

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**CONOCOPHILLPS LOS ANGELES REFINERY PM10 AND NOX  
REDUCTION PROJECTS**

**Attachment 1: Findings; Statement of Overriding Considerations; and  
Mitigation, Monitoring and Reporting Plan**

SCH No. 2006111138

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# TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>SUMMARY OF THE PROPOSED PROJECTS .....</b>	<b>2</b>
<b>3.0</b>	<b>STATEMENT OF FINDINGS .....</b>	<b>4</b>
3.1	POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO A LEVEL OF INSIGNIFICANCE.....	4
3.2	POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED TO A LEVEL OF INSIGNIFICANCE .....	5
3.3	IMPACTS ASSOCIATED WITH ALTERNATIVES .....	5
3.4	STATEMENT OF FINDINGS CONCLUSION.....	6
<b>4.0</b>	<b>STATEMENT OF OVERRIDING CONSIDERATIONS.....</b>	<b>6</b>
<b>5.0</b>	<b>MITIGATION MONITORING AND REPORTING PLAN .....</b>	<b>7</b>

## TABLES

TABLE 1.	MITIGATION MONITORING AND REPORTING PLAN FOR CONOCOPHILLIPS LOS ANGELES REFINERY PM10 AND NOX REDUCTION PROJECTS.....	14
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## 1.0 INTRODUCTION

On November 7, 2003, the South Coast Air Quality Management District (SCAQMD) adopted Rule 1105.1 - Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units, and certified the Final Environmental Assessment (EA) for the rule. The SCAQMD 2003 Final EA identified six refineries within the South Coast Air Basin (Basin) that operate fluidized catalytic cracking units (FCCUs) that would be subject to the requirements of Rule 1105.1; however, one of the six refineries was currently operating in compliance with the emission standards outlined in the rule. As a result, five of the six refineries in the Basin would be required to take additional actions to comply with the emission standards in Rule 1105.1. The ConocoPhillips Los Angeles Refinery is one of the five refineries required to make modifications to meet the emission limits of Rule 1105.1.

Operators of the ConocoPhillips Los Angeles Refinery is proposing projects that will reduce particulate matter less than 10 microns in diameter (PM10) and nitrogen oxide (NOx) emissions at its existing Wilmington and Carson Plants. The projects include modifications to Refinery units at both the Wilmington and Carson Plants. Modifications to the Wilmington Plant include the installation of a wet gas scrubber (WGS) with a wet electrostatic precipitator (WESP) to comply with Rule 1105.1, and a selective catalytic reduction (SCR) unit on Boiler 7 to comply with the NOx reduction requirements of SCAQMD Regulation XX - Regional Clean Air Incentives Market (RECLAIM). The Refinery operators also plan to install a new SCR unit on Boiler 11 at their Carson Plant to comply with RECLAIM requirements. The proposed projects will not increase or decrease the Refinery crude throughput capabilities.

The proposed modifications to comply with Rule 1105.1 were determined to be a “project” as defined by the California Environmental Quality Act (CEQA) and Public Resources Code §21000, et seq. The SCAQMD is the lead agency for this project because it is the public agency that has the principal responsibility for approving the project which may have a significant effect upon the environment (Public Resources Code, §21067). The proposed project requires discretionary approval from the SCAQMD for air quality permits associated with modifications to existing and new stationary source equipment at the refinery. Thus, the SCAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines §15051[b]).

To fulfill the purpose and intent of CEQA, the SCAQMD prepared and released a Notice of Preparation and Initial Study (NOP/IS) for a 30-day public review and comment period from November 30, 2006 to December 29, 2006, to address the potential environmental impacts associated with the ConocoPhillips PM10 and NOx Reduction Projects. The basis and focus of the technical analyses in the Draft EIR were determined by the NOP/IS. The NOP/IS identified aesthetics, air quality, hydrology and water quality, and transportation and traffic as the environmental resources that might be adversely affected by the proposed projects. The SCAQMD received two comment letters on the NOP/IS. A copy of the NOP/IS, the comments received and the response to the comments are included as Appendix A in the Final EIR.

