5.2 AIR QUALITY

This section of the Monterey Park Market Place Supplemental EIR (SEIR) evaluates the potential for the Monterey Park Market Place Precise Plan (MPMP Precise Plan) to impact air quality in the local and regional context. The analysis compares the impacts identified in the 2000 Monterey Park Town Plaza EIR (2000 MPTP EIR) to impacts of the MPMP Precise Plan. The SEIR also addresses certain impacts related to significant thresholds which were not included in the 2000 MPTP EIR because the South Coast Air Quality Management District (SCAQMD) had not yet adopted thresholds or has since revised methodology for determining significance. The existing ambient air quality was also studied and documented to provide an accurate and complete representation of the surrounding environment. Air quality modeling data sheets used in this analysis are included as Appendix C.

5.2.1 Methodology

This air quality evaluation was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) to determine if significant air quality impacts are likely to occur in conjunction with the type and scale of development associated with the MPMP Precise Plan in Monterey Park. SCAQMD has published the *CEQA Air Quality Handbook* (Handbook) and posted updates included on its website, these are intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. This Handbook provides standards, methodologies, and procedures for conducting air quality analyses in environmental impact reports and was used extensively in the preparation of this analysis. In addition, the SCAQMD has published two additional guidance documents: *Localized Significance Threshold Methodology for CEQA Evaluations* (2003) and *Particulate Matter (PM) 2.5 Significance Thresholds and Calculation Methodology* (2006), which that are intended to provide guidance in evaluating localized effects from mass emissions during construction. These documents were also used in the preparation of this analysis.



The analysis makes use of the URBEMIS2007 urban emissions model (Version 9.2.4) for determination of daily construction and operational emissions; guidance included in the SCAQMD Final Localized Significance Threshold Methodology and the United States Environmental Protection Agency (EPA) Industrial Source Complex ISCST3 Dispersion model for localized construction impacts; and the provisions of the California Department of Transportation's (Caltrans) *Transportation Project-Level Carbon Monoxide Protocol* and CALINE4 computer model of on-road carbon monoxide (CO) dispersion modeling.

5.2.2 Impacts Identified in the 2000 MPTP EIR

The impacts analyzed in the 2000 MPTP EIR used SCAQMD's CEQA Handbook, URBEMIS7G, and CALINE4 computer modeling. All of these except CALINE4 have been updated since publication of the 2000 MPTP EIR.

- **AQMP Consistency:** The 2000 MPTP EIR did not identify significant impacts regarding consistency with the AQMP.

- **Construction-Related Regional Air Quality Impacts:** The 2000 MPTP EIR did not identify impacts related to construction activities (fugitive dust and construction exhaust, including diesel) associated with the project. However, mitigation measures were included to reduce construction emissions in accordance with SCAQMD policies. The 2000 MPTP EIR evaluated construction impacts associated with fugitive dust emissions and exhaust emissions. Fugitive dust and construction equipment exhaust were compared with SCAQMD screening thresholds. These screening thresholds are no longer applicable under current SCAQMD methodology.

- **Operational Phase Regional Air Quality Impacts:** The 2000 MPTP EIR identified that operational phase emissions would exceed SCAQMD thresholds for CO, volatile organic compounds (VOC), and NO_x. Mitigation measures were incorporated into the EIR; however, impacts remained significant and avoidable. In 2006, the EPA adopted ambient air quality standards (AAQS) for $PM_{2.5}$. Therefore, at the time of preparation, SCAQMD had not adopted thresholds for $PM_{2.5}$. In addition, regional operational air quality modeling in the 2000 MPTP EIR was performed using the California Air Resources Board's (CARB) URBEMIS7G model. CARB updated emission factors in the model and released an updated URBEMIS2007.

- **Localized Air Quality Impacts:** The 2000 MPTP EIR did not identify localized impacts (microscale) associated with CO hotspots generated by project-related vehicles at congested intersections. Since the 2000 MPTP EIR, SCAQMD has also adopted localized significance thresholds for onsite emissions.

- **Air Toxics:** The 2000 MPTP EIR did not identify a significant cancer risk associated with proximity to the OII Landfill for employees and patrons at the commercial site. In addition, the 2000 MPTP EIR did not identify impacts from remediation activities at the landfill.

