IV. ENVIRONMENTAL IMPACT ANALYSIS
C. AIR QUALITY

This section evaluates the potential impacts on air quality resulting from construction and operation of the proposed project. This includes the potential for the proposed project to conflict with or obstruct implementation of the applicable air quality plan, to violate an air quality standard or contribute substantially to an existing or projected air quality violation, to result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, to expose sensitive receptors to substantial pollutant concentrations, or to create objectionable odors affecting a substantial number of people. Documents used in preparation of this section include the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook* and the 2003 Air Quality Management Plan (AQMP), as amended, as well as federal and state regulations and guidelines.

Comment letters received from the Southern California Association of Governments (SCAG) and the South Coast Air Quality Management District (SCAQMD) were received regarding the Notice of Preparation (NOP). Comments made by these responsible agencies will we incorporated into this section.

ENVIRONMENTAL SETTING

Climate

The proposed project site is located within the South Coast Air Basin (Basin); named so because of its geographical formation is that of a basin, with the surrounding mountains trapping the air and its pollutants in the valleys or basins below. This area includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The air quality within the Basin is primarily influenced by a wide range of emissions sources—such as dense population centers, heavy vehicular traffic, and industry—and meteorology.

The proposed project site is located on the west side of the City of Los Angeles. The annual average temperature ranges from a daily low of 47 degrees Fahrenheit (°F) to a daily high of 75°F, although temperatures exceed 100°F on an occasional basis. The area also experiences a typical daily wind pattern that is a daytime onshore sea breeze (from the west) and a nighttime land breeze. This regime is broken only by occasional winter storms and infrequent strong northeasterly (from the northeast) Santa Ana winds from the mountains and deserts north of the Basin. On practically all spring and early summer days, the daily wind patterns flush much of the Basin of high levels of air pollutants. From late summer through the winter months, the flushing is less pronounced because of lighter wind speeds.

Air Quality Background

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 or combustion equipment that produces 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 barbeque 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 levels which concentrations could be generally harmful to human health and welfare, and 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 SCAQMD is responsible for bringing air quality within the Basin into conformity with the federal and state standards.

The air pollutants most relevant to air quality planning and regulation and that are most commonly measured and regulated: CO, O_3, NO_2, SO_2, and suspended particulate (i.e., PM_{10} and $PM_{2.5}$). Each of these is briefly described below along with their adverse health effects.

- Carbon Monoxide - CO, a colorless and odorless gas, interferes with the transfer of oxygen to the brain. It can cause dizziness and fatigue, and can impair central nervous system functions. CO is emitted almost exclusively from the incomplete combustion of fossil fuels. Automobile exhausts release approximately 70 percent of the CO in the Los Angeles area. A substantial amount also comes from burning wood in fireplaces and wood stoves. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. The highest CO concentrations measured in the Los Angeles area are typically recorded during the winter.

- Ozone - O_3, a colorless toxic gas, is the chief component of urban smog. O_3 enters the blood stream and interferes with the transfer of oxygen, depriving sensitive tissues in the heart and brain of oxygen. Although O_3 is not directly emitted, it forms in the atmosphere through a

chemical reaction between reactive organic gas (ROG) and nitrogen oxides (NO_x) under sunlight.[1] ROG and NO_x are primarily emitted from automobiles and industrial sources. O_3 is present in relatively high concentrations within the Los Angeles area, and the damaging effects of photochemical smog are generally related to the concentration of O_3. Highest O_3 concentrations occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies.

- Nitrogen Dioxide - NO_2, a reddish-brown gas, irritates the lungs. It can cause breathing difficulties at high concentrations. Like O_3, NO_2 is not directly emitted, but is formed through a reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_x and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10} (see discussion of suspended particulate matter below).

- Sulfur Oxides - Sulfur oxides, primarily SO_2, are a product of high-sulfur fuel combustion. The main sources of SO_2 are coal and oil used in power stations, in industries, and for domestic heating. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 concentrations have been reduced to levels well below the state and national standards, but further reductions in emissions are needed to attain compliance with standards for PM_{10}, of which SO_2 is a contributor.

