

April 2004

SCH No. 2003031044

**PARAMOUNT REFINERY**

**CLEAN FUELS PROJECT**

**FINAL ENVIRONMENTAL IMPACT REPORT**

**Statement of Findings, Statement of Overriding Considerations, and  
Mitigation Monitoring Plan**

**Executive Officer**

Barry Wallerstein, D. Env.

**Deputy Executive Officer**

**Planning, Rules, and Area Sources**

Elaine Chang, DrPH

**Assistant Deputy Executive Officer**

**Planning, Rule Development and Area Sources**

Laki Tsopoulos, Ph.D., P.E.

**Planning and Rules Manager**

**CEQA and Socioeconomic Analyses**

Susan Nakamura

Submitted to:

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Prepared by:

**ENVIRONMENTAL AUDIT, INC.**

**Reviewed by:** James Koizumi - Air Quality Specialist  
Steve Smith, Ph.D. - Program Supervisor  
Barbara Baird - District Counsel

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

Chairman: WILLIAM A. BURKE, Ed.D.  
Speaker of the Assembly Representative

Vice Chairman: S. ROY WILSON, Ed.D.  
Supervisor, Fourth District  
Riverside County Representative

### **MEMBERS**

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

JANE CARNEY  
Senate Rules Committee Appointee

BEATRICE J. S. LAPISTO – KIRTLEY  
Councilmember, City of Bradbury  
Cities Representative, Los Angeles County, Eastern Region

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

BILL POSTMUS  
Supervisor, First District  
San Bernardino County Representative

JAMES W. SILVA.  
Supervisor, Second District  
Orange County Representative

CYNTHIA VERDUGO-PERALTA  
Governor's Appointee

JAN PERRY  
Cities Representative, Los Angeles County, Western Region

DENNIS YATES  
Councilmember, City of Chino  
Cities Representative, San Bernardino County

### **EXECUTIVE OFFICER**

BARRY WALLERSTEIN, D. Env.

**TABLE OF CONTENTS**

**PARAMOUNT REFINERY CLEAN FUELS PROJECT**

**ATTACHMENT I:  
Statement of Findings, Statement of Overriding Considerations  
and Mitigation Monitoring Program**

	Page No.
I. INTRODUCTION .....	1
II. SUMMARY OF THE PROPOSED PROJECT.....	2
III. STATEMENT OF FINDINGS .....	3
IV. STATEMENT OF OVERRIDING CONSIDERATIONS .....	6
V. MITIGATION MONITORING PLAN .....	8
VI. CONCLUSION.....	9

DABWORD:2150ATTACHTOC

## **I. INTRODUCTION**

The proposed project includes modifications to the Paramount Petroleum Corporation's Refinery (Refinery) in Paramount California that will allow it to produce cleaner-burning gasoline and ultra low sulfur diesel (ULSD) fuels for California markets in accordance with the requirements of United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB). Cleaner-burning fuels reduce emissions of criteria and toxic air pollutants and, thereby, help to achieve and maintain federal and state ambient air quality standards in the Basin.

The proposed refinery modifications were determined to be a "project" as defined by the California Environmental Quality Act (CEQA) (California Public Resources Code §21000 et seq.). The South Coast Air Quality Management District (SCAQMD) is the lead agency because it has primary approval authority over the project and, therefore, has prepared a Final Environmental Impact Report (EIR) pursuant to CEQA Guidelines §15089 and §15132.

The NOP/IS of a Draft EIR for the Clean Fuel Project were released for public review on March 12, 2003. The NOP/IS contains a project description and the environmental checklist as required by the California Environmental Quality Act (CEQA) Guidelines. A copy of the NOP/IS is included in Appendix A of the EIR. The environmental disciplines that were determined to have potentially significant impacts and were analyzed in the EIR include air quality, hazards/hazardous material, and transportation/traffic.