- **Cumulative Impacts:** The 2000 MPTP EIR identified that regional operational emissions of CO, VOC, and NO_x would be cumulatively considerable. No significant cumulative impacts were identified with regard to CO hot spots.

5.2.3 Environmental Setting

South Coast Air Basin

The project site lies within the South Coast Air Basin (SoCAB), which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties. The air basin is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the site is the San Gabriel Fire Department Monitoring Station. The average low is reported at 41.8°F in January while the average high is 89.7°F in August (WRCC 2010).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast with slightly heavier shower activity in the east and over the mountains. Rainfall averages around 17.24 inches per year in the project area, as measured in San Gabriel (WRCC 2010).

Humidity

Although the SoCAB has a semiarid climate, the air near the surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the ocean effect is dominant. Periods of heavy fog, especially along the coastline, are frequent; low stratus clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB.

Wind

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area.

Air Pollutants of Concern

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are known as "criteria air pollutants" and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_x, PM_{10}, and $PM_{2.5}$ are criteria pollutants. VOC and NO_X are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

Presented below is a description of each of the primary and secondary criteria air pollutants and their known health effects. Other pollutants, such as carbon dioxide (CO_2), a natural by-product of animal respiration that is also produced in the combustion process, have been linked to such phenomena as global climate

change. Greenhouse gas (GHG) emissions that affect global climate change, including CO_2, methane (CH_4), nitrous oxide (N_2O), and fluorinated gases, are discussed in Section 5.3, *Greenhouse Gas Emissions*.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005). The SoCAB is designated under the California and national AAQS as attainment for CO.

Nitrogen Dioxide (NO_2) is a byproduct of fuel combustion and contributes to the formation of O_3, PM_{10}, and $PM_{2.5}$. The principle form of NO_2 produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called nitrogen oxides (NO_x). Thus, NO_x is both a primary and secondary air pollutant. NO_x absorbs blue light and reflects brown/red light; the results are a brownish-red cast to the atmosphere and reduced visibility. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm) (SCAQMD 2005).The SoCAB is designated as an attainment area for NO_x under the national AAQS and nonattainment under the California AAQS.

Ozone (O_3) is commonly referred to as "smog" and is a gas that is formed when volatile organic compounds (VOCs) and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Additionally, O_3 has been tied to crop damage, typically in the form of stunted growth and premature death. O_3 can also act as a corrosive, resulting in property damage such as the degradation of rubber products (SCAQMD 2005). The SoCAB is designated as extreme nonattainment under the California 1-hour and 8-hour AAQS and Extreme nonattainment under the national 8-hour AAQS.

Volatile organic compounds (VOCs), also known as reactive organic gases, are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. VOCs are also released from the out-gassing of paints and surface coatings such as asphalt. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants, including O_3. There are no AAQS established for VOCs. However, because they contribute to the formation of O_3, the SCAQMD has established a significance threshold for this pollutant. Adverse effects on human health are not caused directly by VOC, but rather by reactions of VOC to form secondary pollutants such as ozone (SCAQMD 2005).

Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Coarse particles (all particles less than or equal to 10 micrometers in diameter, or PM_{10}) are derived from a variety of sources, including windblown dust and construction activities. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for fine particles (less than 2.5 microns in diameter, or $PM_{2.5}$). Fine particles can also be formed in the atmosphere through chemical reactions. Particulate matter of 10 microns or smaller pose a health concern because they

can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. Diesel particulates (DPM) are also classified by the California Air Resources Board (CARB) as a carcinogen. The SoCAB is a nonattainment area for the California and national AAQS for $PM_{2.5}$ and designated as attainment/maintenance under the national AAQS for PM_{10} and nonattainment under the California AAQS for PM_{10}.

Sulfur dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. When sulfur dioxide oxidizes in the atmosphere, it forms sulfates (SO_4). Together, these pollutants are referred to as sulfur oxides (SO_x). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. A primary source of SO_2 emissions is high-sulfur-content coal. Gasoline and natural gas have very low sulfur content and hence do not release significant quantities of SO_2 (SCAQMD 2005). The SoCAB is designated as attainment under the California and national AAQS.

