
IV.C AIR QUALITY

ENVIRONMENTAL SETTING

The California Air Resources Board (CARB) divides the State into air basins that share similar meteorological and topographical features. The proposed project is in the South Coast Air Basin (SCAB), a 6,600-square-mile area comprised of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB's climate and topography are highly conducive to the formation and transport of air pollution. Peak ozone concentrations in the SCAB over the last two decades have occurred at the base of the mountains around Azusa and Glendora in Los Angeles County and at Crestline in the mountains above the City of San Bernardino. Both peak ozone concentrations and the number of days the standards were exceeded decreased everywhere in the SCAB throughout the 1990s. Carbon monoxide concentrations also dropped significantly throughout the SCAB as a result of strict new emission controls and reformulated gasoline sold in winter months.

Regulatory and Planning Requirements for the South Coast Air Basin

Federal Attainment Status

The SCAB, the nation's only "extreme" ozone (O₃) non-attainment area until the EPA "bumped up" the San Joaquin Valley Air Basin from "severe" to "extreme" in October 2001, has until 2010 to achieve the national one-hour ozone standard. The SCAB is designated a "serious" non-attainment area for both carbon monoxide (CO) and respirable particulate matter (PM₁₀). The federal Clean Air Act sets CO and PM₁₀ attainment deadlines in "serious" non-attainment areas at 2000 and 2005, respectively. The eight-hour CO standard was not met in 2000. Although no CO standard was exceeded anywhere in the SCAB in 2001, the eight-hour federal standard was exceeded twice in 2000 in the South Central Los Angeles County Source-Receptor Area. EPA regulations specify that the CO standard is attained when there are two years of data with no more than one exceedance at any one station. The Draft 2003 AQMP states that the CO attainment requirements were met in 2002. The national nitrogen dioxide (NO₂) standard was regularly exceeded in Los Angeles County until 1992, and the SCAB was the only area in the nation still designated an NO₂ non-attainment area in 1998 when it was re-designated "attainment" by the EPA.

In July 1997, the EPA promulgated a new eight-hour standard for ozone and a new standard for fine particulate matter (PM_{2.5}). The EPA is currently developing an implementation policy for the eight-hour ozone standard, and designation of non-attainment areas now scheduled for late 2003 or early 2004. Designation of PM_{2.5} non-attainment areas is expected in late 2004 or sometime in 2005. Until these designations are made and the clock for meeting these new standards starts running, the existing federal one-hour ozone and PM₁₀ standards are the only ozone and particulate standards of reference for determining attainment of national standards.

State Standards

California standards are generally stricter than national standards, but have no penalty for non-attainment. California and national ambient air standards are shown on Table IV. C-1.

**Table IV.C-1
Ambient Air Quality Standards**

Air Pollutant	State Standard	National Standards		Health Effect
		Primary	Secondary	
Ozone (O ₃)	0.09 ppm, 1-hr. avg.	0.12 ppm, 1-hr. avg. 0.08 ppm, 8-hr. avg.	0.12 ppm, 1-hr. avg. 0.08 ppm, 8-hr. avg.	Aggravation of respiratory and cardiovascular diseases; impairment of cardiopulmonary function
Carbon Monoxide (CO)	9 ppm, 8-hr. avg. 20 ppm, 1-hr. avg.	9 ppm, 8-hr. avg. 35 ppm, 1-hr. avg.	None	Aggravation of respiratory diseases (asthma, emphysema)
Nitrogen Dioxide (NO ₂)	0.25 ppm, 1-hr. avg.	0.0534 ppm, annual avg.	0.0534 ppm, annual avg.	Aggravation of respiratory illness
Sulfur Dioxide (SO ₂)	.25 ppm 1-hr. 0.04 ppm, 24-hr. avg.	0.03 ppm, annual avg. 0.14 ppm, 24-hr. avg.	0.50 ppm, 3-hr. avg.	Aggravation of respiratory diseases (asthma, emphysema)
Respirable Particulate Matter (PM ₁₀)	50 g/m ³ , 24-hr. avg. 20 g/m ³ AGM1	150 g/m ³ , 24-hr. avg. 50 g/m ³ AAM	150 g/m ³ , 24-hr. avg.; 50 g/m ³ AAM	Increased cough and chest discomfort; reduced lung function; aggravation of respiratory and cardio-respiratory diseases
Fine Particulate Matter (PM _{2.5})	No 24-hr, State std. 12 g/m ³ AGM1	65 g/m ³ , 24-hr. avg. 15 g/m ³ AAM	65 g/m ³ , 24-hr. avg. 15 g/m ³ AAM	
Sulfates (SO ₄)	25 g/m ³ , 24-hr. avg.	--	--	Increased morbidity and mortality in conjunction with other pollutants
Lead (Pb)	1.5 g/m ³ , monthly avg.	1.5 g/m ³ , calendar quarter	1.5 g/m ³	Impairment of blood and nerve function; behavioral and hearing problems in children
Hydrogen Sulfide (H ₂ S)	0.03 ppm, 1-hr. avg.	--	--	Toxic at very high concentrations
Vinyl Chloride	0.010 ppm, 24-hr. avg.	--	--	Carcinogenic

