

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

**DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE
CHEVRON COKE DRUM REPLACEMENT PROJECT**

**ATTACHMENT 1: FINDINGS, STATEMENT OF OVERRIDING CONSIDERATIONS,
AND MITIGATION, MONITORING AND REPORTING PLAN**

SCH No. 2011101026

November 2012

Executive Officer

Barry Wallerstein, D.Env.

Deputy Executive Officer,

Planning, Rule Development, and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer,

Planning, Rule Development, and Area Sources

Laki Tisopulos, Ph.D, P.E.

Planning and Rules Manager,

CEQA and Toxics

Susan Nakamura

Prepared by: Environmental Audit, Inc.

Reviewed by: Jeffrey Inabinet – Air Quality Specialist
Steve Smith, Ph.D. – Program Supervisor
Bob Sanford – Air Quality Engineer II
Megan Lorenz - Deputy District Counsel II
Barbara Baird – District Counsel

THIS PAGE INTENTIONALLY LEFT BLANK

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

CHAIRMAN: WILLIAM A. BURKE, Ed.D.
Speaker of the Assembly Appointee

VICE CHAIRMAN: DENNIS YATES
Mayor, City of Chino
Cities Representative, San Bernardino County

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County Representative

JOHN BENOIT
Supervisor, Fourth District
Riverside County

MICHAEL CACCIOTTI
Councilmember, City of South Pasadena
Cities Representative, Los Angeles County, Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
San Bernardino County Representative

RONALD O. LOVERIDGE
Mayor, City of Riverside
Cities Representative, Riverside County

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDITH MITCHELL
Councilmember, Rolling Hills Estates
Cities Representative, Los Angeles County, Western Region

SHAWN NELSON
Supervisor, Fourth District
Orange County Representative

CLARK E. PARKER, Ph.D.
Senate Rules Committee Appointee

JAN PERRY
Councilmember, Ninth District
City of Los Angeles Representative

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

1.0 Introduction..... 1

2.0 CERTIFICATION OF THE FINAL EIR..... 1

2.1 ENVIRONMENTAL REVIEW PROCESS..... 1

2.2 SUMMARY OF THE PROPOSED PROJECT..... 3

2.2.1 *Construction of the Proposed Project*..... 4

2.2.2 *Operation of the Proposed Project*..... 4

2.3 ABSENCE OF NEW INFORMATION..... 4

2.4 DIFFERENCES OF OPINION REGARDING THE IMPACTS OF THE PROJECT 4

2.5 IMPACTS AND MITIGATION MEASURES 5

3.0 Findings..... 6

3.1 POTENTIALLY SIGNIFICANT IMPACTS WHICH CANNOT BE MITIGATED TO A LEVEL OF INSIGNIFICANCE7

3.1.1 *Construction Emissions of NOx Would Exceed SCAQMD Regional Significance Thresholds*..... 7

3.1.2 *Construction-Related Noise Impact Associated with the Coke Drum Transport* 8

3.1.3 *Cumulative Construction Emissions of NOx Would Exceed SCAQMD Regional Significance Thresholds*..... 8

3.2 IMPACTS ASSOCIATED WITH ALTERNATIVES 9

3.2.1 *Description of Project Objectives*..... 9

3.2.2 *Project Alternatives that Would Reduce the Potentially Significant Impacts are Not Available* 9

3.3 FINDINGS CONCLUSION 11

4.0 STATEMENT OF OVERRIDING CONSIDERATION..... 11

5.0 Record of Proceedings 13

6.0 MITIGATION, MONITORING AND REPORTING PLAN 13

6.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES 13

6.2 AIR QUALITY MITIGATION MONITORING AND REPORTING..... 15

6.3 NOISE IMPACTS AND MITIGATION MEASURES 19

6.4 NOISE MITIGATION MONITORING AND REPORTING 20

6.5 TRAFFIC IMPACTS AND MITIGATION MEASURES 20

6.6 TRAFFIC MITIGATION MONITORING AND REPORTING..... 20

7.0 CONCLUSION 21

TABLES

1 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES AND RESIDUAL IMPACTS..... 6

2 ENVIRONMENTAL IMPACTS OF ALTERNATIVES AS COMPARED TO PROPOSED PROJECT..... 10

3 EMISSION REDUCTIONS FROM THE DELAYED COKER UNIT SHUTDOWN DURING CONSTRUCTION..... 15

4 MITIGATION, MONITORING AND REPORTING PLAN FOR CHEVRON PRODUCTS COMPANY EL SEGUNDO
REFINERY COKE DRUM RELIABILITY PROJECT 22

THIS PAGE INTENTIONALLY LEFT BLANK

1.0 INTRODUCTION

Chevron Products Company (Chevron) is proposing a project at its El Segundo Refinery (Refinery) to replace the six existing coke drums that are reaching the end of their useful life cycle with six new coke drums, of the same size, to be installed at the same location within the Refinery. The Coke Drum Reliability Project (proposed Project) includes fabrication of the six replacement coke drums in an overseas shop with the completed drums being shipped in their entirety to the Port of Los Angeles/Port of Long Beach. Fabrication in a shop is proposed to take advantage of the expertise shop fabricators have developed to fabricate coke drums since the existing coke drums were manufactured and installed at the Refinery more than 40 years ago. The overseas fabrication shop was selected through a formal bid process.

Once the drums are onsite, they would be installed during a planned shutdown of the Delayed Coker Unit. Installation would be accomplished by removing the six-derrick structure in one piece off the existing drums, setting it at grade, and replacing the drums one by one. Piping, electrical wiring, and control wiring will be disconnected to free the derrick structure for the lift. Once the new coke drums have been set in place, the derrick structure will then be reset atop the drums; piping, wiring, and controls reconnected; and, the Delayed Coker Unit placed back in operation. The proposed Project will not change the Refinery crude throughput capacity or Delayed Coker Unit capacity.

The proposed Project was determined to be a “project” as defined by CEQA and the Public Resources Code (PRC) §21000 et. seq. The SCAQMD is lead agency because it has the greatest responsibility for supervising or approving the project as a whole (CEQA Guidelines §15051(b)) and, therefore, has prepared a Final EIR pursuant to CEQA Guidelines §15089, §15132, and §15162.

2.0 CERTIFICATION OF THE FINAL EIR

The decision-making body of the SCAQMD certifies that it has been presented with the Final EIR and that it has reviewed and considered the information contained in the Final EIR prior to making the following certifications and findings.

Pursuant to CEQA Guidelines §15090 (Title 14 of the California Code of Regulations, §15090), the decision-making body certifies that the Final EIR has been completed in compliance with the CEQA statutes and the State CEQA Guidelines. The decision-making body certifies the Final EIR for the actions described in these findings and in the Final EIR, i.e., the proposed Project. The decision-making body further certifies that the Final EIR reflects its independent judgment and analysis.

