PROPOSED BP CARSON REFINERY COMPLIANCE AND SAFETY PROJECT

ATTACHMENT 1 - MITIGATION MONITORING AND REPORTING PLAN

INTRODUCTION

BP West Coast Products LLC (BP) is proposing modifications to four components at its Refinery located in Carson, California. These four components are collectively known as the BP Carson Refinery Compliance and Safety Project and constitute a "project" as defined by CEQA (California Public Resources Code [PRC] §21000 et seq.). Since the SCAQMD has primary approval authority over the proposed project, SCAQMD is the appropriate lead agency under CEQA.

Pursuant to CEQA Guidelines §15070, the SCAQMD prepared a Draft Mitigated Negative Declaration (MND) and distributed a Notice of Intent to adopt the Draft MND (CEQA Guidelines §15072) to responsible public agencies and interested parties for review and comment. The Draft MND was distributed for a 30-day public review and comment period beginning on May 26, 2005, and ending on June 24, 2005. No comment letters were received from the public relative to the Draft MND. After the close of the public comment period, a Final MND was prepared for certification by the SCAQMD's decisionmaking body.

There are potentially significant adverse impacts to cultural resources and traffic/transportation associated with construction of the proposed project. There are also potentially significant adverse cumulative impacts for NOx emissions during overlapping construction periods of the proposed project and another previously certified construction project at the refinery. All significant adverse impacts, however, can be mitigated to less than significant levels.

Pursuant to CEQA Guidelines §15075(b) the Notice of Determination prepared for a MND project that has identified potentially significant effects that would be mitigated to a point where no significant effects would occur must include a statement indicating whether mitigation measures were made a condition of the approval of the project. Further, when changes or alterations have been required in, or incorporated into, a project that mitigate or avoid the significant effects, the public agency is required to adopt a Mitigation Monitoring and Reporting Plan (CEQA Guidelines § 15097) for the changes made, in order to ensure compliance during project implementation.

The following sections of this document describe the proposed project and identify the significant adverse impacts that can be mitigated to below a significant level. Since all significant adverse effects can be mitigated to less than significant levels as identified in the Final MND and the Mitigation Monitoring and Reporting Plan, a Statement of Findings and a Statement of Overriding Considerations are not required for this project.

SUMMARY OF THE PROPOSED PROJECT

The purposes of the BP's proposed modifications to its Carson Refinery are: 1) to remedy past violations of SCAQMD Rule 402 and to avoid future odor complaints by replacing the existing Tank 710 with a new sour water surge tank that is designed to prevent releases of hydrogen sulfide (H_2S) and ammonia (NH_3); 2) remedy an NOV issued in May 2004 for "failure to maintain equipment in good operating condition" by replacing several components of the No. 51 Vacuum Distillation Unit, including the vacuum

distillation tower; 3) to comply with Rule 1173 by replacing the No. 1 Crude Unit's existing pressure relief valves with a system that will control emissions to the atmosphere when excessive internal pressures build up in the unit; and, 4) to comply with Rule 1173 by replacing all three pressure relief valves and routing the discharges to the South Area (Coker) Flare to control emissions to the atmosphere when excessive internal pressures build up in the equipment.

Tank 710 receives sour water, which is water that contains H_2S and NH_3 produced by various refinery processing units. The design of Tank 710 has allowed the venting of H_2S and NH_3 directly to the atmosphere when the internal tank pressure has exceeded safe limits. Tank 710 has been the subject of odor complaints and caused violations of SCAQMD Rule 402. BP is proposing to replace the existing Tank 710 with a new sour water surge tank that is designed to prevent these releases, and thus, avoid future odor complaints and violations of Rule 402.

The No. 51 Vacuum Distillation Unit (No. 51 VDU) performs one of the initial steps in refining crude oil at the Carson Refinery. The No. 51 VDU was the subject of a notice of violation (NOV) issued by the SCAQMD in May 2004 for "failure to maintain equipment in good operating condition." Additionally, this unit has required excessive maintenance and experienced a number of unscheduled outages during the last 10 years. To remedy the NOV, BP is proposing to replace several components of the No. 51 VDU, including the vacuum distillation tower, to reduce maintenance requirements and the occurrence of unplanned outages.