- Suspended Particulate Matter - Particulate matter pollution consists of very small liquid and solid particles suspended in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when industry and gases emitted from motor vehicles undergo chemical reactions in the atmosphere. PM_{10} and $PM_{2.5}$ represent fractions of particulate matter. PM_{10} refers to particulate matter less than 10 microns in diameter, about one/seventh the thickness of a human hair. $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter. Major sources of PM_{10} include motor vehicles; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning, industrial sources, windblown dust from open lands, and atmospheric chemical and photochemical reactions. $PM_{2.5}$ results primarily from diesel fuel combustion (from motor vehicles, power generation, industrial facilities), residential fireplaces, and wood stoves.

  In addition, $PM_{2.5}$ is formed in the atmosphere from gases such as SO_2, NO_x, and reactive organic gas (ROG). PM_{10} and $PM_{2.5}$ pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM_{10} and $PM_{2.5}$ can increase the number and severity of asthma

[1] *ROG and NO_x are emitted from automobiles and industrial sources.*

attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates can cause lung damage directly. Whereas, larger particles tend to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that they can penetrate deeper into the lungs and damage lung tissues.[2] Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

- Toxic Air Contaminants (TAC) - TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

  Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The U.S. EPA has adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially. These go into effect in June 2006.

  In cooler weather, smoke from residential wood combustion can be a source of TACs. Localized high TAC concentrations can result when cold stagnant air traps smoke near the ground and, with no wind, the pollution can persist for many hours. This occurs in sheltered valleys during the winter. Wood smoke also contains a significant amount of PM_{10} and $PM_{2.5}$. Wood smoke is an irritant and is implicated in worsening asthma and other chronic lung problems.

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[2] *The NAAQS for $PM_{2.5}$ was adopted in 1997. Presently no methodologies for determining impacts relating to $PM_{2.5}$ have been developed or adopted by federal, state, or regional agencies. The State standard for PM_{10} is more stringent than the Federal $PM_{2.5}$ standard.*

Existing Regional Air Quality

The entire Basin is designated as a federal-level non-attainment area for ozone (extreme), CO, and PM_{10}. On November 15, 1995, the Basin was re-designated from non-attainment to attainment for nitrogen dioxide (NO_2)—a pure form of NO_x. The Basin is a State-level non-attainment area for ozone, CO (Los Angeles County only), and PM_{10}.

In an effort to monitor the various concentrations of air pollutants throughout the Basin, the SCAQMD has proposed project is located within SRA 2, which covers the northwest coastal Los Angeles County area. Ambient air pollutant concentrations within SRA 2 are monitored at the Veterans Administration building in West Los Angeles. Of the air pollutants discussed previously, only ambient concentrations of ozone, CO, and NO2 are monitored in SRA 2. Table IV.C-1 (Summary of Ambient Air Quality in the Project Vicinity) identifies the national and State ambient air quality standards for relevant air pollutants along with the ambient pollutant concentrations that have been measured within SRA 2 through the period of 2001 to 2003.

Table IV.C-1
Summary of Ambient Air Quality in the Project Vicinity

Pollutant	Air Quality Standards	Year		
		2001	2002	2003
SRA 2- Northwest Coastal Los Angeles County				
Ozone				
Maximum 1-hour concentration		0.09	0.118	0.134
Number of days exceeding federal 1-hour standard	>0.12 ppm	0	0	1
Number of days exceeding State 1-hour standard	>0.09 ppm	1	1	11
Maximum 8-hour concentration		0.080	0.077	0.104
Number of days exceeding federal 8-hour standard	>0.08 ppm	0	0	1
Carbon Monoxide (CO)				
Maximum 1-hour concentration		4.0	4.0	N/A
Number of days exceeding federal 1-hour standard	>35.0 ppm	0	0	N/A
Number of days exceeding State 1-hour standard	>20.0 ppm	0	0	N/A
Maximum 8-hour concentration		3.20	2.73	2.79
Number of days exceeding federal 8-hour standard	9.5 ppm	0	0	0
Number of days exceeding State 8-hour standard	>9.0 ppm	0	0	0
ppm Parts by volume per million of air $\mu g/m^3$ Micrograms per cubic meter of air NA 2003 data is not available as of November 2004				
Sources: SCAQMD 2002, 2003; California Air Resources Board 2002.				

