4.6 AIR QUALITY

INTRODUCTION

This section addresses issues related to air pollutant emissions, including "criteria air pollutants" associated with the update of the existing 1974 Westchester-Playa del Rey Community Plan and the refinement of the existing 1996 General Plan Framework Element to guide development through 2025. The proposed project plans to amend the Plan land use map to reflect existing conditions with respect to Service System Symbols; to amend the Plan land use map and related zone changes to achieve consistency between existing land uses and the community plan; to implement a portion of the Citywide General Plan Framework Element; to implement the new land use categories established by the General Plan Framework for specific locations throughout the community; to include a Short Term Land Use Diagram to reflect boundaries of the Centers and Districts identified in the Framework Element; to identify Mixed Use Areas, Pedestrian Oriented Districts, and Community Design Overlay Areas; and to implement zone changes throughout the plan area to insure consistency with the amended Plan land use map and General Plan Framework land use categories.

This section of the EIR focuses on the proposed Plans effects on existing air emissions and air quality, its consistency with local air quality policies and regulations, and the potential impacts on the surrounding community.

SETTING

The Westchester-Playa del Rey Community Plan area is located within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD), within the South Coast Air Basin (SCAB). The SCAB encompasses 6,745 square miles and includes some portions of San Bernardino, Riverside, Los Angeles, and Orange Counties. The SCAQMD stretches from the Pacific Ocean in the west, to the Angeles National Forest to the north, to Orange County to the south, and to Riverside and San Bernardino Counties to the east.

REGIONAL CLIMATE

Air quality is affected by the rate and location of pollutant emissions and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, affect air quality.

The SCAB encompasses a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the southwest and high mountains around the rest of its perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild

climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or offshore Santa Ana winds.[1]

The vertical dispersion of air pollutants in the SCAB is hampered by the presence of persistent temperature inversions. High-pressure systems, such as the semi-permanent high-pressure zone in which the SCAB is located, are characterized by an upper layer of dry air that warms as it descends, restricting the mobility of cooler marine-influenced air near the ground surface. This results in the formation of subsidence inversions. Such inversions restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog.

The atmospheric pollution potential of an area is largely dependent on winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and strong inversions produces the greatest concentration of air pollutants. On days without inversions, or on days of winds averaging over 15 mph, smog potential is greatly reduced.[2]

APPLICABLE REGULATIONS

FEDERAL STANDARDS

The federal Clean Air Act (CAA) of 1970 is the comprehensive law that regulates air emissions from area, stationary, and mobile sources. The law authorized the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The goal of the Act was to set and achieve NAAQS in every state by 1975. The setting of maximum pollutant standards was coupled with directing the states to develop state implementation plans (SIPs) applicable to appropriate industrial sources in the state.

The Act was amended in 1977, primarily to set new goal dates for achieving attainment of NAAQS since many areas of the country had failed to meet the deadlines. The CAA was amended in 1990 to meet unaddressed or insufficiently addressed problems such as acid rain, ground level ozone, stratospheric ozone depletion, and air toxics.

NAAQS have been established for carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM_{10}), and lead (Pb). These contaminants are referred to as criteria pollutants. Table 1 summarizes state and federal air quality standards.
Areas are classified under the federal CAA as either "attainment" or "non-attainment" areas for each criteria pollutant based on whether the NAAQS have been achieved or not. The SCAB is designated as a non-attainment area for O_3, CO, and PM_{10}. The SCAB is designated as an attainment area for

[1] South Coast Air Quality Management District, CEQA Air Quality Handbook, April 1993.
[2] *Ibid.*

SO_2 and lead, and a maintenance area for NO_2.

STATE STANDARDS

In 1967, California's legislature passed the Mulford-Carrel Act, which established the California Air Resources Board (CARB). The CARB set state air quality standards for criteria pollutants. The state standards for these pollutants are more stringent than the corresponding federal standards (see **Table 4.6-1**). As in the federal CAA, the California CAA classifies areas as either being in "attainment" or "non-attainment" for these criteria pollutants. Areas designated as non-attainment are then given a time frame to achieve attainment.