The Draft EIR for the ConocoPhillips PM10 and NOx Reduction Projects, prepared pursuant to CEQA Guidelines §15189, was released for a 45-day public review and comment period from April 4, 2007 to May 18, 2007. After a detailed evaluation, the Draft EIR concluded that project-specific construction air quality impacts were significant for NOx emissions. The

environmental impacts associated with aesthetics, operational air quality, hydrology and water quality, and transportation and traffic were considered to be less than significant. Further environmental analysis revealed that regional project-specific and cumulative construction-related air quality impacts were considered significant even after implementation of mitigation measures. As a result, both Findings and a Statement of Overriding Considerations are required for the potentially significant adverse cumulative construction-related air quality impacts pursuant to CEQA Guidelines §§15091 and 15093, respectively.

Four comment letters were received during the Draft EIR public comment and review period. Responses to comments received on the Draft EIR have been prepared and incorporated into the document such that it is now a Final EIR. The Final EIR is available from the SCAQMD, 21865 Copley Drive, Diamond Bar, California 91765. The CEQA documents associated with the ConocoPhillips PM10 and NOx Reduction Projects can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by accessing the SCAQMD's CEQA webpages at <http://www.aqmd.gov/ceqa/nonaqmd.html>.

When considering for approval a proposed project that has one or more significant adverse effects, a public agency must make one or more written findings for each significant adverse effect, accompanied by a brief rationale for each finding (Public Resources Code §21081 and CEQA Guidelines §15091). The analysis in the Final EIR concluded that the proposed projects have the potential to generate significant adverse project-specific construction-related air quality impacts and cumulative construction-related air quality impacts.

For a proposed project with significant adverse impacts, CEQA requires the lead agency to balance the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental impacts when determining whether to approve the project. Under CEQA Guidelines §15093(a), "If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable'." Thus, after adopting the Findings, as discussed above, the lead agency must adopt a "Statement of Overriding Considerations" to approve a project with significant adverse environmental effects. The following sections of this document include a summary of the proposed projects; the Findings; Statement of Overriding Considerations and; pursuant to CEQA Guidelines §15097, a Mitigation Monitoring and Reporting Plan.

## **2.0 SUMMARY OF THE PROPOSED PROJECTS**

The proposed projects are described in this section. Modifications to the ConocoPhillips Los Angeles Refinery units at its Wilmington and Carson Plants include the installation of a WGS at the Wilmington Plant to comply with SCAQMD Rule 1105.1 – Reduction of PM10 and Ammonia Emissions from Fluid Catalytic Cracking Units, and an SCR unit on Boiler 7 to comply with the requirements of SCAQMD Regulation XX (RECLAIM). Upgrades at the Carson Plant include installation of a new SCR unit on Boiler 11, also to comply with RECLAIM.

The components of the proposed projects are associated with and designed to comply with recent amendments to SCAQMD air quality rules and regulations that regulate emissions from the existing Refinery. The WGS will eliminate the need for ammonia so ammonia emissions will be

eliminated from the FCCU (SCAQMD Rule 1105.1 requires that ammonia emissions be limited to 10 parts per million (ppm)). Further, the WGS technology can also reduce sulfur oxide (SOx) emissions (even though SOx emission reductions are not required to comply with SCAQMD Rule 1105.1).

There are two leading technology options for FCCU flue gas particulate emission control: the WGS and the Dry ESP. ConocoPhillips has selected the WGS with a WESP as the best technology to meet the project objectives. WGSs require no ammonia use, can control SOx emissions, a precursor to PM2.5, in addition to PM10, and can better control particulates during transient conditions like start-ups and shut downs. Flue gas containing particulates and SOx will be vented to the WGS. In the scrubber, there is intimate contacting of the particulate matter and the sulfur oxides with scrubbing liquid that flows current to the gas flow. The scrubbing liquid is a mixture of water and caustic (sodium hydroxide) that is constantly re-circulated. Following the scrubber, a WESP section will remove most of the remaining fine particulates. The WGS system has two effluent streams: clean FCCU flue gas and a purge liquid. The clean FCCU flue gas passes up the stack of the scrubber system and is released to the atmosphere. The purge liquid goes to a purge treatment unit. Caustic (sodium hydroxide) will be supplied by installing a new 10,000 gallon storage tank near the scrubber. Caustic will be supplied from a local vendor in the Los Angeles area and delivered to the Wilmington Plant for storage and use.