The Draft EIR for the proposed Paramount Clean Fuel Project was released for a 45-day public review and comment period beginning on December 17, 2003. The public comment period was extended to about 70-days (to February 25, 2004) due to requests from the public and the project applicant. One comment letter was received during the comment period for the Draft EIR. Responses to this comment letter were prepared and are included in Appendix E of the Final EIR. Minor changes were made to the text of the Final EIR due to public comments received on the Draft EIR or to finalize the EIR. The Final EIR concluded that there would be no significant adverse impacts on aesthetics, agriculture resources, biological resources, cultural resources, energy, geology/soils, hydrology/water quality, land use/planning, mineral resources, noise, population/housing, public services, recreation, and solid/hazardous waste. The environmental disciplines that were determined to have potentially significant impacts and analyzed in the EIR included air quality, hazards, and transportation/traffic. After further environmental analyses, the environmental resource where significant adverse environmental impacts would occur after implementation of mitigation measures was air quality. It should be noted that significant hazard impacts were identified in the Draft EIR for the proposed project. However, the alternative location identified in Alternative 3 of the Draft EIR (see Chapter 6) for the Naphtha Splitter is feasible. Therefore, the location of the Naphtha Splitter will be moved to the alternate site eliminating the potentially significant hazard impacts. Based on the analysis in the EIR, transportation/traffic was determined not to be significant. Accordingly, a Statement of Findings

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

---

and Overriding Considerations is required for the potentially significant adverse air quality impacts.

The Final EIR includes the Notice of Preparation (NOP) of a Draft EIR and Initial Study (IS) (March 12, 2003), the Draft Environmental Impact Report (December, 2003), and a Health Risk Assessment (Volume II) (December, 2003). The Final EIR includes a project description, the environmental setting, environmental impacts and mitigation measures, cumulative impacts, project alternatives, a Hazards Analysis (Appendix C of the Final EIR), and Responses to Comments (Appendix E of the Final EIR). All documents comprising the Final Environmental Impact Report (EIR) for the proposed project are available at the SCAQMD, 21865 Copley Drive, Diamond Bar, California, 91765. These documents can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by accessing <http://www.aqmd.gov/ceqa/nonaqmd.html>.

When considering a proposed project that has one or more significant adverse effects for approval, a public agency must make one or more written findings for each of those significant adverse effects, 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 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 project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'" Thus, after adopting the Statement of 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 Statement of Findings, Statement of Overriding Considerations and, pursuant to CEQA Guidelines §15097, a Mitigation Monitoring Plan.

## **II. SUMMARY OF THE PROPOSED PROJECT**

In order to make gasoline and diesel products that meet current and future CARB and U.S. EPA requirements, Paramount is proposing modifications to its existing Refinery. The objectives of the proposed project are to: (1) Produce cleaner-burning California gasoline blend stock for oxygenate blending (CARBOB) by removing benzene from naphtha streams; (2) produce finished reformulated gasoline (RFG) by blending ethanol and the CARBOB product; and (3) produce ULSD. At the Refinery, process unit modifications are required to the Light Naphtha Stabilizer, a hydrodesulfurization unit, the butane loading and unloading rack, and the gasoline blender. New equipment includes a Naphtha Splitter, a Benzene Saturation and Isomerization

unit, a Light Naphtha rundown chiller, a Pressure Swing Adsorption Unit, and Ethanol Unloading and Blending facilities. The proposed project will not increase the crude throughput capacity of the Refinery.

As a result of reformulating all of California's gasoline through its Phase 3 requirements, CARB estimates that the Phase 3 requirements will reduce statewide mobile source hydrocarbon emissions by 0.5 ton per day, nitrogen oxides (NOx) emissions by 19 tons per day, and will eliminate MTBE in gasoline. Toxic emissions are expected to decrease by about seven percent. These emission reductions were based on comparing the properties of the 1998 average gasoline to the properties of a representative CARB reformulated gasoline. The CARB Reformulated Gasoline (RFG) Phase 3 requirements are expected to preserve and enhance the motor vehicle emission reduction benefits of the current program and will further aid in meeting the emission reductions required by the State Implementation Plan (CARB, 1999).