LOCAL REGULATIONS

The project site is located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD adopted an Air Quality Management Plan (AQMP) in 1979, which intended to meet federal air quality standards by December 31, 1987. Using better data and modeling tools, the 1982 revision of the AQMP concluded that the basin could not demonstrate attainment by the 1987 deadline required by the federal CAA. Therefore, the 1982 Revision of the AQMP proposed a long-range strategy that could result in attainment in 20 years. In 1987, a federal court ordered the U.S. EPA to disapprove the 1982 AQMP revision because it did not demonstrate attainment of the federal standards by the 1987 deadline.[3]

[3] South Coast Air Quality Management District and Southern California Association of Governments, Final 1989 Air Quality Management Plan, March 1989.

TABLE 4.6-1: AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

Pollutant	**Averaging Time**	**California Standard**	Federal Primary Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	0.12 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Motor vehicles.
	8 hours	---	0.08 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, CO interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9 ppm	9.0 ppm		
Nitrogen Dioxide (NO_2)	Annual Average	---	0.05 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
Suspended Particulate Matter (PM_{10} $PM_{2.5}$)	1 hour	0.25 ppm	---	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).
	1 hour	0.25 ppm	---		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Geometric Mean	30 ug/m^3 (PM_{10})	65 ug/m^3 ($PM_{2.5}$)		
	Annual Arithmetic Mean	---	50 ug/m^3 (PM_{10})		
	24 hours	50 ug/m^3 (PM_{10})	150 ug/m^3 (PM_{10}) 15 ug/m^3 ($PM_{2.5}$)		
Lead	Monthly	1.5 ug/m^3	------	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurologic dysfunction (in severe cases).	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m^3		

Source: California Air Resources Board, *Ambient Air Quality Standards*, January 25, 1999.

Currently, the SCAQMD is operating under the 1997 AQMP and the 1999 amendment to the 1997

ozone portion of the AQMP. The 1997 AQMP relies on short-term and intermediate-term attainment measures which were to be adopted by 2000, and long term attainment measures utilizing advances in technology reasonably expected to be available by the year 2010. On January 12, 1999, the U.S. EPA proposed a partial disapproval of the ozone portion of the 1997 AQMP. The AQMD responded with the 1999 Ozone State Implementation Plan revision, which the EPA indicated would be approvable. Currently, the AQMD is in the process of preparing the Proposed 2003 Air Quality Management Plan for the South Coast Air Basin. The 2003 AQMP seeks to demonstrate attainment with state and federal air quality standards and will incorporate a revised emissions inventory, the latest modeling techniques, and updated control measures remaining from the 1997/1999 SIP and new control measures based on current technology assessments.

EXISTING AIR QUALITY

The SCAQMD maintains air quality monitoring stations throughout the SCAB. The closest monitoring station is located at the intersection of 120th Street and La Cienega Boulevard in the City of Hawthorne, approximately two miles southeast of the planning area. A five-year summary (1997-2001) of data collected at this station is shown in **Table 4.6-2** and compared with the corresponding state ambient air quality standards.

Ozone (O_3). The most pervasive air quality problem in the air basin is high O_3 concentrations. Ozone is not emitted directly, but is a secondary pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic compounds (ROC) and nitrogen oxides (NO_x). Significant O_3 production generally requires about three hours in a stable atmosphere with strong sunlight. Ozone is a regional air pollutant because it is transported and diffused by wind concurrent with the photochemical reaction process. Motor vehicles are the major source of ozone precursors in the basin. During late spring, summer, and early fall, light winds, low mixing heights, and abundant sunshine combine to produce conditions favorable for maximum production of O_3. Ozone causes eye and respiratory irritation, reduces resistance to lung infection, and may aggravate pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber. The state one-hour ozone standard was exceeded on an average of 3.2 days per year in the project area from 1997 through 2001 (see **Table 4.6-2**).