Lead (Pb). Lead is a primary criteria air pollutant. Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceed the state or federal air quality standards at any regular monitoring station since 1982 due to the phase out of leaded fuels. Consequently, the SoCAB has been designated as attainment under the California and national AAQS (SCAQMD 2005). However, the Los Angeles County portion is designated as nonattainment under the California AAQS, because of large industrial emitters.



Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to subsection (b) of Section 112 of the federal Clean Air Act (42 United Sates code Section 7412[b]) is a toxic air contaminant. Under state law, the California EPA, acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. CARB has, to date, established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

Since the last update to the TAC list in December 1999, CARB has designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in the diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

In 2000, the SCAQMD conducted a study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,400 in a million. The largest contributor to this risk was diesel exhaust, accounting for 71 percent of the air toxics risk. In 2008, the SCAQMD conducted its third update to their study on ambient concentrations of TACs and estimated the potential health risks from air toxics. The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for approximately 84 percent of the air toxics risk (SCAQMD 2008).

Regulatory Framework

Development of the project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the SCAQMD. However, the SCAQMD reports to CARB, and all criteria emissions are also governed by the California AAQS as well as the national AAQS. Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the project are summarized below.

Ambient Air Quality Standards

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act Amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting national AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the national AAQS and are based on even greater health and welfare concerns.

These national AAQS and California AAQS standards are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very

young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both the State of California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 5.2-1, these pollutants include O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.2-1
Ambient Air Quality Standards for Criteria Pollutants

Pollutant	*Averaging Time*	*California Standard*	*Federal Primary Standard*	*Major Pollutant Sources*
Ozone (O_3)	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.075 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Average	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Average	*	0.03 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	*	
	24 hours	0.04 ppm	0.14 ppm	
Suspended Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 $\mu g/m^3$	150 $\mu g/m^3$	
Suspended Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 $\mu g/m^3$	
Lead (Pb)	Monthly	1.5 $\mu g/m^3$	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	*	1.5 $\mu g/m^3$	
	3-Month Average	*	0.15 $\mu g/m^3$	
Sulfates (SO_4)	24 hours	25 $\mu g/m^3$	*	Industrial processes.

Source: CARB 2010.
ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.

Air Quality Management Planning

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the air quality management plan (AQMP) for the SoCAB. Since 1979, a number of AQMPs have been prepared.

The most recently adopted comprehensive plan is the 2007 AQMP, which was adopted on June 1, 2007, and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2007 AQMP proposes attainment demonstration of the federal $PM_{2.5}$ standards through a more focused control of SO_X, directly emitted $PM_{2.5}$, and focused control of NO_X and VOC by 2015. The eight-hour ozone control strategy builds upon the $PM_{2.5}$ strategy, augmented with additional NO_X and VOC reductions to meet the standard by 2024, assuming a bump-up (i.e., extended attainment date) is obtained.

The AQMP provides local guidance for the State Implementation Plan, which provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Severity classifications for nonattainment range in magnitude: marginal, moderate, serious, severe, and extreme. The attainment status for the SoCAB is included in Table 5.2-2. The SoCAB is also designated as attainment of the California AAQS for SO_2, lead, and sulfates. According to the 2007 AQMP, the SoCAB will have to meet the new federal $PM_{2.5}$ standards by 2015 and the 8-hour ozone standard by 2024 and will most likely have to achieve the recently revised 24-hour $PM_{2.5}$ standard by 2020. The SCAQMD has recently designated the SoCAB as nonattainment for NO_2 (entire basin) and lead (Los Angeles County only) under the California AAQS and attainment/maintenance for PM_{10} under the national AAQS.

Table 5.2-2
Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	*State*	*Federal*
Ozone – 1-hour	Extreme Nonattainment	Extreme Nonattainment[1]
Ozone – 8-hour	Extreme Nonattainment	Severe-17 Nonattainment[2]
PM_{10}	Serious Nonattainment	Attaniment/Maintenance[3]
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment[4]
NO_2	Nonattainment[5]	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Nonattainment[6]	Attainment[6]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: California Air Resource Board, based on 2004 State Area Designations and National Area Designations current as of July 2007.

[1] Under prior standard.

[2] May petition for Extreme.

[3] Annual Standard Revoked September 2006. CARB approved SCAQMD's redesignation request for the SoCAB on March 25, 2010.