**Table IV.C-1
Ambient Air Quality Standards**

Air Pollutant	State Standard	National Standards		Health Effect
		Primary	Secondary	
Visibility-Reducing Particles	In sufficient amount to reduce prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation	--	--	--
<p><i>Note:</i> ppm = parts per million by volume g/m³ = micrograms per cubic meter AAM = annual arithmetic mean AGM = annual geometric mean</p> <p><i>Source:</i> California Air Resources Board, March 2003</p>				

State Planning

CARB approves the regional plans from each planning area in California for incorporation in the State Implementation Plan (SIP) for California. Each SIP is a plan mandated by the EPA that describes how the State will achieve Federal air quality standards by specified dates, depending on the severity of the air quality within the State or air basin. The CARB is also responsible for preparing the portions of the SIP related to mobile and many area source control measures.

Regional Planning

The South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG) jointly prepare the Air Quality Management Plan (AQMP) for the SCAB. The AQMP contains measures to meet California and federal requirements. When approved by CARB and the federal EPA, the AQMP becomes part of the SIP.

The most recent AQMP was adopted in August 2003. Pursuant to the California Clean Air Act, non-attainment areas are required to update their respective AQMP triennially in order to ensure that current data and information is incorporated into the review process. This triennial update allows each AQMP revision to represent a “snap-shot” in time of the air quality based on the best available information thereby allowing decision makers to make informed decisions in accordance with state and federal requirements. The 2003 AQMP updates attainment policies for ozone, PM10 and oxides of nitrogen, and replaces the 1997 AQMP attainment policy for carbon monoxide. The 2003 AQMP also addresses new state and federal planning requirements resulting from recent scientific data such as vehicular emission inventories, ambient air quality measurements and new air quality modeling technologies.

Existing Conditions

Air Quality Background

The proposed project site is located within the South Coast Air Basin (Basin), named so because its geographical formation is that of a basin, with the surrounding mountains trapping air pollutants in the valleys or basins below. This area includes the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties, and all of Orange County. A wide range of emission sources influence the Basins air quality, including dense populations, heavy vehicular traffic, industrial activity, and meteorological conditions.

Air pollutant emissions within the Basin are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at an identified location and are usually associated with manufacturing and industry. Examples are boilers and combustion equipment that produce electricity or generates heat. Area sources are widely distributed and produce many small emissions. Examples of area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbecue lighter fluid and hair spray. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and self-propelled construction equipment. Mobile sources account for the majority of the air pollutant emissions within the Basin.

Both the federal and State governments have established ambient air quality standards for outdoor concentrations of various pollutants in order to protect public health. The federal and state standards have been set at concentrations that could be generally harmful to human health and welfare, to protect the most sensitive persons from illness or discomfort with a margin of safety. Applicable standards are identified later in this EIR section. The South Coast Air Quality Management District (SCAQMD) is responsible for enforcing federal and State standards.

The air pollutants most relevant to air quality planning and regulation in the Basin include ozone, carbon monoxide (CO), fine particulate matter (PM10), and toxic air contaminants. All of which are briefly described below.

- Ozone gas forms when volatile organic compounds (VOCs) and nitrogen oxides (NOx)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable.
- Carbon Monoxide is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings with little to

no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are the primary source of CO in the Basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- Fine Particulate Matter (PM10) consists of extremely small suspended particles or droplets (10 microns or smaller in diameter). Some sources of PM10, like pollen and windstorms, occur naturally. However, in populated areas most PM10 is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- Toxic Air Contaminants (TAC) refers to a diverse group of air pollutants that can affect human health, but are not subject to established air quality standards. This is not because TACs fundamentally different from the pollutants discussed above, but rather because their effects tend to be local rather than regional.