The WGS will generate a liquid discharge containing captured pollutants. That liquid will be treated at a new Purge Treatment Unit (PTU), which will consist of a clarifier and oxidation equipment. The estimated liquid discharge from the PTU is about 70 gallons per minute. The purge treatment has two effluents, a liquid composed of water and sodium sulfate and earth moist solids. The main constituent of the earth moist solids stream is the catalyst fines that have been captured from the FCCU flue gas in the WGS portion of the system. A clarifier separates the solids as an underflow thickened solids stream that is collected and, if necessary, further dewatered in a roll-off bin. The liquid passes out of the clarifier as an overflow clear liquid. Reduction of chemical oxygen demand is accomplished by air oxidation of the liquid. The treated clear liquid is then passed to the existing refinery wastewater treatment system where it is treated prior to discharge to the City of Los Angeles sewage treatment plant. The solids are collected as concentrated slurry for recycling or in a roll-off bin.

The Wilmington Plant currently operates Boiler 7. ConocoPhillips operators have proposed to install an SCR Unit on Boiler 7 to reduce NOx emissions from the Boiler. Additional NOx emission reductions assist the Wilmington Plant in meeting the declining NOx RECLAIM annual allocation levels. SCR is considered to be best available control technology (BACT) for the control of NOx from combustion sources. NOx emissions are controlled by injecting aqueous ammonia into the exhaust gas stream upstream of a catalyst. The aqueous ammonia to be used in the SCR will consist of 19 percent ammonia. NOx, ammonia, and oxygen react on the surface of the catalyst to form nitrogen and water. The catalyst will be made from a metal with control efficiencies expected to be approximately 90 percent or more. The NOx concentration after the SCR treatment is expected to be approximately 10 parts per million. The ammonia will be supplied by installing a new 12,000-gallon pressurized storage tank for 19 percent aqueous ammonia. Aqueous ammonia will be supplied from a local vendor in the Los Angeles area and delivered to the Wilmington Plant for storage and use.

The ConocoPhillips Los Angeles Refinery operates at two locations, the Carson Plant and the Wilmington Plant. The Refinery only operates one FCCU, located at the Wilmington Plant. Therefore, no modifications are required to the Carson Plant to comply with SCAQMD Rule 1105.1.

The Carson Plant currently operates Boiler 11. ConocoPhillips operators are proposing to install new low NO<sub>x</sub> burners and an SCR Unit on Boiler 11 to reduce NO<sub>x</sub> emissions from the Boiler. Additional NO<sub>x</sub> emission reductions assist the Carson Plant to meet the declining NO<sub>x</sub> RECLAIM annual allocation levels. The aqueous ammonia to be used in the SCR will consist of 19 percent ammonia. The NO<sub>x</sub> concentration after the SCR treatment is expected to be approximately 10 parts per million. The ammonia will be supplied from an existing 11,000-gallon pressurized ammonia storage tank. Aqueous ammonia is currently supplied from a local vendor in the Los Angeles area and delivered to the Carson Plant for storage and use.

The environmental benefits of the proposed project include:

- The WGS is expected to reduce PM<sub>10</sub> emissions by about 200 lbs/day and eliminate ammonia emissions.
- The WGS is expected to reduce SO<sub>x</sub> emissions by approximately 1,300 to 1,600 lbs/day, based on the difference between historical emissions as reported for RECLAIM and projected SO<sub>x</sub> emissions of about 10 to 20 ppm with the WGS.
- It is expected that NO<sub>x</sub> emissions will decrease by 160 to 370 lbs/day for Boiler 7 and 290 to 545 lbs/day for Boiler 11, depending on firing rate. The estimated reductions are based on the difference between historical emissions as reported for RECLAIM and projected NO<sub>x</sub> emissions of about 10 ppm with the SCRs.

### **3.0 FINDINGS**

Pursuant to CEQA Guidelines §15091, a public agency is prohibited from approving or carrying out a project for which a CEQA document has been completed which identifies one or more significant adverse environmental effects unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The following sets forth findings for the significant adverse impacts identified in the EIR that cannot be reduced to insignificance and the rationale for each finding. The findings are supported by substantial evidence in the record as explained in each finding. This Statement of Findings will be included in the record of project approval and will also be noted in the Notice of Determination.

#### **3.1 POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO A LEVEL OF INSIGNIFICANCE**

The Final EIR identified project-specific and cumulative construction-related air quality impacts as potentially significant adverse environmental impacts that cannot be reduced to a level of insignificance.