TABLE 4.6-2: PROJECT AREA AIR POLLUTANT SUMMARY, 1997-2001[a]

Pollutant	Standard[b]	1997	1998	1999	2000	2001
Ozone (O_3)						
Highest 1-hr average, ppm[c]	0.09	0.11	0.09	0.15	0.10	0.12
Number of standard exceedance[d]		6	0	1	1	8
Carbon Monoxide (CO)						
Highest 1-hr average, ppm[c]	20.0	12.0	11.0	10.0	9.0	7.0
Number of standard exceedance[d]		0	0	0	0	0
Highest 8-hr average, ppm[c]	9.0	10.3	6.6	8.4	7.0	5.1
Number of standard exceedance[d]		1	0	0	0	0
Nitrogen Dioxide (NO_2)						
Highest 1-hr average, ppm[c]	0.25	0.17	0.15	0.13	0.13	0.11
Number of standard exceeance[d]		0	0	0	0	0
Particulate Matter-10 Micron (PM_{10})						
Highest 24-hr average, $\mu g/m^3$ [c]	50	79	66	69	74	75
Number of standard exceedance[d,e]		4	7	6	9	8
Annual Geometric Mean, $\mu g/m^3$ [c]	30	33.8	30.3	33.4	33.4	34.4
Violation		Yes	Yes	Yes	Yes	Yes

NOTE: Underlined values indicate an excess of applicable standard.

a. Data are from the SCAQMD monitoring station located at 120th Street and La Cienega Boulevard.
b. State standard, not to be exceeded.
c. ppm - parts per million; $\mu g/m^3$ - micrograms per cubic meter.
d. Refers to the number of days in a year during which at least one exceedance was recorded. Measured every six days.

Source: SCAQMD, *Air Quality Data Summaries*, 1997-2001.

Carbon Monoxide (CO). Carbon Monoxide is a non-reactive pollutant emitted primarily by motor vehicles. Ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic and are also influenced by meteorological factors such as wind speed and atmospheric mixing. When strong surface inversions formed on winter nights are coupled with near-calm winds, CO from automobile exhaust becomes concentrated. The highest CO levels within the Basin are almost always measured during the winter. Carbon Monoxide interferes with the transfer of oxygen to the blood. It may cause dizziness and fatigue and can impair central nervous system functions. The one-hour CO standards has not been exceeded at the Monitoring Station in the last five years while the eight-hour average was exceeded once in 1997 (see **Table 4.6-2**).

Nitrogen Dioxide (NO_2). There are two oxides of nitrogen which are important in air pollution: Nitric Oxide (NO) and Nitrogen Dioxide (NO_2). Nitric oxide, along with some NO_2, is emitted from motor vehicle engines, power plants, refineries, industrial boilers, ships, aircraft, and railroads. Nitrogen dioxide is primarily formed when NO reacts with atmospheric oxygen in the presence of

Reactive Organic Compounds (ROC) and sunlight; the other product of this reaction is ozone. Nitrogen dioxide is the "whiskey brown" colored gas, more commonly known as smog, readily observed during periods of heavy air pollution. Concentrations of NO_2 are highest during the late fall and winter. Nitrogen dioxide increases damage from respiratory disease and irritation, and may reduce resistance to certain infections. The state standard for NO_2 has not been exceeded in the last five years in the project area (see **Table 4.6-2**).

Inhalable Particulate Matter (PM_{10}). PM_{10} refers to particulates less than 10 microns in diameter -- those which can be inhaled and cause health effects. Particulates in the atmosphere result from many kinds of dust- and fume-producing industrial and agricultural operations, combustion, and atmospheric photochemical reactions. Demolition, construction, and vehicular traffic are major sources of particulates in urban areas. Natural sources of particulates include wind-blown dust, and ocean spray. Very small particulates of certain substances can cause direct lung damage, or can contain absorbed gasses that may be injurious. Particulates can also damage materials and reduce visibility. PM_{10} standards have been exceeded on an average of 6.8 days per year in the project area between 1997 and 2001 (see **Table 4.6-2**).

