SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Attachment 1 to the Governing Board Resolution for: Final Program Environmental Assessment for Proposed Amended Regulation XX – Regional Clean Air Incentives Market (RECLAIM)

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

SCAQMD No. 06182009BAR

State Clearinghouse No: 2009061088

October 5, 2010

Executive Officer

Barry R. 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

Planning, Rule Development and Area Sources

Susan Nakamura

Author: Barbara Radlein Air Quality Specialist

Reviewed

By: Steve Smith, Ph.D. Program Supervisor, CEQA

Joe Cassmassi Planning and Rules Manager, Planning, Rule

Development, and Area Sources

Gary Quinn, P.E. Program Supervisor, Planning, Rule Development,

and Area Sources

Barbara Baird District Counsel

William Wong Principal Deputy District Counsel

Veera Tyagi Deputy District Counsel II

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

CHAIRMAN: WILLIAM A. BURKE, Ed.D.

Speaker of the Assembly Appointee

VICE CHAIR: 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 Representative

MICHAEL A. CACCIOTTI

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

BILL CAMPBELL

Supervisor, Third District Orange County Representative

JANE CARNEY

Senate Rules Committee Appointee

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

JUDY MITCHELL

Councilmember, Rolling Hills Estates

Cities of Los Angeles County, Western Region

JAN PERRY

Councilwoman, 9th 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.

TABLE OF CONTENTS

INTRODUCTION	1-1
SUMMARY OF THE PROPOSED PROJECT	1-2
POTENTIAL SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL	1-2
STATEMENT OF FINDINGS	1-5
STATEMENT OF OVERRIDING CONSIDERATIONS	1-7
MITIGATION MONITORING PLAN	1-9

ATTACHMENT 1

Introduction

Summary of the Proposed Project

Potential Significant Adverse Impacts Mitigated Below a Significant Level

Potential Significant Adverse Impacts that Cannot Be Reduced Below a Significant Level

Statement of Findings

Statement of Overriding Considerations

Mitigation Monitoring Plan

INTRODUCTION

The proposed amendments to Regulation XX - Regional Clean Air Incentives Market (RECLAIM) are considered a "project" as defined by the California Environmental Quality Act (CEQA) (California Public Resources Code §§21000 et seq.). The SCAQMD as Lead Agency for the proposed project, prepared a Notice of Preparation/Initial Study (NOP/IS) which identified environmental topics to be analyzed in a Draft Environmental Assessment (EA). The NOP/IS provided information about the proposed project to other public agencies and interested parties prior to the intended release of the Draft EA. The NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period from June 19, 2009, to July 21, 2009. The initial evaluation in the NOP/IS identified the topics of aesthetics, air quality, energy, hydrology and water quality, hazards and hazardous materials, and transportation and traffic as potentially being adversely affected by the proposed project. During that public comment period, the SCAQMD received three comment letters.

Of the comment letters received relative to the NOP/IS, in particular, Comment 2-4 from Comment Letter #2 suggested that a Program Environmental Assessment (PEA), in lieu of an EA, be prepared for the proposed project. In response to this comment, and in accordance with CEQA Guidelines §15168, SCAQMD has prepared a Final PEA to evaluate potential adverse impacts from the proposed project. The decision to prepare a PEA is appropriate because the proposed project consists of a series of actions that can be characterized as one large project and are related: 1) in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program (CEQA Guidelines §15168 (a)(3)); and, 2) as individual activities that would be carried out under the same authorizing regulatory authority and having similar environmental effects which can be mitigated in similar ways (CEQA Guidelines §15168 (a)(4)).

The Draft PEA, which included the NOP/IS and comment letters with responses to comments in Appendices C and D, respectively, was released for a 45-day public review and comment period from August 18, 2010 to October 1, 2010. Based on the conclusions in the NOP/IS prepared for the proposed project, the Draft PEA further analyzed whether or not the aesthetics, air quality, energy, hydrology and water quality, hazards and hazardous materials, and transportation and traffic impacts are significant. The Draft PEA concluded that only the topics of air quality and hydrology (water demand) would have significant adverse impacts.

Three comment letters were received during the public comment period on the analysis presented in the Draft PEA. Responses to these comment letters have been prepared and are included in Appendix E of the Final PEA The Final PEA, prepared pursuant to CEQA Guidelines §15132, identifies air quality and hydrology (water demand) as areas that may be adversely affected by the proposed project. No comment letters were received that identified other potentially significant adverse impacts from the proposed project.

Note that some minor modifications have been made to the Draft PEA to make it into a Final PEA. These modifications were evaluated by staff and it was concluded that none of the modifications alter any conclusions reached in the Draft PEA, nor do they constitute "significant

new information" and, therefore, do not require recirculation of the document pursuant to CEQA Guidelines §15088.5. The Final PEA will be presented to the Governing Board prior to its November 5, 2010 public hearing.

SUMMARY OF THE PROPOSED PROJECT

SCAQMD staff is proposing amendments to Regulation XX – Regional Clean Air Incentives Market (RECLAIM), Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) to achieve additional SOx emission reductions as outlined in the 2007 AQMP in Control Measure (CM) CMB-02: Further SOx Reduction for RECLAIM (CM #2007CMB-02). The proposed changes to Rule 2002 would reduce the allowable SOx emission limits based on current Best Available Retrofit Control Technology (BARCT) for the following industrial equipment and processes: 1) petroleum coke calciners; 2) cement kilns; 3) coal-fired boiler (cogeneration); 4) container glass melting furnace; 5) diesel combustion; 6) fluid catalytic cracking units; 7) refinery boilers/heaters; 8) sulfur recovery units/tail gas treatment units; and, 9) sulfuric acid manufacturing. Additional amendments are proposed to establish procedures and criteria for reducing RECLAIM Trading Credits (RTCs) and RTC adjustment factors for year 2013 and later. Other minor changes are proposed for clarity and consistency throughout the regulation. The proposed project is expected to result in anticipated reductions of up to 5.7 tons per day of SOx emissions by 2019 from 11 facilities.