2.1 ENVIRONMENTAL REVIEW PROCESS

To fulfill the purpose and intent of CEQA, the SCAQMD, as the lead agency for the proposed Project, prepared and released a Notice of Preparation and Initial Study (NOP/IS) to initially identify potentially significant adverse environmental impacts associated with the proposed Project to be further analyzed in the Draft EIR. The NOP/IS was circulated from October 11, 2011 through November 10, 2011, in compliance with the requirement for a minimum comment period of 30 days. The NOP/IS was circulated in El Segundo and to neighboring jurisdictions, responsible agencies, other public agencies, and interested individuals in order to solicit input on

the scope of the environmental analysis to be included in the EIR. Two comment letters were received on the NOP/IS during the public comment period. Responses to those comments are provided in Appendix A of the Final EIR. The NOP/IS formed the basis for and focus of the technical analyses in the Draft EIR. The following environmental issues were identified in the NOP/IS as potentially significant and were further addressed in the EIR:

- Air Quality and Greenhouse Gas Emissions,
- Noise, and
- Transportation/Traffic.

The NOP/IS concluded that the proposed Project would not create significant adverse environmental impacts to the following areas: aesthetics, agricultural and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, and solid/hazardous waste. No comments were received disputing this conclusion. A copy of the NOP/IS is included in Appendix A of the Final EIR.

The Draft EIR for the proposed Project was released for a 47-day public review and comment period from August 31, 2012 through October 16, 2012. As with the NOP/IS, the Draft EIR was circulated to neighboring jurisdictions, responsible agencies, other public agencies, and interested individuals in order to solicit input on the scope of the environmental analysis to be included. Two comment letters were received during the public comment period on the Draft EIR. Responses to the comment letters have been prepared and are included in Appendix E of the Final EIR. Changes to the proposed Project were evaluated and minor modifications have been made to the Draft EIR such that it is now a Final EIR. However, none of the modifications alter any of the conclusions reached in the Draft EIR or provide new information of substantial importance relative to the draft document that would require recirculation of the Draft EIR pursuant to CEQA Guidelines §15088.5. The environmental disciplines that were determined to have potentially significant impacts or were commented upon, and were further analyzed in the EIR, included air quality, noise, and transportation/traffic. After further environmental analyses, significant adverse environmental impacts from the proposed Project are expected to occur after implementing mitigation measures for air quality, noise, and transportation/traffic during construction activities. Accordingly, both Findings and a Statement of Overriding Considerations are required for the potentially significant adverse air quality, noise, and transportation/traffic during construction of the proposed Project per CEQA Guidelines §15091 and §15093, respectively.

The Final EIR consists of an NOP/IS (October 11, 2011) and a Draft EIR (August 2012). The Final EIR includes a project description, the environmental setting, environmental impacts and mitigation measures, cumulative impacts, project alternatives, a noise analysis (Appendix C of the Final EIR), a traffic analysis (Appendix D of the Final EIR), and responses to comments on the Draft EIR (Appendix E). All documents comprising the Final EIR for the proposed Project are available at the SCAQMD, 21865 Copley Drive, Diamond Bar, California, 91765. These documents can also 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 Project has the potential to generate significant adverse air quality, noise, and transportation/traffic impacts during construction activities.

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 project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered ‘acceptable.’” Thus, after adopting the Findings, as discussed above, the agency must adopt a “Statement of Overriding Considerations” to approve a project with significant adverse environmental effects.

The following sections of this document include the Findings, Statement of Overriding Considerations and, pursuant to CEQA Guidelines §15097, a Mitigation, Monitoring and Reporting Plan.

2.2 SUMMARY OF THE PROPOSED PROJECT

The six existing coke drums at the Refinery increasingly require maintenance and repair to remain operational as they age. The six existing coke drums are approaching the end of their serviceable and economical life cycle and must be replaced. The proposed replacement coke drums will have the same diameter and height as the existing drums, each measuring approximately 26-feet in diameter by 96 feet tall, allowing the Refinery to maintain the current processing capacity. The proposed Project includes coke drum design improvements including upgraded metallurgy, seismic upgrades, and replacement of ancillary equipment (e.g., monitoring gauges). Existing pressure relief valves are currently vented to a vapor recovery system and flare, and will continue to be vented to this equipment once the proposed Project becomes operational. No changes will occur to the vapor recovery system and flare operations.

The six replacement coke drums will be fabricated overseas and shipped in their entirety to the Refinery via the Port of Los Angeles/Port of Long Beach. Once the ships carrying the fabricated coke drums have arrived at the Port of Los Angeles/Port of Long Beach, the coke drums would be transported via barge from the Port to King Harbor in Redondo Beach, and, then by public roads through the cities of Redondo Beach, Hermosa Beach, and Manhattan Beach to the Refinery located in El Segundo, CA. The coke drums are expected to be transported over local roads during the nighttime in order to minimize traffic impacts and conflicts. It is expected that each coke drum will take one night to be transported from King Harbor to the Refinery.

Once the replacement drums are onsite, installation would take place during a planned shutdown of the Delayed Coker Unit (commonly called a turn-around), at which time the other equipment in the Unit will also be shutdown. Installation would be accomplished by removal of the six-derrick structure in one piece from the existing drums, setting it nearby at grade, and replacing the drums one by one onto the existing support structure. Piping, electrical wiring, and control wiring will be disconnected to free the derrick structure for this lift. Once the new coke drums are in place, the derrick structure will then be reset atop the drums; piping, wiring, and controls will be reconnected; and, the Delayed Coker Unit will be placed back in operation.

The removed drums will be dismantled on site and transported by semi-truck for metal recycling. Other demolition debris will be transported to the appropriate disposal facility.

2.2.1 Construction of the Proposed Project

The preliminary construction schedule calls for road surface improvements at King Harbor to be completed in the first phase of work, which is expected to commence in the fourth quarter of 2012. Construction work to be completed within the Refinery is expected to occur during 2013 and be completed by the mid-2014. The number of construction workers for the proposed Project will peak at approximately 335 during the first quarter of 2014. During this period, construction activities are planned for seven days per week, incorporating two 10-hour shifts per day. All other construction periods for the proposed Project are expected to operate five days per week with one 10-hour shift per day.

2.2.2 Operation of the Proposed Project

The proposed Project would not result in an increase in the permanent work force at the Refinery. The proposed Project is not expected to increase or decrease the overall Refinery crude throughput capabilities. The proposed Project would improve the reliability of the Delayed Coker Unit, which is expected to result in a three to four percent increase in the operational efficiency of the Delayed Coker Unit on an annual basis. Consequently, the proposed Project is expected to result in an increase in coke truck transport of three to four percent. Coke truck transport is expected to increase by up to 2,130 trucks per year, with no increase in the maximum number of trucks per day because daily truck trips are dependent of the maximum amount of coke produced per day, which will not change as a result of the proposed Project. No change to rail or marine vessel traffic is expected as a result of the proposed Project.

2.3 ABSENCE OF NEW INFORMATION

CEQA Guidelines §15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide examples of significant new information under this standard. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

No new information has been added to the EIR after public notice that would require recirculation of the EIR pursuant to CEQA Guidelines §15088.5.