Existing Local Air Quality

Land uses in the vicinity of the proposed project site include commercial, institutional, and residential uses. The single-family residential neighborhood of Bel Air is located north of the proposed project site. South of Le Conte Avenue is the commercial district of Westwood Village, comprised of retail shops, movie theaters, restaurants, and office buildings. East of Hilgard Avenue are sorority houses, apartment buildings, and the single-family residential Holmby-Westwood neighborhood. West of Gayley Avenue is the North Village multi-family residential neighborhood, primarily comprised of fraternity houses and apartment buildings. West of Veteran Avenue is the single-family Westwood Hills neighborhood and the Los Angeles National Cemetery. Local emissions sources include stationary activities, such as space and water heating, landscape maintenance, and consumer products, and mobile sources, primarily automobile and truck traffic.

Motor vehicles are the primary source of pollutants in the proposed 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 problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

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 the existing 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 utilized by the SCAQMD. The simplified model is intended as a screening analysis in order to identify a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

Maximum existing CO concentrations were calculated for the intersections evaluated in the traffic report prepared by Crain and Associates (refer to Appendix D) that have receptors in close proximity to the roadways. For the purpose of this analysis, receptors are any of the sensitive receptor types identified previously, as well as any location where people would be required (as in a work site) to be located for one to eight hours. The results of these calculations are presented in Table IV.C-2 (Existing Localized Carbon Monoxide Concentrations) for representative receptor locations at 25, 50, and 100 feet from each roadway. These distances were selected because they represent

locations where a person may be living or working for more than one or eight hours at a time. The National 1-hour standard is 35.0 parts per million (ppm), and the State 1-hour standard is 20.0 ppm. The 8-hour National and State standards are 9.5 ppm and 9.1 ppm, respectively.

Table IV.C-2
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
1. Beverly Glen & Wilshire Boulevard	7.2	5.0	6.6	4.6	5.9	4.1
2. Comstock Avenue & Wilshire Boulevard	7.2	5.0	6.6	4.6	5.9	4.1
3. Comstock Avenue & Club View Drive	4.5	3.1	4.4	3.1	4.3	3.0
4. Club View Drive & Santa Monica Blvd.	6.7	4.7	6.2	4.3	5.6	3.9
1. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million. 2. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.						
SOURCE: Christopher A. Joseph and Associates 2004. Calculation print out sheets are provided in Appendix E.						

As shown, under worst-case conditions, existing CO concentrations near the four intersections analyzed in the traffic report do not exceed the national or State 1-hour and 8-hour ambient air quality standards at 25, 50 or 100 feet from the roadways. Therefore, sensitive receptors in close proximity to these four intersections would not be exposed to existing substantial pollutant concentrations.

Existing Site Emissions

The proposed project site is currently vacant and does not contain any facility which produce daily amount of pollutants. However, the proposed project site does support intermittent uses as a pumpkin patch during the Halloween season and Christmas trees during the Christmas season. Equipment located on site during these operations may include small gasoline powered generators and other similar type of equipment for supplying small amounts of temporary electricity. Both of these uses are temporary and do not result in the daily generation of large amounts of pollutants.

REGULATORY FRAMEWORK

Air quality within the Basin is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air

quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the Basin are discussed below.

Federal

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The U.S. EPA also jurisdiction over emissions sources outside state waters (outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

As part of its enforcement responsibilities, the U.S. EPA requires each state with nonattainment areas to prepare and submit a state implementation plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs.

State

California Air Resources Board

The California Air Resources Board (ARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the ARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The ARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. It is a regional planning

agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan and Guide (RCPG) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the SCAQMD. The RCPG is a framework for decision-making for local governments, assisting them in meeting federal and state mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes through the year 2015, and beyond. Policies within the RCPG include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

South Coast Air Quality Management District

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. Every three years, the SCAQMD prepares an overall plan for air quality improvement. Each iteration of the plan is an update of the previous plan and has a 20 year horizon. The Final 2003 AQMP was adopted by the SCAQMD Governing Board on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and particulate matter (PM10); replaces the 1997 attainment demonstration for the federal carbon monoxide (CO) standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide (NO2) standard that the South Coast Air Basin (Basin) has met since 1992. This revision to the AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the South Coast Air Basin for the attainment of the federal ozone air quality standard.