POTENTIAL SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

The Final PEA identified the topics of air quality and water demand as the only areas that may be significantly adversely affected by the proposed project.

Project-Specific and Cumulative Construction Air Quality Impacts

Relative to construction emissions, the "worst-case" scenario are that the construction phases overlap due to concurrent construction activities at a single facility or at more than one facility. Specifically, the scenario analyzed in the Final PEA is the simultaneous activities of demolishing existing equipment, site preparation, and constructing new air pollution control equipment, which could occur at a single facility or at more than one facility. The analysis further assumes that the "worst-case" day is that in which each construction project is operating construction equipment that generates the greatest emissions.

Based on these assumptions for overlapping construction phases, the "worst-case" emissions were calculated to be 89 pounds of VOC per day, 464 pounds per day of NOx, and 159 pounds

.

¹ Pursuant to CEQA Guidelines §15088.5, "Significant new information" requiring recirculation include, for example, a disclosure showing that:

⁽a) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

⁽b) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

⁽c) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it

⁽d) The draft EA was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

per day of PM10. The significance threshold for construction-related emissions is 75 pounds of VOC per day, 100 pounds of NOx per day, and 150 pounds of PM10 per day. Estimated construction emissions did not exceed the significance thresholds for CO, SOx and PM2.5.

Greenhouse Gas Impacts

With regard to greenhouse gas (GHG) emissions, the proposed project involves combustion processes during both construction and operation, which could generate GHG emissions such as carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). However, the proposed project does not affect equipment or operations that have the potential to emit non-combustion GHGs such as sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs) or perfluorocarbons (PFCs).

Installation of SOx control equipment as part of implementing the proposed project is expected to generate construction-related CO2 emissions. In addition, based on the type and size of equipment affected by the proposed project, CO2 emissions from the operation of the SOx control equipment are likely to increase from current levels due to electricity, fuel and water use. The proposed project will also result in an increase of GHG operational emissions produced from additional truck hauling and deliveries necessary to accommodate the additional solid waste generation and increased use of supplies such as catalyst and caustic.

For the purposes of addressing the GHG impacts of the proposed project, the overall impacts of CO2 equivalent (CO2eq) emissions from the project were estimated and evaluated from the earliest possible initial implementation of the proposed project with construction beginning in 2012. Once the proposed project is fully implemented, the potential SOx emission reductions would continue through the end of the useful life of the equipment. The analysis estimated CO2eq emissions from all sources subject to the proposed project (construction and operation) from the beginning of the proposed project (2012) to the end of the project construction (2019). The beginning of the proposed project was assumed to be no sooner than 2012, since installing SOx control equipment such as a wet gas scrubber (WGS) takes considerable advance planning and engineering. Full implementation of the proposed project is expected to occur by the end of 2018 since all the affected facilities would be required to comply with the proposed project by January 1, 2019, such that any installed or modified SOx controls would be constructed and operational by the final compliance date. Thus, once construction is complete and the equipment is operational, no further changes in CO2eq emissions are anticipated.

Implementing the proposed project is expected to increase GHG emissions that exceed the SCAQMD's GHG significance threshold for industrial sources and this potentially significant adverse impact cannot be mitigated below significance. The SCAQMD's GHG significance threshold for industrial sources is 10,000 metric tons of CO2eq emissions per year (MTCO2eq/yr). While none of the affected facilities individually exceed the GHG industrial significance threshold of 10,000 MTCO2eq/yr, the "worst-case" GHG emissions from the proposed project as a whole were calculated to be 39,020 MTCO2eq/yr which exceeds the SCAQMD's GHG significance threshold.

Recycled water projects and the utilization of recycled water are among the most direct ways to reduce GHG from combustion activities associated with conveying water to the affected facilities if water-intensive scrubbers are installed as a result of the proposed project. Specifically, the

energy it would take to treat and convey reclaimed water to a facility (e.g., 1,200 kilowatt-hours per million gallons (kWh/MMgallons)²) is approximately 10 times less than the amount of energy it would take for potable water (e.g., 12,700 kWh/MMgallons³) to be supplied, conveyed and distributed. Thus, for each facility that will have future access to recycled water and uses reclaimed wastewater to satisfy the water demands for the proposed project and in turn, mitigate CO2eq emissions, less GHG emissions would be generated for the operational water use/conveyance and operational wastewater generation portions of the proposed project. While the GHG mitigation measures identified in the Mitigation Monitoring Plan section of this document may reduce GHG emissions associated with water conveyance to the maximum extent feasible, none are mitigation measures that will avoid the significant impact or reduce the GHG impact to less than significant. Also, no other feasible mitigation measures have been identified to reduce GHG emissions to a level of insignificance. Therefore, the proposed project is considered to have significant adverse unavoidable cumulative GHG impacts.

Water Demand

Implementation of the proposed project may cause water demand impacts associated with the existing facilities affected by the proposed project. Specifically, the installation of WGSs and dry gas scrubbers (DGSs), the installation of new or modification of existing fuel gas treatment (FGT) systems, and upgrading existing sulfuric acid plant controls all involve an increased demand for water. However, for any facility that installs a SOx control equipment that utilizes water, SCAQMD staff requires that the facility operators utilize both current supplies and future supplies of recycled water if available, pursuant to the Harbor Refineries Recycled Water Pipeline Project (HRRWPP), for operation of the equipment. The HRRWPP is an ongoing construction project to conserve potable water and instead produce and convey recycled water to multiple industrial and irrigation customers in the Los Angeles Harbor area⁴. Several facilities that may be affected by the proposed project will be served by the HRRWPP.