2.4 DIFFERENCES OF OPINION REGARDING THE IMPACTS OF THE PROJECT

In making its determination to certify the Final EIR and to approve the proposed Project, the decision-making body recognizes that the proposed Project involves a number of environmental

issues and that a range of opinion exists with respect to those issues. The decision-making body has acquired an understanding of the range of opinion by its review of the Draft EIR, the comments received on the Draft EIR and the responses to those comments in the Final EIR. Additionally, the decision-making body has its own experience and expertise in assessing air quality effects and in administering its regulatory and permitting programs. The decision-making body has reviewed and considered, as a whole, the evidence and analysis presented in the Draft EIR, the analysis presented in the comments on the Draft EIR, the analysis presented in the Final EIR, and the expert opinions of SCAQMD staff addressing those comments. The decision-making body has gained a comprehensive and well-rounded understanding of the environmental issues presented by the proposed Project. In turn, this understanding has enabled the decision-making body to make its decisions after weighing and considering the various viewpoints on these important issues. The decision-making body accordingly certifies that its findings are based on full appraisal of all of the information contained in the Final EIR, as well as the evidence and other information in the record.

2.5 IMPACTS AND MITIGATION MEASURES

This attachment provides the written analysis and conclusions for the decision-making body regarding the environmental impacts of the proposed Project and the mitigation measures proposed in the Final EIR to be adopted by the decision-making body. In making these findings, the decision-making body has considered the opinions of other members of the public, including opinions that may disagree with some of the analysis used in the EIR. The decision-making body finds that the appropriate methodology for calculating effects and determining significance is a judgment within the discretion of the decision-making body; the method of analysis used in the Final EIR is supported by substantial evidence in the record, including the expert opinions of the SCAQMD staff; and the significance thresholds used in the Final EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the proposed Project.

Table 1 summarizes the environmental determinations of the Final EIR regarding the proposed Project's impacts. This table does not attempt to describe the full analysis of each environmental impact contained in the Final EIR. Instead, Table 1 provides a summary description of each impact and states the decision-making body's findings on the significance of each impact. A full explanation of these environmental findings and conclusions can be found in the Final EIR. These findings hereby incorporate by reference the discussion and analyses in the Final EIR supporting the Final EIR's determinations regarding the proposed Project's impacts and mitigation measures designed to address those impacts. In making these findings, the decision-making body ratifies, adopts, and incorporates the analysis and explanation in the Final EIR and ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

Table 1
Summary of Environmental Impacts, Mitigation Measures and Residual Impacts

Impact	Project-Specific Impact	Cumulative Impact
Air Quality		
Construction NO _x emissions	Significant	Significant
Construction emissions for VOC, CO, SO _x , PM ₁₀ , and PM _{2.5}	Not significant	Not significant
Localized construction impacts for NO ₂ , CO, PM ₁₀ , and PM _{2.5}	Not significant	Not significant
Operational VOC, CO, NO _x , SO _x , PM ₁₀ , and PM _{2.5} , emissions	Not significant	Not significant
Operational cancer & non-cancer health risk impacts	Not significant	Not significant
GHG impacts	Not applicable	Not significant
Noise		
Construction noise impacts	Significant	Not significant
Operation noise and ground vibration impacts	Not significant	Not significant
Transportation/Traffic		
Construction transportation and traffic	Significant	Not significant
Operational transportation and traffic	Not significant	Not significant

Notes:

NO₂ = nitrogen dioxideNO_x = nitrogen oxidesPM₁₀ = particulate matter less than 10 microns in diameterPM_{2.5} = particulate matter less than 2.5 microns in diameterSO_x = sulfur oxides

VOC = volatile organic compounds

As shown in Table 1, project-specific construction traffic is expected to exceed the applicable SCAQMD significance threshold (see Final EIR Subsection 4.4.3). An analysis of potential mitigation measures was conducted to determine if construction traffic could be mitigated to less than the applicable significance threshold. The analysis identified project design features along with one feasible mitigation measure that could reduce traffic to the Refinery to less than significant. Therefore, applying the mitigation measure would reduce the traffic impacts to less than significant. Consistent with CEQA Guidelines findings are only required for impacts that cannot be mitigated to less than significant. Therefore, findings are not required for construction traffic impacts since they can be mitigated to less than significant.

3.0 FINDINGS

CEQA prohibits a public agency from approving or carrying out a project for which a CEQA document has been completed which identifies one or more significant adverse environmental

effects of the project 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 (CEQA Guidelines §15091). The following sets forth findings for the significant adverse impacts identified in the EIR that cannot be reduced to insignificance, those that can be mitigated to less than significant, and the rationale for each finding. The findings are supported by substantial evidence in the record as explained in each finding. These 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 three potentially significant adverse environmental impacts that cannot be reduced to a level of insignificance: (1) air quality NOx emissions associated with construction activities; (2) noise impacts associated with coke drum transport during construction activities; and (3) cumulative air quality NOx emissions associated with construction. The Final EIR also identified one potentially significant adverse environmental impact that can be reduced to a level of insignificance, traffic associated with construction activities,

3.1.1 Construction Emissions of NOx Would Exceed SCAQMD Regional Significance Thresholds

Finding: The decision-making body finds that (1) mitigation measures were incorporated into the project that would reduce the significant adverse construction air quality impacts, but not to insignificance, (2) such mitigation measures are within the jurisdiction of the SCAQMD, and (3) no feasible measures were identified that would mitigate this significant adverse construction NOx air quality impact to insignificance. The air quality analysis showed that no other criteria pollutant emissions during construction would exceed any of the applicable regional significance thresholds.

Explanation: The project-specific construction emissions of NOx are expected to exceed the applicable SCAQMD regional significance threshold (see Final EIR Subsection 4.2.2.1). An analysis of potential mitigation measures was conducted to determine if construction NOx emissions could be mitigated to less than the applicable regional significance threshold. The analysis identified eight feasible mitigation measures that could reduce NOx emissions, but would not reduce the level to less than significant. Though these measures would not reduce construction emissions below the SCAQMD NOx significance threshold, no other feasible mitigation measures or project alternatives have been identified that would reduce the construction impacts to less than significant. Further, the construction emission calculations were based on conservative assumptions and would likely overestimate actual emissions. In addition, the construction emissions would not have a long-term adverse air quality impact because these emissions will cease following the completion of construction. Finally, the localized significance threshold analysis indicates the proposed Project would not generate significant adverse localized change in local ambient air quality for carbon monoxide (CO), particulate matter (PM) 10 microns in diameter or 2.5 microns in diameter (PM10 and PM2.5, respectively), and NO₂ emission impacts from construction activities associated with the proposed Project. Therefore, no significant adverse localized impacts on air quality during construction are expected.

3.1.2 Construction-Related Noise Impact Associated with the Coke Drum Transport

Finding: The SCAQMD’s decision-making body makes the following findings with respect to the construction-related noise associated with the coke drum transport: (1) use of project design features identified in Section 4.3.2 and the mitigation measure incorporated into the project that would reduce the significant construction-related noise impacts, but not to insignificance, (2) such mitigation measures are within the jurisdiction of the SCAQMD, and (3) no feasible measures were identified that would mitigate this significant adverse construction noise impact to insignificance.