The future air quality levels projected in the 2003 AQMP are based on several assumptions. For example, the SCAQMD assumes that general new development within the Basin will occur in accordance with population growth and transportation projections identified by SCAG in its most current version of the Regional Comprehensive Plan and Guide (RCPG), which was adopted in March 1996. The AQMP also assumes that general development projects will include feasible strategies (i.e., mitigation measures) to reduce emissions generated during construction and operation.

Local

City of Los Angeles

Local jurisdictions, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City of Los Angeles is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

A project's air quality impacts can be separated into short-term impacts due to construction and long-term permanent impacts from project operations. Determination of significant impact is the responsibility of the lead agency, which is the City.

The City prepared the Draft L.A. CEQA Thresholds Guide in 1998. For air quality, the City has not adopted specific citywide significance thresholds but instead relies on significance thresholds recommended by the SCAQMD in its CEQA Air Quality Handbook (SCAQMD CEQA Handbook), as revised in November 1993 and approved by the SCAQMD's Board of Directors.

The SCAQMD's emission thresholds apply to all federally regulated air pollutants except lead, which is not exceeded in the SCAB. Construction and operational emissions are considered by the SCAQMD to be significant if they exceed the thresholds shown in Table IV.C-3.

Carbon monoxide emissions from a project are significant if they cause CO concentrations at impacted locations to exceed a national or State standard or, in an area that already exceeds a standard, to increase CO concentrations by more than one part per million (ppm) averaged over one hour or 0.45 ppm averaged over eight hours.

Table IV.C-3
SCAQMD's Emission Thresholds of Significance

Pollutant	Construction		Operation
	pounds/day	tons/quarter	pounds/day
Carbon Monoxide (CO)	550	24.75	550
Sulfur Oxides (SO_x)	150	6.75	150
Particulate Matter (PM_{10})	150	6.75	150
Nitrogen Oxides (NO_x)	100	2.5	55
Reactive Organic Gases (ROG)	75	2.5	55
Source: SCAQMD CEQA Air Quality Handbook, 1993.			

In addition, 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.

Project Impacts

Implementation of the proposed project would not exceed federal, state or regional standards or thresholds, or substantially contribute to an existing or projected air quality violation.

During construction, two basic types of activities would be expected to occur and generate emissions. First, the development site would be prepared, excavated, and graded to accommodate the subterranean parking structure and building foundations. Second, the proposed project use would be constructed.

The analysis of daily construction emissions has been prepared utilizing the URBEMIS 2002 computer model recommended by the SCAQMD. Due to the construction time frame and the normal day-to-day variability in construction activities, it is difficult, if not impossible, to precisely quantify the daily emissions associated with each phase of the proposed construction activities. Nonetheless, Table IV.C-4 identifies worst-case scenario daily emissions that are estimated to occur on peak construction days, such as when the entire site is being graded and when residential and commercial construction is occurring simultaneously. As shown, construction related daily emissions would not exceed SCAQMD significance thresholds for during the construction phase.

Implementation of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan.

A significant impact may occur if the project is not consistent with the applicable Air Quality Management Plan (AQMP) or would in some way represent a substantial hindrance to employing the policies or obtaining the goals of that plan. The proposed project site is located within the South Coast Air Basin (Basin), within the jurisdiction of the South Coast Air Management District (SCAQMD). The SCAQMD has adopted criteria for consistency with regional plans and the regional AQMP in its CEQA Air Quality Handbook (Handbook). These include: 1) identifying whether the project would increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations and 2) identifying whether the project would exceed the assumptions utilized in preparing the AQMP. A significant impact may occur if a project is inconsistent with the growth assumptions upon which the regional AQMP was based The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. Every three years, the SCAQMD prepares an overall plan for air quality improvement. Each iteration of the plan is an update of the previous plan and has a 20 year horizon. The Final 2003 AQMP was adopted by the SCAQMD Governing Board on August 1, 2003. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and particulate matter (PM10); replaces the 1997 attainment demonstration for the federal carbon monoxide (CO) standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide (NO2) standard that the South Coast Air Basin (Basin) has met since 1992. This revision to the AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the South Coast Air Basin for the attainment of the federal ozone air quality standard.

