IV.E AIR QUALITY

1. INTRODUCTION

Implementation of the project would generate both construction- and operation-related pollutant emissions. Construction-related emissions would be generated by on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles, and energy use. Operation-related emissions would be generated by on-/off-site stationary sources and by mobile sources. The City of Los Angeles has prepared an Initial Study that determined that the long-term operation of the project would not conflict or obstruct with any air quality plan and that the project would not create objectionable odors.[1] However, construction and operational emissions associated with the proposed project were found to have the potential to cause a significant impact and further study was necessary in an EIR. Consequently, the focus of this EIR section is on evaluating construction- and operational-related impacts associated with project buildout and whether the proposed project would cause an exceedance of an ambient air quality standard or South Coast Air Quality Management District (SCAQMD) significance threshold. Where potential impacts are identified, mitigation measures are recommended to reduce such impacts, if possible, to below the level of significance.

Introduction to Air Quality

The Southern California area has been divided into a number of geographical air basins. The project sites are located within the South Coast Air Basin (Basin), a 6,000-square-mile area encompassing all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties, all of which are governed by the SCAQMD. This area consistently generates the highest levels of smog in the United States and is considered to have the worst air quality in the nation. The factors that influence this determination are discussed below.

Smog and Its Causes

Smog is a general term based on the words smoke and fog that is used to describe dense, visible air pollution. Although some air pollutants are colorless, smog is commonly used to describe the general concentrations of pollutants in the air. Smog is formed when combustion emissions and gaseous emissions, such as volatile organic compounds (VOC, also referred to as reactive organic compounds, or ROC) and oxides of nitrogen (NO_x), undergo photochemical reactions in sunlight to form ozone (O_3). O_3 is a gas that, in the upper atmosphere, helps to shield the earth from harmful radiation. However, in the lower atmosphere where people live, O_3 poses health risks and damages crops, rubber and other

[1] The Initial Study is contained in **Appendix I** of this Draft EIR. Operational emissions calculations are provided in **Appendix IV.E**.

materials. Particulates, such as soil and dust materials, and vehicle exhaust particulates often mix with O_3, nitrogen dioxide (NO_2 (a form of NO_x)) and other compounds and create a brownish haze in the air. "Smog episode" warnings occur when an occurrence of high concentrations of O_3 is predicted that could endanger or cause harm to the public.

The topography and climate of the Basin combine to make it an area of high smog potential. During the summer months, a warm air mass frequently descends over the lower, cool, moist marine air layer. The warm upper layer forms a cap over the marine layer and inhibits the air pollutants generated near the ground from dispersing upward. Light summer winds and the surrounding mountains further limit the horizontal disbursement of the pollutants. Concentrating volumes of pollutants in this manner allows the summer sunlight to generate high levels of smog. In the winter, cool ground temperatures and very light winds cause extremely low inversions and air stagnation that trap carbon monoxide (CO) and NO_x during the late night and early morning hours. On days when no inversions occur, or when winds average 25 miles per hour or more, there will be no important smog effects. A summary of local climatic conditions is provided later in this section.

The air pollutants within the Basin are generated by both stationary and mobile sources. Stationary sources are known as "point sources," which have one or more emission sources at a single facility. Point sources are usually associated with manufacturing and industrial uses, and includes sources that produce electricity or process heat, such as refinery boilers or combustion equipment, but may also include commercial establishments, like dry cleaners or charbroilers in restaurants. "Area sources," which are widely distributed, produce many small emissions. Examples of area sources include residential water heaters, painting operations, lawn mowers, agricultural fields, landfills, and consumer products such as barbecue lighter fluid or hair spray. "Mobile sources" refer to operational and evaporative emissions from motor vehicles. They account for over 95 percent of the CO emissions, approximately two-thirds of the sulfur oxides (SO_x) emissions, three-quarters of the NO_x emissions and one-half of the ROC found within the Basin.[2]

2. EXISTING CONDITIONS

a. Existing Local Climate

The project sites are located in the Basin, which both transports and receives air pollutants from the coastal portions of Ventura and Santa Barbara counties that are located in the South Central Coast Air Basin. The South Central Coast Air Basin also receives air pollutants from oil and gas development operations on the outer continental shelf. The 2003 AQMP does not specifically address the control

2 SCAQMD, *California Environmental Quality Act (CEQA) Air Quality Handbook* (Diamond Bar, California: SCAQMD, April 1993), p. 3-4.

requirements for these adjacent areas; however, the control measures in the plan meet both the federal Clean Air Act (CAA) and California Clean Air Act (CCAA) transport requirements and assist downwind areas in complying with the federal O_3 air quality standard.

Regional climate is dominated by a persistent high-pressure area, which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell causes changes in the weather patterns of the area. Warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity characterize local climate conditions.

b. Existing Ambient Air Quality

Regional Air Quality

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to national and state standards. California and the federal government have established health-based air quality standards for the following criteria air pollutants: O_3, CO, NO_2, sulfur dioxide (SO_2, a form of SO_x), PM_{10} (particulate matter 10 microns or less in size), $PM_{2.5}$ (particulate matter 2.5 microns or less in size) and lead. The California and national ambient air quality standards (CAAQS and NAAQS) were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards and in the case of PM_{10} and SO_2, much more stringent. California has also established standards for sulfates, visibility-reducing particles, hydrogen sulfide and vinyl chloride. The state and national ambient air quality standards for each of the monitored pollutants and their effects on health are summarized in **Table IV.E-1, Ambient Air Quality Standards**.

Air quality of a region is considered to be in attainment of the state standards if the measured ambient air pollutant levels for O_3, CO, SO_2 (one- and 24-hour), NO_2, PM_{10}, $PM_{2.5}$ and visibility-reducing particles are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive three-year period. The National Ambient Air Quality Standards (other than O_3, PM_{10}, $PM_{2.5}$ and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant.

The Basin is in an area of high air pollutant potential, particularly from June through September. This condition is generally attributed to the large amount of pollutant emissions, light winds and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus, causing elevated air pollution levels. Pollution concentrations in the Basin vary with location, season and time of day. Ozone (O_3) concentrations, for example, tend to be lower along the coast, higher in the near inland valleys and lower in the far inland areas of the Basin and adjacent desert.

Table IV.E-1
Ambient Air Quality Standards

Air Pollutant	State Standard	Federal Primary Standard	Most Relevant Health Effects
Ozone (O_3)	0.09 ppm, 1-hr avg.	0.12 ppm, 1-hr avg. (revoked 6/15/05) 0.08 ppm, 8-hr avg. (3-year average of annual 4th-highest daily maximum)	(a) Short-term exposures: (1) Pulmonary function decrements and localized lung edema in humans and animals; (2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; (d) Property damage
Carbon Monoxide (CO)	9.0 ppm, 8-hr avg. 20 ppm, 1-hr avg.	9 ppm, 8-hr avg. 35 ppm, 1-hr avg.	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses
Nitrogen Dioxide (NO_2)	0.25 ppm, 1-hr avg.	0.053 ppm, annual arithmetic mean	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration
Sulfur Dioxide (SO_2)	0.04 ppm, 24-hr avg. 0.25 ppm, 1-hr avg.	0.030 ppm, annual arithmetic mean 0.14 ppm, 24-hr avg.	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in person with asthma
Suspended Particulate Matter (PM_{10})*	20 $\mu g/m^3$, annual arithmetic mean 50 $\mu g/m^3$, 24-hr avg.	50 $\mu g/m^3$, annual arithmetic mean 150 $\mu g/m^3$, 24-hr avg.	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; (b) Excess seasonal declines in pulmonary function, especially in children
Suspended Particulate Matter ($PM_{2.5}$)*	12 $\mu g/m^3$, annual arithmetic mean	15 $\mu g/m3$, annual arithmetic mean (3-year average) 65 $\mu g/m3$, 24-hr avg. (3-year average of 98th percentile)	(a) Increased hospital admissions and emergency room visits for heart and lung disease; (b) Increased respiratory symptoms and disease; and (c) Decrease lung functions and premature death
Sulfates	25 $\mu g/m^3$, 24-hr avg.	None	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage
Lead*	1.5 $\mu g/m^3$, 30-day avg.	1.5 $\mu g/m^3$, calendar quarterly average	(a) Increased body burden; (b) Impairment of blood formation and nerve conduction
Visibility-Reducing Particles	Reduction of visual range to less than 10 miles at relative humidity less than 70%, 8-hour avg (10 AM – 6 PM)	None	Visibility impairment on days when relative humidity is less than 70%

Air Pollutant	State Standard	Federal Primary Standard	Most Relevant Health Effects
Hydrogen Sulfide	0.03 ppm, 1-hr avg.	None	Odor annoyance
Vinyl Chloride*	0.01 ppm, 24-hr avg.	None	Known carcinogen

Source: SCAQMD. Final Program Environmental Impact Report to the 2003 Draft AQMP (Diamond Bar, California: SCAQMD, August 2003), Table 3.1-1, p. 3.1-2. This report may be reviewed on the SCAQMD website at http://ww.aqmd.gov/ceqa/documents/2003/aqmd/finalEA/aqmp/AQMP_FEIR.html.