Existing Regional Air Quality

The entire Basin is designated as a federal-level non-attainment area for ozone (extreme), CO, and PM10. The Basin is also a State-level non-attainment area for ozone, CO (Los Angeles County only), and PM10.

In an effort to monitor the various concentrations of air pollutants throughout the Basin, the SCAQMD has divided the region into 27 source receptor areas (SRAs) in which 31 monitoring stations operate. The proposed project site is located within SRA 7, which covers the eastern portion of the San Fernando Valley. Table IV.C-2 identifies the federal and state air quality standards for relevant air pollutants that are monitored within SRA 7 along with the ambient pollutant concentrations that were measured from 1999 to 2001.

Table IV.C-2
Summary of Ambient Air Quality in the Project Vicinity

Air Pollutants Monitored Within the San Fernando Valley	Year		
	2001	2002	2003
Carbon Monoxide (CO)			
Maximum 1-hour concentration measured	6.0ppm	6.00	N/A
Number of days exceeding national 35.0ppm 1-hour standard	0	0	N/A
Number of days exceeding State 20.0ppm 1-hour standard	0	0	N/A
Maximum 8-hour concentration measured	4.88	4.60	3.74
Number of days exceeding national 9.5ppm 8-hour standard	0	0	0
Number of days exceeding State 9.0ppm 8-hour standard	0	0	0
Ozone			
Maximum 1-hour concentration measured	0.129	0.128	0.134
Number of days exceeding national 0.12ppm 1-hour standard	2	1	4

Number of days exceeding State 0.09ppm 1-hour standard	15	17	37
Maximum 8-hour concentration measured	0.104	0.097	0.106
Number of days exceeding national 0.08ppm 8-hour standard	5	6	21
Fine Particulate Matter (PM10)			
Maximum 24-hour concentration	86.0	71.0	81.0
Number of days exceeding federal 150 ug/m3 standard	0	0	0
Number of days exceeding state 50 ug/m3 standard	14	7	6
<p>1. Ambient concentrations of CO, SO₂, and lead are not monitored within the project vicinity</p> <p>2. ppm = parts by volume per million of air.</p> <p>3. N/A = 2003 data not available as of March 2004.</p> <p>Source: ARB 2004</p>			

Existing Local Air Quality

The vicinity of the project site includes residential, commercial and institutional land uses. Local emission sources include stationary activities such as space and water heating, landscape maintenance, consumer products, industrial processes, and mobile sources (primarily automobile and truck traffic).

Motor vehicles are the primary source of pollutants within the project vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO “hotspots.” Section 9.4 of the SCAQMD’s CEQA Air Quality Handbook identifies CO as a localized pollutants requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots.

The SCAQMD recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak hour turning volumes to ambient CO air concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District (BAAQMD) and accepted by the SCAQMD. The simplified model is intended to be used as a screening analysis to identify potential CO hotspots. This methodology assumes worst-case conditions and screens maximum and worst-case CO concentrations.

Maximum CO concentrations were calculated for three intersections in close proximity to the project site. The results of these calculations are presented in Table IV.C-3 for representative receptors located 25, 50, and 100 feet from each roadway. As shown, existing CO concentrations near these intersections do not exceed federal or State ambient air quality standards. Therefore, CO hotspots do not exist near these intersections.

**Table IV.C-3
Existing Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million ^{1, 2}					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Sepulveda Boulevard & Ventura Boulevard	8.9	5.8	8.4	5.4	7.8	5.0
Sepulveda Boulevard & Magnolia Boulevard	7.7	4.9	7.4	4.7	7.0	4.4
Sepulveda Boulevard & Burbank Boulevard	9.3	6.0	8.7	5.6	8.0	5.1
1. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0ppm.						
2. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1ppm.						
Source: Christopher A Joseph & Associates, 2004. Calculation sheets are provided in Appendix C.						

Existing Site Emissions

The proposed project site is currently vacant; however, a former single family residential unit and associated outbuildings still exist on the site. These buildings are currently vacant and not used. Therefore, the proposed project site does not currently generate emissions.