Toxic Air Contaminants (TACs). TACs are pollutants known or suspected to cause cancer or other serious health effects such as birth defects. TACs may also have significant adverse environmental and ecological effects. Examples of TACs include benzene, diesel particulate, hydrogen sulfide, methylchloride, 1,1,1-trichloroethane, toluene, and metals such as cadmium, mercury, chromium, and lead. Health effects from TACs vary depending on the specific toxic pollutant but may include cancer, immune system damage, as well as neurological, reproductive, developmental, and respiratory problems.

According to the EPA, approximately 50% of the TACs we are exposed to comes from mobile source emissions. EPA and CARB are both concerned over diesel particulate matter emissions. The EPA has published its final rule to control emissions of hazardous air pollutants from mobile sources, in the March 29, 2001 Federal Register. The CARB approved a comprehensive diesel risk reduction plan in September 2000.

EXISTING AIR POLLUTION SOURCES

Major emissions sources in the Plan area include stationary and mobile sources of emissions. Stationary sources of emissions include the Hyperion sewage treatment plant, Scattergood power generating plant, and numerous other emissions sources associated with industrial activity. Mobile sources of emissions would include motor vehicle traffic on roadways within the Plan area. In addition, major sources of stationary and mobile sources of emissions are located adjacent to the plan area. Stationary sources of emissions include the Los Angeles International Airport, Chevron Oil Refinery, and emissions sources associated with industrial activity. Mobile sources of emissions include vehicle traffic on the I-405 San Diego Freeway, the I-105 Glenn Anderson Freeway and other roadways which border the Plan area.

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. SCAQMD includes in its list of sensitive receptors, residences, schools, playgrounds, childcare centers, convalescent homes, retirement homes, rehabilitation centers, and athletic facilities. Sensitive population groups include children, the elderly, and the acutely and chronically ill, especially those with cardio-respiratory diseases. Residential areas are considered to be sensitive to air pollution because residents tend to be home for extended periods of time, resulting in sustained exposure to any pollutant present. All types of sensitive receptors are located throughout the project Plan area.

IMPACTS AND MITIGATION

CRITERIA FOR DETERMINING SIGNIFICANCE

The criteria used to determine the significance of an impact are based on the model initial study checklist contained in Appendix G of the CEQA Guidelines.

Air quality impacts would be considered significant if the project would:

- conflict with or obstruct implementation of the applicable air quality plan;
- violate any air quality standards 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 releasing emissions which exceed quantitative thresholds for ozone precursors);
- expose sensitive receptors to substantial pollutant concentration; or,
- create objectionable odors affecting a substantial number of people.

SCAQMD air quality suggested project specific thresholds of significance for construction activities and project operations are shown in **Table 4.6-3.** While these thresholds may not be considered applicable to plan-level projects, they are evaluated herein because they are the only numerical thresholds given by the SCAQMD and are based on Federal New Source Review regulations. Planning projects that entail plans for large-scale areas are generally evaluated based on their conformance with the AQMP and the population projections contained therein. However, the current AQMP does not reach 2025.

TABLE 4.6-3: SCAQMD AIR POLLUTION SIGNIFICANCE CRITERIA

Air Pollutant	Project Construction	Project Operation
Carbon Monoxide (CO)	550 lbs. Per day	550 lbs. Per day

Reactive Organic Compounds (ROC)	75 lbs. Per day	55 lbs. Per day
Nitrogen Oxides (NO_x)	100 lbs. Per day	55 lbs. Per day
Particulates (PM_{10})	150 lbs. Per day	150 lbs. Per day

SOURCE: South Coast Air Quality Management District.

PROJECT IMPACTS

Impact 4.6-1: Construction allowed under the proposed Westchester-Playa del Rey Community Plan Update and General Plan Framework Element would emit criteria pollutants. Plan emissions would exceed project-level threshold criteria recommended by the SCAQMD. This would be a significant project-level impact.

