

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

---

**Final Negative Declaration for:  
Paramount Petroleum Refinery  
7.5 MW Cogeneration Plant  
SCH No. 2001111161**

**December 20, 2001**

**Executive Officer**  
Barry Wallerstein, D. Env.

**Deputy Executive Officer, Planning  
Rules, and Area Sources**  
Elaine Chang, DrPH

**Manager  
Planning, Rules, and Area Sources**  
Alene Taber, AICP

Submitted to:  
**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

Prepared by:  
**ENVIRONMENTAL AUDIT, INC.**

**Reviewed by:** Mike Krause - Air Quality Specialist  
Steve Smith, Ph.D. - Program Supervisor  
Knut Beruldsen - Engineer

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

Chairman:

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

Vice Chairman:

NORMA J. GLOVER  
Councilmember, City of Newport Beach  
Cities Representative, Orange County

### **MEMBERS**

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

HAL BERNSON  
Councilmember, City of Los Angeles  
Cities Representative, Los Angeles County, Western Region

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

JON D. MIKELS  
Supervisor, Second District  
San Bernardino County Representative

LEONARD PAULITZ  
Councilmember, City of Montclair  
Cities Representative, San Bernardino County

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

CYNTHIA VERDUGO-PERALTA  
Governor's Appointee

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

**EXECUTIVE OFFICER**  
BARRY WALLERSTEIN, D. Env.

## TABLE OF CONTENTS

---

### TABLE OF CONTENTS

|   | Page No. |
|---|----------|
| <b>CHAPTER 1 – PROJECT DESCRIPTION</b>                  |          |
| 1.1 Introduction .....                                  | 1-1      |
| 1.2 Agency Authority .....                              | 1-1      |
| 1.3 Project Location .....                              | 1-1      |
| 1.4 Proposed Description .....                          | 1-2      |
| <b>CHAPTER 2 – ENVIRONMENTAL</b>                        |          |
| Introduction .....                                      | 2-1      |
| General Information .....                               | 2-1      |
| Environmental Resources Potentially Affected .....      | 2-2      |
| Determination .....                                     | 2-3      |
| Environmental Checklist and Discussion .....            | 2-4      |
| Aesthetics .....  | 2-4      |
| Agriculture Resources .....                             | 2-6      |
| Air Quality .....                                       | 2-7      |
| Biological Resources .....                              | 2-24     |
| Cultural Resources .....                                | 2-26     |
| Energy .....  | 2-27     |
| Geology and Soils .....                                 | 2-30     |
| Hazards and Hazardous Materials .....                   | 2-38     |
| Hydrology and Water Quality .....                       | 2-46     |
| Land Use and Planning .....                             | 2-51     |
| Mineral Resources .....                                 | 2-54     |
| Noise .....   | 2-55     |
| Population and Housing .....                            | 2-61     |
| Public Services .....                                   | 2-62     |
| Recreation .....  | 2-65     |
| Solid/Hazardous Waste .....                             | 2-66     |
| Transportation/Traffic .....                            | 2-68     |
| Mandatory Findings of Significance .....                | 2-72     |
| References .....  | 2-74     |
| <b>FIGURES:</b>   |          |
| Figure 1: Regional Map .....                            | 1-3      |
| Figure 2: Site Location Map .....                       | 1-4      |
| Figure 3: Project Location Map .....                    | 1-5      |
| Figure 4: Project Maximum Impact Locations .....        | 2-23     |
| Figure 5: Existing Land Use Paramount, California ..... | 2-53     |
| Figure 6: Noise Monitoring Locations .....              | 2-57     |

## TABLE OF CONTENTS

---

## TABLE OF CONTENTS

|   | Page No. |
|---|----------|
| <b>TABLES:</b>  |          |
| Table 1: Air Quality Significance Thresholds .....  | 2-8      |
| Table 2: Ambient Air Quality Standards .....  | 2-10     |
| Table 3: Ambient Air Quality South Coastal<br>Los Angeles County Monitoring Station ..... | 2-12     |
| Table 4: Ambient Air Quality Toxic Air Contaminants – North Long Beach .....              | 2-14     |
| Table 5: Cancer Risk Based on CARB North Long Beach<br>Monitoring Station Data .....      | 2-15     |
| Table 6: Peak Day Construction Emissions .....  | 2-16     |
| Table 7: Emission Increase Estimates .....  | 2-17     |
| Table 8: NOx Emission Decrease Estimates .....  | 2-18     |
| Table 9: Emission Decrease Estimates .....  | 2-18     |
| Table 10: Operational Emissions .....   | 2-19     |
| Table 11: Potentially Emitted Chemical and Associated Health Effects .....                | 2-21     |
| Table 12: Major Active or Potentially Active Faults in Southern California .....          | 2-33     |
| Table 13: Significant Historical Earthquakes in Southern California .....                 | 2-34     |
| Table 14: Truck Accident Rates for Cargo on Highways .....                                | 2-42     |
| Table 15: Existing Noise Levels .....   | 2-58     |
| Table 16: City of Paramount Noise Ordinance .....   | 2-58     |
| Table 17: Construction Noise Sources .....  | 2-59     |
| Table 18: Project Construction Noise Levels .....   | 2-59     |
| Table 19: Project Operational Noise Levels .....  | 2-60     |
| Table 20: Los Angeles County Landfill Status .....  | 2-67     |
| Table 21: Estimated Traffic Conditions .....  | 2-71     |
| <b>APPENDICES</b>   |          |
| Appendix A: Emission Calculations .....   | A-1      |
| Appendix B: Health Risk Assessment Results .....  | B-1      |
| Appendix C: Hazard Analysis .....   | C-1      |

DABWORD:2061:TOC