$\mu g/m^3$ = microgram per cubic meter; ppm = parts per million by volume; hr = hour; avg. = average

* *The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.*

Local Air Quality

To monitor the concentrations of the criteria pollutants, the SCAQMD has divided the Basin into source receptor areas (SRAs) in which 33 air quality monitoring stations are operated. The project sites are located within SRA 1, also known as the Central Los Angeles County Monitoring Area. The station that monitors this SRA is located at 1630 North Main Street in the City of Los Angeles, approximately 2 miles north of the project sites. This station presently monitors emission levels of O_3, CO, NO_2, SO_2, $PM_{2.5}$ and PM_{10}.

Table IV.E-2, Ambient Pollutant Concentrations Registered in SRA 1, lists the ambient pollutant concentrations registered and the violations of state and federal standards that have occurred at the Central Los Angeles County monitoring station from 2000 through 2004.

Hydrogen sulfide, vinyl chloride, and visibility-reducing particles were not monitored by the ARB or the SCAQMD in Los Angeles County during the period of 2000 to 2004.

As shown in **Table IV.E-2**, for the years 2000 to 2004, the Central Los Angeles monitoring station has registered values above state and federal standards for O_3 and state standards for PM_{10}, and state and federal standards for $PM_{2.5}$. Data shows that violations of the PM_{10} and $PM_{2.5}$ standards have been decreasing over the past five years. However, particulate matter is still in nonattainment of NAAQS. This fast growing area requires constant construction to support the population growth, which is a large contributor to particulate matter emissions. Concentrations of CO and NO_2 have not been exceeded within SRA 1; nevertheless as a precursor for ozone, NO_x it is essential to control this criteria pollutant. Constant violations in the Los Angeles Basin of the O_3 standard warrant caution when dealing with its precursors, such as NO_x and ROC. Due to the densely populated area coupled with high motor vehicle use and unfavorable topography, O_3, NO_x, and ROC have remained a lingering problem for the SCAB. Concentrations of the other two criteria pollutants, SO_2 and lead, have not been exceeded anywhere within the Basin for several years.

Table IV.E-2
Ambient Pollutant Concentrations Registered in SRA 1

Pollutant	Standards[1]	Year				
		2000	2001	2002	2003	2004
OZONE (O_3)						
Maximum 1-hr concentration (ppm)		0.14	0.116	0.122	0.152	0.110
Maximum 8-hr concentration (ppm)		0.105	0.099	0.079	0.088	0.092
Number of days exceeding federal 1-hr standard	0.12 ppm	1	0	0	1	0
Number of days exceeding state 1-hr standard	0.09 ppm	8	8	8	11	7
Number of days exceeding federal 8-hr standard	0.08 ppm	4	1	0	2	1
CARBON MONOXIDE (CO)						
Maximum 1-hr concentration (ppm)		7	6	5	6	4
Maximum 8-hr concentration (ppm)		6.0	4.6	4.0	4.6	3.2
Number of days exceeding federal 8-hr standard	9 ppm	0	0	0	0	0
Number of days exceeding state 8-hr standard	9.0 ppm	0	0	0	0	0
NITROGEN DIOXIDE (NO_2)						
Maximum 1-hr concentration (ppm)		0.16	0.14	0.14	0.16	0.16
Annual arithmetic mean concentration (ppm)		0.0404	0.0378	0.0327	0.0338	0.0328
Number of days exceeding state 1-hr standard	0.25 ppm	0	0	0	0	0
SULFUR DIOXIDE (SO_2)						
Maximum 1-hr concentration (ppm)		0.08*	0.03	0.02	0.05*	0.08
Maximum 24-hr concentration (ppm)		0.010*	0.010	0.016	0.006*	0.015
Annual arithmetic mean concentration (ppm)		0.001*	0.003	0.002	0.002*	0.002
Number of days exceeding state 1-hr standard	0.25 ppm	0	0	0	0	0
Number of days exceeding state 24-hr standard	0.04 ppm	0	0	0	0	0
Number of days exceeding federal 24-hr standard	0.14 ppm	0	0	0	0	0
PARTICULATE MATTER (PM_{10})						
Maximum 24-hr concentration ($\mu g/m^3$)		80	97	65	81	72
Annual arithmetic mean concentration ($\mu g/m^3$)		40.0	44.2	39.3	34.6	32.7
Number of samples exceeding federal 24-hr standard	150 $\mu g/m^3$	0	0	0	0	0
Number of samples exceeding state 24-hr standard	50 $\mu g/m^3$	15	20	8	6	5
PARTICULATE MATTER ($PM_{2.5}$)						
Maximum 24-hr concentration ($\mu g/m^3$)		87.8	73.4	66.3	83.7	75.0
Annual arithmetic mean concentration ($\mu g/m^3$)		22.0	22.9	21.8	21.3	19.6
Number of samples exceeding federal 24-hr standard	65 $\mu g/m^3$	11	4	1	5	2
LEAD[2]						
Maximum 30-day average concentration ($\mu g/m^3$)		0.06	0.06	0.05	0.15	0.03
Maximum quarterly average concentration ($\mu g/m^3$)		0.05	0.05	0.03	0.15	0.03
Number of months exceeding the state standard	1.5 $\mu g/m^3$	0	0	0	0	0
SULFATE						
Maximum 24-hr concentration ($\mu g/m^3$)		16.4	15.9	15.2	14.6	12.7
Number of days exceeding state standard	25 $\mu g/m^3$	0	0	0	0	0

na = not available
** Less than 12 full months of data, may not be representative.*
Sources:
(i) SCAQMD, Air Quality Data (for 2000, 2001, 2002 2003, and 2004), (Diamond Bar, California: SCAQMD); http://www.aqmd.gov/smog/historicaldata.htm.
(ii) California Air Resources Board Air Quality Database http://www.arb.ca.gov/adam/welcome.html.
[1] *Parts by volume per million of air (ppm), micrograms per cubic meter of air ($\mu g/m^3$), or annual arithmetic mean (aam).*

Local Vicinity Emissions

As part of a focused planning effort to promote housing, a thriving commercial environment, well-planned community uses, and improved vehicular circulation, the Central Business District Redevelopment Project was established in 1975 under the direction of the Community Redevelopment Agency. The 1,549-acre Central Business District Redevelopment Plan was adopted to address long-standing issues of blight and deterioration affecting the heart of Downtown Los Angeles. The Central Business District Redevelopment Project includes four sub-areas: Central City East, the Financial Core, South Park and the Historic Core. The Herald Examiner project is located in the South Park sub-area, which is in the southwestern quadrant of the Central Business District/City Center Redevelopment Area. The South Park sub-area is an emerging mixed use, predominantly residential, community intended to provide a full range of residential options for households of all income levels within walking distance of the Regional Commercial Core.

Other prominent land uses within the South Park neighborhood area include the Los Angeles Convention Center, Staples Center, the Fashion Institute of Design and Merchandising (FIDM) and the California Hospital Medical Center. Other land uses in the immediate vicinity of the project area include retail stores, wholesale outlets, parking structures and surface parking lots.

Emissions sources within the South Park sub-area include stationary activities, such as space heating, cooking, and water heating and mobile activities, primarily automobile traffic. Motor vehicles are the primary sources of pollutants within the project vicinity. The prominence of worker commuting and a highly dense area magnify the impacts that these sources have on air quality. The addition of the Herald Examiner project would include residential units that could possibly reduce worker commutes and promote environmentally friendly transportation, such as walking, biking and public transportation.

The Herald Examiner project consists of development proposed on three sites owned by the project applicant in Downtown Los Angeles. These three sites are identified as the Broadway site, which includes the existing Herald Examiner building, the Hill Street site and the 12th Street site. These three sites are located in the South Park neighborhood in Downtown Los Angeles in the Central Business District/City Center Redevelopment Project area.

The Herald Examiner building, referred to as the Broadway building in this report, is a 90,500-square-foot historically significant structure located on the southwest corner of West 11th Street and South Broadway at 1111 South Broadway. The building is bounded by South Broadway on the east, West 11th Street on the north, the Hill Street site to the west and the Transamerica Center on the south. The Hill Street site, as described below, is located immediately adjacent to this site to the west.

The Hill Street site, which is located adjacent to the Broadway site discussed above, consists of a 46,220-square-foot lot, and is located along South Hill Street between 11th Street and 12th Street. The Hill Street site address is 156 West 11th Street. The site is bounded by the Broadway site on the east, West 11th Street on the north, South Hill Street on the west and the Transamerica Center on the south. The Hill Street site is currently developed with the Press building, which was built in 1948 to accommodate for the printing presses, paper storage and parking.