The No. 1 Crude Unit performs the initial step in refining most of the crude oil processed by the refinery. At the time when the No. 1 Crude Unit was constructed, the pressure relief valves were designed to release pollutants directly to the atmosphere when internal pressures within equipment at the crude unit approach unsafe levels. To comply with SCAQMD Rule 1173 - Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants, BP is proposing to replace the No. 1 Crude Unit's existing pressure relief valves with a system that will control emissions to the atmosphere when excessive internal pressures build up in equipment at the unit.

The Butane Tank Car Loading Rack has six stations to load or unload railroad tank cars with Butane, Isobutane, Butane/Butylene stock or Pentane. In addition to the loading equipment, the loading rack area also contains a Butane Unloading Surge Drum, a Low Line Knockout Drum, and a Butane Repressurizing Vaporizer. The Butane Unloading Surge Drum, Low Line Knockout Drum, and Butane Repressurizing Vaporizer each are equipped with a pressure-activated relief valve that discharge directly to the atmosphere in the event of an emergency release. To comply with Rule 1173, BP proposes to replace all three pressure relief valves and route the discharges to the South Area (Coker) Flare.

One other project has been identified at or near the Carson Refinery with the potential for cumulative impacts in conjunction with the proposed project. This cumulative project, referred to as the Methyl Tertiary Butyl Ether (MTBE)/Iso-octene conversion project, is

also located at the Carson Refinery and involves the proposed conversion of the existing MTBE Unit at the refinery to a unit that produces iso-octene. The MTBE/Iso-octene conversion was originally part of the CARB Phase 3/MTBE Phase-out project that was evaluated in the May 2001 Final Environmental Impact Report (EIR) for the Proposed ARCO California Air Resources Board (CARB) Phase 3/MTBE Phase-out Project (SCAQMD 2001). However, as construction of the initial phases of the overall CARB Phase 3/MTBE Phase-out project was underway, additional engineering and process designs specific to the MTBE Unit provided a preferable, but different technology for producing iso-octene than had been contemplated at the time of the May 2001 Final EIR. Thus, changes to the original proposal for the MTBE/Iso-octene conversion were proposed and addressed in the April 2005 Addendum to the Final Environmental Impact Report for the BP Carson Refinery (formerly ARCO Los Angeles Refinery) CARB Phase 3/MTBE Phase-out Project. Construction of the MTBE/Iso-octene conversion started in April 2005 and is expected to be completed in October 2005. Construction of the MTBE/Iso-octene conversion overlaps with the currently proposed project for a total of four months, from July through October, 2005.

SIGNIFICANT ADVERSE IMPACTS WHICH CAN BE REDUCED BELOW A SIGNIFICANT LEVEL

The Final MND identified three potentially significant adverse impacts that can be reduced to a level of insignificance: 1) potentially significant cumulative adverse air quality impacts from NOx emissions associated with construction; 2) potentially significant adverse impacts to cultural resources associated with construction; and 3) potentially significant adverse impacts to traffic/transportation associated with construction.

Air Quality

For the proposed project, both the peak daily construction emissions and the peak daily cumulative construction emissions are less than the significance thresholds. However, the potentially significant cumulative air quality impact associated with construction includes 99.1 pounds per day of NOx emissions, which is less than one pound below the 100 lb/day significance threshold. Because of potential uncertainties in the estimation of peak daily cumulative construction emissions, NOx emissions during construction could potentially cause significant adverse cumulative air quality impacts.

The main component of the cumulative peak daily NOx emissions is from diesel fuel combustion occurring in off-road construction equipment. To mitigate the potential impact to a level of insignificance, BP will fuel all diesel-powered construction equipment with emulsified diesel fuel throughout construction of the proposed project (Mitigation Measure AQ-1).

AQ-1: Diesel-powered construction equipment will be fueled with emulsified diesel fuel throughout construction of the proposed modifications to the four components of the project.

The California Air Resources Board has established an interim procedure for verification of emission reductions for alternative diesel fuels. This procedure has been used to verify emission reductions from the use of four alternative diesel fuels: PuriNOx diesel fuel developed by Lubrizol Corporation, Aquazole fuel developed by TotalFinaElf, Clean Fuels Technology's water emulsified diesel fuel, and O_2 Diesel Fuel developed by O_2 Diesel, Inc. Specifically, Lubrizol's water-emulsified PuriNOx diesel fuel has received interim verification that it can reduce NOx emissions by 14 percent and PM10 emissions by 62.9 percent (ARB, 2001).