[4] The EPA granted the request to redesignate the SoCAB from nonattainment to attainment for the CO national AAQS on May 11, 2007 (Federal Register Volume 71, No. 91), which became effective as of June 11, 2007.

[5] The state NO_2 standard was strengthened in 2007 from 0.25 ppm to 0.18 ppm. Under the revised standards, the entire SoCAB was designated nonattainment on March 25, 2010. In addition, the EPA adopted a new 1-hour NO_x standard of 0.100 ppm on January 22, 2010.

[6] The Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are proposed as unclassified (March 25, 2010).

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site and project area are best documented by measurements made by SCAQMD. The project site is located within Source Receptor Areas (SRA) 11– South San Gabriel (San Gabriel Valley). The air quality monitoring station closest to the project is the Pico Rivera Monitoring Station. However, this station does not monitor PM_{10} or SO_x. Consequently, data was obtained from the Los Angeles North Main Street Monitoring Station for these criteria pollutants. Data from these stations are summarized in Table 5.2-3. The data show that the area occasionally exceeds the state and federal one-hour and eight-hour O_3 standards. The data also indicate that the area regularly exceeds the state PM_{10} and federal $PM_{2.5}$ standards. The CO, SO_2, or NO_2 standard have not been violated in the last five years at this station.

Table 5.2-3
Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2005	2006	2007	2008	2009
Ozone (O_3)[1]					
State 1-Hour ≥ 0.09 ppm	0	9	6	7	8
State 8-hour ≥ 0.07 ppm	0	9	9	12	6
Federal 8-Hour > 0.075[2] ppm	0	4	5	5	3
Max. 1-Hour Conc. (ppm)	0.077	0.128	0.135	0.107	0.131
Max. 8-Hour Conc. (ppm)	0.065	0.095	0.101	0.094	0.101
Carbon Monoxide (CO)[1]					
State 8-Hour > 9.0 ppm	0	0	0	0	0
Federal 8-Hour ≥ 9.0 ppm	0	0	0	0	0
Max. 8-Hour Conc. (ppm)	2.41	2.71	2.89	2.11	2.11
Nitrogen Dioxide (NO_2)[1]					
State 1-Hour ≥ 0.18[4] ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.087	0.102	0.108	0.099	0.096
Sulfur Dioxide (SO_2)[3]					
State 1-Hour ≥ 0.04 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.010	0.006	0.005	0.003	0.002
Coarse Particulates (PM_{10})[3]					
State 24-Hour > 50 $\mu g/m^3$	3	3	5	2	3
Federal 24-Hour > 150 $\mu g/m^3$	0	0	0	0	0
Max. 24-Hour Conc. ($\mu g/m^3$)	70.0	59.0	78.0	66.0	72.0
Fine Particulates (PM2.5)[1]					
Federal 24-Hour > 35[6,7] $\mu g/m^3$	4	7	5	4	2
Max. 24-Hour Conc. ($\mu g/m^3$)	58.2	72.2	63.6	47.2	71.0

Source: CARB 2010.
ppm: parts per million; $\mu g/m^3$: or micrograms per cubic meter.
[1] Data obtained from the Pico Rivera Monitoring Station.
[2] The EPA recently revised the 8-hour O_3 standard from 0.08 ppm to 0.075 ppm, effective May 2008.
[3] Data obtained from the Los Angeles – North Main Street Monitoring Station.
[4] The NO_x standard was amended on February 22, 2007, to lower the 1-hr standard to 0.18 ppm. In addition, the EPA adopted a new 1-hour standard of 0.100 ppm on January 22, 2010.
[5] Included data related to an exceptional event (such as a wildfire).
[6] Percentage of samples exceeding standard.
[7] The EPA revised the 24-hour $PM_{2.5}$ standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$; this standard did not take effect until December 2006.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, since the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

5.2.4 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

AQ-3 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).

AQ-4 Expose sensitive receptors to substantial pollutant concentrations.

AQ-5 Create objectionable odors affecting a substantial number of people.

The Initial Study, included as Appendix A, substantiates that impacts associated with the following threshold would be less than significant:

- Threshold AQ-5

This impact will not be addressed in the following analysis.