Explanation: The project-specific construction noise is expected to exceed the applicable SCAQMD significance threshold (see Final EIR Subsection 4.3.3.2). An analysis of potential mitigation measures was conducted to determine if construction noise could be mitigated to less than the applicable significance threshold. The analysis identified project design features and one feasible mitigation measure that could reduce noise during coke drum transport, but would not reduce the level to less than significant. Though these design features and mitigation measure would not reduce construction noise below the SCAQMD significance threshold, no other feasible mitigation measures or project alternatives have been identified that would reduce the construction impacts to less than significant. Further, the construction noise calculations were based on conservative assumptions and would likely overestimate actual noise levels. In addition, the construction noise would not occur for a long period of time because these increased noise levels would only occur on six consecutive nights (once for each drum) and cease following the movement of the coke drum through the area.

3.1.3 Cumulative Construction Emissions of NO_x Would Exceed SCAQMD Regional Significance Thresholds

Finding: The decision-making body finds that (1) mitigation measures were incorporated into the project that would reduce the significant adverse cumulative NO_x construction air quality impacts, but not to less than significant, (2) such mitigation measures are within the jurisdiction of the SCAQMD, and (3) additional feasible mitigation measures to reduce significant adverse NO_x construction air quality impacts have not been identified for other cumulative projects.

Explanation: The cumulative construction emissions of NO_x are expected to exceed the applicable SCAQMD regional significance threshold (see Final EIR Subsection 5.2.1.2). An analysis of potential mitigation measures was conducted to determine if project-specific construction NO_x emissions could be mitigated to less than the applicable regional significance threshold. The analysis identified eight feasible mitigation measures that could reduce the project-specific NO_x emissions, but would not reduce the level to less than significant. Though these measures will not reduce construction emissions below the SCAQMD NO_x significance threshold, no other feasible mitigation measures or project alternatives have been identified that would reduce the construction impacts to less than significant. Chevron does not have any authority to control construction emissions from the non-Chevron owned/operated projects that were considered in the cumulative impacts analysis. For the cumulative projects where the SCAQMD is the lead agency, feasible mitigation measures will be imposed as necessary. However, most of the cumulatively related projects identified in Chapter 5 of the Final EIR have

another entity or agency acting as the lead agency that is responsible for implementing feasible mitigation measures if required.

3.2 IMPACTS ASSOCIATED WITH ALTERNATIVES

The Final EIR evaluated five potential alternatives to the proposed Project. The Final EIR examines the environmental impacts of each alternative in comparison with the proposed Project and the relative ability of each alternative to satisfy the project objectives. The Final EIR also summarizes the criteria used to identify a range of reasonable alternatives for review and describes proposals that SCAQMD concluded did not merit additional, more-detailed review, either because they did not present viable alternatives to the proposed Project or they are variations on the alternatives that are evaluated in detail.

In making these findings, the decision-making body certifies that it has independently reviewed and considered the information on alternatives provided in the Final EIR, including the information provided in comments on the Draft EIR and the responses to those comments in the Final EIR. The Final EIR's discussion and analysis of these alternatives is not repeated in these findings, but the discussion and analysis of the alternatives in the Final EIR is incorporated into these findings by reference.

3.2.1 Description of Project Objectives

The primary objective of the proposed Project is to replace six existing coke drums with six new coke drums. By installing the six new coke drums the proposed Project would also meet the following project objectives:

- Eliminate the need for frequent repair and maintenance due to equipment age and stresses (heating and cooling of metal) from decades of operation;
- Increase the reliability of coke drum operations through substantially reducing unplanned repairs;
- Increase the ability of the Refinery to produce and supply reformulated gasoline and other petroleum products by minimizing equipment disruption and unplanned repairs to the coke drums; and,
- Reduce costs currently associated with the increasing numbers of unplanned repairs.

3.2.2 Project Alternatives that Would Reduce the Potentially Significant Impacts are Not Available

Finding: The Final EIR describes and evaluates five alternatives to the proposed Project. The decision-making body finds that the proposed Project would satisfy the project objectives better than all alternatives considered. The decision-making body finds that no alternatives would generate fewer or less severe environmental impacts than those of the proposed Project. Further no project alternatives would, on balance, have environmental advantages over the proposed Project that are sufficiently great to justify approval of such alternatives instead of the proposed

Project, in light of each such alternative's inability to satisfy the proposed Project objectives to the same degree as the proposed Project. Accordingly, the decision-making body has determined to approve the proposed Project instead of approving any of the alternatives.

In making this determination, the decision-making body finds that when compared to the alternatives described and evaluated in the Final EIR, the proposed Project provides a reasonable balance between fully satisfying the project objectives and reducing potential environmental impacts to an acceptable level. The decision-making body further finds and determines that the proposed Project should be approved, rather than one of the other alternatives.

Explanation: Potential adverse environmental impacts from five project alternatives were analyzed and it was determined that no feasible project alternatives were identified that would feasibly attain most of the basic objectives of the Project with fewer or less severe environmental impacts than those of the proposed Project (see Final EIR, Section 6.0).

Alternatives evaluated in the Final EIR for the proposed Project include the No Project Alternative, Alternate Project Route, Onsite Drum Assembly, Replace Drums in Place, and Replace Drums in Pairs. No feasible alternatives have been identified that would reduce the proposed Project's significant construction NOx emission impacts or construction noise to less than significant levels, as shown in Table 2, while achieving the basic objectives described above in Subsection 3.3.1.

Table 2
Environmental Impacts of Alternatives as Compared to Proposed Project

Environmental Topic	Proposed Project	Alt. 1 ^(a) (No Project)	Alt. 2 (Alternate Transport Route)	Alt. 3 (Onsite Drum Assembly)	Alt. 4 (Replace Drums in Place)	Alt. 5 (Replace Drums in Pairs)
Air Quality						
Construction	S	NS(-)	S(-)	S(-)	S(-)	S(+)
Operation	NS	NS(-)	NS(=)	NS(=)	NS(=)	NS(=)
Toxic Air Contaminants	NS	NS(-)	NS(=)	NS(=)	NS(=)	NS(=)
Greenhouse Gas	NS	NS(-)	NS(-)	NS(-)	NS(+)	NS(+)
Noise						
Construction Noise	S	NS(-)	S(+)	NS(-)	NS(-)	S(=)
Transportation/Traffic						
Construction	MNS	NS(-)	MNS(+)	NS(-)	NS(-)	MNS(=)
Hazards	NS	NS	NS	NS	S(+)	S(+)

(a) The No Project Alternative would eliminate the impacts associated with the proposed Project on a temporary basis only. The proposed Project or one of the feasible alternatives will be required to maintain the long term operation of the Refinery.

Notes: MNS = Mitigated, Not Significant
 NS = Not Significant
 S = Significant
 (-) = Potential impacts are less than the proposed Project.
 (+) = Potential impacts are greater than the proposed Project.
 (=) = Potential impacts are approximately the same as the proposed Project.