BP has contacted a local distributor of PuriNOx, who currently supplies PuriNOx to other customers in the South Coast Air Basin, and verified that the distributor has the capacity to supply the quantities of diesel fuel required during construction of the proposed project. The supplier will locate a temporary fuel storage tank for PuriNOx diesel fuel at the refinery to be used to refuel mobile construction equipment for the proposed project. The distributor will refill the temporary fuel storage tank periodically as needed during the construction period and will also refuel non-mobile construction equipment, such as large cranes, on-site. Truck trips to refill the temporary fuel storage tank and to refuel non-mobile equipment will be scheduled for weekends, when other construction activities for the proposed project are not occurring. Therefore, fuel delivery truck trips will not increase peak daily emissions.

Prior to the start of construction for the proposed project, BP will establish a contractual arrangement with a supplier to provide sufficient quantities for use during construction of the project of PuriNOx diesel fuel or another emulsified diesel fuel that has received interim verification by the California Air Resources to achieve equivalent or greater NOx emission reductions. BP will also verify that the construction equipment operates properly when fueled with PuriNOx diesel fuel. Minor modifications to the equipment will be made, if necessary.

During construction of the proposed project and for two years following completion of construction, BP will maintain records of the quantity of emulsified diesel fuel purchased and the daily operating hours and quantity of emulsified diesel fuel used by each piece of construction equipment.

Cultural Resources

Construction activities associated with the proposed project will occur in areas of the refinery where the ground surface has already been disturbed, and this past disturbance reduces the likelihood that previously unknown resources will be encountered. While the likelihood of encountering cultural resources is low, there is still a potential that additional buried archaeological resources may exist, and such resources conceivably could be adversely affected by ground disturbance associated with construction of the proposed project. Any such impact would be considered significant, but would be reduced to less-than-significant with implementation of the following mitigation measures in the event that unexpected sub-surface resources were encountered:

CU-1: Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if this occurred;

CU-2: Monitoring of subsurface earth disturbance by a professional archaeologist and a Gabrielino/Tongva representative if cultural resources are exposed during construction;

CU-3: Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction, so the find can be evaluated and mitigated as appropriate; and,

CU-4: As required by State law, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

Traffic/Transportation

The proposed project will cause additional traffic during construction on the roadways and intersections near BP's refinery and result in a potentially significant unmitigated adverse impact at one intersection (Gate 60 and 223rd Street) during the p.m. traffic peak period (4 p.m. – 6 p.m.). The following mitigation measures will be implemented to reduce construction-phase traffic impacts to a less than significant level:

T-1: Access to and from the construction site will be limited to the access points that were identified and evaluated in the traffic study. The two existing exit lanes leaving the refinery at Gate 60 and 223rd Street will be modified as follows: 1) the right-turn lane will be re-striped to be an exclusive (dedicated) right-turn lane; and, 2) the left-turn lane will be re-striped to allow both left- and right-turns. If the construction plans change such that different access points are proposed, these changes will be evaluated by a registered Traffic Engineer and submitted to the City of Carson Traffic Engineer for review.

T-2: Sufficient parking will be provided on the refinery site to accommodate all the construction employees, and no on-street parking (i.e., off the refinery site) will be permitted;

T-3: Delivery of construction materials to the site will be scheduled to occur during off-peak periods (i.e. from 9:00 a.m. until 3:00 p.m.) and/or after 7:00 p.m. and before 7:00 a.m.; and

T-4: Truck deliveries of over-sized equipment and materials will be scheduled for non-peak a.m. and p.m. periods (i.e., no such deliveries scheduled in the 7:00 a.m. – 9:00 a.m. and 4:00 p.m. – 6 p.m. periods).

SIGNIFICANT ADVERSE IMPACTS WHICH CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

There are no potentially significant adverse environmental impacts that cannot be reduced to a level of insignificance for the proposed project.

MITIGATION MONITORING AND REPORTING PLAN

When a public agency adopts a mitigated negative declaration in conjunction with approving a project, the lead agency shall adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant adverse environmental effects. PRC §21081.6 states in part:

> When making the findings required by subdivision (a) of Section 21081 or when adopting a negative declaration pursuant to paragraph (2) of subdivision (c) of Section 21080, the public agency shall adopt a reporting or monitoring program for the changes to the project that it has adopted or made a condition of approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by this project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.