South Coast Air Quality Management District Thresholds

Regional Significance Thresholds

CEQA allows for the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. The SCAQMD has established thresholds of significance for air quality for construction activities and project operation, as shown in Table 5.2-4:

Table 5.2-4
SCAQMD Regional Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Volatile Organic Compounds (VOC)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Fine particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: SCAQMD 2007.

CO Hotspot Thresholds

Localized CO impacts are determined based on the presence of congested intersections. The significance of localized project impacts depends on whether the project would cause substantial concentrations of CO. A project is considered to have a significant impact if project-related mobile-source emissions result in an exceedance the California one-hour and eight-hour CO standards, which are:

- 1 hour = 20 parts per million
- 8 hour = 9 parts per million

Localized Significance Thresholds

The SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (offsite mobile-source emissions are not included the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS. LSTs are based on the ambient concentrations of that pollutant within the project SRA and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required. The construction LSTs for a five-acre project site within SRA 11 for sensitive receptors within 25 meters (approximately 82 feet) are therefore used as screening criteria, as shown in Table 5.2-5. If emissions exceed the LST for a five-acre site, then dispersion modeling needs to be conducted. Projects larger than five acres can determine the localized significance for construction by performing dispersion modeling using the thresholds in Table 5.2-6 for emissions that exceed the screening LSTs shown in Table 5.2-5.

Table 5.2-5
SCAQMD Localized Significance Threshold: Screening Level Analysis

Air Pollutant	Threshold (lbs/day)	
	Construction	Operation
Nitrogen Oxides (NO_2)	183	183
Carbon Monoxide (CO)	1,814	1,814
Coarse Particulates (PM_{10})	14	4
Fine Particulates ($PM_{2.5}$)	9	2

Source: SCAQMD 2003; SCAQMD 2006, for a 5-acre site with receptors 82 feet (25 meters) from the source in SRA 11.

Table 5.2-6
SCAQMD Localized Significance Thresholds Based on Ambient Air Quality Standards for Projects Larger than 5 Acres

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (California AAQS)	20 ppm
8-Hour CO Standard (California AAQS)	9.0 ppm
1-Hour NO_2 Standard (National AAQS)[1]	0.100 ppm
24-Hour PM_{10} Standard (SCAQMD)[2]	10.4 $\mu g/m^3$
24-Hour PM_{10} Standard (SCAQMD)[2]	2.5 $\mu g/m^3$

Notes: ppm: parts per million; $\mu g/m^3$ – micrograms per cubic meter
[1] Updated based on the new national AAQS adopted January 2010.
[2] Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an "allowable change" in concentration. Therefore, background concentration is irrelevant.

5.2.5 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

IMPACT 5.2-1: THE PROPOSED PROJECT IS CONSISTENT WITH THE APPLICABLE AIR QUALITY MANAGEMENT PLAN. [THRESHOLD AQ-1]

Impact Analysis: CEQA requires that general plans be evaluated for consistency with the AQMP. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals contained in the AQMP. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the AQMP strategy is based on projections from local general plans. Projects that are consistent with the local general plan are considered consistent with the air quality-related regional plan. The 2000 MPTP EIR did not identify any significant impacts associated with consistency with the AQMP.

The land use designations of the general plan are, in part, the foundation for the emissions inventory of the SoCAB in the AQMP. The AQMP is based on projections in population, employment, and vehicle miles traveled (VMT) in the SoCAB region projected by SCAG. The MPMP Precise Plan would generate a 6 percent increase in trips (19,719 vs. 18,674 weekday average daily trips) and a 16 percent increase in building square footage (600,000 square feet vs. 515,382 square feet) from the 2000 MPTP. However, because the 2000 MPTP EIR was found to be generally consistent with the Monterey Park General Plan and was not considered significant in this respect, and because the proposed uses associated with the revised MPMP Precise Plan are substantially similar to those analyzed in the 2000 MPTP EIR, the revised MPMP Precise Plan is also consistent with the planning goals of the City, even though it results in a slight increase in trips. In this respect, the project does not represent a significant impact. Impacts associated with the revised project would be slightly greater than those identified in the 2000 MPTP EIR, but would remain less than significant.