Implementation of the Westchester-Playa del Rey Community Plan Update would allow for the construction of an additional 700,000 square feet of retail space, 1,000,000 square feet of office space, 19,444,990 square feet of industrial space, 5,752 single family residences, and 18,696 multi family dwelling units over the twenty year life of the Community Plan. Construction-related emissions would primarily be 1) dust generated from grading and soil importation; 2) hydrocarbon emissions from paint and asphalt; 3) exhaust emissions from powered construction equipment; and 4) motor vehicle emissions associated with construction activities.

Table 4.6-3 shows average daily calculated construction emissions if the total construction allowed for in the plan were built out evenly over a twenty-year period. The estimated daily construction emissions, shown in **Table 4.6-4**, were calculated utilizing the CARB, URBEMIS 2001 air emissions model and are based on the following key assumptions:

- 35,000 square feet of retail space would be built per year;
- 50,000 square feet of commercial office space would be built per year;
- 154,996 square feet of industrial space would be built per year;
- 288 single family residential units would be built per year;
- 935 multi family residential units would be built per year.

TABLE 4.6-4: AVERAGE DAILY TOTAL CALCULATED CONSTRUCTION EMISSIONS IN THE PLANNING AREA

Air Pollutant	Construction	SCAQMD Construction	Significant Impact

		Significance Criteria	
Carbon Monoxide (CO)	14 lbs./day	550 lbs./day	No
Reactive Organic Compounds (ROC)	117 lbs./day	75 lbs./day	Yes
Nitrogen Oxides (NO_x)	90 lbs./day	100 lbs./day	No
Particulates (PM_{10})	298 lbs./day	150 lbs./day	Yes

Source: URBEMIS 2001.

Construction emissions would occur throughout the twenty-year period at individual sites within the Plan area. Emissions would vary from day to day depending on the amount and type of construction taking place. Currently major construction projects are occurring in the Plan area. Future construction emissions are assumed to be similar to existing construction emissions in the Plan area. As emissions control technology improves, emissions factors for vehicle exhaust are anticipated to decrease in the future.

As stated above, the SCAB is currently in non-attainment with respect to ozone and particulate matter. As shown in **Table 4.6-4,** total daily average emissions in the Plan area would be considered significant due to the large amount of construction emissions allowed under the Westchester-Playa del Rey Community Plan Update. The following mitigation measures are recommended for all projects occurring within the plan area. However, due to the large amount of construction air emissions in a non-attainment area, the Westchester-Playa del Rey Community Plan Update could lead to significant unavoidable impacts to air quality caused by construction activity.

Mitigation Measures

1. The City as a condition of approval of all discretionary projects shall require all contractors building within the Westchester-Playa del Rey Community Plan Update area to utilize best available control technologies to reduce the creation of inhaleable dust particles during construction.

2. Dust abatement shall use measures consistent with SCAQMD Rule 403, including site wetting, covering of haul trucks, and storage piles, and periodic street sweeping in accordance with SCAQMD regulations.

3. The City as a condition of approval of all discretionary projects shall require all contractors building projects within the Westchester-Playa del Rey Community Plan Update area to utilize properly tuned and maintained equipment.

Residual Impacts

Impacts would be significant and unavoidable

Impact 4.6-2: Increased development allowed under the proposed Westchester-Playa del Rey Community Plan Update and General Plan Framework Element would increase criteria pollutant emissions in the area. This would be considered a significant project level impact to air quality.

The update to the Westchester-Playa del Rey Community Plan and General Plan Framework Element would allow for a population increase of 42,586 people. The population increase would lead to a planned increase of 24,443 housing units and 9,923 jobs in the Plan area.

Operational emissions sources would increase throughout the 20-year period as individual sites throughout the Plan area are developed. These sources of emissions would include stationary and mobile sources. Stationary emissions sources would include residential, commercial, and industrial sources. Increased mobile emissions sources would result from the increase in motor vehicle traffic supported by the Plan as well as vehicles traversing the plan area for neighboring developments such as the Los Angeles International Airport.