- **Project-specific and cumulative construction emissions of NO<sub>x</sub> could result in significant cumulative regional air quality impacts.**

Finding: The SCAQMD makes the following findings with respect to this air quality impact: (1) project-specific construction emissions associated with the ConocoPhillips PM10 and NO<sub>x</sub> Reduction Projects are concluded to be significant because they exceed the SCAQMD's construction air quality significance thresholds; (2) project-specific construction-related emissions added to other concurrent project emissions result in significant adverse cumulative construction-related air quality impacts; (3) mitigation measures were incorporated into the project, but significant adverse construction-related air quality impacts could not be reduced to insignificance; (4) such mitigation measures are within the jurisdiction of the SCAQMD; and (5) no other feasible mitigation measures or project alternatives are available to lessen the significant adverse air quality impacts during construction to less than significant.

Explanation: Construction-related emissions associated with the ConocoPhillips PM10 and NO<sub>x</sub> Reduction Projects are expected to exceed the SCAQMD significance thresholds. Consequently, the construction related air quality impacts are considered significant. Seven mitigation measures to minimize these impacts were imposed on the proposed project and are set forth in the Mitigation Monitoring and Reporting Plan included herein.

Though these measures will not reduce significant adverse project-specific and cumulative construction air quality impacts to less than significant, no other feasible mitigation measures were identified. The ConocoPhillips Los Angeles Refinery does not have control or the authority to control construction emissions from the other non-ConocoPhillips refinery projects that were considered in the cumulative impact analysis. The SCAQMD, as lead agency, will however, impose feasible mitigation measures, as necessary, on all other related projects within its jurisdiction. The construction emission calculations were based on conservative assumptions, e.g., that all related projects were under construction at the same time, which will likely overestimate actual emissions. In addition, the construction emissions will not have a long-term adverse air quality impact because these emissions will cease following the completion of construction.

### **3.2 POTENTIALLY SIGNIFICANT IMPACTS WHICH CAN BE MITIGATED TO A LEVEL OF INSIGNIFICANCE**

Other than cumulative project-specific and construction air quality impacts, no other potentially significant adverse impacts were identified for the proposed ConocoPhillips PM10 and NO<sub>x</sub> Reduction Projects that were required to be mitigated to a level of insignificance.

### **3.3 IMPACTS ASSOCIATED WITH ALTERNATIVES**

Finding: The SCAQMD finds that the alternatives evaluated in the Final EIR would not achieve the goals of the proposed project and would not result in fewer or less severe environmental impacts.

Explanation: Potential adverse environmental impacts from three project alternatives were analyzed and it was determined that no feasible project alternatives were identified that would



achieve the goals of the projects with fewer or less severe environmental impacts than the proposed projects.

The EIR evaluated the relative merits of the following three alternatives: the No Project Alternative, Alternative Technologies for Particulate Matter Reduction, and Alternative Methodology for NOx Emission Reductions. No feasible alternatives were identified that would reduce or eliminate the significant adverse project-specific and cumulative construction-related air quality impacts to less than significant and still achieve the objectives of the ConocoPhillips PM10 and NOx Reduction Projects that include: complying with SCAQMD Rule 1105.1 to reduce PM10 and ammonia emissions from the existing FCCU at the ConocoPhillips Los Angeles Refinery, complying with the requirements of SCAQMD Regulation XX (RECLAIM), and further reducing sulfur oxide emissions. Consequently, the proposed projects are preferred over the alternatives because they will ensure that ConocoPhillips will be able to achieve the primary objectives of the proposed project.

### **3.4 FINDINGS CONCLUSION**

Changes or alterations have been incorporated into the proposed project to mitigate or minimize the potentially significant adverse environmental effects associated with the project-specific and cumulative construction-related air quality impacts. No additional feasible mitigation measures or alternatives to the proposed projects, other than those already included in the Final EIR, have been identified that can further mitigate the potentially significant cumulative impacts on regional air quality while meeting the objectives of the proposed projects.

All feasible mitigation measures identified in the Final EIR have been adopted as set forth in the Mitigation Monitoring and Reporting Plan. The analysis in the Final EIR also indicates that the alternatives would not reduce to insignificant levels the significant impacts identified for the proposed projects.

The proposed projects are intended to comply with the requirements of SCAQMD Rule 1105.1 by reducing PM10 and ammonia emissions from the existing FCCU at the ConocoPhillips Los Angeles. To comply with the requirements of SCAQMD Regulation XX (RECLAIM), upgrades at the Wilmington Plant include an SCR unit on Boiler 7; and at the Carson Plant, installation of new a new SCR unit on Boiler 11. Based on these criteria, the SCAQMD finds that the proposed projects achieve the best balance between minimizing potential adverse environmental impacts and achieving the overall projects' objectives. The SCAQMD further finds that all of the findings presented here are supported by substantial evidence in the record. The record of approval for these proposed projects may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD Headquarters in Diamond Bar, California.