The analysis in the Final PEA shows that the increased potential demand for total water (i.e., 883,368 gallons per day) that may result from implementing the proposed project is not expected to exceed the SCAQMD's significance threshold of five million gallons of total water demand per day. Further, based on discussions with the local water suppliers, the existing water supply is expected to have the capacity to meet the increased demands of the proposed project. While the total water demand for the proposed project will not exceed the SCAQMD's significance threshold for total water demand, based on the definition of "water demand project" in CEQA Guidelines §15155, the potential increase in potable water demand was estimated to be 201,587

² California's Water – Energy Relationship, Table 1-2, Page 9, California Energy Commission, Final Staff Report, CEC-700-2005-011-SF, November 2005. http://www.energy.ca.gov/2005publications/CEC-700-2005-011/CEC-700-2005-011-SF.PDF

³ California's Water – Energy Relationship, Table 1-3, Page 11, California Energy Commission, Final Staff Report, CEC-700-2005-011-SF, November 2005. http://www.energy.ca.gov/2005publications/CEC-700-2005-011/CEC-700-2005-011-SF.PDF

Future access to recycled water for these five facilities is dependent upon the completion of the Harbor Refineries Recycled Water Pipeline Project (HRRWPP) by Summer 2013 (SCH No. 2008121093, certified on October 20, 2009). The HRRWPP will conserve potable water and instead produce and convey recycled water to multiple industrial and irrigation customers in the Los Angeles Harbor area (http://www.ladwp.com/ladwp/cms/ladwp011486.jsp). Proponents of the HRRWPP are working with each of the affected facilities to negotiate construction of a new water conveyance at their site in order to tie-into the recycled water pipeline.

gallons per day and may be considered a substantial use of potable water. For the purposes of the CEQA analysis prepared for the proposed project, a substantial amount of potable water is defined as the amount of water necessary to supply 500 dwelling units or approximately 133,911 to 223,186 gallons of potable water per day.

While the use of recycled water may reduce potable water demand to the maximum extent feasible, the use of recycled water will not avoid the significant impact or reduce the potable water demand impact to less than significant. Also, no other feasible mitigation measures have been identified to reduce potable water demand to a level of insignificance. Therefore, the proposed project may cause significant potable water demand impacts.

STATEMENT OF FINDINGS

Public Resources Code §21081 and CEQA Guidelines §15091(a) state that no public agency shall approve or carry 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. Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines §15091(b)). As identified in the Final PEA and summarized above, the proposed project has the potential to create significant adverse air quality and water demand impacts. The SCAQMD Governing Board, therefore, makes the following findings regarding the proposed project. 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 Decision. The Findings made by the SCAQMD Governing Board are based on the following significant adverse impacts identified in the Final PEA.

1. Potential project-specific and cumulative VOC, NOx, and PM10 emissions during construction exceed the SCAQMD's applicable significance air quality thresholds and cannot be mitigated to insignificance.

Finding and Explanation:

The implementation of the proposed project is anticipated to trigger construction activities associated with the installation of new SOx control equipment, (i.e., WGSs). Construction activities associated with the proposed project would result in emissions of VOC, NOx, SOx, CO PM10, and PM2.5, but only the estimated emissions for VOC, NOx and PM10 are expected to exceed the SCAQMD's applicable significance air quality thresholds for construction. As a result, the proposed project is expected to have significant adverse construction air quality impacts. However, the temporary construction emissions would cease upon completion of the installation of new or modification of existing air pollutant control equipment, as applicable. Once all the modified or new equipment are in place, the proposed project is expected to result in a reduction of SOx emissions up to 5.7 tons per day.

The Governing Board finds that mitigation measures have been identified, but they would not reduce to insignificance the significant adverse project-specific or cumulative impacts to air quality associated with construction. No other feasible mitigation measures have been identified. CEQA Guidelines §15364 defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

The Governing Board further finds that the Final PEA considered alternatives pursuant to CEQA Guidelines §15126.6, but no project alternative, other than the No Project Alternative, would reduce to insignificant levels the significant project-specific or cumulative construction air quality impacts identified for the proposed project.

2. Potential GHG emissions exceed the SCAQMD's applicable significance GHG threshold and cannot be mitigated to insignificance.

Finding and Explanation:

While none of the affected facilities individually exceed the SCAQMD's industrial GHG significance threshold of 10,000 MTCO2eq/yr, if the proposed project is implemented, the analysis indicates that there would be a significant increase in GHG emissions for the project as a whole. Because there are significant adverse GHG impacts from the proposed project, the PEA must describe feasible measures that could minimize significant adverse impacts.

The Governing Board finds that mitigation measures have been identified, but they would not reduce to insignificance the significant adverse GHG emission impacts. No other feasible mitigation measures have been identified. CEQA Guidelines §15364 defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

The Governing Board further finds that aside from the No Project Alternative, the Final PEA considered alternatives pursuant to CEQA Guidelines §15126.6, Alternative B was found to be the environmentally superior alternative. Alternative B can reduce to insignificant levels the significant GHG impacts identified for the proposed project. However, Alternative B, with a potential SOx emissions reduction of 1.50 tons per day, only partially achieves the SOx emission reductions identified in the AQMP, which are necessary to demonstrate attainment with state and federal air quality standards. When compared to the proposed project, while Alternative B creates fewer environmental impacts, it also provides fewer benefits to air quality and public health and does not satisfy project objectives.

3. Potential potable water demand would use a substantial amount of potable water and cannot be mitigated to insignificance.

Finding and Explanation:

The PEA concluded that the proposed project may cause significant adverse potable water demand impacts. Because there are significant adverse potable water demand impacts from the proposed project, the PEA must describe feasible measures that could minimize significant adverse impacts. While these mitigation measures may reduce the

amount of potable water needed, they would not avoid or reduce the adverse potable water demand impact to less than significant.

The Governing Board further finds that aside from the No Project Alternative, the Final PEA considered alternatives pursuant to CEQA Guidelines §15126.6, Alternative B was found to be the environmentally superior alternative. Alternative B can reduce to insignificant levels the significant water demand impacts identified for the proposed project. However, Alternative B, with a potential SOx emissions reduction of 1.50 tons per day, only partially achieves the SOx emission reductions identified in the AQMP, which are necessary to demonstrate attainment with state and federal air quality standards. When compared to the proposed project, while Alternative B creates fewer environmental impacts, it also provides fewer benefits to air quality and public health and does not satisfy project objectives.

