors or consultants, as deemed necessary. In some cases, monitoring responsibilities may be assumed by responsible agencies, such as the Bay Area Air Quality Management District (BAAQMD), the Regional Water Quality Control Board (RWQCB), California Department of Transportation (Caltrans), or others, in which case the City will coordinate efforts with inspectors of the other agencies. The number of construction monitors assigned to the project will depend on the number of concurrent construction activities and their locations.

The City and/or its designee will ensure that any deviation from the procedures identified under the monitoring program is reviewed with the Director of Planning and Building Services. Any unanticipated deviation, and its correction, shall be reported immediately to the Director of Planning and Building Services and/or his/her designee. Deviation procedures are discussed in Section 1.7 of this MMRP.

Ongoing documentation of mitigation compliance in the field will be conducted by the City's monitor(s) using a standardized daily report format (Appendix C to this MMRP). The City's monitor(s) will prepare routine reports documenting mitigation compliance and work progress. Periodic reports, such as monthly and/or quarterly reports, may be compiled. Close coordination between any inspectors or monitors of other agencies, Chevron's environmental coordinator(s), and Chevron's construction managers or contractors will be required to effectively comply with the adopted mitigation measures. The City's monitor(s) will provide real-time reporting (verbal, written, or electronic) of conditions found to the Chevron environmental coordinator(s). This means that under no circumstances shall the City's monitor(s) identify an apparent non-compliance situation and not immediately report it to the Chevron environmental coordinator(s).

1.3 Enforcement Responsibility

Following discussions and agreement with Chevron representatives, the Planning and Building Services Department Director or his/her designee may retain *expert consultants* to assist the City in monitoring Chevron's compliance with the mitigation measures and conditions of approval. The retained expert consultant's scope of work will include advising the City with respect to technical aspects of the project that are outside the expertise of City staff. Any assigned field monitor shall note any problems encountered during monitoring, notify appropriate agencies about any problems, and report to the City or its designee. The City will require all costs of compliance monitoring to be paid by Chevron.

The City's *field monitor(s)* will perform compliance inspection throughout the construction period to ensure compliance with all applicable mitigation measures, plans, permits, and conditions of approval of the City. The City's monitor(s) will have controlled access to all active construction areas and areas affected by construction. The monitor will contact personnel on-site, and coordinate with the City's or Chevron's technical experts as needed during construction progress. The monitor(s) will also document compliance with construction mitigation requirements. It is possible that some monitoring responsibilities may be assumed by responsible agencies, such as affected resource agencies, in which case the City's field monitor(s) will coordinate with the inspectors of the other agencies. With regard to compliance and enforcement activities, the City's monitor(s) will prepare and issue Non-Compliance Reports, if necessary.

The City will rely upon the following monitors for ensuring compliance with the mitigation measures

- **City Lead Field Monitor.** The City lead field monitor (LFM) will be the primary contact for Chevron's environmental coordinator. The LFM oversees other field monitors, the monitoring program, and the reporting program on a daily basis. The LFM also meets on a weekly basis with Chevron's environmental coordinator to discuss upcoming personnel and monitoring requirements by evaluating the level of construction activity and proximity and sensitivity of impacted resources. The LFM also communicates with the City project managers on a daily basis to ensure that the City has the most current information regarding field activities.

- **City Field Monitors.** Depending on the scheduling of activities for the Renewal Project,

one or more field monitors may be required to maintain adequate oversight during construction. If only one field monitor is needed, this individual may also fill the function of the LFM. The field monitors may work in conjunction with the LFM to conduct daily oversight of all work areas. Oversight of the work area includes meeting with Chevron's monitors, patrolling the entire work area each day, and inspecting each construction site to ensure compliance with this MMRP. Field monitors will also be responsible for visually inspecting any sensitive areas that would be affected by construction. The monitors compare the visual inspection of the area to the MMRP and any applicable permit requirements. The City field monitors will document inspection observations for each construction site visited each day (Appendix C).

1.4 Mitigation Compliance Responsibility

Chevron shall designate an *environmental coordinator or coordinators who are* responsible for monitoring and directing compliance with relevant adopted mitigation measures and all conditions contained in Project permits, City conditions of approval. Chevron is responsible for assuring that these requirements are met by all of its construction contractors and field personnel.