IMPACT 5.2-2: CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE MPMP PRECISE PLAN WOULD GENERATE SHORT-TERM EMISSIONS THAT EXCEED SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S REGIONAL SIGNIFICANCE THRESHOLD FOR NO_x, WHICH IS A NEW SIGNIFICANT IMPACT NOT IDENTIFIED IN THE 2000 MPTP EIR. [THRESHOLDS AQ-2 AND AQ-3]

Impact Analysis: Construction activities produce combustion emissions from various sources, such as onsite heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from soil-disturbing activities such as grading and excavation. Exhaust emissions from construction activities onsite would vary daily as construction activity levels change.

Approximately 51 acres would be disturbed (42.1-acre North Parcel plus the 9.0-acre SCE easement). The first phase of construction would involve removal of the berm between the site and SR-60 to construct the maintenance access road. Phase 2 consists of development of the North Parcel for the commercial retail development. Based on information from the applicant, construction associated with Phase 2 is assumed to be phased in as demand for retail/commercial uses increases. Construction activities are assumed to start in June 2011 and be completed by April 2017 (approximately 6 years).

The 2000 MPTP EIR did not identify significant impacts with regard to construction emissions; however, construction activities were compared to screening criteria that are no longer applicable. In addition, several components of the 2000 MPTP have been completed, including removal of the existing industrial buildings (Recycled Woods Productions operation, Ecology Auto Wrecking area, Aman Brothers Pavement Crushing, and Manhole Adjustment, Inc.); construction of the TDF to the south of the LTP; remediation process to remove contaminated soil and material; and improvements to the Paramount Boulevard/Neil Armstrong Street alignments.



Construction activities associated with MPMP Precise Plan were modeled using the URBEMIS2007 computer model based on construction assumptions provided by the applicant. Where construction information is not available, default URBEMIS2007 information was used. Based on the results of the modeling, construction emissions would temporarily increase PM_{10}, $PM_{2.5}$, VOC, NO_X, SO_X, and CO regional emissions within the SoCAB. An estimate of maximum daily construction emissions is provided in Table 5.2-7. Construction activities associated with the project would exceed the SCAQMD regional thresholds for NO_x during grading activities. The primary source of NO_x emissions would be from construction equipment exhaust. NO_x is a precursor to both the formation of O_3 and particulate matter (PM_{10} and $PM_{2.5}$). Consequently, emissions of NO_X that exceed the SCAQMD regional significance thresholds would significantly contribute to the O_3, particulate matter (PM_{10} and $PM_{2.5}$), and NO_2 nonattainment designations of the SoCAB.

Table 5.2-7
Construction Phase Regional Emissions Scenario
(in pounds per day)

Construction Phase[1]	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1						
Grading[2]	16	**147**	69	0	81	21
Paving	5	23	13	<1	2	2
Worst-Case Day	16	147	69	<1	81	21
SCAQMD Standard	75	100	550	150	150	55
Significant?	No	**Yes**	No	No	No	No
Phase 2						
Site Preparation Maximum Daily Emissions	21	**195**	90	<1	85	24
Grading[2]	20	**130**	87	<1	85	23
Trenching	1	5	3	0	<1	<1
Building Maximum Daily Emissions	19	39	63	<1	3	3
Building	5	23	52	<1	2	1
Paving	3	16	10	<1	1	1
Architectural Coatings	11	<1	<1	0	0	0
Worst-Case Day	21	195	90	<1	85	24
SCAQMD Standard	75	100	550	150	150	55
Significant?	No	**Yes**	No	No	No	No

Source: URBEMIS2007, Version 9.2.4.

[1] Construction equipment mix is based on information provided by the applicant and includes 100,000 cubic yards of soil import in Phase 2 based on a maximum of 80 truck trips per day. Where detailed construction information is not available, URBEMIS2007 default construction mix was used.

[2] Grading includes fugitive dust control measures as promulgated by SCAQMD Rule 403, requiring an application of water at least twice per day to at least 80 percent of the unstabilized disturbed onsite surface areas, maintaining at least six inches of freeboard and placing a protective tarp on haul vehicles, replacing disturbed ground cover quickly, restricting speeds on unpaved roads to less than 15 miles per hour, and watering unpaved hauls roads twice per day.