The 12th Street site is currently a 47,916-square-foot asphalt-paved parking lot, and is located on the south side of West 12th Street between South Broadway and South Main Street at 120 West 12th Street. The site is bounded by West 12th Street on the north, South Main Street on the east, West Pico Boulevard on the south and South Broadway on the west.

3. 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, policymaking, education and a variety of programs. The agencies primarily responsible for improving the air quality within the Basin are discussed below along with their individual responsibilities.

a. U.S. Environmental Protection Agency (U.S. EPA)

The U.S. EPA is responsible for enforcing the 1990 amendments to the CAA and the NAAQS. These standards identify levels of air quality for seven "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants that are considered safe, with an adequate margin of safety to protect the public health and welfare. The seven criteria pollutants include O_3, CO, NO_2 (a form of NO_x), SO_2, $PM_{2.5}$, PM_{10} and lead. The U.S. EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives and interstate trucking.

In response to its enforcement responsibilities, the U.S. EPA requires each state to prepare and submit a State Implementation Plan (SIP) that describes how the state will achieve the federal standards by specified dates, depending on the severity of the air quality within the state or air basin. The Basin is classified by the U.S. EPA as a serious nonattainment area for CO, and a nonattainment area for NO_2 and PM_{10}. In addition to these pollutants, the Basin was classified as an extreme nonattainment area for the federal 1-hour O_3 standard. U.S. EPA revoked this standard on June 15, 2005 (see discussion of the 8-hour standard below). Under the compliance timetables that pertain to O_3, the Basin was to achieve attainment status for O_3 within 20 years after enactment of the 1990 CAA Amendments (i.e., 2010). To do so, the

Basin must show a 15 percent reduction from its 1990 Basin-wide emissions inventory within 6 years and a 3.0 percent annual reduction thereafter for the remainder of the 20 years. For the other nonattainment pollutants, the Basin must achieve attainment status by the most expeditious date that can be achieved, but no later than five years from the date the area was designated nonattainment. If the Basin experiences difficulty doing so, the U.S. EPA may extend the period for attainment for an additional 10 years.

On April 30, 2004, the U.S. EPA published designations of nonattainment areas with respect to the 8-hour O_3 standard. The Basin was designated as "severe-17" nonattainment for the purposes of this standard. Severe-17 nonattainment areas have an attainment date of June 15, 2021 (17 years after the effective date of the designation) to comply with the 8-hour O_3 standard. This designation commences a new round of planning to demonstrate compliance with the 8-hour standard.

The status of the Basin with respect to attainment with the NAAQS is summarized in **Table IV.E-3, National Ambient Air Quality Standards and Status, South Coast Air Basin**.

Table IV.E-3
National Ambient Air Quality Standards and Status
South Coast Air Basin

Pollutant	Averaging Time	Designation/Classification
Ozone (O_3)	8 Hour	Nonattainment/Severe 17
	1 Hour[1]	Nonattainment/Extreme
Carbon Monoxide (CO)	8 Hour	Nonattainment/Serious
	1 Hour	Nonattainment/Serious
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	Attainment/Unclassifiable
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	Attainment/Unclassifiable
	24 Hour	Attainment/Unclassifiable
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	Nonattainment/Serious
	24 Hour	Nonattainment/Serious
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Nonattainment
	24 Hour	Nonattainment
Lead (Pb)	Calendar Quarter	Attainment

Source: Environmental Protection Agency. "Region 9: Air Programs, Air Quality Maps." [Online] [July 14, 2005]. <http://www.epa.gov/region9/air/maps/maps_top.html>.

[1] *The national 1-hour O_3 standard was revoked on June 15, 2005. The previous attainment designation/classification is shown for informational purposes.*

b. California Air Resources Board

The California Air Resources Board (ARB), a department of the California Environmental Protection Agency (CalEPA), oversees air quality planning and control throughout California. It is primarily responsible for ensuring implementation of the CCAA, responding to the federal CAA requirements and

for regulating emissions from motor vehicles and consumer products within the state. In addition, the ARB has established emission standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The CCAA established a legal mandate to achieve the CAAQS by the earliest practicable date. These standards apply to the same criteria pollutants as the federal CAA, and also include sulfate, visibility, hydrogen sulfide and vinyl chloride. They are also more stringent than the federal standards and in the case of PM_{10} and SO_2, far more stringent.

Health and Safety Code Section 39607(e) requires the ARB to establish and periodically review area designation criteria. These designation criteria provide the basis for the ARB to designate areas of the state as "attainment," "nonattainment," or "unclassified" for the state standards. In addition, Health and Safety Code Section 39608 requires the ARB to use the designation criteria to designate areas of California and to annually review those area designations. The ARB makes area designations for 10 criteria pollutants: O_3, CO, NO_2, SO_x, PM_{10}, $PM_{2.5}$, sulfates, lead, hydrogen sulfide and visibility-reducing particles.[3] Currently, the ARB has not established area designations for vinyl chloride;[4] however, the ARB has identified vinyl chloride as toxic air contaminants with an undetermined threshold level of exposure for adverse health effects. Therefore, vinyl chloride is addressed on a project-by-project basis. As discussed below, this project is not expected to emit vinyl chloride or some of the other criteria pollutants, such as sulfates, lead, hydrogen sulfide and visibility-reducing particles. The status of the Basin with respect to attainment of the CAAQS is summarized in **Table IV.E-4, California Ambient Air Quality Standards and Status, South Coast Air Basin**. The Basin is currently in nonattainment with respect to the 1-hour state O_3 standard. SCAB has been out of attainment for O_3 for the past several years and has a current O_3 reduction plan in place. The Basin is also out of attainment for PM_{10} and $PM_{2.5}$ annual mean standards, as well as the 24-hour PM_{10} standard. With the exception of hydrogen sulfide, vinyl chloride and visibility-reducing particles, which are still unclassified at this time, the SCAB is in attainment of the remaining criteria pollutants.

---

3 California Air Resources Board. Area Designations (Activities and Maps). [Online] 22 December 2003. <http://www.arb.ca.gov/desig/desig.htm>; Written communication with Marcy Nystrom, California Air Resources Board, 24 December 2003, stating that state law states requires ARB to make area designations for pollutants with state standards listed in California Code of Regulations, Title 17, Section 70200. However, vinyl chloride is not included in this section of the California Code of Regulations; and therefore, the ARB does not make area designations for vinyl chloride.

4 Ibid.

Table IV.E-4
California Ambient Air Quality Standards and Status
South Coast Air Basin

Pollutant	Averaging Time	Designation/Classification
Ozone (O_3)	1 Hour	Nonattainment/Extreme
Carbon Monoxide (CO)	8 Hour	Attainment
	1 Hour	Attainment
Nitrogen Dioxide (NO_2)	1 Hour	Attainment
Sulfur Dioxide (SO_2)	24 Hour	Attainment
	1 Hour	Attainment
Respirable Particulate Matter (PM_{10})	Annual Arithmetic Mean	Nonattainment
	24 Hour	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	Nonattainment
Lead (Pb)[1]	30 Day Average	Attainment
Sulfates (SO_4)	24 Hour	Attainment
Hydrogen Sulfide (H_2S)	1 Hour	Unclassified
Vinyl Chloride[1]	24 Hour	Unclassified
Visibility-Reducing Particles	8 Hour (10:00 AM to 6:00 PM)	Unclassified

Source: California Air Resources Board. "Area Designations (Activities and Maps)." [Online] [July 21, 2005]. <http://www.arb.ca.gov/desig/desig.htm>
[1] *The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined.*

c. Southern California Association of Governments (SCAG)

SCAG is a council of governments for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. As a regional planning agency, SCAG serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG also serves as the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews projects to analyze their impacts on SCAG's regional planning efforts.