Conclusion

The Governing Board finds that feasible mitigation measures have been identified to help minimize the potentially significant adverse impacts to air quality and water demand. CEQA defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code §21061.1).

The Governing Board further finds that aside from the No Project Alternative, the Final PEA considered alternatives pursuant to CEQA Guidelines §15126.6. While Alternative B would reduce to insignificant levels the significant GHG and water demand impacts identified for the proposed project, Alternative B will not reduce to insignificant levels the significant air quality construction impacts and will not achieve the objectives of the proposed project.

The Governing Board further finds that a Mitigation Monitoring Plan (pursuant to Public Resources Code § 21081.6) needs to be prepared since feasible mitigation measures were identified.

The Governing Board further finds that the findings required by CEQA Guidelines §15091(a) 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.

STATEMENT OF OVERRIDING CONSIDERATIONS

If significant adverse impacts of a proposed project remain after incorporating mitigation measures, or no measures or alternatives to mitigate the adverse impacts are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable 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 risks when determining whether to approve the project [CEQA Guidelines §15093(a)]. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable"

[CEQA Guidelines §15093(a)]. Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse air quality and water demand impacts that may result from the proposed project has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Decision for the proposed project.

Despite the inability to incorporate changes into the proposed project that will mitigate potentially significant adverse air quality and water demand impacts to a level of insignificance, the SCAQMD's Governing Board finds that the following benefits and considerations outweigh the significant unavoidable adverse environmental impacts:

- 1. The analysis of potential adverse environmental impacts incorporates a "worst-case" approach. This entails the premise 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 environmental impacts from the proposed project.
- 2. Each of the alternatives was crafted to show the various possibilities or permutations of how operators of SOx RECLAIM facilities could achieve actual SOx reductions, but ultimately, there is no way to predict what each facility operator will do. Further, because of the compliance flexibility inherent in the RECLAIM program, affected operators may choose to reduce SOx emissions using compliance options that minimize or eliminate significant environmental impacts at their facilities.
- 3. The 2007 AQMP identifies ambient air pollutant levels relative to federal and state ambient air quality standards (AAQS), establishes baseline and future emissions, and develops control measures to ensure attainment of the AAQS. Construction is a continuous activity in the district and is accounted for in the AQMP. Thus, any changes in air quality as a result of construction emissions from the proposed project are accounted for in the AQMP and would not be expected to interfere with the attainment demonstrations.
- 4. The proposed project implements 2007 AQMP Control Measure CMB-02: Further SOx Reductions for RECLAIM (CM #2007CMB-02) and obtains 2.9 tons per day of SOx emission reductions as called for in the 2007 AQMP. The proposed project may actually achieve additional SOx emission reductions beyond 2.9 tons per day (up to 5.7 tons per day) depending on the actual BARCT SOx emission controls employed.
- 5. The reduction of SOx emissions that may occur from implementing the proposed project will also reduce the secondary formation of PM2.5, which will provide additional health benefits from reducing exposure to PM2.5 concentrations.
- 6. Since the Basin is in non-attainment for PM2.5, for which SOx is a major precursor and since 17 million residents of the South Coast Air Basin are experiencing the worst PM2.5 exposure in the nation, the proposed project achieves the largest amount of overall SOx reductions by relying on currently available SOx control technologies.

- 7. SCAQMD staff has calculated that the air quality benefit of reducing one ton of SOx is equivalent to the air quality benefit achieved by reducing 15 tons of NOx in progressing towards attainment of the PM2.5 standard. Thus, the SOx reductions that may be achieved by the proposed project will help substantially reduce PM2.5 concentrations.
- 8. Although the proposed project also has the largest amount of adverse environmental impacts overall when compared to the alternatives, it achieves the maximum level of SOx reductions and corresponding health benefits.
- 9. Considering the PM2.5 exposure levels of the residents in the South Coast Air Basin and the need for expeditious improvement in PM2.5 air quality, the proposed project is preferred over Alternatives A, B, and C because it provides the most flexibility in the methods for reducing SOx emissions while maximizing the amount of potential SOx reductions and health benefits if the methods are implemented.
- 10. Implementing the control measures in the 2007 AQMP will result in an overall net reduction in criteria pollutant emissions. Therefore, cumulative air quality impacts from the proposed project and all other AQMP control measures when considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement.

The SCAQMD's Governing Board finds that the above-described considerations outweigh the unavoidable significant effects to the environment as a result of the proposed project.

MITIGATION MONITORING PLAN

When making findings as required by Public Resources Code §21081 and CEQA Guidelines §15091, the lead agency must 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 and CEQA Guidelines §15097[a]). To fulfill the requirements of Public Resources Code §21081.6 and CEQA Guidelines §15097, the SCAQMD has developed this mitigation monitoring plan for anticipated impacts resulting from implementing the proposed project.

AIR QUALITY IMPACTS

IMPACT SUMMARY OF MITIGATION MEASURES AQ-1 to AQ-8: Project-specific and cumulative construction-related emissions of VOC, NOx, and PM10 emissions, based on a "worst-case" analysis, would exceed the SCAQMD's regional mass daily significance thresholds for these pollutants. Emission sources include worker vehicles and heavy construction equipment. The following mitigation measures are intended to minimize the emissions associated with these sources during construction activities. No feasible mitigation measures have been identified to reduce emissions to a level of insignificance.

MITIGATION MEASURES: The following construction mitigation measures are required for each of the affected facilities.