Recently, U.S. EPA adopted national diesel fuel standards that will lower sulfur to 15 ppm starting in 2006. This change enables tighter emission standards for new diesel engines and retrofits that require the use of NOx oxidation catalysts and particulate filters. CARB has adopted the new sulfur limits into the California diesel fuel regulations. The new emission standards represent a 90 percent reduction of NOx emissions, 72 percent reduction of VOC emissions, and 90 percent reduction of PM emissions compared to the 2004 standards (CARB, 2003).

### **III. STATEMENT OF 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 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.

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

The Draft EIR concluded that the proposed project could result in significant adverse air quality and hazard impacts. The potentially significant hazard impacts were related to a potential release from the Naphtha Splitter. An alternative location for the Naphtha Splitter was evaluated in the Chapter 6 – Alternatives, which would reduce the potential hazard impacts to less than significant. The alternative location identified in the Draft EIR (see Chapter 6) for the Naphtha

Splitter is feasible. Therefore, the location of the Naphtha Splitter will be moved to the alternate site eliminating the potentially significant hazard impacts.

The only potentially significant adverse environmental impacts that cannot be reduced to a level of insignificance is air quality emissions associated with project operation.

**1. Operation emissions of VOCs (primarily from fugitive emission sources, e.g., pumps, valves, and flanges) would exceed SCAQMD significance thresholds.**

Finding: The SCAQMD finds that no feasible mitigation measures or project alternatives have been identified to lessen or minimize the potentially significant adverse operational air quality impacts associated with the proposed project.

Explanation: Operation emissions of VOCs (estimated to be 66.4 pounds per day) are expected to exceed the SCAQMD significance threshold of 55 pounds per day. The proposed project requires the installation of equipment (e.g., valves, flanges, and pumps) which is the primary source of fugitive VOC emissions from the proposed project. VOC emissions from fugitive components are controlled through the use of best available control technology (BACT). BACT, by definition, is the cleanest commercially available control equipment or technique. The use of BACT controls emissions to the greatest extent feasible for the modified emission sources. In addition, the fugitive components will be required to be included in an inspection and maintenance program to ensure that the equipment is properly maintained. Therefore, additional VOC emission reductions (through mitigation measures) from fugitive components associated with the proposed project equipment are not feasible.

**B. IMPACTS ASSOCIATED WITH PROJECT ALTERNATIVES**

**1. Operation of the Naphtha Splitter had the potential for significant hazard impacts in the event of a “worst-case” release scenario.**

Finding: The SCAQMD finds that an alternative site for the Naphtha Splitter was identified in the Draft EIR that would reduce the potentially significant hazard impacts to less than significant. The alternative site is feasible mitigation measure of the hazard impacts and has been incorporated into the project, therefore, the potentially significant adverse hazard impacts associated with the proposed project have been reduced to less than significant.

Explanation: The Draft EIR concluded that the proposed project could result in significant adverse hazard impacts associated with a potential release from the Naphtha Splitter. An alternative location for the Naphtha Splitter was evaluated in the Chapter 6 – Alternatives, which would reduce the potential hazard impacts to less than significant. The alternative location identified in the Draft EIR (see Chapter 6) for the Naphtha

Splitter is feasible. Therefore, the location of the Naphtha Splitter will be moved to the alternate site reducing the potentially significant hazard impacts to less than significant. The location of the Naphtha Splitter will be enforced through permit conditions.

**1. Project alternatives are not available to reduce the potentially significant air quality impacts.**

Finding: The SCAQMD finds that the identified project alternatives would not achieve the goals of the project with fewer or less severe air quality 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 project with fewer or less severe air quality impacts than the proposed project. No feasible alternatives have been identified that would reduce the proposed project's air quality impacts to a less than significant level while achieving the project objectives. Consequently, the proposed project is considered the preferred alternative to ensure that Paramount will be able to achieve all the objectives of the proposed project, which is to produce clean fuels as specified by state regulations, and minimize adverse environmental impacts.