Although SCAG is not an air quality management agency, it is responsible for several air quality planning issues. Specifically, as the designated Metropolitan Planning Organization (MPO) for the Southern California region, it is responsible, pursuant to Section 176(c) of the 1990 amendments to the CAA, for providing current population, employment, travel and congestion projections for regional air quality planning efforts and for determining conformity with the applicable air quality management plan. It is required to quantify and document the demographic and employment factors influencing expected transportation demand, including land use forecasts. Pursuant to California Health and Safety Code Section 40460(b), SCAG is also responsible for preparing and approving the portions of the Basin's air quality management plans relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures and strategies. SCAG's method of

accomplishing these requirements is through the preparation of the Growth Management Chapter of the *Regional Comprehensive Plan and Guide* (RCPG).

d. Regional Comprehensive Plan and Guide (RCPG)

In April 2004, the SCAG devised the RCPG to help local agencies plan consistently and prudently with the envisioned growth for the South Coast. The plan addressed all areas relevant to major development such as: land use, housing, hazardous waste, energy, air quality, open space, economy, education, water, transportation, finance and emergency preparedness. With respect to air quality, the plan is designed to coordinate agency actions in order to implement the most effective technology and transportation investments that will help reduce air pollution and raise air quality. A major component of the plan is to identify gaps in air quality actions to be better addressed in future air and transportation plans. The primary goal of the air quality section is to make measures and actions taken by federal, state, or regional agencies more effective. Since the SCAB is in severe and serious nonattainment of NAAQS for O_3 and PM_{10}, respectively, "integrated, innovative and aggressive actions" must be taken to protect human health and the environment. The RCP provides the binding that brings all air quality activities and agencies together to achieve the ultimate goal of cleaner and more healthful air.

e. South Coast Air Quality Management District (SCAQMD)

The management of air quality in the Basin is the responsibility of the SCAQMD. This responsibility was given to SCAQMD by the California Legislature's adoption of the 1977 Lewis-Presley Air Quality Management Act, which merged four County air pollution control bodies into one regional district. Under the Act, SCAQMD is responsible for bringing air quality in the areas under its jurisdiction into conformity with federal and state air quality standards. Specifically, SCAQMD is responsible for monitoring ambient air pollutant levels throughout the Basin and for developing and implementing attainment strategies to ensure that future emissions will be within federal and state standards.

f. SCAQMD Air Quality Management Plan (AQMP)

As discussed previously, the federal and state CAAs require the preparation of plans to bring air emissions within healthful levels. In response to federal and state CAA requirements, the SCAQMD has prepared a series of AQMPs, the most recent of which was adopted by SCAQMD's Governing Board in August 2003. This AQMP is referred to as the 2003 AQMP. The 2003 AQMP employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources including stationary sources, on- and off-road mobile sources and area sources.

The 2003 AQMP is an update to the 1997 AQMP, which was amended in 1999. The 1997 AQMP was designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of the SCAQMD, to return clean air to the region by 2010 and to minimize the impact on the economy. The 2003 AQMP is generally similar to the structure of the 1997 AQMP. The key improvements incorporated in the 2003 AQMP are summarized as follows:

1. Revised emissions inventory projections using 1997 as the base year, the CARB on-road motor vehicle emissions model EMFAC2002, and SCAG 2001 Regional Transportation Plan (RTP) forecast assumptions;

2. Revised control strategy that updates remaining control measures from the 1997/1999 SIP and incorporation of new control measures based on current technology assessments;

3. Reliance on 1997 O_3 episodes and updated modeling tools for attainment demonstration relative to O_3 and PM_{10}; and

4. An initial assessment of progress toward the new federal 8-hour O_3 and $PM_{2.5}$ standards.[5]

Projects that are considered to be consistent with AQMP growth projections should not interfere with attainment and should not contribute to the exceedance of any existing federal or state air quality standard because such growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds at the project level. The AQMP control strategy is based on projections from local general plans and population growth projections identified by the SCAG in the Growth Management Chapter of the RCPG. The AQMP also assumes that general development projects will implement strategies (mitigation measures) to reduce emissions during construction and operation phases of development. For this reason, projects that are consistent with local general plans are considered consistent with air quality-related regional plans, such as the AQMP.

SCAQMD Rules and Regulations

The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the Basin by various stationary and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board which limit the emissions that can be generated by various uses and/or activities, and identify specific pollution reduction measures which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and state

5 In 1997, U.S. EPA promulgated new federal 8-hour standard for O_3, and a 24-hour and an annual average standard for fine particulate matter ($PM_{2.5}$). The implementation guidelines for the new standards have not yet been finalized, and the SIP to demonstrate attainment with these new standards is expected to be due in 2007.

criteria pollutants, but also toxic emissions and acutely hazardous materials.[6] They are also subject to on-going refinement by SCAQMD.

Emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing the AQMP. The project would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts.

SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook

In April 1993, the SCAQMD prepared its *CEQA Air Quality Handbook* as a guide to assist local government agencies and consultants in preparing environmental documents for projects subject to CEQA. It was later updated in November 1993 and is presently being updated by the district. The *CEQA Air Quality Handbook* is an advisory document and local jurisdictions are not required to utilize the methodology outlined therein. This document describes the criteria that SCAQMD uses when reviewing and commenting on the adequacy of environmental documents, such as this EIR. It recommends thresholds for use in determining whether or not projects would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts and identifies measures that can be used to avoid or reduce air quality impacts. Although the *CEQA Air Quality Handbook* has been adopted by the Governing Board of the SCAQMD, it does not, nor does it intend to, supersede a local jurisdiction's CEQA procedures. This EIR was prepared following the recommendations of the SCAQMD found in the 1993 *Air Quality Handbook*, as well as more current recommendations for air quality modeling.[7]

The *CEQA Air Quality Handbook* is currently undergoing revision. As of September 2, 2005 (the last revision to the district's website (www.aqmd.gov/ceqa/hdbk.html) that addresses the *CEQA Air Quality Handbook* revisions at the time of this writing),[8] only three chapters have been revised: Chapter 2 – Improving Air Quality and the AQMD's Role, Chapter 3 – Basic Air Quality Information and Chapter 4 – Early Consultation and Sensitive Receptor Siting Criteria. In addition, the air quality significance thresholds have been revised, and a new procedure referred to as localized significance thresholds, has been added. The *CEQA Air Quality Handbook* and the revised chapters were used in preparing the air quality impact analysis in this EIR section.

---

6 Defined by the federal government as an air pollutant to which no ambient air quality standard is applicable and which, in the judgment of the administrator of the U.S. EPA, may result in an increase in mortality, serious irreversible illness or incapacitating reversible illness.

7 SCAQMD recommends use of URBEMIS2002 as an alternative air quality model. Personal communication with Charles Blankson, Ph.D., SCAQMD, Diamond Bar, California, November 8, 2002.

8 The most current version of the *CEQA Air Quality Handbook* available at the time this section was written, and upon which this section relies, can be viewed at SCAQMD website, as stated above.

g. Local Governments

Local governments, such as the City of Los Angeles, have the authority and responsibility to reduce air pollution through their police power and land use decision-making authority. Specifically, local governments are responsible for the mitigation of emissions resulting from land use decisions and for the implementation of transportation control measures as outlined in the AQMP.[9] The AQMP assigns local governments certain responsibilities to assist the Basin in meeting air quality goals and policies. In general, a first step toward implementation of a local government's responsibility is accomplished by identifying air quality goals, policies and implementation measures in its general plan. Through capital improvement programs, local governments can fund infrastructure that contributes to improved air quality, by requiring such improvements as bus turnouts, energy-efficient streetlights and synchronized traffic signals.[10] In accordance with CEQA requirements and the CEQA review process, local governments assess air quality impacts, require mitigation of potential air quality impacts by conditioning discretionary permits, and monitor and enforce implementation of such mitigation.[11]

4. ENVIRONMENTAL IMPACT ANALYSIS

a. Significance Criteria

New and modified projects will often affect regional air quality both directly and indirectly. When determining the extent of a project's environmental impacts and the significance of such impacts, the project should be compared to established thresholds of significance. The City of Los Angeles defers to the SCAQMD thresholds of significance for determining air quality impacts, as contained in the SCAQMD *CEQA Air Quality Handbook*. The following discusses the thresholds for both construction and operational emissions generated by the proposed project. Impacts related to the Herald Examiner project sites are considered significant if the proposed projects would exceed any of the following significance thresholds.

Construction Emission Thresholds

The SCAQMD recommends that projects with construction-related emissions that exceed any of the following emissions thresholds should be considered significant:

- 75 pounds per day (ppd) of ROC (VOC)
- 100 ppd of NO_x
- 550 ppd of CO

9 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, April 1993), p. 2-2.
10 Ibid.
11 Ibid.

- 150 ppd of PM_{10}
- 150 ppd of SO_x

In addition to the above-listed emission-based thresholds, the SCAQMD also recommends that the potential impacts on ambient air concentrations due to construction emissions be evaluated. This evaluation requires that anticipated ambient air concentrations, determined using a computer-based air quality dispersion model, be compared to localized significance thresholds for PM_{10}, NO_2 and CO.[12] The significance threshold for PM_{10} represents compliance with Rule 403 (Fugitive Dust), while the thresholds for NO_2 and CO represent the allowable increase in concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The SCAQMD Localized Significance Threshold Methodology (LST document) includes "lookup tables" that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., not cause an exceedance of the applicable concentration limits). The allowable emission rates depend on (a) the SRA in which the project is located, (b) the size of the project site, and (c) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals). Because construction activities could occur concurrently on the adjacent Broadway and Hill Street sites, the construction emissions were compared to the LST thresholds for a 2-acre site (the approximate total area of these two sites). The site area for the 12th Street portion of the project is approximately 1 acre. For a given SRA and project area, the allowable emission rates are then based on distance to the nearest sensitive receptor. The distance to the nearest sensitive receptor for the combined Broadway/Hill Street site is 941 feet (287 meters). The distance to the nearest sensitive receptor for the 12th Street site is 461 feet (141 meters). (See **Section IV.H (Noise)** for additional discussion of the proximity of sensitive receptors to the project sites.) The project-specific localized significance thresholds for SRA 1 (Central Los Angeles County) are shown in **Table IV.E-5, Localized Significance Thresholds for SRA 1**.