On-Road Mobile Sources

AQ-1 Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles including, but not limited to: consolidating truck deliveries; scheduling deliveries to avoid peak hour traffic conditions; describing truck routing; describing deliveries including logging delivery times; describing entry/exit points; identifying locations of parking; identifying construction schedule; and prohibiting truck idling in excess of five consecutive minutes or another time-frame as allowed by the California Code of Regulations, Title 13 §2485 - CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

Off-Road Mobile Sources

- AQ-2 Suspend all construction activities that generate air pollutant emissions during first stage smog alerts.
- AQ-3 Prohibit construction equipment from idling longer than five minutes.
- AQ-4 Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.
- AQ-5 Tune-up construction equipment and maintain a two- to four-degree retard diesel engine timing, to the extent feasible.
- AQ-6 Use electric welders to avoid emissions from gasoline or diesel welders in portions of the project sites where electricity is available.
- AQ-7 Use on-site electricity rather than temporary power generators in portions of the project sites where electricity is available.
- AQ-8 Prior to use in construction, each project applicant will evaluate the feasibility of retrofitting the large off-road construction equipment that will be operating for substantial periods. Retrofit technologies such as particulate traps, selective catalytic reduction, oxidation catalysts, air enhancement technologies, etc., will be included in the evaluation. These technologies will be required if they are certified by CARB and/or USEPA and are commercially available and can feasibly be retrofitted onto construction equipment.

Other mitigation measures were considered but were rejected because they would not further mitigate the potential significant impacts of the proposed project. These mitigation measures included: 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 onsite and lunch trucks visit the construction site); 3) use methanol, natural gas, propane or butane-powered construction equipment (equipment is not CARB-certified or commercially available); 4) pave unpaved roads (most facility roads are paved).

IMPLEMENTING PARTIES: The SCAQMD's Governing Board finds that implementing the mitigation measures AQ-1 through AQ-8 is the responsibility of the owner, operator, or agent of each affected facility who submits a permit application to comply with the proposed project.

MONITORING AGENCY: The SCAQMD's Governing Board finds that through its discretionary authority to issue and enforce permits for this project, the SCAQMD will ensure compliance with mitigation measures AQ-1 through AQ-8. Mitigation monitoring and reporting will be accomplished as follows:

MMAQ-1: CONSTRUCTION EMISSION MANAGEMENT PLAN

Each facility operator shall develop and submit a Construction Emission Management Plan to the SCAQMD for approval prior to starting construction activities. Upon approval, each facility operator 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 such as flag persons, contractor entry/exit gates, et cetera; construction schedule including hours of operation; description of truck routing; and, description of deliveries including hours of delivery.

Traffic Control

Traffic requiring entrance onto each facility's property will be directed toward the entry gate or gates, if there are multiple entrances, so that congestion, as well as associated air pollution, will be minimized.

Points of entry will be selected to maximize facility security and reduce trafficassociated emissions. Each facility operator will direct their Receiving Department to consider delivery items, time of delivery, in-plant congested areas, surrounding area traffic, and gate security issues when assigning a gate entry location.

On-site parking will be used to the maximum extent available. In the event that off-site parking is required, construction workers may be requested to park at a designated off-site property. Buses or some other type of shuttle may transfer multiple workers at one time to and from the project site. No on-street parking (i.e., off of each facility's site) will be allowed.

Construction Schedule

In an effort to reduce traffic by construction workers, operators of the each facility may request its contractors to follow a compressed workweek. An example of a compressed workweek would be a four-day work week and a 10-hour work day with most work scheduled to begin by 7:00 a.m. and end after 5:30 p.m., Monday through Friday, to further minimize traffic congestion and related emissions. In addition, some work may need to be scheduled during the night shift, which will begin after 6:00 p.m. and end around 4:30 a.m. Critical path work may require a deviation from the aforementioned workweek and start- and stop-times; however, deviations will be minimized.

During process unit shutdowns, extended work shifts and night shifts, scheduled six to seven days per week, may be necessary. Each facility operator will establish in their Construction Emission Management Plan the details of the construction schedule, including operating hours, days, and number of shifts per day. This construction work schedule will need to be designed to minimize the travel time during peak travel periods.

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 offsite 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.

Delivery of Equipment and Materials

Each facility operator 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 which are typically from 8:30 a.m. until 4:00 p.m. Monday through Friday. Each facility operator will request 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 each facility during high traffic peak 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 the California Department of Transportation regulations.

It may be necessary to handle a limited amount of equipment as wide or special loads. These deliveries are subject to California Department of Transportation regulations and will be coordinated with local police departments. These trips will be scheduled to avoid peak hour traffic.

MMAQ-2: SUSPEND ALL CONSTRUCTION ACTIVITIES THAT GENERATE AIR EMISSIONS DURING FIRST STAGE SMOG ALERTS.

If and when any first stage smog alert or greater occurs, each facility operator will record the date and time of each alert, will suspend all construction 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 on-site for a period of at least two years from completion of construction.

MMAQ-3: PROHIBIT TRUCKS FROM IDLING LONGER THAN FIVE MINUTES

Each facility operator will notify all vendors that during deliveries, truck idling time will be limited to no longer than five minutes. For any delivery that is expected to take longer than five minutes, each facility operator will require the truck's operator to shut off the engine. Each facility operator will notify the vendors of these delivery requirements at the time that the purchase order is issued and again when trucks enter the gates of the facility. To further ensure that drivers understand the truck idling requirement, signs will be posted at each facility entry gates stating idling longer than five minutes is not permitted.

MMAQ-4: USE ELECTRICITY OR ALTERNATE FUELS FOR ON-SITE MOBILE EQUIPMENT INSTEAD OF DIESEL EQUIPMENT TO THE EXTENT FEASIBLE

Each facility operator shall evaluate the use of electricity and alternate fuels for on-site mobile construction equipment prior to the commencement of construction activities, provided that suitable equipment is available for the activity. Equipment vendors will be contacted to determine the commercial availability of electric or alternate-fueled construction equipment. Equipment that will use electricity or alternate fuels will be included in the Construction Emission Management Plan.

The potential equipment that may be considered includes, but is not limited to:

- Electric scissor lifts
- Electric golf carts
- Bicycles
- Boom lifts

Each facility operator will limit the number of personal and company vehicles allowed to enter each facility beyond the parking lots. This restriction helps minimize onsite emissions and promotes the use of ride sharing and alternate fueled transportation such as bicycles and electric golf carts.