Pursuant to the requirement of PRC §21081.6, the SCAQMD must establish a plan to monitor project compliance with those mitigation measures adopted as conditions of approval for BP's Compliance and Safety Project. The following subsections identify the specific mitigation measures identified in the MND and the public agency responsible for monitoring implementation of each mitigation measure.

AIR QUALITY

The following mitigation measure is required to minimize the potential short-term significant adverse air quality impacts during project construction.

IMPACT SUMMARY: Construction activities may have significant unmitigated cumulative air quality impacts for NOx. The main component of the cumulative peak daily NOx emissions is from diesel fuel combustion occurring in off-road construction equipment. The mitigation measure listed below is intended to reduce the NOx emissions from diesel fuel combustion to ensure NOx levels remain below the applicable NOx significance threshold.

AQ-1: Diesel-powered construction equipment will be fueled with emulsified diesel fuel throughout construction of the proposed modifications to the four components of the project.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure AQ-1 is the responsibility of BP.
MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMAQ-1: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-1 as specified in Table 1.

CULTURAL RESOURCES
The following mitigation measures are required to minimize the potential significant adverse cultural resources impacts during project construction.

IMPACT SUMMARY: There is a potential that buried archaeological resources may exist, and such resources conceivably could be adversely affected by ground disturbance associated with construction of the proposed project. Any such impact would be considered significant. The mitigation measures listed below would reduce impacts to cultural resources to less-than-significant in the event that unexpected sub-surface resources were encountered.

CU-1: Conduct a cultural resources orientation for construction workers involved in excavation activities. This orientation will show the workers how to identify the kinds of cultural resources that might be encountered, and what steps to take if this occurred.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure CU-1 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMCU-1: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure CU-1 as specified in Table 1.

CU-2: Monitoring of subsurface earth disturbance by a professional archaeologist and a Gabrielino/Tongva representative if cultural resources are exposed during construction.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure CU-2 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMCU-2: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure CU-2 as specified in Table 1.

CU-3: Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance work in the vicinity of cultural resources exposed during construction, so the find can be evaluated and mitigated as appropriate.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure CU-3 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMCU-3: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure CU-3 as specified in Table 1.

CU-4: As required by State law, prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure CU-4 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMCU-4: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure CU-4 as specified in Table 1.

TRAFFIC/TRANSPORTATION

The following mitigation measures are required to minimize the potential significant adverse traffic/transportation impacts during project construction.

IMPACT SUMMARY: The proposed project will cause additional traffic during construction on the roadways and intersections near BP's refinery and result in a potentially significant unmitigated adverse impact at one intersection (Gate 60 and 223rd Street) during the p.m. traffic peak. The following mitigation measures are required to reduce construction phase traffic impacts to a less than significant level.

T-1: Access to and from the construction site will be limited to the access points that were identified and evaluated in the traffic study. The two existing exit lanes leaving the refinery at Gate 60 and 223rd Street will be modified as follows: 1) the right-turn lane will be re-striped to be an exclusive (dedicated) right-turn lane; and, 2) the left-turn lane will be re-striped to allow both left- and right-turns. If the construction plans change such that different access points are proposed, these changes will be evaluated by a registered Traffic Engineer and submitted to the City of Carson Traffic Engineer for review.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure T-1 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMT-1: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure T-1 as specified in Table 1.

T-2: Sufficient parking will be provided on the refinery site to accommodate all the construction employees, and no on-street parking (i.e., off the refinery site) will be permitted.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure T-2 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMT-2: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure T-2 as specified in Table 1.

T-3: Delivery of construction materials to the site will be scheduled to occur during off-peak periods (i.e. from 9:00 a.m. until 3:00 p.m.) and/or after 7:00 p.m. and before 7:00 a.m.

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure T-3 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMT-3: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure T-3 as specified in Table 1.

T-4: Truck deliveries of over-sized equipment and materials will be scheduled for non-peak a.m. and p.m. periods (i.e., no such deliveries scheduled in the 7:00 a.m. – 9:00 a.m. and 4:00 p.m. – 6 p.m. periods).