Table IV.E-5
Localized Significance Criteria for SRA 1

	pounds/day	
Pollutant	**Broadway/Hill Street**	**12th Street**
Respirable Particulate Matter (PM_{10})	224	137
Nitrogen Dioxide (NO_2)	212	138
Carbon Monoxide (CO)	3,759	1,399

Source: SCAQMD, Final Localized Significance Threshold Methodology, June 2003, Appendix L. LST thresholds are interpolated from the values in Appendix L, based on the distance to the nearest sensitive receptor.

12 SCAQMD, *Final Localized Significance Threshold Methodology* (Diamond Bar, California: SCAQMD, June 2003).

Operational Emissions

The SCAQMD has recommended two sets of air pollution thresholds to assist lead agencies in determining whether or not the operational phase of a project's development would be significant. These are identified in the following discussion under Primary Effects and Secondary Effects. The SCAQMD recommends that a project's impacts be considered significant if thresholds are exceeded for either primary or secondary effects.

Primary Effects

The SCAQMD has established these thresholds, in part, based on Section 182(e) of the federal CAA that identifies 10 tons a year of volatile organic gases as the significance level for stationary sources of emissions in extreme nonattainment areas for O_3. As discussed earlier, ROC and NO_x undergo photochemical reactions in sunlight to form O_3, and, at the time these thresholds were established, the Air Basin was an extreme nonattainment area for O_3 in the United States. This emission threshold has been converted to a pound per day threshold for the operational phase of a project. Thresholds for other emissions have been identified based on their levels in the Basin in comparison with O_3 levels. Because they are converted from a CAA threshold, the SCAQMD has determined that these thresholds are based on scientific and factual data.[13] Therefore, the district recommends that the following thresholds be used by lead agencies in making a determination of operation-related project significance:

- 55 ppd of ROC (VOC)
- 55 ppd of NO_x
- 550 ppd of CO
- 150 ppd of PM_{10}
- 150 ppd of SO_x

Secondary Effects

The *L.A. CEQA Thresholds Guide* and the SCAQMD recommend that projects meeting any of the following criteria also be considered to have significant air quality impacts:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation;
- Project could result in population increases within an area that would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's build-out year; and

13 *CEQA Air Quality Handbook*, p. 6-1.

- Project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot or the incremental increase due to the project is equal or greater than 1.0 ppm for the California 1-hour CO standard or 0.45 ppm for the 8-hour CO standard.

b. Project Impacts

Construction-Related Impacts

Construction of the proposed project is expected to last approximately five years. Development of the proposed project would involve several phases including rehabilitation of the existing Herald Examiner building, demolition of the existing Press building located on the Hill Street site, site clearance of both the Hill Street and 12th Street sites and construction of the new buildings proposed on the Hill Street and 12th Street sites. Construction staging would occur within each of the proposed project sites. Rehabilitation of the Broadway building would begin in 2006. Demolition, excavation, shoring and site clearance of the Hill Street building would begin in early 2007. Construction of the parking structure for the Hill Street building would begin in 2007 with estimated completion and project occupancy in 2009. Site clearance and excavation of the 12th Street site would begin in 2008 with targeted and completion and occupancy in 2010. Implementation of the project would require export of on-site soil associated with excavation of the two subterranean parking structures.

During periods of construction activity, on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles, energy use and asphalt paving would generate emissions. In addition, fugitive dust would be generated by grading and construction activities. During later phases of the project architectural coatings would be applied to the permanent buildings, which would generate emissions, as would workers arriving and leaving the construction site. However, construction impacts would be short term in nature and limited only to the time period when construction activity is taking place on the property.

Demolition Activities

In addition to the emissions of criteria pollutants, demolition of the existing buildings has the potential to release asbestos fibers due to the age of the structures. Demolition activity is subject to SCAQMD Rule 1403. This rule is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the U.S. EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) and provides additional requirements to cover non-NESHAP areas. As part of project implementation, the Herald Examiner project must comply with the requirements of SCAQMD Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities. This rule is intended to limit asbestos

emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste generated or handled during these activities. The rule requires the SCAQMD to be notified before demolition or renovation activity occurs. This notification includes a description of structures and methods utilized to determine the presence of asbestos or lack thereof. All asbestos-containing material found on the site must be removed prior to demolition or renovation activity in accordance with the requirements of Rule 1403. Project compliance with Rule 1403 would ensure that asbestos-containing materials would be disposed of appropriately. Compliance with the requirements of this measure would avoid a significant construction-related air quality impact in relation to demolition activities by preventing the release of asbestos emissions.

Site Grading and Building Construction

The URBEMIS2002 computer model was used to quantify construction emissions generated during each phase of project construction. URBEMIS2002 is a land use and transportation based computer model designed to estimate regional air emissions from new development projects. The model accounts for specific meteorological conditions that characterize each specific air basin in California.

A number of variables are input into the model including the type of construction equipment required to build the project (based on conversation with the civil engineer) and emission factors for this equipment, which are obtained from the ARB's emissions inventory contained in the URBEMIS2002 model. All of the construction equipment and activities are assumed to occur continuously over an 8-hour period. In reality, this would not occur, as most equipment would operate only a fraction of each workday. However, for the purposes of this analysis, a "worst-case scenario" will be analyzed. Last, modeling assumes the use of standard construction practices such as compliance with SCAQMD Fugitive Dust Rule 403 to minimize fugitive dust, specifically the watering of unpaved roads two times daily, and the use of properly maintained equipment to avoid excessive emissions. Other modeling assumptions include the emission factor utilized for architectural coatings and the demolition truck-hauling miles per round trip. In the modeling utilizing URBEMIS version 8.7.0 contained in **Appendix IV.E**, the default emission factor of 18.5 pounds/thousand square feet of application area was changed for construction and operation per direction provided by the SCAQMD staff as it pertains to Rule 1113, Architectural Coatings. The emission factor utilized reflects the architectural coatings that more closely reflect the paints and cleanup solvents that are available within the district. Specifically, emission factors of 0.0602 pounds/square foot and 0.0116 pounds/square foot for residential and nonresidential (e.g., retail) construction, respectively, were utilized in the modeling. Operational modeling assumes that all residential units would use natural gas appliances and not include fireplaces.

In order to minimize construction emissions, the construction contractor is required to comply with the following control measures under SCAQMD Fugitive Dust Rule 403, which were not assumed during modeling:

a. Configure construction parking to minimize traffic interference. (The emission reduction efficiency for this measure is not quantified.)

b. Provide temporary traffic controls during all phases of construction activities to maintain traffic flow (e.g., flag person). (The emission reduction efficiency for this measure is not quantified.)

c. Schedule construction activities that affect traffic flow on the arterial system to off peak hours to the degree practicable. (The emission reduction efficiency for this measure is not quantified.)

d. Re-route construction trucks away from congested streets. (The emission reduction efficiency for this measure is not quantified.)

e. Consolidate truck deliveries, when possible. (The emission reduction efficiency for this measure is not quantified.)

f. Provide dedicated turn lanes for movement of construction trucks and equipment on and off site. (The emission reduction efficiency for this measure is not quantified.)

g. Maintain equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions. (The emission reduction efficiency for this measure is not quantified.)

h. Suspend use of all construction equipment operations during second stage smog alerts. Contact the SCAQMD at (800) 242-4022 for daily forecasts. (The emission reduction efficiency for this measure is not quantified.)

i. Use electricity from power poles rather than temporary diesel- or gasoline-powered generators. (This measure has an estimated reduction efficiency of 99 percent for ROC and 96 percent for NO_x.)

j. Use methanol- or natural gas-powered mobile equipment and pile drivers instead of diesel if readily available at competitive prices (as determined by the SCAQMD). (This measure has an estimated reduction efficiency of 54 percent for ROC and 29 percent for NO_x.)

k. Use propane- or butane-powered on-site mobile equipment instead of gasoline, if readily available at competitive prices (as determined by the SCAQMD). (This measure has an estimated reduction efficiency of 53 percent for ROC and NO_x.)

Table IV.E-6, Estimated Unmitigated Construction Emissions, identifies the maximum daily emissions associated with typical equipment for different construction phases based on those assumptions.