In addition to the other alternative fueled equipment, each facility operators and the construction contractors will use electric boom lifts or bi-powered boom lifts, when available.

MMAQ-5: MAINTAIN CONSTRUCTION EQUIPMENT, TUNED UP AND WITH TWO TO FOUR DEGREE RETARD DIESEL ENGINE TIMING

Each facility operator, 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. Each facility operator will maintain their construction equipment and the construction contractor will be responsible for maintaining their equipment and maintenance records. All maintenance records for each facility and their construction contractor(s) will remain on-site for a period of at least two years from completion of construction. Each facility operator, in cooperation and coordination with each construction contractor and equipment vendor, will evaluate the practicality of retarding diesel engine timing on off-road construction equipment for the purpose of reducing emissions.

MMAQ-6: USE ELECTRIC WELDERS INSTEAD OF GAS OR DIESEL WELDERS IN PORTIONS OF THE FACILITY WHERE ELECTRICITY IS AVAILABLE.

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

MMAQ-7: USE ON-SITE ELECTRICITY RATHER THAN TEMPORARY POWER GENERATORS IN PORTIONS OF THE FACILITY WHERE ELECTRICITY IS AVAILABLE.

The use of temporary power generators shall be prohibited in areas of the facility that have existing infrastructure to provide access to electricity. Construction areas within the facility 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 within these identified areas of the facility will be allowed. The use of temporary power generators outside of these identified areas shall be prohibited. Each facility operator shall include in all construction contracts the requirement that the use of temporary power generators is prohibited in certain portions of the facility as identified on the site plan. Each facility operator 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.

MMAQ-8: PRIOR TO USE IN CONSTRUCTION, EACH FACILITY OPERATOR WILL EVALUATE THE FEASIBILITY OF RETROFITTING THE LARGE OFF-ROAD CONSTRUCTION EQUIPMENT THAT WILL BE OPERATING FOR SIGNIFICANT PERIODS. RETROFIT TECHNOLOGIES SUCH AS SELECTIVE CATALYTIC REDUCTION, OXIDATION CATALYSTS, AIR ENHANCEMENT TECHNOLOGIES, ETC., WILL BE EVALUATED. SUCH **TECHNOLOGIES** WILL \mathbf{BE} REQUIRED IF THEY COMMERICALLY AVAILABLE AND CAN FEASIBLY BE RETROFITTED ONTO CONSTRUCTION EQUIPMENT.

All construction equipment diesel engines rated at 50 hp or greater shall meet the highest tier of California Emission Standards for Off-Road Compression-Ignition Engines as specified in 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.

At a minimum, construction equipment engines will be required to meet Tier 1 California standards if equipment with engines that meet Tier 2 standards are not available, unless such engine is not available for a particular item of equipment.

In the event that an engine is not available that meet any tier (e.g., Tier 1 up to Tier 4) for any off-road engine rated at 50 hp or greater, that engine shall be equipped with a diesel particulate filter, unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Each facility operator shall submit to the SCAQMD, prior to initiation of construction, information in writing on why particulate filters are not practical. For purposes of this condition, the use of such devices is "not practical" if, among other reasons:

- (1) There is no available particulate filter that has been certified by either the California Air Resources Board or U.S. Environmental Protection Agency for the engine in question; or,
- (2) The construction equipment is intended to be on-site for 30 days or less.

The use of a particulate filter may be terminated immediately if one of the following conditions exists:

- (1) The use of the particulate filter is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure;
- (2) The particulate filter is causing or is reasonably expected to cause significant engine damage; or,
- (3) The particulate filter is causing or is reasonably expected to cause a significant risk to workers or the public.

During construction of the proposed project and for two years following completion of construction, each facility operator shall keep records onsite of applicable compliance activities to demonstrate the steps taken to assure compliance with Mitigation Measure AQ-8 as specified in Tables 1 and 2.

GHG IMPACTS

IMPACT SUMMARY OF MITIGATION MEASURES GHG-1 to GHG-2: Based on a "worst-case" analysis, none of the affected facilities individually exceed the industrial GHG significance threshold. However, if the proposed project gets implemented, the analysis indicates that there will be a significant increase in GHG emissions for the project as a whole. Because there are significant adverse GHG impacts from the proposed project, the PEA must describe feasible measures which could minimize the significant adverse impacts. The following mitigation measures are intended to minimize the GHG emissions associated with water conveyance. No feasible mitigation measures have been identified to reduce GHG emissions to a level of insignificance.

MITIGATION MEASURES: The following GHG mitigation measures are required for each of the affected facilities.

- GHG-1 When SOx control equipment is installed and water is required for its operation, the facility operator is required to use recycled water, if available, to satisfy the water demand for the SOx control equipment.
- GHG-2 In the event that recycled water cannot be delivered to the affected facility, the facility operator is required to use their best efforts to submit a written declaration with the application for a Permit to Construct for the

SOx control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

IMPLEMENTING PARTIES: The SCAQMD's Governing Board finds that implementing mitigation measures GHG-1 through GHG-2 is the responsibility of the owner, operator, or agent of each affected facility who submits a permit application to comply with the proposed project.

MONITORING AGENCY: The SCAQMD's Governing Board finds that through its discretionary authority to issue and enforce permits for this project, the SCAQMD will ensure compliance with mitigation measures GHG-1 through GHG-2. Mitigation monitoring and reporting will be accomplished as follows:

MMGHG-1: USE RECYCLED WATER, IF AVAILABLE, FOR SOX CONTROL EQUIPMENT THAT REQUIRES WATER FOR ITS OPERATION

At the time of submitting an application for a Permit to Construct for SOx control equipment that requires water for its operation, each facility operator shall submit a copy of a Memorandum of Understanding agreement reached between the facility operator and the recycled water supplier or purveyor that indicates recycled water will be used to supply water to the SOx control equipment. Once the SOx control equipment becomes operational, on a monthly basis, each facility operator will record the amount of recycled water supplied to the SOx control equipment from the recycled water bill. This log shall be maintained on-site for a period of at least two years from initiating operation.