**C. STATEMENT OF FINDINGS CONCLUSION**

Changes or alterations have been incorporated into the project to mitigate or minimize the potentially significant adverse environmental effects associated with certain project impacts, i.e., air quality impacts during operation, and hazards associated with proposed project operations. No additional feasible mitigation measures or project alternatives, other than those already included in the Final EIR, have been identified that can further mitigate the potentially significant project impacts on air quality and meet the proposed project objectives.

All feasible mitigation measures identified in the Final EIR have been adopted as set forth in the mitigation monitoring program. The analysis indicated that the alternatives would not reduce to insignificant levels the significant air quality impacts identified for the proposed project.

The need for cleaner burning fuels was identified in the 1990 federal Clean Air Act Amendments and the California Clean Air Act. Both the U.S. EPA and CARB have developed and mandated use of reformulated fuels with detailed specifications in severe non-attainment areas, such as the Basin, to reduce mobile source emissions. Based on these requirements, the SCAQMD finds that the proposed project achieves the best balance between minimizing potential adverse environmental impacts and achieving the project 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 this project may be found in the SCAQMD's Clerk of the Board's Office located at SCAQMD Headquarters in Diamond Bar, California.



#### **IV. STATEMENT OF OVERRIDING CONSIDERATIONS**

If significant adverse impacts of a proposed project remain after incorporation of 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 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 approved 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), the 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 above, 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 project outweigh the potentially significant unavoidable adverse impacts for the following reasons:

1. The proposed project will produce gasoline and diesel fuels in compliance with state and federal clean fuels requirements.
2. The federal Clean Air Act (CAA) directed the U.S. Environmental Protection Agency (U.S. EPA) to adopt federal reformulated fuel gasoline (RFG Phase 1) regulations applicable starting January 1995 in the nine major metropolitan areas of the country with the worst ozone pollution, including the South Coast Air Basin (Basin). The federal CAA required that RFG 1 contain at least 2.0 weight percent oxygen year-round. In addition to the federal RFG Phase 1 requirements, California adopted regulations for reformulated gasoline in 1991 (RFG Phase 2).

Because of the federal requirements for oxygen content in RFG Phase 1, an oxygen content specification was incorporated in the RFG Phase 2 California reformulated gasoline regulations. The RFG Phase 2 requirements were implemented in March 1996. While there are several oxygenates that can be used to meet the oxygenate requirement for gasoline, methyl tertiary butyl ether (MTBE) and ethanol are used most frequently. In 1996, over 95 percent of the gasoline used in California was blended with MTBE (CARB, 1999).

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

---

In December 1999, CARB developed additional regulations that affect the composition of gasoline in California. CARB adopted new gasoline specifications which are known as California Reformulated Gasoline Phase 3 (RFG Phase 3) requirements. The RFG Phase 3 requirements prohibit the use of MTBE, while establishing more stringent standards for sulfur and benzene content in gasoline. Taken together, the RFG Phase 3 requirements are intended to preserve current emission reduction benefits associated with RFG 2 and to gain additional hydrocarbon, NO<sub>x</sub> and toxic air contaminant (TAC) emissions reductions.