### **4.0 STATEMENT OF OVERRIDING CONSIDERATIONS**

If significant adverse impacts of a proposed project remain after incorporating feasible mitigation measures, or no feasible measures to mitigate the adverse impacts are identified, the lead agency must make a determination that the benefits of the proposed project outweigh the unavoidable, significant, adverse environmental effects if it is to approve the project. CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental impacts when

determining whether to approve the project (CEQA Guidelines §15093(a)). If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable (CEQA Guidelines §15093(a)). Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse environmental impacts resulting from the proposed project, as set forth below, has been prepared for the SCAQMD's decision makers' consideration. Pursuant to CEQA Guidelines §15093(c), a Statement of Overriding Considerations will be included in the record of the project approval and will also be noted in the Notice of Determination.

Having reduced the potential effects of the proposed project through all feasible mitigation measures, as described previously in this attachment, and balancing the benefits of the proposed projects against its potential unavoidable adverse impacts on air quality, the SCAQMD finds that the following legal requirements and benefits of the proposed project outweigh the potentially significant unavoidable adverse impacts for the following reasons:

- The proposed projects will allow ConocoPhillips to install new equipment and modify existing equipment to comply with SCAQMD Rule 1105.1 and SCAQMD Regulation XX (RECLAIM). Compliance with SCAQMD Rule 1105.1 will reduce particulate emissions from the existing FCCU due to the installation of new air pollution control equipment (new WGS with WESP) and result in a decrease in overall PM10 and ammonia emissions at the Los Angeles Refinery following completion of construction activities.
- Although the proposed projects are expected to contribute to project-specific and regional cumulative construction emissions in the short term, the proposed projects are expected to result in long-term emissions benefits by reducing overall PM10, ammonia, NOx, and SOx, emissions from the ConocoPhillips Los Angeles Refinery. As a result, the proposed projects are not expected to hinder progress in attaining all state and federal ambient air quality standards, but are expected to help towards progress with attainment.
- The analysis of significant adverse project-specific and cumulative construction air quality impacts was based on conservative assumptions regarding the construction of the proposed project and concurrent Rule 1105.1 construction projects. The actual project impacts (i.e., construction emission estimates) are expected to be less than estimated in the EIR and will terminate prior to operation of the project.

In balancing the benefits of the overall project described above with the proposed projects' contribution to unavoidable and significant adverse environmental impacts, the SCAQMD finds that the proposed project benefits outweigh the unavoidable adverse impacts, such that the impacts are acceptable. The SCAQMD further finds that substantial evidence presented in the Final EIR supports the need to adopt the Final EIR despite the proposed projects' potential adverse impacts.

## **5.0 MITIGATION MONITORING AND REPORTING PLAN (PLAN)**

Pursuant to the requirements of Public Resources Code §21081.6(a)(1) and CEQA Guidelines §15097, when a public agency conducts an environmental review of a proposed project 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.

CEQA Guidelines in §15097 state that when a public agency has made the finding of significant adverse impacts [pursuant to CEQA Guidelines §15091(a)(1)], the agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects.

Further, pursuant to the requirements in Public Resources Code §21081.6(a)(1), a lead [public] agency shall adopt a monitoring program of mitigation measures and insure their enforceability.

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted 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 a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.”

Enforcement of the mitigation monitoring and reporting requirements described in this Plan is primarily the responsibility of the SCAQMD as the lead agency under CEQA. The mitigation measures outlined herein are primarily the responsibility of the ConocoPhillips Los Angeles Refinery to implement. To certify compliance, documentation that mitigation measures have been implemented will be maintained by the ConocoPhillips Los Angeles Refinery to ensure potential environmental impacts are mitigated to the greatest extent feasible.

## **MITIGATION MEASURES, MONITORING AND REPORTING**

Construction-related emissions of NO<sub>x</sub> were concluded to be significant in spite of implementing mitigation measures. Emission sources include worker vehicles, heavy construction equipment, fugitive dust from paved and unpaved roads, the erection and installation of air pollution control equipment, and excavation activities. The mitigation measures identified in the following discussion are intended to minimize the impacts associated with these emission sources. No feasible mitigation measures have been identified to reduce emissions to a level of insignificance. CEQA Guidelines §15364 defines feasible as “...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.” The requirements of this mitigation monitoring and reporting plan are summarized in Table 1.