Table IV.C-4
Estimated Peak Daily Construction Emissions

Emissions Source	Peak Day Emissions in Pounds per Day				
	ROG	**NO_x**	**CO**	**SO_x**	**PM_{10}**
Site Excavation and Grading Phase					
Fugitive Dust	-	-	-	-	2.00
Off-Road Diesel	4.31	36.05	29.50	-	1.68
On-Road Diesel	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.04	0.05	0.93	0.00	0.00
Total Emissions	***4.35***	***36.10***	***30.43***	***0.00***	***1.68***
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0
Significant Impact?	NO	NO	NO	NO	NO
Construction Phase					
Building Construction Off-Road Diesel	3.94	30.03	29.16	-	1.34
Building Construction Worker Trips	0.08	0.05	0.96	0.00	0.01
Arch. Coatings Off-Gas	48.25	-	-	-	-
Arch. Coatings Worker Trips	0.07	0.04	0.91	0.00	0.01
Asphalt Off-Gas	0.00	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00
Total Emissions	***52.34***	***30.11***	***30.98***	***0.00***	***1.36***
SCAQMD Thresholds	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. Calculation sheets are provided in Appendix E.

Principal control measures of the AQMP focus on adoption of new regulations or enhancement of existing regulations for stationary sources and implementation/facilitation of advanced transportation technologies (i.e., telecommunication, zero emission and alternative-fueled vehicles and infrastructure, and both capital and noncapital transportation improvements). Capital improvements consist of high-occupancy vehicle (HOV) lanes; transit improvements; traffic flow improvements; park-and-ride and intermodal facilities; and urban freeway, bicycle, and pedestrian facilities. Noncapital improvements consist of rideshare matching and transportation demand management activities derived from the congestion management program.

The future air quality levels projected in the 2003 AQMP are based on several assumptions. For example, the SCAQMD assumes that general new development within the Basin will occur in accordance with population growth and transportation projections identified by SCAG in its most current version of the Regional Comprehensive Plan and Guide (RCPG), which was adopted in March

1996. The AQMP also assumes that general development projects will include feasible strategies (i.e., mitigation measures) to reduce emissions generated during construction and operation. The proposed project is consistent with the land use projections in the City of Los Angeles General Plan. Therefore, because the population growth and transportation projections identified in the RCPG are based on General Plan build-out, the proposed project is also consistent with the RCPG. As mentioned above, consistency with the RCPG indicates consistency with the 2003 AQMP air quality projections; thus, the proposed project is consistent with the AQMP, and potential impacts would be less than significant.

Another measurement tool use in determining consistency with the AQMP is to determine how a project accommodates the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of Vehicle Miles Traveled (VMT) both within the project and the community in which it is located, and consequently the minimization of air pollutant emissions, that aspect of the project is consistent with the AQMP.

The proposed project is a residential development proposed to be located in West Los Angeles. The proposed project site is located in a heavily urbanized area of Los Angeles which has a large need for housing. The proposed project would make use of under utilized land and provide housing to primarily local residents while providing easy access to commercial uses, thus reducing the amount of VMT within the community. As discussed above, any project that reduces the amount of VMT is considered consistent with the AQMP. Therefore, the proposed project would be consistent with the AQMP and would result in a less-than-significant impact. No mitigation is required

Implementation of the proposed project would not 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

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, the operation of landscape maintenance equipment, and the use of consumer products. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

The proposed project incorporates a number of design characteristics that would help to reduce the operational emissions that would otherwise be generated by the project. These characteristics of the proposed project include the following:

- Provide direct pedestrian connections; and

- Provide shade trees to shade sidewalks to encourage pedestrian activity on hot days.