MMGHG-2: SUBMIT WRITTEN DECLARATION IF RECYCLED WATER IS NOT AVAILABLE

The facility operator is required to use their best efforts submit a written declaration with the application for a Permit to Construct for the SOx control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

WATER DEMAND IMPACTS

IMPACT SUMMARY OF MITIGATION MEASURES HWQ-1 to HWQ-2:

Because some SOx control equipment can utilize a substantial amount of water, significant adverse impacts associated with water demand are expected from the proposed project during operation. Because there are significant adverse potable water demand impacts from the proposed project, the PEA must describe feasible measures which could minimize the significant adverse impacts. The following mitigation measures are intended to minimize the amount of potable water demand. No feasible mitigation measures have been identified to reduce the potable water demand to a level of insignificance.

MITIGATION MEASURES: The following water demand mitigation measures are required for each of the affected facilities.

- HWQ-1 When SOx control equipment is installed and water is required for its operation, the facility operator is required to use recycled water, if available, to satisfy the water demand for the SOx control equipment.
- HWQ-2 In the event that recycled water cannot be delivered to the affected facility, the facility operator is required to submit a written declaration with the application for a Permit to Construct for the SOx control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

IMPLEMENTING PARTIES: The SCAQMD's Governing Board finds that implementing the mitigation measures HWQ-1 through HWQ-2 is the responsibility of the owner, operator, or agent of each affected facility who submits a permit application to comply with the proposed project.

MONITORING AGENCY: The SCAQMD's Governing Board finds that through its discretionary authority to issue and enforce permits for this project, the SCAQMD will ensure compliance with mitigation measures HWQ-1 through HWQ-2. Mitigation monitoring and reporting will be accomplished as follows:

MMHWQ-1: USE RECYCLED WATER, IF AVAILABLE, FOR SOX CONTROL EQUIPMENT THAT REQUIRES WATER FOR ITS OPERATION

At the time of submitting an application for a Permit to Construct for SOx control equipment that requires water for its operation, each facility operator shall submit a copy of a Memorandum of Understanding agreement reached between the facility operator and the recycled water supplier or purveyor that indicates recycled water will be used to supply water to the SOx control equipment. Once the SOx control equipment becomes operational, on a monthly basis, each facility operator will record the amount of recycled water supplied to the SOx control equipment from the recycled water bill. This log shall be maintained on-site for a period of at least two years from initiating operation.

MMHWQ-2: SUBMIT WRITTEN DECLARATION IF RECYCLED WATER IS NOT AVAILABLE

The facility operator is required to submit a written declaration with the application for a Permit to Construct for the SOx control equipment, to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.

CONCLUSION

Based on a "worst-case" analysis, the potential adverse construction air quality impacts, GHG impacts, and water demand impacts from the adoption and implementation of the proposed project are considered significant and unavoidable. Although feasible mitigation measures have been identified that would reduce these impacts associated with the proposed project, they are not sufficient to reduce the impacts to insignificance. Further, although implementing Alternative B would reduce GHG and potable water demand impacts to less than significant, Alternative B does not achieve the project objectives as well as the proposed project. As a result, no other feasible mitigation measures or project alternatives have been identified that would further reduce these impacts while still achieving the overall objectives of the proposed project.

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase	
AQ-1/ Schedule truck deliveries of	Each Affected	Maintain records of the date and time of	1. SCAQMD	
over-sized equipment and materials for	Facility	each delivery of over-sized equipment and	2. SCAQMD	
non-peak a.m. and p.m. periods (i.e.,	Operator	materials during construction activities.	3. Daily during all	
avoid deliveries between 7:00 a.m. –			construction phases	
8:00 a.m. and 4:30 p.m. – 5:30 p.m.				
periods), except for time-sensitive				
materials during construction activities.				
AQ-1/ Limit access to and from the	Each Affected	Submit plot plan to SCAQMD that	1. SCAQMD	
construction site.	Facility	indicates access points to and from the	2. SCAQMD	
	Operator	construction site. Maintain records	3. Prior to the start of	
		documenting that all construction	construction	
		contractors and subcontractors have been		
		directed to use only specified access points.		
AQ-1/ Provide sufficient parking on	Each Affected	Submit plot plan to SCAQMD that	1. SCAQMD	
the facility site or other local site to	Facility	indicates location(s) of construction	2. SCAQMD	
accommodate all the construction	Operator	employee parking and number of parking	3. Prior to the start of	
employees, and do not permit on-street		spaces available. Maintain records that all	construction	
parking.		construction contractors and subcontractors		
		have been directed to park only in		
		designated areas and are not permitted to		
		use on-street parking.		

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
AQ-1/ Schedule construction delivery materials 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.	Each Affected Facility Operator	Maintain records of the date and time of each construction material delivery.	 SCAQMD SCAQMD Daily during all construction phases
AQ-1/ Record number of construction personnel on-site.	Each Affected Facility Operator	Maintain records of number of construction personnel on-site.	 SCAQMD SCAQMD Daily during all construction phases
AQ-1/ Record number of construction delivery trucks and haul trucks.	Each Affected Facility Operator	Maintain records of number of construction delivery trucks and haul trucks entering the facility site.	 SCAQMD SCAQMD Daily during all construction phases
AQ-2/ Suspend use of construction equipment during first stage smog alert or greater.	Each Affected Facility Operator	Maintain records of date and time of each first stage smog alert or greater.	 SCAQMD SCAQMD Per first stage smog alert or greater
AQ-3/ Notify vendors and contractors that truck and equipment operators are prohibited from idling longer than five minutes.	Each Affected Facility Operator	Prepare standard notification letter that explains idling limitation during deliveries and provide copy to all vendors. Post signs on-site.	 SCAQMD SCAQMD At time purchase order is issued or contract is signed