**AQ-1:** Develop a Construction Traffic Emission Management Plan for each site to minimize emissions from vehicles including, but not limited to, scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting individual truck idling in excess of five consecutive minutes or what is allowed under Title 13 California Code of Regulations §2485 (CARB’s Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling).

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-1 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Project Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD’s Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed project will ensure compliance with this mitigation measure.

**MMAQ-1:** ConocoPhillips Los Angeles Refinery shall develop and submit a Construction Traffic Emission Management Plan for each site to the SCAQMD for review prior to starting construction activities. ConocoPhillips Los Angeles Refinery will ensure that construction personnel are trained on the requirements set forth in the Construction Traffic Emission Management Plan, and ensure that documentation of that training occurs. The SCAQMD may conduct routine inspections of the site to verify compliance.

The Construction Traffic Emission Management Plan shall include the following: (1) a description of onsite construction traffic control methods; (2) worker and delivery entry/exit access; (3) construction worker schedules; (4) designated parking areas for workers; (5) designated route and anticipated schedule for delivery of materials by truck; (6) entry/exit security and safety protocols; and (7) a map showing the location of the construction site, lay down area, the gate entrance/exit, parking areas and truck route.

The construction workers assigned to the ConocoPhillips Carson Plant and associated construction truck deliveries will enter the construction parking lot from Sepulveda Boulevard. Parking for all construction workers will be provided onsite. Truck deliveries will be scheduled so as to not interfere with regular ConocoPhillips Carson Plant employee begin and end work hours and peak hour traffic. No on-street parking off-site will be allowed. The construction workday is planned to begin at 7:00 a.m. and end at 5:30 p.m. Construction will take place five days a week (Monday through Friday).

The construction workers assigned to the ConocoPhillips Wilmington Plant and associated construction truck deliveries will enter the construction parking lot from Anaheim Street. Parking for all construction workers will be provided onsite. Truck deliveries will be scheduled so as to not interfere with regular ConocoPhillips Wilmington Plant employee begin and end work hours and peak hour traffic. No on-street parking off-site will be allowed. The construction workday is planned to begin at 6:30 a.m. and end at 5:30 p.m. Construction will take place five days a week (Monday through Friday).

The Construction Emission Management Plan shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years following the time construction is completed.

**AQ-2:** Suspend the use of all construction equipment during first-stage smog alerts.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-2 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery

PM10 and NOx Reduction Project Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD's Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed projects will ensure compliance with this mitigation measure.

**MMAQ-2:** If and when any first stage smog alert occurs, ConocoPhillips Los Angeles Refinery will suspend the use of all construction equipment and record the date and time of the alert and the date and time the use of construction equipment is suspended. Records regarding suspending operation shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years from the time construction is completed.

**AQ-3:** Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-3 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Projects Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD's Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed projects will ensure compliance with this mitigation measure.

**MMAQ-3:** ConocoPhillips Los Angeles Refinery and its contractors will evaluate the use of electricity and alternative fuels for on-site mobile construction equipment prior to the commencement of construction activities. Equipment vendors shall be contacted to determine the commercial availability of electric or alternative-fueled construction equipment. Equipment that will use electricity or alternative fuels will be included in the Construction Emission Management Plan.

The worker parking area is located in close proximity (i.e., walking distance) to both the lay down area and construction site, thus, minimizing the need for excessive vehicular worker-related traffic, and reducing onsite emissions. ConocoPhillips Los Angeles Refinery and its contractors will also promote the use of electric golf carts for transportation onsite to reduce mobile source emissions during construction.

**AQ-4:** Maintain construction equipment by conducting regular tune-ups and retard diesel engine timing, to the extent feasible.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-4 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Projects Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD's Executive Officer. The SCAQMD through

its discretionary authority to issue and enforce permits for the proposed projects will ensure compliance with this mitigation measure.

**MMAQ-4:** ConocoPhillips Los Angeles Refinery and its contractors shall maintain all construction vehicles and equipment in compliance with the manufacturer’s recommended maintenance schedule. ConocoPhillips Los Angeles Refinery and its contractors will maintain vehicle and equipment maintenance records for the duration of the construction portion of the proposed projects and for a period of at least two years from completion of construction. ConocoPhillips Los Angeles Refinery, its contractors and the equipment vendors will evaluate the practicality of retarding diesel engine timing on off-road construction equipment for the purpose of reducing emissions. Equipment maintenance records shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years from the time construction is completed.