The analysis of daily operational emissions has been prepared utilizing the URBEMIS 2002 computer model recommended by the SCAQMD. The results of these calculations, and associated SCAQMD thresholds, are presented in Table IV.C-5 and take into consideration the internal trip reduction and mode-shift reduction characteristics of the mixed-use interaction of the proposed project and the surrounding land uses, and the design features of the proposed project discussed above. As shown, the proposed project would generate daily emissions of ROG, NOx, CO, SOx and PM_{10} which would not exceed the thresholds of significance recommended by the SCAQMD (emissions in pounds per day). Therefore, this is considered a less than significant impact. No mitigation is required.

Table IV.C-5
Project Daily Operational Emissions

Emissions Source	Emissions in Pounds per Day				
	ROG	**NO_x**	**CO**	**SO_x**	**PM_{10}**
Water and Space Heating	0.02	0.26	0.11	-	0.00
Landscape Maintenance	0.08	0.01	0.58	0.00	0.00
Consumer Products	1.71	-	-	-	-
Motor Vehicles	2.75	2.83	30.07	0.02	2.08
Total Emissions	***4.56***	***3.10***	***30.76***	***0.02***	***2.08***
Thresholds (lb/day)	55.0	55.0	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 E.

Implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Motor vehicles are the primary source of pollutants in 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 problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. The SCAQMD defines typical sensitive receptors as residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

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 the existing 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 and utilized by the SCAQMD. The simplified model is intended as a screening analysis in order to identify a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

The results of these calculations are presented in Table IV.C-6. As shown, future CO concentrations near these intersections would not exceed national or State ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future, and the contribution of project traffic-related CO at these intersections would be less than significant.

Table IV.C-6
Future 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
1. Beverly Glen & Wilshire Boulevard	6.8	4.8	6.3	4.4	5.6	3.9
2. Comstock Avenue & Wilshire Boulevard	7.2	5.1	6.6	4.6	5.9	4.1
3. Comstock Avenue & Club View Drive	4.5	3.1	4.4	3.1	4.3	3.0
4. Club View Drive & Santa Monica Blvd.	6.7	4.7	6.2	4.3	5.6	3.9
1. National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million. *2. National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.*						
SOURCE: Christopher A. Joseph and Associates 2004. Calculation print out sheets are provided in Appendix E.						

Implementation of the proposed project would not expose sensitive receptors to objectionable odors.

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the proposed project involves no elements related to these types of activities, no odors are anticipated.

Odors related to kitchens located within the individual units uses may result. However, these odors would be considered consistent with odors generated in the vicinity due to existing restaurants and residential units in the area and would be result in a less than significant impact. No mitigation is required.

CUMULATIVE IMPACTS

Construction Impacts

The City has identified 35 related projects within one and a half miles of the proposed project. Construction of these projects could result in additional cumulative impacts on local air quality, particularly fugitive dust impacts, if all were constructed simultaneously. However, only the 19 unit apartment building project located at the intersection of Wilshire Blvd. and Devon Ave. is located close enough to the project site that fugitive dust emissions could potentially combine with those of the proposed project. However, because both projects are located on small parcels and would not generate excessive levels of pollutants, it is very unlikely that the local area would experience cumulative impacts from the two projects, even if both were under construction at the same time. Also, the adopted AQMP projects construction-related regional emissions for the population growth anticipated through the year 2025 and incorporated control measures to offset the increase in regional emissions that would result from this construction.

Regional Operational Impacts

The 2003 AQMP is based on population growth through the year 2025 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 below the standards. The project site is in the Los Angeles City sub-area. The City has projected growth to the year 2025 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 sub-area for the build-out 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 2025 and the proposed project is anticipated to be completed by the year 2007, the proposed project is consistent with the total population forecast in the AQMP. Therefore, the proposed project would not have a significant cumulative adverse impact on air quality.

Local Operational Impacts

The traffic study for the project contains a list of proposed new projects in the vicinity of the project site. Traffic from these related projects was included in the analysis of local traffic impacts and potential carbon monoxide hotspots. Since future one-hour and eight-hour CO concentrations would be below national and State ambient air standards when the traffic from the proposed project and the other

related projects is included in the analysis, the project would not have a significant cumulative adverse impact on local air quality.

MITIGATION MEASURES

No significant air quality impacts would occur as a result of the proposed project. Therefore, no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project would not result in any significant air quality impacts.