Thresholds of Significance

Regional Air Quality

In its "1993 CEQA Air Quality Handbook" the SCAQMD established significance thresholds to assess the regional impact of project-related air pollutant emissions. Table IV. C-4 presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project resulting in net increases in daily air pollutant emissions below these thresholds is considered to have a less than significant effect on regional air quality throughout the South Coast Air Basin.

**Table IV.C-4
Emission Thresholds of Significance**

Pollutant	Construction		Operations
	pounds/day	tons/quarter	pounds/day
Carbon Monoxide (CO)	550	24.75	550
Sulfur Oxides (SOx)	150	6.75	150
Particulate Matter (PM10)	150	6.75	150
Nitrogen Oxides (NOx)	100	2.5	100
Reactive Organic Gasses (ROG)	75	2.5	75
Source: SCAQMD CEQA Air Quality Handbook, 1993.			

Local Air Quality

The significance thresholds for local air quality impacts are derived from the State standards of 20 ppm for 1-hour CO concentration levels, and 9 ppm for 8-hour CO concentration levels. If CO concentrations exceed these standards, then a significant impact would occur if the proposed project would increase the ambient 1-hour concentration by 1 ppm, or the ambient 8-hour concentration by 0.45 ppm. If the future CO concentration levels resulting from the development of the proposed project are below these standards, then no significant impact would occur.

Additional Air Quality Thresholds

The SCAQMD CEQA Handbook lists additional indicators of potential air quality impacts (i.e., Secondary Effects), including:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.
- Have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety; or could emit a toxic air contaminant regulated by SCAQMD rules or that is on a Federal or State air toxic list; or, could be occupied by sensitive receptors within one-quarter mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or, could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of one in one million.

Project Impacts***Short-Term Construction Impacts***

Construction air quality impacts can result from airborne dust from demolition, grading, excavation and dirt hauling and gaseous emissions from the use of heavy equipment, delivery and dirt hauling trucks, employee vehicles, and paints and coatings. Pollutants, such as ozone, are those where emissions from many sources combine in the atmosphere and impact areas that are far removed from the emission sources.

Construction impacts were forecasted and quantified through the URBEMIS 2002 land use based air quality model. The URBEMIS 2002 air quality model forecasts pollutant emission values based on project specific criteria. Construction is anticipated to occur for approximately 22 months and would involve demolition, site grading and the construction of the new multi-family building. During demolition activities, the single family structure, sheds and the Tower of Wooden Pallets would be demolished, with all debris cleared from the project site. Such activities result in airborne debris and emissions from collapse of the actual structures, soil disturbance as well as emissions from mechanical equipment (both stationary and mobile). Site grading involves the use of construction equipment to prepare the vacant site for the actual construction activity. Given the relatively small size of the project site (1.43 acres) and that it was occupied by few structures, no extensive site grading activities are warranted. However, it is reasonable to forecast that heavy construction equipment would be required during grading operations. As such, this type of equipment and general on-site activity results in air quality emissions from heavy equipment as well as from soil disturbance in the form of particulate matter.

Finally, during construction of the proposed multi-family structure, air quality emissions are generally a result of architectural and asphalt coatings, as well as from vehicular emissions associated with workers traveling to and from the project site. Project demolition and construction activities would occur within immediate proximity to sensitive receptors (i.e., residential land uses) to the north and east of the project site. Based on the available project data as well as the project description, regional air quality emissions associated with project construction were calculated.¹ The results of the forecast in peak daily emissions consistent with the adopted thresholds are provided in Table IV.C-5.

The project is too limited in scope to cause air quality impact significance thresholds to be exceeded during construction. This is evident in the emission analysis conducted for the project with the results presented in Table IV.C-5. As shown, construction related daily emissions would not exceed SCAQMD significance thresholds for any of the criteria pollutants. Therefore, construction impacts would be less than significant. Though the total daily emissions of dust or equipment exhaust will be less than significant, the very limited distance between on-site activities and adjacent occupied apartments and condominiums creates a potential for dust deposition soiling nuisance on parked cars, landscaping foliage, or outdoor furniture. It is not a significant impact because the emission magnitude is less than SCAQMD threshold levels, and the health impact of soil dust is much less than from complex chemical species found in urban atmospheres. Mitigation measures that reduce small-diameter, respirable particulate emissions also reduce larger soiling particles. Mitigation measures for dust control are thus recommended even if the SCQAMD threshold is not exceeded.