Table IV.E-6
Estimated Unmitigated Construction Emissions

Construction Phase	Year	Emissions in Ppd				
		ROC	NO_x	CO	SO_x	PM_{10}
Broadway Site	**2006**	3.83	27.78	32.20	0.14	2.26
Broadway Site	2007	14.65	24.13	34.27	0.00	.86
Hill Street	2007	12.19	129.03	86.26	0.14	90.53
2007 Total	**2007**	**26.84**	**153.16**	**120.53**	**0.14**	**91.39**
Hill Street	2008	4.17	22.64	36.80	0.00	0.83
12th Street	2008	10.51	89.89	81.47	0.07	50.07
2008 Total	**2008**	**14.68**	**112.53**	**118.27**	**0.07**	**50.90**
Hill Street	2009	168.05	23.43	42.24	0.00	0.89
12th Street	2009	4.24	22.27	38.01	0.00	0.80
2009 Total	**2009**	**172.29**	**45.70**	**80.25**	**0.00**	**1.69**
12th Street	2010	56.76	23.54	40.90	0.00	0.78
Maximum Emissions in Any Year		172.29	153.16	120.53	0.14	91.39
SCAQMD Thresholds		75	100	550	150	150
Exceeds Thresholds?		**YES**	**YES**	NO	NO	NO

Source: Impact Sciences, Inc. Calculations can be found in ***Appendix IV.E****.*
Notes: Assumes conformance with Rule 403 (Fugitive Dust).

- Construction Emission Thresholds
  - 75 ppd of ROC (VOC)
  - 100 ppd of NO_x
  - 550 ppd of CO
  - 150 ppd of PM_{10}
  - 150 ppd of SO_x

As shown, thresholds for criteria pollutants would be exceeded during construction of the project. Specifically, the emission threshold for ROC would be exceeded by 97.29 ppd during the overlap construction (2009) of the Hill Street building and 12th Street building. The threshold for NO_x would be exceeded in two consecutive years; in 2007 by 97.29 ppd during the overlap of construction for the Broadway building and the Hill Street building and again in 2008 by 12.53 ppd during the build out of the Hill Street and 12th Street buildings. Even though construction thresholds for CO, SO_x and PM_{10} will not be exceeded in any phase of the project, construction-related air quality impacts regarding ROC and NO_x would result in significant and unavoidable construction impacts regarding these thresholds, even with the inclusion of mitigation.

Operational Impacts

Primary Effects

As indicated in the project traffic report, trip reductions related to the proposed project are expected to occur as a result of "multi-purpose" or "internal" trips within the site. These trip reductions will also result in a reduction in vehicle miles traveled and air emissions otherwise associated with such trips. This type of trip generally occurs at integrated mixed-use developments containing a variety of uses. It is generally recognized that residents or patrons of a site will utilize other on-site uses if they are conveniently located or provide useful services or amenities, with the level of interaction dependent upon the number of residents or patrons, service providers, accessibility and other factors. For this particular project, some of the condominium residents and office employees are expected to use the on-site retail use, and some of the office employees are expected to live in the on-site condominiums, thereby reducing some of the trips the retail and office uses would otherwise generate. It was estimated that approximately 10 percent of the retail patronage would be the result of utilization by on-site residents and on-site office employees, and 5 percent of the office employees would reside in the on-site condominiums.

The use of public transportation is another important consideration in the evaluation of the project's trip making potential. The project is well served by bus lines provided by various transit operators. These transit operators provide both local and regional routes that are easily accessible to project residents, visitors, employees, and retail patrons.

"Walk-in" trips are trips that are already occurring in the project vicinity, but which have other nearby downtown Los Angeles attractions as their specified destinations. These trips account for "built-in" patronage and subsequent traffic reductions for both the project specifically and downtown in general. These trips are expected to continue to occur with or without the development of the project. They are not directly site-oriented, but provide walk-in patronage from other nearby destinations, thereby reducing site vehicular trips. A 5 percent walk-in trip reduction was assumed for the retail use. Trip reduction factors for the proposed project also account for the presence of "pass-by" trips. As these trips pass by the project, the specific convenient facilities provided by the project, or other factors produces a stop at the site. Such activity is considered to be an interim stop along a trip that existed without development of the project, and, therefore, vehicles making these stops are not considered to be newly generated project-related traffic. The Los Angeles Department of Transportation (LADOT) has developed a series of recommended pass-by trip reduction percentages for various development types and sizes. Based on these recommendations, it was assumed that the project retail use would experience a 50 percent pass-by reduction.

Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activity on the three sites after occupation. Stationary emissions would be generated by the consumption of natural gas for space and water heating devices, the operation of landscape maintenance equipment, and from consumer products. Mobile emissions would be generated by motor vehicles traveling to and from the project sites. **Table IV.E-7, Estimated Operational Emissions without Mitigation – Cumulative Broadway Site, Hill Street Site, and 12th Street Site**, identifies daily emissions associated with both stationary and mobile sources.

Table IV.E-7
Estimated Operational Emissions without Mitigation
Cumulative Broadway Site, Hill Street Site, and 12th Street Site

Emissions Source	Emissions in Ppd ROC	NO_x	CO	SO_x	PM_{10}
Summertime Emissions[1]					
Broadway Site	12.46	12.65	130.64	0.07	10.85
Hill Street Site	18.31	14.31	137.32	0.09	13.59
12th Street Site	34.07	16.11	157.43	0.11	16.67
Summertime Emission Totals	67.74	43.07	425.39	0.27	41.11
Recommended Threshold	55	55	550	150	150
Exceeds Threshold?	**YES**	NO	NO	NO	NO
Wintertime Emissions[2]					
Broadway Street	12.82	17.89	130.38	0.06	10.84
Hill Street Site	25.83	19.74	132.68	0.07	13.58
12th Street Site	34.00	22.08	150.82	0.10	16.66
Wintertime Emission Totals	72.55	59.71	413.88	0.23	41.08
Recommended Threshold	55	55	550	150	150
Exceeds Threshold?	**YES**	**YES**	NO	NO	NO

*Source: Impact Sciences, Inc. Emissions calculations are provided in **Appendix IV.E**.*
Totals in table may not appear to add exactly due to rounding in the computer model calculations.
[1] *"Summertime Emissions" are representative of worst-case conditions that may occur during the O_3 season (May 1 to October 31).*
[2] *"Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).*

- Operation Emission Thresholds
  - 55 ppd of ROC (VOC)
  - 55 ppd of NO_x
  - 550 ppd of CO
  - 150 ppd of PM_{10}

As shown in **Table IV.E-7**, the Herald Examiner project at build out and in full operation would generate emissions that would exceed SCAQMD thresholds for ROC in summer and winter by 12.74 and 17.55 ppd, respectively, and NO_x emissions in winter by 4.71 ppd. Consequently, a significant and unavoidable impact to local or regional air quality would occur with respect to those criteria pollutants, even with the

inclusion of mitigation. This impact is primarily the result of the number of vehicle trips associated with the project.

Secondary Effects

As previously discussed, the City of Los Angeles and the SCAQMD list criteria indicating when a project may create potential air quality impacts. These criteria are listed below along with an analysis of whether or not the project meets any of them. If a project meets any one of the criteria, project air quality impacts would be significant relative to that criterion.

- *Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation.*

As indicated in the discussion of the threshold of significance, the SCAQMD recommends that potential impacts on ambient air quality during the construction phase of a project be evaluated. The following analysis uses the thresholds based on LST lookup tables. Estimates of construction emissions of PM_{10}, NO_2 and CO were presented in **Table IV.E-7**. That analysis determined the emission rates on the days with the highest estimated daily mass emission rates for the Broadway/Hill Street sites and for the 12th Street site. Because construction activities could occur concurrently on the adjacent Broadway and Hill Street sites, the construction emissions were compared to the LST thresholds for a 2-acre site (the approximate total area of these two sites). These emission rates are compared to the localized significance thresholds in **Tables IV.E-8, Localized Significance Thresholds Analysis for Construction – Broadway/Hill Street Site**, and **IV.E-9, Localized Significance Thresholds Analysis for Construction – 12th Street Site**, for the Broadway/Hill Street and 12th Street project sites, respectively.

Table IV.E-8
Localized Significance Thresholds Analysis for Construction
Broadway/Hill Street Site

Pollutant	Emissions lb/day	LST[1] lb/day	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	91.39	224	NO
Nitrogen Dioxide (NO_2)	153.16	212	NO
Carbon Monoxide (CO)	120.53	3,759	NO

Source: Impact Sciences, Inc.
[1] *SCAQMD, Final Localized Significance Threshold Methodology, June 2003, Appendix L.*

Table IV.E-9
Localized Significance Thresholds Analysis for Construction
12th Street Site

Pollutant	Emissions lb/day	LST[1] lb/day	Exceeds Threshold?
Respirable Particulate Matter (PM_{10})	50.07	137	NO
Nitrogen Dioxide (NO_2)	89.89	138	NO
Carbon Monoxide (CO)	81.47	1,399	NO

Source: Impact Sciences, Inc.
[1] *SCAQMD, Final Localized Significance Threshold Methodology, June 2003, Appendix L.*

As shown in **Tables IV.E-8** and **IV.E-9,** the construction of the proposed project would not cause localized significance thresholds for PM_{10}, NO_2, and CO to be exceeded. Consequently, there is no potential for significant construction air quality impacts under these thresholds.