IMPLEMENTING PARTY: The SCAQMD finds that Mitigation Measure T-4 is the responsibility of BP.

MONITORING AGENCY: The SCAQMD through its enforcement authority in issuing permits for this project will ensure compliance with this mitigation measure.

MMT-4: During construction of the proposed project and for two years following completion of construction, BP shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure T-4 as specified in Table 1.

CONCLUSION

In accordance with the monitoring action items outlined in Table 1 and the reporting forms provided in Tables 2, 3, 4, and 5 of this Mitigation Monitoring and Reporting Plan, BP will be required to submit to the SCAQMD initial reports and other supporting documentation prior to the start of construction and quarterly reports during the construction phase of the proposed project. The SCAQMD and BP will evaluate the effectiveness of this Mitigation Monitoring and Reporting Plan during the construction period. If either the Mitigation Monitoring and Reporting Plan or the mitigation measures as set forth in this document are deemed inadequate, the SCAQMD or another responsible agency may require BP to employ additional or modified monitoring measures and/or measures to effectively mitigate identified significant adverse impacts to the levels identified in the Final MND.

Table 1
Mitigation Monitoring and Reporting Plan for BP Carson Refinery Compliance and Safety Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action[a]	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
AQ-1/Establish contractual arrangement for supply of emulsified diesel fuel during construction	BP	Submit letter to SCAQMD verifying contractual arrangement.	1. SCAQMD 2. SCAQMD 3. Prior to start of construction
AQ-1/Verify that all diesel-fueled construction equipment operates properly when fueled with emulsified diesel fuel	BP	Submit list to SCAQMD of all diesel-fueled equipment that specifies in accordance with Table 2: 1. Equipment ID; 2. Equipment type; 3. Equipment manufacturer and model; 4. Engine horsepower rating; 5. Actions taken to verify proper operation with emulsified diesel fuel; and, 6. Modifications made to allow proper operation with emulsified diesel fuel.	1. SCAQMD 2. SCAQMD 3. Prior to start of construction and quarterly thereafter
AQ-1/Purchase emulsified diesel fuel; ensure fuel deliveries only occur on weekends	BP	Maintain records of emulsified diesel fuel deliveries including date of each delivery, day of the week, and quantity delivered in accordance with Table 3.	1. SCAQMD 2. SCAQMD 3. Prior to start of construction for initial delivery and daily thereafter

Table 1 (continued)
Mitigation Monitoring and Reporting Plan for BP Carson Refinery Compliance and Safety Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action[a]	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
AQ-1/Fuel construction equipment with emulsified diesel fuel	BP	Maintain records of refueling for each piece of equipment including in accordance with Table 4: 1. Equipment ID; 2. Equipment type; 3. Date refueled; and, 4. Quantity of fuel.	1. SCAQMD 2. SCAQMD 3. Daily
AQ-1/Equip all diesel-fueled construction equipment with a meter to record hourly usage	BP	Maintain records that verify that each piece of construction equipment is equipped with a meter in accordance with Table 5.	1. SCAQMD 2. SCAQMD 3. Prior to start of construction and prior to use of a new piece of equipment
AQ-1/Record operating time for each piece of construction equipment	BP	Maintain records of hour meter readings for each piece of construction equipment in accordance with Table 5.	1. SCAQMD 2. SCAQMD 3. Daily
AQ-1/Record number of construction personnel on-site	BP	Maintain records of number of construction personnel on-site.	1. SCAQMD 2. SCAQMD 3. Daily
AQ-1/Record number of delivery trucks and haul trucks	BP	Maintain records of number of delivery trucks and haul trucks entering the refinery.	1. SCAQMD 2. SCAQMD 3. Daily