¹ Please refer to the URBEMIS 2002 air quality data for a detailed description of project construction assumptions.

**Table IV.C-5
Estimated Peak Daily Construction Emissions**

Emissions Source	Peak Day Emissions in Pounds per Day				
	ROG	NOx	CO	SOx	PM10
<i>Existing Buildings Demolition Phase</i>					
Fugitive Dust	-	-	-	-	1.05
Off-Road Diesel	6.14	47.34	45.10	-	2.15
On-Road Diesel	0.20	4.53	0.75	0.06	0.10
Worker Trips	0.07	0.18	1.72	0.00	0.01
Total Emissions	6.41	52.05	47.57	0.06	3.31
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0
Significant Impact?	NO	NO	NO	NO	NO
<i>Site Excavation and Grading Phase</i>					
Fugitive Dust	-	-	-	-	14.30
Off-Road Diesel	5.99	47.61	44.84	-	2.22
On-Road Diesel	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.09	0.13	1.70	0.00	0.00
Total Emissions	6.08	47.77	46.54	0.00	16.52
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0
Significant Impact?	NO	NO	NO	NO	NO
<i>Construction Phase</i>					
Building Construction Off-Road Diesel	8.47	57.44	68.53	-	2.49
Building Construction Worker Trips	0.24	0.13	2.84	0.00	0.00
Arch. Coatings Off-Gas	46.13	-	-	-	-
Arch. Coatings Worker Trips	0.24	0.13	2.84	0.00	0.00
Total Emissions	55.07	57.71	74.21	0.00	2.49
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0
Significant Impact?	NO	NO	NO	NO	NO
<i>Source: Urbemis 2002. Christopher A. Joseph & Associates, 2004. Calculation sheets are provided in Appendix C.</i>					

Demolition of the existing structure at the project site could disturb asbestos-containing materials and potentially release asbestos into the air. However, the project would be subject to SCAQMD Rule 1403, which specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities. The requirements of Rule 1403 ensure that there is virtually no release of asbestos into the air. Mandatory compliance with Rule 1403 would reduce this potential impact to a less than significant level.

Operational Impacts

Regional Emissions

When completed, the proposed project would consist of 98 multi-family units. The primary source of operational emissions would be vehicle travel to and from the proposed project. Based on the traffic report for the project (see Section IV. K. Transportation and Traffic), there would be approximately 722 total daily trips. In addition to vehicular emissions, a small amount of gaseous emissions would result from use of natural gas and other area emission sources, inducing indirect emissions from electricity usage.

As done with construction air quality emissions, operational emissions were forecasted utilizing the URBEMIS 2002 land use air quality model based on traffic data supplied by the traffic consultant. The results of these calculations are presented in Table IV. C-6. As shown, the daily operational emissions associated with the proposed project would not result in emissions of any pollutant exceeding the established thresholds. Therefore, no significant impact would occur for operational impacts.

**Table IV.C-6
Project Daily Operational Emissions**

Emissions Source	Emissions in Pounds per Day				
	ROG	NO _x	CO	SO _x	PM ₁₀
Water and Space Heating	0.06	0.74	0.31	-	0.00
Landscape Maintenance	0.08	0.01	0.58	0.00	0.00
Consumer Products	4.79	-	-	-	-
Motor Vehicles	8.38	8.63	96.33	0.08	7.37
Total Emissions	13.31	9.38	97.22	0.08	7.37
Thresholds (lb/day)	75.0	100.0	550.0	150.0	150.0
Significant Impact	NO	NO	NO	NO	NO

Source: Urbemis 2002. Christopher A. Joseph & Associates, 2004. Computer sheets are provided in Appendix C.

Local Emissions.

With respect to local operational CO air quality impacts, Section 9.4 of the SCAQMD CEQA Air Quality Handbook identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. The simplified CALINE4 screening procedure was used to predict future CO concentrations at study-area intersections in 2005 when the proposed project and other nearby development are expected to be completed. The results of these calculations are presented in IV.C-7. As shown, future CO concentrations near these intersections would not exceed federal or State ambient air quality standards. Reductions from existing conditions are attributable to improvements in automotive emission technology assumed for future vehicles. Therefore, CO hotspots are not predicted to

exist near these intersections in the future and the contribution of project traffic-related CO at these intersections would not be considered significant.