SCAQMD's *CEQA Air Quality Handbook* indicates that an air quality modeling analysis that identifies the project's impact on ambient air quality would need to be performed.[14] In order for a project to be found consistent, the analysis would have to demonstrate that the project's emissions would not increase the frequency or the severity of existing air quality violations, or contribute to a new violation.[15] URBEMIS2002 is used to calculate project emissions for comparison with thresholds addressing regional significance, and it is concluded that the operational emissions due to proposed project are significant for ROC and NO_X. There is no specific ambient air quality standard for ROC, and the effect of the project's ROC and NO_x emissions on regional O_3 concentrations cannot be determined for a single project, that is, no model exists to estimate such impacts. However, the project emissions are not substantially above the significance thresholds. For example, in the winter, ROC emissions are exceeded by 17.55 ppd and NO_X emissions are exceeded by 4.71 ppd. The emissions are dispersed throughout a large area, as they are primarily associated with the project traffic, and are small in comparison to the regional ROC and NO_x emissions in the Basin. The ARB estimates that in 2010 ROC emissions in the South Coast Air Basin will average 1,376,780 ppd and NO_X emissions will average 1,535,512 ppd. The project's 72.55 ppd of winter ROC emissions is less than 0.01 percent of the basin estimate. The project's 59.71 ppd of winter NO_X emissions is less than 0.004 percent of the basin estimate.[16] Accordingly, the project emissions are not expected to violate ambient air quality standards or contribute considerably to an existing or projected air quality violation. Consequently, there is no potential for significant construction air quality impacts under this criterion.

14 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, April 1993), p. 12-3.
15 Ibid.
16 Source for 2010 South Coast Air Basin emission estimates: California Air Resources Board, http://www.arb.ca.gov/app/emsinv/fcemssumcat2005.php, accessed November 22, 2005.

- *Project could result in population increases within an area that would be in excess of that projected by SCAG in the AQMP, or increase the population in an area where SCAG has not projected that growth for the project's build-out year.*

As discussed earlier in this analysis, the 1997 and 2003 AQMP are designed to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region by 2010 and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP do not interfere with attainment and do not contribute to the exceedance of an existing air quality violation because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. The following analysis discusses the project's consistency with the AQMP.

Projects that are consistent with the projections of population forecasts identified in the Growth Forecast Report are considered consistent with the AQMP growth projections. This is because the Growth Forecast Reports form the basis of the land use and transportation control portions of the AQMP.

As discussed in **Section V.B, Population and Housing**, the project is consistent with the future population and employment figures projected in the area in which the project is located. The project would not increase population over those that have been planned for the area, would be consistent with the AQMP forecasts for this area, would be considered consistent with the air quality-related regional plans and should not jeopardize attainment of state and federal ambient air quality standards in the Basin.

Another measurement tool in determining AQMP consistency is to determine how a project accommodates the expected increase in population and 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 in the community in which it is located and consequently the minimization of air pollutant emissions, that project is consistent with the AQMP.[17]

The project is designed to accommodate the demand for housing in this portion of the City while supporting commercial office and retail uses. Together, these objectives would minimize the need for or distance of some automobile trips, thereby reducing automotive emissions from such trips. This type of development is consistent with the goals of the AQMP for reducing motor vehicle emissions. In addition, the project sites are located adjacent to existing job centers that provide employment opportunities in the downtown area. With these job centers, many local residents do not have to commute to distant

17 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, April 1993), p. 12-5.

employment centers. Additionally, the City of Los Angeles operates a transit system in the area that serves the site and its surroundings well. For example, LADOT operates five commuter express routes in the vicinity of the project. The routes are listed below in **Table IV.E-10**.

Table IV.E-10
LADOT Commuter Express Routes in the Project Vicinity

Route Number	Travel Street	Stops in Project Vicinity
413	Hill Street	Olympic Boulevard, 12th Street and Pico Boulevard
419	Eastbound on Olympic Boulevard, Northbound on Broadway and Westbound on 8th Street	Olympic Boulevard at Grand Avenue and Olive Street
430, 431 and 437	Northbound on Olive Street and Southbound on Grand Avenue	Both directions at Pico Boulevard, 12th Street, Olympic Boulevard and 9th Street

These commuter express routes operate on weekdays during peak commute periods. Use of these facilities could reduce the need for some motor vehicle trips. As a result of reduced commutes and other vehicle trips, VMT and, consequently, air pollutant emissions could be further reduced. Therefore, no significant air quality impacts associated with population increases anticipated from the proposed project would occur.

- *Project could generate vehicle trips that cause a CO hotspot or project could be occupied by sensitive receptors that are exposed to a CO hotspot or the incremental increase due to the project is equal or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.*

As indicated in the project traffic study, all study intersections would operate at Level of Service (LOS) A or B after construction and operation of the proposed project. Intersections with such high levels of service are not typically associated with localized CO concentrations exceeding state and federal standards. According to the Transportation Project-Level Carbon Monoxide Protocol prepared by the University of Davis,[18] if study intersections operate at LOS C or better, as is the case with this project, no CO hotspots are expected and no further analysis is required. Consequently, the proposed project does not have the potential for a significant impact to the regional air quality as it relates to CO emissions under this significance criterion.

18 University of Davis, Institute of Transportation Studies, *Transportation Project-Level Carbon Monoxide Protocol,* UCD, ITS, RR-97-21, pp. 4-10 and 4-11.

c. Cumulative Impacts

The SCAQMD's *CEQA Air Quality Handbook* identifies methodology to determine the cumulative significance of land use projects.[19] The SCAQMD has not identified thresholds to which the total emissions of all cumulative development can be compared. Instead, the SCAQMD's methods 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 above, air emissions generated by the project would exceed the thresholds of significance established by the SCAQMD for ROC and NO_x during project construction. Thresholds of significance would be exceeded during the year 2009 construction for ROC by 97.29 ppd. The NO_x significance threshold for construction would be exceeded in both 2007 and 2008 by 53.16 and 12.53 ppd, respectively. However, the proposed project is consistent with the population growth projections of the SCAG Growth Forecast. The control strategy of the AQMP is based on projections contained in local general plans. Projects that are consistent with local general plans are considered consistent with air quality-related regional plans such as the AQMP.[20] Uses and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended thresholds. According to the methodology described in the SCAQMD *CEQA Air Quality Handbook*, if an individual project reduces the rate of growth of VMT and is consistent with the AQMP, then the project's cumulative impact could be considered less than significant.[21] As shown in **Table IV.E-10**, above, the growth of VMT or average daily trips (ADT) is less than the population growth. As this criterion has been met, and the project is consistent with the AQMP, there is no potential for significant cumulative impacts with respect to this criterion.

In addition to the above criteria, however, the operational emissions associated with the proposed project would exceed the recommended thresholds of significance for ROC and NO_X as shown in **Table IV.E-7**. The threshold for ROC emission would be exceeded in both the summer and wintertime by 12.74 and 17.55 ppd, respectively. The NO_x significance threshold would be exceeded by 4.71 ppd during the wintertime, but would be below the threshold during summertime. Because the Basin is nonattainment for the state and federal O_3 and PM_{10} standards, a project that creates individually significant air quality impacts would also contribute to cumulatively significant air quality impacts. Thus, the proposed project would have a potentially significant and unavoidable cumulative impact to air quality measured under the SCAQMD operational significance thresholds.

---

19 *CEQA Air Quality Handbook*, p. 9-12.
20 *CEQA Air Quality Handbook*, p. 12-2.
21 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, November 1993), p. 9-12.

Another method for assessing the cumulative significance of land use projects in the SCAQMD *CEQA Air Quality Handbook*, is to determine whether or not the project shows a 1-percent-per-year reduction in project emissions of CO, ROC, NO_x, SO_x and PM_{10} with mitigation in place.[22] The assessment of whether or not the project shows a 1-percent-per-year reduction in project emissions of CO, ROC, NO_x, SO_x and PM_{10} differs from the cumulative impacts analysis methodology used in other sections of this EIR in which all foreseeable future development within a given service boundary or geographical area is predicted and its impacts measured. However, this SCAQMD assessment method is consistent with the SCAQMD's overall goal to reduce emissions within the Basin in order to meet the standards set in the 2003 AQMP.

As shown in **Table IV.E-11**, **Operational Emissions Reductions**, below, implementation of the recommended mitigation measures would reduce CO emissions by 7.0 percent, ROC emissions by 3.6 percent, NO_x emissions by 9.7 percent and PM_{10} emissions by 6.9 percent. Although these represent daily emission reductions, they would exceed the SCAQMD's performance standard for annual emissions reductions. The *Handbook* does not identify any reduction efficiencies for emissions of SO_x; however, it should be assumed that these measures would reduce emissions of SO_x by a minimum of 1 percent given that the minimum reduction for other emissions is 3.6 percent. Therefore, the project would meet the target annual emission reduction for all criteria pollutants of 1 percent and would have no potential for a significant cumulative impact to regional air quality pursuant to the SCAQMD's recommended approach.