Chevron is also responsible for assuring compliance with all applicable, pre-established programs and plans already in place at the Chevron Refinery site which were considered during EIR impact analysis. These include, but are not limited to, pre-established programs: the California Accidental Release Prevention (CalARP) Program; Storm Water Pollution Prevention Plan (SWPPP), as required by the RWQCB; the San Francisco Basin Plan, which regulates discharges through National Pollutant Discharge Elimination System (NPDES) permits; the State Implementation Plan; and BAAQMD permits.

1.5 Process For Determining Compliance Status During Construction

The City's field monitor will document all observations and communications in a logbook and will determine whether the observed construction activities are consistent with mitigation measures, the project description in the certified EIR, and permit conditions.

The City's field monitor shall not direct the work of a construction contractor or subcontractor. If, in the opinion of the City's field monitor the activity does not properly implement the mitigation measure(s), the opinion and basis for the opinion will be recorded in the logbook, and the monitor's opinion of the level of non-compliance will be determined, as defined below.

Non-compliance is defined as any significant deviation from adopted mitigation measures. Designations for levels of compliance are an internal management tool, but not all of the non-compliance reports issued by City field monitor(s) would represent a violation of the adopted mitigation measures.

Non-compliance violation levels are defined as follows:

- ***Level 1 Non-Compliance (Minor Problem)***. One aspect of a mitigation measure has not been complied with, resulting in only partial implementation of a mitigation measure but no significant impact. An oral warning shall be issued to Chevron's environmental coordinator(s) and corrective action shall be required within a stated maximum period. If

corrective action is not taken within the stated period, a written warning will be issued.

- **Level 2 Non-Compliance (Violation).** One or more of the aspects or a mitigation measure are not complied with and the implementation of a mitigation measure is deficient or non-existent, resulting in significant impact(s), or there is immediate threat of major or irreversible environmental damage or property loss. Repeated Level 2 Non-Compliance can also lead to serious violations. An oral warning, followed by a Non-Compliance Report, will be submitted to Chevron's environmental coordinator(s). Corrective action shall begin immediately.

In addition to the above non-compliance levels, Chevron's Renewal Project may encounter emergency situations, such as fires or accidents (e.g., a fuel truck accident or a significant hazardous material spill). Emergency events would be communicated immediately to the appropriate jurisdictional agency and/or landowner. An emergency event may or may not result in a non-compliance situation. For example, if a brush fire started adjacent to the work area, this emergency would not necessarily be considered a non-compliance situation. If, the fire started due to the contractor's negligence, it would be reported as a non-compliance item.

All potential non-compliance activity will be reported to the City via immediate notification or monthly reporting based on the severity of the potential non-compliance. Based on the severity of a given infraction the City has the authority to shut down project construction activities. If a shut down of construction activity occurs, construction shall not resume until the City authorizes it to do so. **No monitor (including the LFM) has the authority to shut down or restart construction activities. Only the Director of Planning and Building Services or his/her designee may shut down construction activities for non-compliance with the MMRP. Revocation of the City Conditional Use Permit by the City is the ultimate enforcement mechanism.**

1.6 City Reporting

The City will establish an ongoing electronic record of monitoring activities and compliance reports.

Daily Environmental Compliance Monitoring

Each City field monitor document appropriate monitoring observations, and prepare a monthly environmental monitoring report which will be transmitted via e-mail to the Planning and Building Services Department Director or his/her designee and the Chevron environmental coordinator. Reports will document preconstruction compliance, construction compliance, post-construction compliance, deviation, and agency coordination activities. The reports can also be distributed to local government agencies, in response to specific requests.

Digital Photo Documentation

Digital photographs may only be taken during construction to document apparent non-compliance observations, following consultation with the Chevron environmental coordinator to ensure that only relevant areas are photographed. The photographs will be used to establish an electronic record of construction practices which appear to be out of compliance with adopted mitigation measures. Digital photos will be forwarded to Chevron and appropriate agency personnel as necessary to assist in resolving non-compliance, and emergency situations. Electronic copies of the photos will be archived by the City for general reference and to document non-compliance resolutions. The photos may be included in the weekly environmental monitoring reports. Photographic equipment must comply with

all Refinery safety requirements.