Summary of Findings Regarding Alternatives: For all of the foregoing reasons, the decision-making body has determined to approve the proposed Project instead of one of the alternatives to the proposed Project. The decision-making body finds that the range of alternatives evaluated in the Final EIR reflects a reasonable attempt to identify and evaluate various types of alternatives that would potentially be capable of reducing the proposed Project's environmental effects, while accomplishing most, but not all of the project objectives. The decision-making body finds that the alternatives analysis is sufficient to inform the decision-making body and the public regarding the tradeoffs between the degree to which alternatives to the proposed Project could reduce environmental impacts and the corresponding degree to which the alternatives would hinder the project proponent's ability to achieve the project objectives.

3.3 FINDINGS CONCLUSION

Changes or alterations have been incorporated into the proposed Project to mitigate or minimize the potentially significant adverse environmental effects associated with project-specific traffic during construction impacts to less than the applicable significance threshold. No additional feasible mitigation measures or alternatives were identified that could further reduce the project-specific regional NOx air quality impacts associated with construction of the proposed Project, noise impacts associated with coke drum transport during construction activities, and cumulative air quality NOx emissions associated with construction.

The proposed Project is intended to achieve the project objectives as described above in Subsection 3.2.1 and Section 2.2 of the Final EIR. Based on achieving the project objectives described in Subsection 3.2.1, the SCAQMD finds that the proposed Project achieves the best balance between minimizing potential adverse environmental impacts and achieving the overall project objectives. The SCAQMD further finds that all of the findings presented here are supported by substantial evidence in the record.

4.0 STATEMENT OF OVERRIDING CONSIDERATION

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. In accordance with CEQA Guidelines §15093, the decision-making body has, in determining whether or not to approve the proposed Project, balanced the economic, social, technological, and other project benefits against its unavoidable environmental risks, and finds that each of the benefits of the proposed Project set forth below outweigh the significant adverse environmental effects that are not mitigated to less than significant levels. This statement of overriding considerations is based on the decision-making body's review of the Final EIR, response to comments, and other information in the administrative record. Each of the benefits identified below provides a separate and independent basis for overriding the significant environmental effects of the proposed Project. Accordingly, this Statement of Overriding Considerations regarding potentially significant adverse environmental impacts resulting from the proposed Project, as set forth below, has been prepared. 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 Project 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:

1. The analysis of potential adverse environmental impacts incorporates a “worst-case” approach. This means that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method likely overestimates the actual significant adverse impacts from the proposed Project.
2. The proposed Project would replace the six existing coke drums nearing the end of their useful lives with six new more efficient coke drums.
3. The proposed Project would eliminate the need for frequent repair and maintenance due to equipment age and stresses (heating and cooling of metal) from decades of operation.
4. The proposed Project would increase the reliability of coke drum operations through substantially reducing unplanned repairs.
5. Since the new coke drums would be more efficient and more reliable, possible hazards associated with unplanned repairs would likely be substantially reduced.
6. The proposed Project would reduce costs currently associated with the increasing number of unplanned repairs.
7. Implementing Mitigation Measures A-1 through A-8 reduces significant adverse NO_x construction air quality impacts but not to less than significant, while also providing construction emission reduction co-benefits because using newer construction engines would additionally provide PM and hydrocarbon emission reduction benefits. Similarly, using electricity in areas of the Refinery that are served by electricity in lieu of temporary power generators will reduce NO_x, SO_x, PM, CO, and hydrocarbon emissions.
8. Implementing Mitigation Measure N-1 would reduce construction noise impacts, although remaining noise impacts during drum transport could exceed the SCAQMD’s significance threshold. The construction noise impacts would be temporary and cease once drum transport is complete.
9. Implementing Mitigation Measure TT-1 would reduce traffic impacts during to construction to less than significant.

In balancing the benefits of the overall project described above with the proposed Project’s unavoidable and significant adverse environmental impacts, SCAQMD finds that the proposed Project’s benefits individually and collectively outweigh the unavoidable adverse impacts, such that these impacts are acceptable. The SCAQMD further finds that substantial evidence presented in the Final EIR supports adopting the Final EIR despite the proposed Project’s potential adverse impacts.

5.0 RECORD OF PROCEEDINGS

Upon certification, the record of approval for this proposed Project, i.e., the Notice of Determination, will be posted and recorded by the Los Angeles County Clerk. The record of approval for the proposed Project and all documents and other materials related to this proposed Project may be found at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, 91765. The Custodian of the Record is the Deputy Executive Officer.

6.0 MITIGATION, MONITORING AND REPORTING PLAN

When a public agency conducts an environmental review of a proposed project in conjunction with approving it, 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 per the requirements of CEQA Guidelines §15097 and Public Resources Code (PRC) §21081.6. PRC §21081.6 states in part that when making the findings required by §21081(a) or when adopting an EIR pursuant to §21080(c)(2):

“... 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 or 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 discussed herein are primarily the responsibility of Chevron to implement. To certify compliance, documentation that mitigation measures have been implemented will be maintained by Chevron to ensure potential environmental impacts are mitigated to the greatest extent feasible.

6.1 AIR QUALITY IMPACTS AND MITIGATION MEASURES

Construction-related emissions of NO_x would exceed the applicable SCAQMD regional significance thresholds for daily construction emissions. Emission sources include worker vehicles, heavy construction equipment, and grading/construction activities. The mitigation measures identified in the following discussion are intended to minimize the emissions associated with these emission sources.

On-Road Mobile Sources:

- A-1 Develop a Construction Emission Management Plan for the proposed Project. The Construction Emission Management Plan shall be submitted to SCAQMD CEQA staff for approval prior to the start of construction. The Plan shall include measures to minimize emissions from vehicles including, but not limited to consolidating truck

deliveries, prohibiting truck idling in excess of five minutes, description of truck routing, description of deliveries including hours of delivery, description of entry/exit points, locations of parking, and construction schedule. At a minimum the Construction Emission Management Plan will include the following mitigation measures.