**AQ-5:** Use electric welders to avoid emissions from gas or diesel welders in portions of the projects’ site where electricity is available.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-5 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Projects Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD’s Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed projects will ensure compliance with this mitigation measure.

**MMAQ-5:** ConocoPhillips Los Angeles Refinery and its contractors will conduct a survey of the construction site and surrounding area within the refinery to assess whether the existing infrastructure can support the electricity requirements of the proposed welding activities at the site. Construction areas where electricity is not available will be identified on a site plan and included in the Construction Emission Management Plan. The use of gasoline or diesel welders shall be prohibited in areas where electricity is available from the existing infrastructure within the refinery. If gasoline or diesel welders must be used during construction activities, ConocoPhillips Los Angeles Refinery and its contractors shall record and report such usage, and the duration of use. The site plan shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years from the time construction is completed.

**AQ-6:** Use on-site electricity rather than temporary power generators in portions of the projects’ site where adequate electricity is available.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-6 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Project Declaration of Certification, signed by the ConocoPhillips

Los Angeles Refinery Manager and the SCAQMD's Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed project will ensure compliance with this mitigation measure.

**MMAQ-6:** ConocoPhillips Los Angeles Refinery and its contractors will conduct a survey of the construction site and surrounding area within the refinery to assess where the existing electricity infrastructure is located. Construction areas where adequate electricity is available will be identified on a site plan and included in the Construction Emission Management Plan. The use of temporary power generators will be prohibited in areas where electricity is available at the refinery. Should temporary power generators be required during construction activities, ConocoPhillips Los Angeles Refinery and its contractors shall record and report such usage, and the duration of use. The site plan shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years from the time construction is completed.

**AQ-7:** Prior to use in construction, the project applicant will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for significant periods. Retrofit technologies such as selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc., will be evaluated. These technologies for NOx control will be required if they are certified by the California Air Resources Board and/or U.S. EPA and are commercially available and can feasibly be retrofitted onto construction equipment.

**IMPLEMENTING PARTY:** The SCAQMD finds that implementing Mitigation Measure AQ-7 is the responsibility of the ConocoPhillips Los Angeles Refinery.

**MONITORING AGENCY:** The SCAQMD has made this mitigation measure fully enforceable through a legally binding instrument, Attachment 2 for the ConocoPhillips Los Angeles Refinery PM10 and NOx Reduction Projects Declaration of Certification, signed by the ConocoPhillips Los Angeles Refinery Manager and the SCAQMD's Executive Officer. The SCAQMD through its discretionary authority to issue and enforce permits for the proposed project will ensure compliance with this mitigation measure.

**MMAQ-7:** ConocoPhillips Los Angeles Refinery and its contractors shall ensure that all off-road construction equipment meet the NOx exhaust emission standards and test procedures for heavy-duty off-road diesel cycle engines as presented in California Code of Regulations, Title 13, Section 2423(b)(1). The NOx exhaust emissions from new off-road compression-ignition engines, sold in California, shall not exceed the exhaust emission standards set forth for each Tier and corresponding model year.

ConocoPhillips Los Angeles Refinery and its contractors will evaluate the feasibility of retrofitting existing off-road construction equipment for use on the proposed projects with equipment such as oxidation catalysts and air enhancement technologies.

In the event a Tier 3 engine is not available for any off-road engine larger than 100 horsepower (hp), ConocoPhillips Los Angeles Refinery and its contractors shall ensure that the engine be equipped with NOx control, unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Evidence of the availability of retrofit equipment and

Tier 3 engines shall be made available to SCAQMD inspectors upon request and remain filed onsite for a period of not less than two years from the time construction is completed.