Table 4.6-5 shows the General Plan Framework Element population, housing, and employment projections for the Westchester-Playa del Rey CPA for the year 2025.

TABLE 4.6-5: POPULATION, HOUSING, AND EMPLOYMENT INCREASES FOR THE WESTCHESTER-PLAYA DEL REY CPA THROUGH THE YEAR 2025

	Existing (2000)	Projections to 2025
Population (persons)	51,255	93,841
Housing (units)	22,507	46,950
Jobs	62,628	72,551

Source: General Plan Framework Element for the Westchester-Playa del Rey CPA.

Over the twenty year life of the Westchester-Playa del Rey Community Plan and General Plan Framework Element, an additional 35,000 square feet of retail space, 50,000 square feet of commercial office space, 154,996 square feet of industrial space, 288 single family residential units and 935 multi family residential units could be added each year.

TABLE 4.6-6: 2025 DAILY OPERATIONAL INCREASE OVER EXISTING CONDITIONS IN THE PLANNING AREA

Air Pollutant	2025 Daily Operational Increase Over Existing Conditions	SCAQMD Project Level Operational Significance Criteria	Significant Impact
Carbon Monoxide (CO)	56,010 lbs./day	550 lbs./day	Yes
Reactive Organic Compounds (ROC)	31,155 lbs./day	55 lbs./day	Yes
Nitrogen Oxides (NO_x)	3,027 lbs./day	55 lbs./day	Yes
Particulates (PM_{10})	5,893 lbs./day	150 lbs./day	Yes

Source: URBEMIS 2001.

Operational emissions were calculated utilizing the CARB, URBEMIS 2001 air emissions model and are based on key assumptions found in Impact 4.6-1. **Table 4.6-6** shows the 2025 daily operational increase over existing conditions allowed by the Community Plan. As shown in **Table 4.6-6**, daily average operational emissions would exceed SCAQMD significance thresholds and as such would be considered a significant impact to air quality.

As shown in **Table 4.6-5**, population and housing in the plan area are anticipated to approximately double in the next twenty years which would lead to the doubling of emissions sources in that time period. However, actual emissions increases would be limited by technological developments in vehicle emissions control, implementation of alternative fuel technologies, and other measures outlined in the AQMP.

As shown in **Table 4.6-6**, non-construction emissions will increase significantly in the future due to growth allowed by the proposed project. Individual projects would be required to undergo

separate CEQA review. Mitigation measures below would help to limit the increase in emissions. Nonetheless, the increase in operational emissions allowed by the proposed Plan would constitute a significant and unavoidable impact to air quality.

In accordance with the 1997 AQMP, local governments are responsible for helping provide supportive actions to assist in the implementation of the AQMP through participation in voluntary programs. One such program, the Interagency AQMP implementation Committee (IAIC), provides ongoing coordination between key local government entities and the SCAQMD Board. The following mitigation measures have been identified in the AQMP as actions local governments should implement.

Mitigation Measures

4. The City shall coordinate with the SCAQMD to facilitate implementation of the AQMP.

5. The City shall identify and resolve issues that could affect timely implementation of the AQMP.

6. The City shall develop a structure for identifying, analyzing, and resolving potential conflicts between air quality and other regional goals.

7. The City shall develop, where possible, advanced transportation technologies.

8. The City shall support implementation of transportation improvements to include High Occupancy Vehicle (HOV) lanes, transit improvements, traffic flow improvements, park and ride and intermodal facilities, urban freeway, bicycle and pedestrian facilities. In addition to the previous capital based actions, where possible non-capital based actions shall be implemented to include rideshare matching programs, congestion management program based programs, telecommunication facilities/satellites work centers, and transit pass centers.

Residual Impacts

Although implementation of the mitigation measures identified in the AQMP will assist in minimizing degradation of air quality posed by the additional growth allowed in the plan, the increased emissions would be considered significant and unavoidable

Impact 4.6-3: The proposed Westchester-Playa del Rey Community Plan Update and General Plan Framework Element would contribute air emissions to the region that would add to the cumulative baseline. This would be considered a significant unavoidable impact to air quality.