Off-Road Mobile Sources:

- A-2 Prohibit construction equipment from idling longer than five minutes at the Refinery.
- A-3 Maintain construction equipment tuned up and with two to four degree retard diesel engine timing or tuned to manufacturer's recommended specifications that optimize emissions without nullifying engine warranties.
- A-4 The project proponent shall survey and document the proposed Project's construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Electric welders shall be used in all construction areas that are demonstrated to be served by electricity.
- A-5 The project proponent shall survey and document the proposed Project's construction areas and identify all construction areas that are served by electricity. This documentation shall be provided as part of the Construction Emissions Management Plan. Onsite electricity rather than temporary power generators shall be used in all construction areas that are demonstrated to be served by electricity.
- A-6 The project proponent shall use cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines. Engines equivalent to Tier 3 may consist of Tier 2 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting cranes rated 200 hp or greater with PM and NOx control devices must occur before the start of construction. If cranes rated 200 hp or greater equipped with Tier 3 engines are not available or cannot be retrofitted with PM and NOx control devices, the project proponent shall use cranes rated 200 hp or greater equipped with Tier 2 or equivalent engines. The project proponent shall provide documentation that cranes rated 200 hp or greater equipped with Tier 3 or equivalent engines are not available in the Construction Emissions Management Plan.
- A-7 For off-road construction equipment rated 50 to 200 hp that will be operating for eight hours or more, the project proponent shall use equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines. Engines equivalent to Tier 3 may consist of Tier 2 engines retrofitted with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Retrofitting equipment rated 50 to 200 hp with PM and NOx control devices must occur before the start of construction. If equipment rated 50 to 200 hp equipped with Tier 3 engines are not available or cannot be retrofitted with PM and NOx control devices, the project proponent shall use equipment rated 50 to 200 hp equipped with Tier 2 or equivalent engines. The project proponent shall provide documentation that equipment rated 50 to

200 hp equipped with Tier 3 or equivalent engines are not available in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available.

- A-8 Suspend use of all construction activities that generate air pollutant emissions during first stage smog alerts.

Other Mitigation Measures

During the course of construction, Delayed Coker Unit and associated combustion sources will be shutdown to accomplish the proposed Project and emission reductions will occur. However, while the reductions are quantifiable, the emission reductions do not directly offset all peak construction emissions, but only offset emissions during the turnaround and, therefore, are not being accumulated as emissions reductions mitigation. Table 3 shows the estimated emission reductions that are expected to occur from not operating refinery equipment during the construction period.

Other mitigation measures were considered, but were rejected because they would not further mitigate the potential significant impacts. These mitigation measures include: (1) provide temporary traffic control during all phases of construction activities (traffic safety hazards have not been identified); (2) implement a shuttle service to and from retail services during lunch hours (most workers eat lunch on-site and lunch trucks will visit the construction site); (3) use methanol, natural gas, propane or butane powered construction equipment (equipment is not CARB-certified or commercially available); and (4) pave unpaved roads (most Refinery roads are already paved).

**Table 3
Emission Reductions from the Delayed Coker Unit Shutdown During Construction
(lbs/day)**

Pollutant	Estimated Emissions Reduction
CO	284
NOx	121
SOx	181
VOC	59
PM10	64

6.2 AIR QUALITY MITIGATION MONITORING AND REPORTING

Implementing Party: The SCAQMD finds that air quality mitigation measures A-1 through A-8 will be implemented by Chevron.

Monitoring Agency: The SCAQMD has made these mitigation measures fully enforceable through a legally binding instrument, Attachment 2 for the Chevron Products Company El Segundo Refinery Coke Drum Reliability Project – Declaration of Certification, signed by the Applicant’s Refinery General 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 these mitigation measures. Mitigation monitoring and reporting will be accomplished as follows:

MMA-1: DEVELOP A CONSTRUCTION EMISSION MANAGEMENT PLAN

Chevron shall develop and submit a Construction Emission Management Plan to the SCAQMD for approval prior to starting construction activities. Upon approval, Chevron shall train all personnel subject to the requirements set forth in the Construction Emission Management Plan on how to comply with the requirements in the plan, and document that training. The SCAQMD may conduct routine inspections of the site to verify compliance.

The Construction Emission Management Plan shall include all of the following: description of construction traffic control methods at the Refinery such as flag persons, contractor entry/exit gates, etc.; construction schedule including hours of operation; description of truck routing; and, description of deliveries including hours of delivery.

Traffic Control Plan

Traffic requiring entrance onto the Refinery property will be directed toward any one of the multiple entry gates at the Refinery, so that congestion, as well as associated air pollution, will be minimized.

Points of entry will be selected to maximize Refinery security and reduce traffic-associated emissions. Chevron Procurement will consider delivery items, time of delivery, in-plant congested areas, surrounding area traffic, and gate security issues when assigning a gate entry location.

Onsite parking will be used. Contractor arrival directions will be monitored.

Construction Schedule

In an effort to reduce traffic by construction workers, Chevron has requested its contractors work a 6:30 a.m. to 5:00 p.m. shift. Most work will be scheduled to consist of a five-day work week and a 10-hour work day. In addition, some work will be scheduled to include a night shift, which will begin at 5:00 p.m. and end around 3:30 a.m. Critical path work may require a deviation from the aforementioned workweek and start- and stop-times; however, deviations will be minimized.

During the Delayed Coker Unit shutdown, extended work shifts and night shifts, scheduled six to seven days per week, are anticipated. Extended construction work schedule shifts and night shifts would continue to require efforts by the project proponent to minimize the travel time during peak travel periods.

Coke drum transport will occur between 9:00 p.m. and 3:00 a.m. to avoid peak travel periods. Coke drum transport will comply with local jurisdictions, California Highway Patrol, and Caltrans requirements.

Trip Reduction Plan

No feasible mitigation has been identified for the emissions from on-road vehicle trips. CEQA Guidelines §15364 defines feasible as ". . . capable of being accomplished in a successful manner." No feasible mitigation measures for off-site motor vehicles have been identified. Health and Safety Code §40929 prohibits the air districts and other public agencies from requiring an employee trip reduction program making such mitigation infeasible. However, Chevron will encourage voluntary ridesharing and public transit use to reduce single occupancy vehicle trips.

Delivery of Equipment and Materials

Chevron will coordinate the delivery of equipment and materials to avoid peak hour traffic, whenever possible. That is, delivery of construction materials to the site will be scheduled to occur during off-peak periods (i.e., from 8:30 a.m. until 4:00 p.m. Monday through Friday). Chevron will require that equipment and material deliveries be minimized between the hours of 7:00 a.m. to 8:00 a.m. and 4:30 p.m. to 5:30 p.m. to reduce traffic in and out of the Refinery during peak traffic times. Exceptions will be made for trucks carrying time-critical materials, e.g., concrete delivery and soil hauling (which eliminates the double handling or on-site stock-piling of soil, preventing it from being moved from place to place due to lack of adequate staging area, and subsequent removal at a later time via trucks). Delivery routes and schedules will be developed pursuant to Caltrans regulations.

Necessary oversized and/or heavy loads will be required for the proposed Project. These deliveries are subject to Caltrans regulations and will be coordinated with local police departments and the California Highway Patrol. These trips will be scheduled to avoid peak hour traffic.

MMA-2: PROHIBIT CONSTRUCTION EQUIPMENT FROM IDLING LONGER THAN FIVE MINUTES

Chevron will notify all contractors that construction equipment will be limited to no longer than five minutes of idling time. This requirement will be included in the construction contracts.

MMA-3: MAINTAIN CONSTRUCTION EQUIPMENT, TUNED UP AND WITH TWO TO FOUR DEGREE RETARD DIESEL ENGINE TIMING

Chevron, in cooperation with the construction contractors, will maintain vehicle and equipment maintenance records for the construction portion of the proposed Project. All construction vehicles must be maintained in compliance with the manufacturer's recommended maintenance schedule. Chevron will maintain their construction equipment and the construction contractor will be responsible for maintaining their equipment and maintenance records. All maintenance records for the Refinery and the construction contractors will remain onsite for a period of at least two years following completion of construction.