Table 1 (continued)
Mitigation Monitoring and Reporting Plan for BP Carson Refinery Compliance and Safety Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action[a]	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
CU-1/Conduct a cultural resources orientation for construction workers involved in excavation activities.	BP	Maintain records of date each construction worker received training.	1. SCAQMD 2. SCAQMD 3. Prior to start of excavation
CU-2/Monitoring of subsurface earth disturbance by a professional archaeologist and a Gabrielino/Tongva representative if cultural resources are exposed during construction	BP	Submit letter to SCAQMD indicating name and qualifications of professional archaeologist and a Gabrielino/Tongva representative.	1. SCAQMD 2. SCAQMD 3. Within one week of exposure of cultural resources during construction
CU-3/Provide the archaeological monitor with the authority to temporarily halt or redirect earth disturbance.	BP	Maintain record of statement authorizing archaeological monitor to halt or redirect earth disturbance.	1. SCAQMD 2. SCAQMD 3. Within one week of exposure of cultural resources during construction
CU-4/Prevent further disturbance if human remains are unearthed, until the County Coroner has made the necessary findings with respect to origin and disposition, and the Native American Heritage Commission has been notified if the remains are determined to be of Native American descent.	BP	Provide written notification to SCAQMD if human remains are unearthed.	1. SCAQMD 2. SCAQMD 3. Within one day of unearthing human remains

Table 1 (continued)
Mitigation Monitoring and Reporting Plan for BP Carson Refinery Compliance and Safety Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action[a]	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
T-1/Limit access to and from the construction site to the access points that were identified and evaluated in the traffic study	BP	Submit plot plan to SCAQMD that indicates access points to and from the construction site. Maintain records documenting that all construction contractors and subcontractors have been directed to use only specified access points.	1. SCAQMD 2. SCAQMD 3. Prior to the start of construction
T-1/Modify the two existing exit lanes leaving the refinery at Gate 60 and 223rd Street as follows: 1) re-stripe the right-turn lane to be an exclusive (dedicated) right-turn lane; and, 2) re-stripe the left-turn lane to allow both left- and right-turns.	BP	Submit letter to SCAQMD verifying completion of re-striping	1. SCAQMD 2. SCAQMD 3. Prior to the start of construction
T-1/If the construction plans change such that different access points are proposed, these changes will be evaluated by a registered Traffic Engineer and submitted to the City of Carson Traffic Engineer for review.	BP	Submit copy of evaluation of proposed access point changes by registered Traffic Engineer to SCAQMD. Provide documentation to SCAQMD that proposed access point changes were submitted to City of Carson Traffic Engineer for review.	1. SCAQMD 2. SCAQMD 3. When evaluation is completed

Table 1 (concluded)
Mitigation Monitoring and Reporting Plan for BP Carson Refinery Compliance and Safety Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action[a]	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
T-2/Provide sufficient parking on the refinery site to accommodate all the construction employees, and do not permit on-street parking	BP	Submit plot plan to SCAQMD that indicates location(s) of construction employee parking and number of parking spaces available. Maintain records that all construction contractors and subcontractors have been directed to park only in designated areas onsite and are not permitted to use on-street parking	1. SCAQMD 2. SCAQMD 3. Prior to the start of construction
T-3/Schedule delivery of construction materials to the site to occur during off-peak periods (i.e. from 9:00 a.m. until 3:00 p.m.) and/or after 7:00 p.m. and before 7:00 a.m.	BP	Maintain records of the date and time of each construction material delivery	1. SCAQMD 2. SCAQMD 3. Daily
T-4/ Schedule truck deliveries of over-sized equipment and materials for non-peak a.m. and p.m. periods (i.e., no such deliveries scheduled in the 7:00 a.m. – 9:00 a.m. and 4:00 p.m. – 6 p.m. periods).	BP	Maintain records of the date and time of each delivery of over-sized equipment and materials.	1. SCAQMD 2. SCAQMD 3. Daily

Table 2
BP Carson Refinery Compliance and Safety Project
Diesel-Fueled Construction Equipment List

Equipment ID	Type	Manufacturer	Model	Engine Horsepower	Verified for Emulsified Diesel Fuel	Modifications

Table 3
BP Carson Refinery Compliance and Safety Project
Emulsified Diesel Fuel Delivery Records

Delivery Date	Day of Week	Delivery Time	Supplier	Quantity Delivered (gallons)

Table 4
BP Carson Refinery Compliance and Safety Project
Construction Equipment Emulsified Diesel Fuel Refueling Records

Equipment ID	Type	Refueling Date	Refueling Quantity (gallons)

Table 5
BP Carson Refinery Compliance and Safety Project
Construction Equipment Daily Operating Records

Equipment ID	Type	Date	Starting Meter Reading	Ending Meter Reading	Elapsed Time (hours)