Public Access to Records

Monitoring records and reports will be made available for public inspection by the City or its designee on request. Summary records of monitoring activities or compliance reports may be posted by the City on its website.

1.7 Deviations from Adopted Mitigation Measures

Any request for a deviation from the mitigation measures shall be submitted in writing to the City's Planning and Building Services department, with the appropriate fee. Chevron and/or the contractor shall receive written approval prior to initiating the specific construction activity for which a deviation is required. Chevron shall submit requests to the Planning and Building Services Department Director or his/her designee for approval, with copies to the City Lead Field Monitor. The request shall contain the following information:

- Date of request
- Detailed description of the proposed change in the mitigation measure and the reason for the change
- Location the deviation will affect (including maps and photos, if needed)
- Description of the existing conditions in the area affected by the deviation
- Which aspect of the mitigation measure will be affected by the deviation (cite approved documents)
- Discussion of any previous deviation of a similar nature
- An analysis that evaluates the potential for occurrence of:
 - New significant impact(s)
 - Incremental increase in an identified impact
 - Reduction in efficiency, nature, or geographical location of a mitigation measure
- Demonstration that the level of mitigation will be equal to or greater than the adopted mitigation measure
- Date of expected construction at the site.

If, in the opinion of the Planning and Building Services Department Director, the deviation is significant, and the matter remains in dispute Chevron's Environmental Coordinator may appeal the matter to the City Manager for resolution. If, in the opinion of the City Manager, the deviation is significant, the City Manager may refer the matter to the City Council for resolution.

1.8 Temporary Extra Work Space Procedures

Pursuant to Richmond Municipal Code, Chapter 15.04.945 Chevron shall apply for a Zoning Administrator temporary use permit for any temporary structures used on site, i.e. construction storage, offices, or other workspace.

1.9 Dispute Resolution

The MMRP is designed to ensure compliance with the mitigations. The MMRP may reduce or eliminate many potential disputes by identifying responsible persons and agencies. However, even with the best preparation efforts, disputes may occur. In such event, the following procedure will be

followed:

- **Step 1.** Disputes and complaints (including those of the public) concerning compliance with the adopted mitigation measures should be directed first to the City of Richmond’s Director of Planning and Building Services Department for resolution. The Director of Planning and Building Services or his/her designee will work with Chevron to resolve the dispute.
- **Step 2.** Should this informal process fail, the Director of Planning and Building Services or his/her designee will initiate further review and determine if enforcement or compliance action to address deviations from the adopted mitigation measure(s) in question is necessary. The Director of Planning and Building Services or his/her designee may shut down all work in the affected area at this Step until the dispute is resolved.
- **Step 3.** If a dispute or complaint regarding the implementation of this MMRP or the adopted mitigation measures cannot be resolved informally or through enforcement or compliance action by the City, any affected participant in the dispute or complaint may file a written “notice of dispute” with the City Manager or his/her designee. This notice must be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the City Manager must meet or confer with the filer and other affected participants for purposes of resolving the dispute. The City Manager or his designee shall prepare a written response to the “notice of dispute,” describe his decision, and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the City Manager’s or designee’s response, such party(ies) may appeal it to the City Council.

Parties may also seek review and request hearings by the City Council through existing procedures specified in the City of Richmond Municipal Code, although a good faith effort should first be made to use the foregoing procedure.

1.10 Mitigation Measure Effectiveness Review

In order to fulfill statutory requirements to ensure compliance with adopted mitigation measures during project implementation:

- The City may conduct a comprehensive review of adopted mitigation measures which are not effectively mitigating impacts at any time it deems appropriate; and
- If, during review, the City determines that any adopted mitigation measures are not adequately mitigating significant environmental impacts caused by the Project, or that recent proven technological advances could provide more effective mitigation, then the City may impose additional measures or substitute more effective measures to implement the adopted mitigation measures identified in the EIR.

1.11 Mitigation Measures

Appendix A to this MMRP includes the full text of the mitigation measures that were adopted by the City as conditions of approval of the Renewal Project and will be monitored during Project implementation.