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
AQ-4/ Identify on-site mobile construction equipment that will use electricity or alternate fuels.	Each Affected Facility Operator	Maintain on-site mobile construction equipment records as follows: 1. equipment ID; 2. equipment type; 3. equipment manufacturer/ model; 4. engine horsepower rating; and, 5. power source/fuel type.	 SCAQMD SCAQMD Daily during all construction phases
AQ-4/ Restrict the number of personal and company vehicles entering the facility site beyond the parking lots.	Each Affected Facility Operator	Maintain records of number of personal and facility-owned or operated vehicles entering the facility site. Each affected facility operator will restrict drive in authorization for contractors, to only those with specific permission.	 SCAQMD SCAQMD Daily during all construction phases
AQ-5/ Identify construction equipment that will undergo retarding of diesel engine timing for the purpose of reducing emissions.	Each Affected Facility Operator	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; 4. manufacturer/model; 5. engine horse-power rating; and, 6. power source/fuel type.	 SCAQMD SCAQMD Submit letter to SCAQMD prior to scheduled use in the field and quarterly thereafter during all construction phases

n 4					
Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase		
AQ-5/ Schedule periodic maintenance activities for all vehicle and construction equipment, including regular tune-ups and retard diesel engine timing.	Each Affected Facility Operator	Maintain records of maintenance activities for all vehicle and construction equipment.	 SCAQMD SCAQMD Daily during all construction phases 		
AQ-6/ Use electric welders during construction activities where existing infrastructure to provide access to electricity is available. AQ-6/ Identify diesel and gasoline welders used during construction.	Each Affected Facility Operator Each Affected Facility Operator	Submit to SCAQMD a site plan that identifies the construction areas within the facility site where electricity is not available. Maintain records of diesel and gasoline 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 facility site where operated; and, 6. amount and type of fuel used (applies to non-electric welders).	 SCAQMD SCAQMD Prior to scheduled use in the field SCAQMD SCAQMD Daily during all construction phases 		

	Party Responsible		
DATA AND DATA OF THE PROPERTY	for		1. Enforcement Agency
Mitigation Measure/Implementation	Implementing		2. Monitoring Agency
Requirement	Mitigation	Monitoring Action	3. Monitoring Phase
AQ-7/ Use on-site electricity during	Each Affected	Submit to SCAQMD a site plan that identifies	1. SCAQMD
construction instead of temporary	Facility	the construction areas within the facility site	2. SCAQMD
power generators where existing	Operator	where electricity is not available.	3. Prior to scheduled
infrastructure to provide access to			use in the field
electricity is available.			
AQ-7/ Identify temporary diesel power	Each Affected	Maintain records of temporary power	1. SCAQMD
generators used, the equipment rating,	Facility	generators used during construction by	2. SCAQMD
the date, time and duration of	Operator	identifying each unit as follows:	3. Weekly during all
operation, and the location within the		1. equipment ID;	construction phases
facility site where operated.		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; and,	
		7. equipment location.	

Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
AQ-8/ Evaluate feasibility of retrofitting large (e.g., 50 hp or greater) sized construction equipment. Verify that each diesel engine meets the highest tier, as applicable, of the California Emission Standards for Off-Road Compression-Ignition Engines or that such an engine is not available. Verify that each construction equipment diesel engine that does not meet any tier standards, is equipped with a diesel particulate filter, unless certified by engine manufacturers that the use of such devices is not practical for specific engine types.	Each Affected Facility Operator	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. equipment is retrofitted with a diesel particulate filter, if not certified to Tier 1 or better and documentation is provided that a Tier 1 or better engine is not available; and, 7. retrofit method or reason why the equipment will not be retrofitted.	SCAQMD SCAQMD Prior to scheduled use in the field and quarterly thereafter during all construction phases
AQ-8/ Equip diesel construction engines 50 hp or above, scheduled to operate one month or greater, that do not meet, at a minimum, California Tier 1 standards, with diesel particulate filters.	Each Affected Facility Operator	Submit a list to SCAQMD of all diesel-fueled equipment rated at 50 hp that do not meet California Tier 1 standards, that specifies: 1) equipment ID; 2) equipment description/type; 3) manufacturer/model; 4) engine horsepower rating; and, 5) a statement that the engine will be equipped with a particulate filter or a statement documenting why use of a diesel particulate filter is not practical.	1. SCAQMD 2. SCAQMD 3. Prior to scheduled use in the field and quarterly thereafter during all construction phases

Witigation, Wor		, I	
Mitigation Measure/Implementation Requirement	Party Responsible for Implementing Mitigation	Monitoring Action	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
GHG-1 & HWQ-1/ Supply recycled water to SOx control equipment, if water is required for its operation.	Each Affected Facility Operator	Submit a copy of a Memorandum of Understanding agreement reached between the facility operator and the recycled water supplier or purveyor that indicates recycled water will be used to supply water to the SOx control equipment	1. SCAQMD 2. SCAQMD 3. At the time of submitting an application for a Permit to Construct for SOx control equipment that requires water for its operation
GHG-1 & HWQ-1/ Use recycled water to operate SOx control equipment, if water is required for its operation.	Each Affected Facility Operator	Maintain records of the amount of recycled water supplied to the SOx control equipment from the water bill. This log shall be maintained on-site for a period of at least two years from initiating operation.	 SCAQMD SCAQMD Monthly, once SOx control equipment becomes operational.
GHG-2 & HWQ-2/ Notify SCAQMD if recycled water cannot be supplied to the facility for operation of the SOx control equipment	Each Affected Facility Operator	Submit a written declaration to be signed by an official of the water purveyor indicating the reason(s) why recycled water cannot be supplied to the project.	 SCAQMD SCAQMD At the time the application for a Permit to Construct for the SOx control equipment is submitted.

Table 2
Off-Road Construction Equipment List

Equipment ID	Туре	Manufacturer	Model	Engine Rating (hp)	To What Tier Is Equipment Certified?	Modifications Made	Date(s) and Hour(s) Operated