MMA-4: USE ELECTRIC WELDERS INSTEAD OF GAS OR DIESEL WELDERS IN AREAS OF THE REFINERY WHERE ELECTRICITY IS AVAILABLE

Chevron and the construction contractors will conduct a survey of the proposed Project area to assess whether the existing infrastructure can provide access to electricity, as available, within the Refinery. Construction areas within the Refinery where electricity is not available will be identified on a site plan as part of the Construction Emission Management Plan. The use of gasoline or diesel welders shall be prohibited in areas of the Refinery that are shown to have access to electricity. Chevron will assess the number of electrical welding receptacles available and will indicate whether diesel generators or welders are required for the proposed Project. Chevron shall include in all construction contracts the requirement that diesel welders are only allowed to operate in the portions of the Refinery as identified on the site plan as not being accessible to electric power. If gasoline or diesel welders are actually used, Chevron shall maintain welder records that indicate the location where welders are operated for a period of at least two years from completion of construction.

MMA-5: USE ONSITE ELECTRICITY RATHER THAN TEMPORARY POWER GENERATORS IN AREAS OF THE REFINERY WHERE ELECTRICITY IS AVAILABLE

The use of temporary power generators shall be prohibited in areas of the Refinery that have existing infrastructure to provide access to electricity. Construction areas within the Refinery where electricity is not available will be identified on a site plan as part of the Construction Emission Management Plan. The use of temporary power generators outside of these identified areas shall be prohibited. Chevron shall include in all construction contracts the requirement that the use of temporary power generators is prohibited in certain portions of the Refinery as identified on the site plan. Chevron shall maintain records that indicate the location where the generators are operated, if at all, for a period of at least two years from completion of construction.

MMA-6: USE CRANES RATED AT 200 HP OR GREATER EQUIPPED WITH TIER 3 ENGINES OR EQUIVALENT ENGINES

All cranes greater than 200 hp shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines as specified in the California Code of Regulations, Title 13, §2423(b)(1) unless such engine is not available for a particular item of equipment within the southern California area for use for the needed construction equipment for the proposed Project. Equivalent engines will be required to meet the Tier 3 by retrofitting Tier 2 engines with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Tier 2 engines shall be used if cranes rated at 200 hp or greater equipped with Tier 3 engines are not available or cannot be retrofitted with PM and NOx control devices.

Prior to construction, Chevron will retrofit all feasible cranes with Tier 2 engines of 200 hp or greater with diesel particulate filters and catalysts that will reduce PM and NOx emissions.

Chevron shall provide documentation that cranes rated at 200 hp or greater equipped with Tier 3 or equivalent engines are not available in the Construction Emissions Management Plan or

associated subsequent status reports as information becomes available. During construction and for two years following construction completion of the proposed Project, Chevron shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with this mitigation measure as specified in Table 4.

MMA-7: USE CONSTRUCTION EQUIPMENT RATED 50 TO 200 HP THAT WILL BE OPERATING EIGHT HOURS OR MORE EQUIPPED WITH TIER 3 ENGINES OR EQUIVALENT ENGINES

All construction equipment rated 50 to 200 hp shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines as specified in the California Code of Regulations, Title 13, §2423(b)(1) unless such engine is not available for a particular item of equipment within the southern California area for use for the needed construction equipment for the proposed Project. Equivalent engines will be required to meet the Tier 3 by retrofitting Tier 2 engines with diesel particulate filters and oxidation catalysts, selective catalytic reduction, or other equivalent NOx control equipment. Tier 2 engines shall be used if equipment rated 50 to 200 hp is not available or cannot be retrofitted with PM and NOx control devices.

Prior to construction, Chevron will retrofit all feasible construction equipment rated 50 to 200 hp with diesel particulate filters and catalysts that will reduce PM and NOx emissions.

Chevron shall provide documentation that equipment rated 50 to 200 hp equipped with Tier 3 or equivalent engines are not available in the Construction Emissions Management Plan or associated subsequent status reports as information becomes available. During construction and for two years following construction completion of the proposed Project, Chevron shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with this mitigation measure as specified in Table 4.

MMA-8: SUSPEND ALL CONSTRUCTION ACTIVITIES THAT GENERATE AIR EMISSIONS DURING FIRST STAGE SMOG ALERTS

If and when any first stage smog alert or greater occurs, Chevron will record the date and time of each alert, will suspend all activities that generate emissions, and will record the date and time when the use of construction equipment and construction activities are suspended. This log shall be maintained onsite for a period of at least two years from completion of construction.

6.3 NOISE IMPACTS AND MITIGATION MEASURES

The noise impacts from the proposed Project associated with the coke drum transport are potentially significant. In addition to the Project Design Features outlined in Section 4.3.2 of the Final EIR, the following noise mitigation measure will be employed to reduce the potential noise impact associated with the transport carrier:

On-Road Mobile Sources:

N-1 Noise from the existing hydraulic power units on the transport carrier will be reduced by installation of mufflers.

6.4 NOISE MITIGATION MONITORING AND REPORTING

Implementing Party: The SCAQMD finds that noise mitigation measures N-1 will be implemented by Chevron.

Monitoring Agency: The SCAQMD has made these mitigation measures fully enforceable through a legally binding instrument, Attachment 2, for the Chevron Products Company El Segundo Refinery Coke Drum Reliability Project – Declaration of Certification, signed by the Applicant’s Refinery General 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 these mitigation measures. Mitigation monitoring and reporting will be accomplished as follows:

MMN-1: INSTALL MUFFLERS ON EXISTING COKE DRUM TRANSPORT CARRIERS

Chevron shall install noise mufflers on the existing hydraulic power units on the transport carriers used to move coke drums from King Harbor in Redondo Beach to the Refinery. During construction and for two years following construction completion of the proposed Project, Chevron shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with this mitigation measure as specified in Table 4.

6.5 TRAFFIC IMPACTS AND MITIGATION MEASURES

The impact of the proposed Project on traffic and transportation would be less than significant with the implementation of traffic control plans and the related Project Design Features, so no additional mitigation measures are required. In order to enforce one of the Project Design Features, mitigation measure TT-1 will be required. (Note that other Project Design Features are enforced through required existing regulations, and required permits and approvals).

TT-1 Construction workers during the Refinery turnaround (peak construction activities) will be prohibited from accessing the Refinery from Sepulveda Boulevard and Rosecrans Avenue, and will be required to use Main Street and Vista Del Mar via Imperial Highway. This mitigation measure will be incorporated into the contract with the construction contractor and enforced by observing employee arrivals at the beginning of the work shifts to observe the direction of arrivals. The measure will be enforced through initial training, consultations, reprimands, and ultimately through employee termination.

6.6 TRAFFIC MITIGATION MONITORING AND REPORTING

Implementing Party: The SCAQMD finds that traffic mitigation measure TT-1 will be implemented by Chevron.