**Table 1. Mitigation Monitoring and Reporting Plan for ConocoPhillips Los Angeles Refinery  
PM10 and NOx Reduction Projects**

Mitigation Measure	1. Implementing Party 2. Monitoring/ Enforcement Agency	Monitoring Action	Monitoring Phase
<p><b>AQ-1:</b> Develop a Construction Traffic Emission Management Plan to minimize emissions from vehicles including, but not limited to, scheduling truck deliveries to avoid peak hour traffic conditions, consolidating truck deliveries, and prohibiting individual truck idling in excess of five consecutive minutes or what is allowed under Title 13 California Code of Regulations §2485 (CARB’s Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling).</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-1: Develop and submit a Construction Traffic Emission Management Plan to include the following: (1) a description of onsite construction traffic control methods; (2) worker and delivery entry/exit access; (3) construction worker schedules; (4) designated parking areas for workers; (5) designated route and anticipated schedule for delivery of materials by truck; (6) entry/exit security and safety protocols; and (7) a map showing the location of the construction site, lay down area, the gate entrance/exit, parking areas and truck route.</p>	<p>Prior to the beginning of construction.</p>
<p><b>AQ-2:</b> Suspend the use of all construction equipment during first-stage smog alerts.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-2: Suspend the use of all construction equipment if and when any first stage smog alert occurs and record the date and time of the alert and the date and time the use of construction equipment are suspended.</p>	<p>If, and when, any first stage smog alert occurs.</p>
<p><b>AQ-3:</b> Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-3: Evaluate the use of electricity and alternative fuels for on-site mobile construction equipment. Include equipment that will use electricity or alternative fuels in the Construction Emission Management Plan.</p>	<p>Prior to the beginning of construction.</p>

**Table 1. Mitigation Monitoring and Reporting Plan for ConocoPhillips Los Angeles Refinery  
PM10 and NOx Reduction Project (Cont.)**

Mitigation Measure	1. Implementing Party 2. Monitoring/ Enforcement Agency	Monitoring Action	Monitoring Phase
<p><b>AQ-4:</b> Maintain construction equipment by conducting regular tune-ups and retard diesel engine timing, to the extent feasible.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-4: Maintain all construction vehicles and equipment in compliance with the manufacturer’s recommended maintenance schedule. Maintain vehicle and equipment maintenance records for the duration of the construction portion of the proposed projects, and for a period of at least two years from completion of construction.</p>	<p>During construction activities, and keep records for a period of at least two years from completion of construction.</p>
<p><b>AQ-5:</b> Use electric welders to avoid emissions from gas or diesel welders in portions of the projects’ site where adequate electricity is available.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-5: Conduct a survey of the construction site and surrounding area within the refinery to locate existing electricity infrastructure that can support the electricity requirements of the proposed welding activities at the site. Identify construction areas where electricity is not available on a site plan in the Construction Emission Management Plan. Gasoline or diesel welders shall be prohibited in areas where adequate electricity is available within the refinery. If gasoline or diesel welders must be used during construction activities, record and report such usage, and the duration of use.</p>	<p>Prior to the beginning of construction, and during construction activities, if necessary.</p>
<p><b>AQ-6:</b> Use on-site electricity rather than temporary power generators in portions of the projects’ site where adequate electricity is available.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-6: Conduct a survey of the construction site and surrounding area within the refinery to locate existing electricity infrastructure. Identify construction areas where adequate electricity is available on a site plan and include in the Construction Emission Management Plan. Temporary power generators will be prohibited in areas where adequate electricity is available at the refinery. Should temporary power generators be required during construction activities, record and report such usage, and the duration of use.</p>	<p>Prior to the beginning of construction, and during construction activities, if necessary.</p>

**Table 1. Mitigation Monitoring and Reporting Plan for ConocoPhillips Los Angeles Refinery  
PM10 and NOx Reduction Projects (Cont.)**

Mitigation Measure	1. Implementing Party 2. Monitoring/ Enforcement Agency	Monitoring Action	Monitoring Phase
<p><b>AQ-7:</b> Prior to use in construction, the project applicant will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for significant periods. Retrofit technologies for NOx control such as selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc., will be evaluated. These technologies will be required if they are certified by the California Air Resources Board and/or U.S. EPA and are commercially available and can feasibly be retrofitted onto construction equipment.</p>	<p>1. ConocoPhillips Los Angeles Refinery 2. SCAQMD</p>	<p>MMAQ-7: Ensure that all off-road construction equipment meets the exhaust emission standards and test procedures for heavy-duty off-road diesel cycle engines as presented in California Code of Regulations, Title 13, Section 2423(b)(1). Exhaust emissions from new off-road compression-ignition engines, sold in California, shall not exceed the exhaust emission standards set forth for each Tier and corresponding model year. Evaluate the feasibility of retrofitting existing off-road construction equipment for NOx control with equipment such as oxidation catalysts, and air enhancement technologies.</p>	<p>Prior to the beginning of construction</p>