The CEQA Guidelines require that a project be evaluated with respect to its contribution to the cumulative condition. Currently, the existing ambient air quality baseline is affected by emissions from the greater Los Angeles Basin. Emissions in the Plan area are influenced by traffic on local roadways and specific land uses within the Plan area. The proposed plan would allow for an increase in sources of stationary and mobile emissions. Emissions associated with local traffic are anticipated to emit the highest levels of criteria pollutants in the Plan area. The proposed plan would add emissions to the Plan area that would lead to an increase in the future baseline emissions level. This increase would be limited by the adoption of more stringent control regulations by the SCAQMD, the advancement of emissions control technology, and the gradual replacement of older and more polluting vehicles. Even so, the contribution of additional emissions to the baseline would be considered a significant unavoidable impact to air quality.

Mitigation Measures

No mitigation is available.

Residual Impacts

Impacts would be significant and unavoidable

Impact 4.6-4: Motor vehicle trips generated by the project would affect carbon monoxide concentrations at intersections in the project vicinity. Future calculated carbon monoxide concentrations would not exceed state or federal ambient air quality standards. This would not be considered a significant impact to air quality.

To determine whether the project would create carbon monoxide hotspots at local intersections, carbon monoxide concentrations under future project conditions were modeled using CALINE4.[4] The model results are compared to state 1-hour carbon monoxide standards of 20.0 parts per million (ppm).

The CALINE-4 dispersion model was developed by the California Department of Transportation (Caltrans). It utilizes peak-hour traffic volumes and worst-case meteorological assumptions to

[4] California Line Dispersion Model, CALTRANS, 1998.

estimate localized worst-case carbon monoxide concentrations. Worst case meteorological conditions include low wind speed and stable atmospheric conditions. The CALINE-4 model predicts an average concentration at specified receptor locations on each side of the modeled roadway.

Background carbon monoxide concentrations in the project vicinity were estimated based on data available from the SCAQMD projected future year 1-hour carbon monoxide concentration. Based on the year 2020, existing worst-case background concentrations were estimated to be 7.3 ppm, one-hour average,[6] which is well below the California one hour standard of 20 ppm.

The roadway most affected by the project was Lincoln Boulevard between Jefferson Boulevard Culver Boulevard. Kaku Associates, Inc. estimated future traffic volumes. The CALINE-4 model was performed for the year 2020 using peak traffic volumes established by Kaku Associates, Inc.. The CALINE-4 model is equipped with a topographic feature that allows inputs to account for terrain features such as steep mountainsides or canyon walls. For each intersection modeled, the terrain was assumed to be flat. Modeling results are presented in **Table 4.6-7.**

As indicated in **Table 4.6-7,** carbon monoxide concentrations would not be above state and national carbon monoxide standards at any of the intersections analyzed. This would be considered a less than significant impact. No mitigation measures would be required. **Appendix 7.3** includes model result printouts.

Mitigation Measures

No mitigation is required.

Residual Impacts

Impacts would be less than significant.

TABLE 4.6-7: PROJECTED MAXIMUM 1-HOUR CURBSIDE CARBON MONOXIDE CONCENTRATIONS

Roadway	State Standard (ppm)	Year 2020 (ppm)
Lincoln Boulevard between Jefferson and Culver Boulevard	20.00	7.6

[6] Source: South Coast Air Quality Management District, Projected Future Year 1-hour CO Concentrations.

Centinela Boulevard between Campus Center Drive and Teale Street	20.00	7.4
Manchester Boulevard between Airport Boulevard and Osage Avenue	20.00	7.4
Sepulveda Boulevard between Century Boulevard and 98th Street	20.00	7.5

Note: Local intersection increment based on CALINE4 and the results of the traffic analysis assuming worst-case meteorological conditions.
Note: All values are parts per million (ppm) of carbon monoxide.
Source: CALINE4 Emissions Model.