Monitoring Agency: The SCAQMD has made these mitigation measures fully enforceable through a legally binding instrument, Attachment 2, for the Chevron Products Company El Segundo Refinery Coke Drum Reliability Project – Declaration of Certification, signed by the Applicant’s Refinery General 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 these mitigation measures. Mitigation monitoring and reporting will be accomplished as follows:

MMTT-1: REQUIRE CONTRACTORS TO USE SPECIFIC ROUTES FOR TRANSPORTATION TO THE REFINERY

Chevron shall incorporate transportation route restrictions into contracts with the construction contractor. Chevron shall periodically observe construction worker arrival at the Refinery to ensure compliance with use of designated routes. Chevron shall provide initial training on the designated routes. Additionally, Chevron shall provide consultation, reprimands, and discipline, as necessary, to non-compliant construction workers. During construction and for two years following construction completion of the proposed Project, Chevron shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with this mitigation measure as specified in Table 4.

7.0 CONCLUSION

During the construction of the proposed Project and for two years following completion of construction, Chevron will maintain records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with imposed Mitigation Measures as specified above and in Table 4. All construction logs and other records shall be made available to SCAQMD inspectors upon request. Chevron will be required to submit quarterly reports to the SCAQMD during the construction phase that summarize the construction progress; includes all required logs, inspection reports, and monitoring reports; identifies any problems; and, provides solutions to problems, as necessary. SCAQMD staff and Chevron will evaluate the effectiveness of this monitoring program during the construction period. If either the monitoring program or the mitigation measures set forth above are deemed inadequate, the SCAQMD or another responsible agency may require Chevron to employ additional or modified monitoring measures and/or measures to effectively mitigate identified significant adverse impacts to the levels identified in the Final EIR.

Table 4

Mitigation, Monitoring and Reporting Plan for Chevron Products Company El Segundo Refinery – Coke Drum Reliability Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
A-1/Schedule delivery of construction materials to the site to occur during off-peak periods (i.e. from 8:30 a.m. until 4:00 p.m.) and/or after 5:30 p.m. and before 7:00 a.m., except for time-sensitive materials.	Chevron	Maintain records of the date and time of each construction material delivery.	1. SCAQMD 2. SCAQMD 3. Daily
A-1/Limit access to and from the construction site.	Chevron	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
A-1/Provide sufficient parking on the refinery site and do not permit on-street parking	Chevron	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 and are not permitted to use on-street parking.	1. SCAQMD 2. SCAQMD 3. Prior to the start of construction
A-1/Record number of construction personnel on-site.	Chevron	Maintain records of number of construction personnel on-site.	1. SCAQMD 2. SCAQMD 3. Daily
A-1/Record number of delivery trucks and haul trucks	Chevron	Maintain records of number of delivery trucks and haul trucks entering the refinery.	1. SCAQMD 2. SCAQMD 3. Daily
A-2/Restrict contractors from idling construction equipment that operates eight hours per day from longer than five minutes.	Chevron	Prepare standard notification letter that explains idling limitation during deliveries and provide copy to all contractors.	1. SCAQMD 2. SCAQMD 3. At time purchase order is issued

22

Table 4 (Continued)

Mitigation, Monitoring and Reporting Plan for Chevron Products Company El Segundo Refinery – Coke Drum Reliability Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
A-3/Identify construction equipment that will undergo retarding of diesel engine timing for the purpose of reducing emissions.	Chevron	Submit to SCAQMD a letter that identifies the construction equipment that will undergo retarding of diesel engine timing as follows: 1. Equipment ID; 2. Equipment type; 3. Equipment manufacturer and model; 4. Engine horsepower rating 5. Power source/Fuel type.	1. SCAQMD 2. SCAQMD 3. Submit letter to SCAQMD prior to scheduled use in the field and quarterly thereafter
A-3/Schedule periodic maintenance activities for all vehicle and construction equipment, including regular tune-ups and retard diesel engine timing.	Chevron	Maintain records of maintenance activities for all vehicle and construction equipment.	1. SCAQMD 2. SCAQMD 3. Daily
A-4/Use electric welders where existing infrastructure to provide access to electricity is available.	Chevron	Submit to SCAQMD a site plan that identifies the construction areas within the Refinery where electricity is not available.	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field
A-4/Identify diesel welders used during construction.	Chevron	Maintain records of diesel welders used during construction that specify the following: 1. Equipment ID; 2. Welder type; 3. Manufacturer and model number 4. Date, time and duration of operation 5. Location within the refinery where operated 6. Amount of fuel used (applies to non-electric welders)	1. SCAQMD 2. SCAQMD 3. Daily
A-5/Use on-site electricity instead of temporary power generators where existing infrastructure to provide access to electricity is available.	Chevron	Submit to SCAQMD a site plan that identifies the construction areas within the Refinery where electricity is not available.	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field

23

Table 4 (Continued)

Mitigation, Monitoring and Reporting Plan for Chevron Products Company El Segundo Refinery – Coke Drum Reliability Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
A-5/Identify temporary diesel power generators used, the equipment rating, the date, time and duration of operation, and the location within the refinery where operated.	Chevron	Maintain records of temporary power generators used during construction by identifying each unit as follows: 1. Equipment ID; 2. Generator type; 3. Equipment manufacturer and model; 4. Engine horsepower rating 5. Date on-site and hours of operation 6. Type and amount of fuel used 7. Equipment location	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field
A-6/Retrofit cranes of 200 hp and greater with diesel particulate filters and catalyst that do not meet California Tier 3 standards.	Chevron	Submit letter to SCAQMD verifying retrofitting has occurred including manufacturer information for particulate filters and catalysts.	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field
A-7/Equip 50 to 200 hp-sized construction equipment with California Tier 3 compliant engines or retrofit Tier 2 engines with diesel particulate filters and NOx catalysts. Verify that each diesel engine meets, Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines.	Chevron	Submit a list to SCAQMD of all large off-road construction equipment that specifies: 1. Equipment ID; 2. Equipment description/ type; 3. Manufacturer and model number; 4. Engine horsepower rating 5. Engine emission certification 6. If not certified to Tier 3 or better, documentation that a California Tier 3 engine is not available. 7. Retrofit method or reason why the equipment will not be retrofitted.	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field

Table 4 (Concluded)

Mitigation, Monitoring and Reporting Plan for Chevron Products Company El Segundo Refinery – Coke Drum Reliability Project

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
A-8/Suspend use of construction equipment during first stage smog alert or greater.	Chevron	Maintain records of date and time of each first stage smog alert or greater.	1. SCAQMD 2. SCAQMD 3. Per first stage smog alert or greater
N-1/Install mufflers on existing coke drum transport carriers	Chevron	Maintain records documenting muffler installation for all coke drum transport carriers used.	1. SCAQMD 2. SCAQMD 3. Prior to use in the field
TT-1/ Restrict contractors to arriving at the Refinery via designated routes.	Chevron	Maintain records documenting training, observation, and enforcement of restriction.	1. SCAQMD 2. SCAQMD 3. Weekly