**Table IV.C-7
Future Plus Project Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million ^{1, 2}					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Sepulveda Boulevard & Ventura Boulevard	8.2	5.5	8.1	5.1	7.6	4.8
Sepulveda Boulevard & Magnolia Boulevard	7.5	4.8	7.2	4.6	6.9	4.4
Sepulveda Boulevard & Burbank Boulevard	8.8	5.7	8.3	5.3	7.7	4.9

1. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0ppm.
2. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1ppm.
Source: Christopher A. Joseph Associates, 2004. Calculation sheets are provided in Appendix C.

Additional Air Quality Analyses

As discussed above, the SCAQMD has provided other criteria, aside from construction and operational activities, which should be analyzed to determine the potential for creating an air quality impact. These additional criteria are identified below along with a corresponding impact analysis.

- Conflict with or obstruct implementation of the applicable air quality plan.

The 2003 AQMP is based on population growth through the year 2020 developed by each of the cities and counties in the region and incorporated by SCAG into the regional AQMP. All projects in the region contribute to regional pollution and the emissions associated with these projects are modeled by the SCAQMD to determine future air quality without additional controls. If pollutant concentrations are shown by the model to exceed State or national ambient air standards, the SCAQMD, SCAG and CARB develop additional control strategies to offset emissions and reduce concentrations to a level below the standards. The project site is in the Los Angeles City subarea. The City has projected growth to the year 2020 in the 2003 AQMP. SCAG has determined that as long as the new population accommodated by a project is within the total population forecast for the subarea for the buildout year, the proposed project is consistent with the AQMP and cumulative impacts are offset by the AQMP. Since the AQMP forecasts growth through the year 2020 and the proposed project would be completed by the year 2006, the proposed project's proportional population increase is consistent with the total population forecast for the subarea and is consistent with the AQMP population forecast. Therefore, the proposed project would not conflict with, or obstruct, implementation of the applicable air quality plan and as a result, would not have a significant impact on air quality.

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Based on the data provided earlier in this analysis, the proposed project would not result in an exceedance of applicable operational air quality emission threshold criteria. Therefore, during construction activities, the proposed project would not result in significant short-term construction impacts.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard (including release in emissions which exceed quantitative thresholds for ozone precursors).

The SCAQMD's CEQA Air Quality Handbook identifies methods to determine the cumulative significance of land use projects. Methods used to determine cumulative air quality impacts are based on performance standards and emission reduction targets necessary to attain the Federal and State air quality standards identified in the AQMP. As discussed earlier, the 2003 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within the basin, to meet State and Federal air quality standards, and to minimize the fiscal impacts that pollution control measures have on the local economy. If the analysis shows that an individual project is consistent with the AQMP performance standards, the project's cumulative impact should be considered less than significant. Based on the discussion above, the proposed project is in fact consistent with the AQMP, and as such, would not result in a cumulatively considerable net increase of any criteria pollutant. Therefore, any impacts would be less than significant.

- Expose sensitive receptors to substantial pollutant concentrations.

As discussed earlier, the purpose of the CO analysis is to determine if the proposed project could cause or contribute to carbon monoxide hot spots that would impact a sensitive receptor. The traffic consultant's estimates of future traffic volume were used to determine the potential for future hotspots developing as a result of the proposed project through the creation or worsening of an intersections LOS. Although the existing environment may not experience a CO hotspot, the introduction of a new project could result in the formation of a hotspot through added traffic or altered roadway configurations. Based on the traffic report prepared for the proposed project, neither existing nor future with project calculations would result in intersection LOS below acceptable levels for those locations where sensitive receptors are located.² It should also be noted that future traffic projections include cumulative traffic volumes resulting from related projects that may be built in the project vicinity. As a result, development and operation of the proposed project would not result in the formation or exacerbation of an existing CO hotspot

² *Traffic Impact Report for the Proposed Apartment Development at 15357 Magnolia Boulevard, Coco Traffic Planners, Inc., June 2003 (see Appendix H). Please refer to the traffic study for a detailed analysis of the LOS calculations.*

- Create objectionable odors affecting a substantial number of people.