Table IV.E-11
Operational Emissions Reductions

	Emissions in Ppd				
Emissions Source	**CO**	**ROC**	**NO_x**	**SO_x[1]**	**PM_{10}**
Total Project Emissions	425.4	77.8	43.1	0.3	41.1
Reduction in Natural Gas Emissions	0.7	0.1	1.5	--	0.0
Reduction in Mobile Source Emissions	29.3	2.6	2.7	--	2.8
Total Reduced Emissions	395.4	75.0	38.9		38.3
Percent Reduction	7.0	3.6	9.7	--	6.9
Recommended Threshold:	550.0	55.0	55.0	150.0	150.0
Exceeds Threshold?	NO	YES	NO	NO	NO

Source: Impact Sciences, Inc. Emission reduction calculations are provided in ***Appendix IV.E****.*
[1] *SCAQMD does not provide emission reductions for* SO_x.

Lastly, as specified in the *CEQA Air Quality Handbook*, the ratio of project VMT or ADT to anticipated VMT or ADT in the City or County is compared to the ratio of the project population to the anticipated

22 SCAQMD, *CEQA Air Quality Handbook*, (Diamond Bar, California: SCAQMD, November 1993), p. 9-12. Written communication with Steve Smith, SCAQMD, November 20, 2003.

population in the City or County.[23] If the growth of VMT or ADT is less than the population growth, then the project is not considered to have a significant cumulative air quality impact. The relevant values are shown in **Table IV.E-10, Comparison of Growth of VMT to Population Growth**. As shown in **Table IV.E-10**, this criterion has been met and the project would be considered consistent with AQMP. The ratio of VMT from the project to VMT from the County (0.00009) is more than two times less than the ratio of project population to the anticipated County population (0.00022). When comparing the employment VMT and population ratios, the population ratio is 20 times that of the VMT ratio from the project. Consequently, there is no potential for significant cumulative air quality impacts under this criterion.

Table IV.E-12
Comparison of Growth of VMT to Population Growth

	Vehicle Miles Traveled	Population/Employees
Population Comparison		
Herald Examiner	19,919	2,360
Los Angeles County	212,479,488	10,718,007
Ratio of Project to Los Angeles County	0.00009	0.00022
Employment Comparison		
Herald Examiner	7,136	266
Los Angeles County	212,479,488	4,814,802
Ratio of Project to Los Angeles County	0.000003	0.00006

*Source: Impact Sciences, Inc., Urbemis 2002 output data (see **Appendix IV.E** of this EIR); Estimated VMT in Los Angeles County in 2010 (project build-out year) as determined by EMFAC2002. Estimated aggregated population in Los Angeles County in 2010. Source: Southern California Association of Governments. "City Projections." [Online] [November 2, 2005]. <http://scag.ca.gov/forecast/index.htm>.*

d. Mitigation Measures

In order to address potentially significant impacts to air quality resulting from the proposed project, the following mitigation measures are recommended.

23 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, April 1993), p. A9-126.

Construction Impacts

MM-AQ-1. Construction emissions generated by the proposed project would exceed thresholds and would be considered significant without mitigation. In addition to the requirements of Rule 403, the applicant shall develop and implement a dust control plan, as approved by the City, which includes the following measures recommended by the SCAQMD:

a. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification or other measures agreed to by the City to all inactive construction areas (previously graded areas inactive for four days or more). (This measure has a reduction efficiency for PM_{10} estimated at up to 65 percent.)

b. Replace ground cover in disturbed areas as quickly as possible. (This measure has reduction efficiency for PM_{10} estimated at up to 49 percent.)

c. Enclose, cover, water twice daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, dirt) according to manufacturers' specifications. (This measure has reduction efficiency for PM_{10} estimated at up to 74 percent.)

d. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph). (The reduction efficiency for this measure is not quantified.)

e. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded, if necessary. (The reduction efficiency for this measure is not quantified.)

f. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer), in accordance with Section 23114 of the California Vehicle Code. (This measure has reduction efficiency for PM_{10} estimated at up to 14 percent.)

g. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads (recommend water sweepers using reclaimed water if readily available). (This measure has reduction efficiency for PM_{10} estimated at up to 60 percent.)

h. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip. (This measure has reduction efficiency for PM_{10} estimated at up to 70 percent.)

i. Apply water three times daily or chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces. (This measure has reduction efficiency for PM_{10} estimated at up to 85 percent.)

j. Enforce traffic speed limits of 15 miles per hour (mph) or less on all unpaved roads. (This measure has reduction efficiency for PM_{10} estimated at up to 70 percent.)

k. Pave construction roads when the specific roadway path would be utilized for 120 days or more. (This measure has reduction efficiency for PM_{10} estimated at up to 92.5 percent.)

Operational Impacts

Project operations would result in emissions of ROC in excess of the SCAQMD daily thresholds. In order to address potentially significant air quality impacts resulting from the project, the following mitigation measures are recommended:

MM-AQ-2. The property manager shall provide information to project residents, commercial tenants and employees regarding the availability of alternative modes of transportation such as the LADOT DASH and Metropolitan Transit Authority (MTA) buses.

MM-AQ-3. The property manager shall ensure that on-site bicycle parking is accessible, safe and secure.

Stationary Source Mitigation

MM-AQ-4. Low emission water heaters shall be installed in all residences and in all non-residential buildings that will have a water supply.

MM-AQ-5. Built-in energy-efficient appliances shall be installed in all residences.

MM-AQ-6. Double-glass-paned windows shall be installed in all exterior windows of residences and non-residential structures.

MM-AQ-7. Light-colored roof materials to reflect heat shall be installed on all roofed structures.

MM-AQ-8. The construction of all inhabitable and/or ventilated structures shall comply with Title 24.

MM-AQ-9. Shade trees shall be planted on the project sites to reduce heating/cooling needs.

MM-AQ-10. Energy-efficient and automated controls for air conditioners shall be installed in all ventilated buildings and building units.

MM-AQ-11. Lighting controls and energy efficient lighting shall be installed in all non-residential buildings and on non-residential properties.

Mobile Source Mitigation

MM-AQ-12. Bus passenger benches and shelters shall be constructed on the site along roadways that have transit service.

MM-AQ-13. Sidewalks that conveniently link on-site uses and that link the site to surrounding uses shall be constructed throughout the site in order to encourage walking.

MM-AQ-14. On-site commercial uses shall provide preferential parking spaces for carpools and vanpools.

MM-AQ-15. Commuter information areas, such as kiosks, that provide information about local and regional transit services, such as the LADOT DASH and MTA buses, as well as carpool opportunities, shall be placed in convenient locations on the site.

Ranges of emission reduction efficiencies for **MM-AQ-2** through **MM-AQ-15**, listed above, are identified in Table 11-6 of the SCAQMD's *CEQA Air Quality Handbook*.[24] The SCAQMD recommends that the low end of the range should be used when selecting the efficiencies for various projects unless otherwise justified.[25] Not all of the recommended measures would measurably reduce operational-related ROC emissions to less than significant, but their implementation would reduce ROC emissions by 3.6 percent. Even with this emissions reduction, project operational ROC emissions would still exceed significance thresholds as shown in **Table IV.E-11**, refer to **Appendix IV.E** for Estimated Emissions Reductions Efficiencies spreadsheets for detailed calculations. Consequently, significant and unavoidable operational impacts would occur, even with the inclusion of mitigation.

e. Adverse Effects

Thresholds for ROC and NO_x would be exceeded during construction of the project. Even though construction thresholds for CO, SO_x and PM_{10} would not be exceeded in any phase of the project, construction-related air quality impacts regarding ROC and NO_x would result in significant and unavoidable construction impacts regarding these thresholds, even with the inclusion of mitigation measures.

Project operations would result in emissions of ROC and NO_X in excess of the SCAQMD daily thresholds. This impact is primarily the result of the number of vehicular trips associated with the proposed land uses. The mixed use character of the project and the proposed mitigation measures would help to reduce the potential number of daily vehicular trips by project residents. However, a significant and unavoidable impact to local or regional air quality would occur with respect to those criteria pollutants, even with the inclusion of mitigation measures.

---

24 No emissions reduction efficiencies are provided for SO_x emissions; however, SO_x emissions of the proposed project would be less than significant.

25 SCAQMD, *CEQA Air Quality Handbook* (Diamond Bar, California: SCAQMD, November 1993).

Because the Basin is in nonattainment of the state and federal O_3 and PM_{10} standards, a project that creates individually significant air quality impacts, such as this project, would also contribute to cumulatively significant air quality impacts. Thus, the proposed project would have a significant and unavoidable cumulative impact measured under the SCAQMD operational significance thresholds, even with the inclusion of mitigation measures.