3. The CARB estimates that mobile source emission reductions from the use of the Phase 3 reformulated fuels will produce regional air quality benefits. CARB estimates that the use of Phase 3 reformulated gasoline will result in emission decreases of about 19 tons per day of NO<sub>x</sub> by 2005 and about a seven percent reduction in potency-weighted toxic emissions over the current fuel. These projected mobile source emission reductions will produce air quality and human health benefits. These benefits, however, were not included as part of the analysis of the proposed project's air quality impacts.
4. The diesel sulfur limit of 15 ppmw will help generate significant air quality benefits by enabling the effective performance of advanced diesel exhaust emissions control technologies that reduce emissions of ozone precursors (NO<sub>x</sub> and VOCs) and diesel particulate matter. These control technologies are needed to achieve the emissions reductions required for compliance with the stringent diesel engine emissions standards adopted by CARB in October 2001 for 2007 and subsequent model year medium-duty and heavy-duty diesel engines. The new emission standards represent a 90 percent reduction of NO<sub>x</sub> emissions, 72 percent reduction of VOC emissions, and 90 percent reduction of PM emissions compared to the 2004 standards. These standards will significantly reduce emissions of NO<sub>x</sub>, VOCs, SO<sub>x</sub>, and particulate matter, which will in turn result in reductions of ozone levels and ambient particulate matter levels. CARB estimates that the NO<sub>x</sub> emissions reductions in California are expected to range from about 100 tons per year in 2005 to about 35 tons per year in 2020. CARB estimates that the particulate matter emissions reductions in California are expected to range from about 16 tons per year in 2005 to about seven tons per year in 2020. Reductions in emissions of diesel particulate matter mean reduced ambient levels of toxic air contaminants found in diesel exhaust and reduced public exposure to those contaminants (California Air Resources Control Board, 2003. Proposed Amendments to the California Diesel Fuel Regulations. Staff Report: Initial Statement of Reasons. June 6, 2003).
5. The long-term effect of existing SCAQMD rules and Air Quality Management Plan (AQMP) control measures is the reduction of emissions district-wide,

contributing to attaining and maintaining state and federal ambient air quality standards (AAQS). The AQMP, which is updated every three years, identifies air pollutant levels relative to federal and state AAQS, establishes baseline and future emissions, and develops control measures to ensure attainment of the AAQS. The operation emissions associated with the proposed project will be accounted for in future revisions to the AQMP.

In balancing the benefits of the overall project with the project's unavoidable and significant adverse environmental impacts, the SCAQMD finds that the project benefits outweigh the unavoidable adverse impacts, such that these 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 project's adverse impacts.

## **V. MITIGATION MONITORING PLAN**

CEQA requires an agency to prepare a plan for reporting and monitoring compliance with and implementation of measures to mitigate significant adverse environmental impacts. Mitigation monitoring requirements are included in CEQA Guidelines §15097 and Public Resources Code §21081.6, which specifically state:

When making findings as required by subdivision (a) of Public Resources Code §21081 or when adopting a negative declaration pursuant to Paragraph (2) of subdivision (c) of Public Resources Code §21080, the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (Public Resources Code §21081.6). The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.

The provisions of CEQA Guidelines §15097 and Public Resources Code §21081.6 are triggered when the lead agency certifies a CEQA document in which mitigation measures, changes, or alterations have been required or incorporated into the project to avoid or lessen the significance of adverse impacts identified in the CEQA document. Public Resources Code §21081.6 leaves the task of designing a reporting or monitoring plan to individual public agencies.

The environmental resources that were identified in the Final EIR as having significant or potentially significant adverse impacts are identified below. The Final EIR concluded that no significant adverse impacts on aesthetics, agriculture resources, biological resources, cultural resources, energy, geology/soils, hazards/hazardous materials, hydrology/water quality, land

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

---

use/planning, mineral resources, noise, population/housing, public services, recreation, solid/hazardous waste, and transportation/circulation. The Final EIR concluded that operation emissions of VOCs, are expected to exceed the SCAQMD significance thresholds and, therefore, are considered to be significant.

No feasible mitigation measures were identified that would minimize or eliminate VOC emissions from fugitive components (e.g., valves, flanges, and pumps). VOC emissions from fugitive components are controlled through the use of BACT. BACT, by definition, is the cleanest commercially available control equipment or technique. The use of BACT controls emissions to the greatest extent feasible. In addition, the fugitive components will be required to be included in an inspection and maintenance program to ensure that the equipment is properly maintained. The use of BACT and the inspection and maintenance program will be enforced through SCAQMD permit conditions. Therefore, no monitoring activities are required for air quality impacts related to the operational phase of the proposed project.

## **VI. CONCLUSION**

No feasible mitigation measures have been identified for the proposed project that require additional monitoring.

2150DBSWORD:2150ttach1