The proposed project would replace an existing single family structure, sheds and Tower of Wooden Pallets with a multi-family structure. The site currently is littered with debris and disused junk and garbage scattered over the entire site, ranging from rusted out cars and a bus to clothes and furniture. Implementation of the project would result in cleaning up this debris with potential objectionable odors. During the building construction phase, odors would be generated during the application of architectural coatings such as paints and varnishes, roofing materials, and the paving of asphalt parking surfaces. The proposed use would not utilize or store products or chemicals that would produce objectionable odors. When completed and in operation, odors would primarily be generated by cooking activities within the proposed residential uses. These odors would be typical of most new residential developments. There are no uses in close proximity to the site that could expose project residents to objectionable odors. Therefore, any impacts would be less than significant.

- Project will have hazardous materials on site and could result in an accidental release of toxic air emissions or acutely hazardous materials posing a threat to public health and safety; or project could emit a toxic air contaminant regulated by SCAQMD rules or that is on a Federal or State air toxic list; or, project could be occupied by sensitive receptors within one-quarter mile of an existing facility that emits air toxics identified in SCAQMD Rule 1401; or, project could emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of one in one million.

Demolition of onsite structures, in particular, the Tower of Wooden Pallets may have the potential to house mold. All molds have the potential to cause health effects. Molds can produce allergens that can trigger allergic reactions or even asthma attacks in people allergic to mold. Others are known to produce potent toxins and/or irritants. It is recommended that a survey be conducted to determine the presence of mold in the Tower of Wooden Pallets. If mold is found to be a hazardous condition on the property then remediation would be required in accordance with the recommendations of the survey. Provided that the recommended remediation guidelines are followed, hazardous materials impacts caused by exposure to mold would be less than significant

The proposed project involves development of a multi-family residential project. No uses that would require the storage of, or transportation of, hazardous materials or materials that emit toxic fumes are proposed. The extent of hazardous materials associated with the project includes, but are not limited to, various household cleaners, solvents and motor oil typical of being stored in or nearby residences. Future residents of the proposed homes would not be subjected to toxic air emissions, as there are not any known uses in the vicinity that store, or transport, hazardous materials which would result in toxic air emissions. The project would not result in any significant impacts with respect to hazardous materials and toxic air releases.

CUMULATIVE IMPACTS

As discussed earlier in the additional air quality analysis section, cumulative air quality impacts, based on SCAQMD guidelines, are not analyzed in a manner similar to operational air quality impacts. Cumulative methods are different than the methodology used throughout the remainder of this EIR in which all-foreseeable future development within a given service boundary or geographical area is predicted and quantified. Instead, the SCAQMD's recommends that cumulative air quality analysis methods be based on performance standards and emission reduction targets necessary to attain the federal and state air quality standards identified in the AQMP, which was established to attain future air quality standards. If an individual project is consistent with the AQMP performance standards, the project's cumulative impact should be considered less than significant. Based on the analysis provided earlier in the additional air quality analysis section, the proposed project is consistent with the AQMP and consequently, would not result in a significant cumulative air quality impact.

MITIGATION MEASURES

Construction Mitigation Measures

The following mitigation measures are recommended during demolition, grading and construction of the proposed project and it is recommended that prior to the issuance of grading permits, the project applicant shall insure that the following measures are incorporated into the construction program prepared for the proposed project:

1. All exposed dirt surfaces shall be watered twice daily during days of construction.
2. All grading activities shall cease during second stage smog alerts and periods of high winds (i.e., greater than 25 mph) if soil is being transported to offsite locations and cannot be controlled by watering.
3. All trucks hauling dirt, sand, soil, or other loose materials offsite shall be covered or wetted or shall maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and the top of the trailer) to reduce dust emissions and meet SCAQMD District Rule 403. Wetting could reduce fugitive dust by as much as 50 percent.
4. A construction relations officer shall be appointed by the Applicant to act as a community liaison concerning onsite construction activity, including resolution of issues related to fugitive dust generation.
5. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators, to the extent feasible.
6. All access points shall be swept daily.

7. Construction equipment shall be visually inspected prior to leaving the site and loose dirt shall be washed off with wheel washers, as necessary.
8. Speed limit on all unpaved construction roads shall be no more than 15 miles per hour.
9. All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.
10. General contractors shall maintain and operate construction equipment so as to minimized exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would be kept with their engines off, when not in use to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.
11. Prohibit all construction vehicles from idling in excess of ten minutes, both on-and off-site.
12. The applicant shall secure any necessary permits from the SCAQMD.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With adoption of the mitigation measures recommended above, potentially significant air quality impacts would remain less than significant.