The 2000 MPTP EIR did not identify significant construction emissions. Construction activities were compared to screening thresholds and were not modeled in the 2000 MPTP. SCAQMD no longer accepts screening criteria for determination of construction-related impacts. Because approximately the same area would be disturbed in the grading process as analyzed in the 2000 MPTP EIR, grading and fugitive dust emissions from the MPMP Precise Plan would be comparable. Air pollutant emissions associated with MPMP Precise Plan would be greater than those analyzed in 2000 MPTP EIR because the revised project increases the total permitted building square footage by approximately 16 percent (600,000 square feet compared to 515,382 square feet).

Grading emissions would be roughly the same between the 2000 MPTP EIR and the revised MPMP Precise Plan, and construction air quality impacts would be similar to those analyzed in the 2000 MPTP EIR. However, because SCAQMD now requires comparison to daily emissions thresholds and new air pollutant models have been released to evaluate construction emissions, impacts from regional air pollutant emissions from construction-related activities would be considered significant for NO_x (see Table 5.2.7). Therefore, regional construction emissions impacts are a new significant impact not identified in the 2000 MPTP EIR.

IMPACT 5.2-3: ***LONG-TERM OPERATION OF THE MPMP PRECISE PLAN WOULD GENERATE AIR POLLUTANT EMISSIONS THAT WOULD CONTINUE TO EXCEED THE SCAQMD'S REGIONAL SIGNIFICANCE THRESHOLDS FOR VOC, NO_x, AND CO AND CUMULATIVELY CONTRIBUTE TO THE SOUTH COAST AIR BASIN'S NONATTAINMENT DESIGNATIONS. IN ADDITION, THE MPMP PRECISE PLAN WOULD EXCEED SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S REGIONAL SIGNIFICANCE THRESHOLDS FOR PARTICULATE MATTER (PM_{10} AND $PM_{2.5}$). SINCE EMISSIONS OF PARTICULATE MATTER (PM_{10} AND $PM_{2.5}$) WERE NOT IDENTIFIED IN THE 2000 MPTP EIR, THIS IS CONSIDERED A NEW SIGNIFICANT IMPACT. [THRESHOLDS AQ-2 AND AQ-3]***

Impact Analysis: The 2000 MPTP EIR identified that operational phase emissions would exceed SCAQMD's thresholds for CO, VOC, and NO_x. At the time of preparation, SCAQMD had not adopted thresholds for $PM_{2.5}$.

Mobile- and stationary-source emissions generated by the project were compiled using URBEMIS2007 air pollutant emissions inventory model (Version 9.2.4) to estimate project-related increases in air pollutant emissions. Project-related vehicle trips were obtained from the traffic impact analysis conducted by KOA Corporation (revised 2010). Based on the trip generation rate found in the traffic study, the project would generate 19,719 average daily trips (ADT) and 26,837 ADT on weekdays at project buildout in 2017. Air pollutant emissions modeling is based on mobile- and stationary-source emissions for each of the land uses. The results of the URBEMIS2007 computer modeling for the weekday and weekend are included in Tables 5.2-8 and 5.2-9, respectively. These tables show emissions generated using the newer URBEMIS2007 model. A comparison of air quality impacts identified in the 2000 MPTP EIR (as presented in the EIR using URBEMIS7G) and the MPMP Precise Plan (as modeled using URBEMIS2007) is shown in Table 5.2-10.

The 2000 MPTP EIR identified significant emissions of CO, VOC, and NO_x. Since the 2000 MPTP EIR, CARB has updated emission factors in the URBEMIS2007 model, and SCAQMD has adopted thresholds for $PM_{2.5}$. As shown in the Table 5.2-10, based on the updated URBEMIS2007 model, the MPMP Precise Plan would exceed the thresholds for VOC, CO, NO_x, PM_{10}, and $PM_{2.5.}$ Criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the NO_2, O_3, and particulate matter nonattainment designations of the SoCAB. The project would result in a 16 percent increase in building square footage (600,000 square feet compared to 515,382 square feet) and 6 percent increase in average daily vehicle trips (19,719 compared to 18,674 weekday average daily trips). The MPMP Precise Plan would result in an approximately 5 to 8 percent increase in air quality impacts for most criteria pollutants on weekdays and an approximately 44 percent increase in air quality impacts for most criteria pollutants on weekends, compared to the 2000 MPTP (see Table 5.2-8 and Table 5.2-9). However, the project would result in a decrease in air quality impacts based on emissions identified in the 2000 MPTP EIR (see Table 5.2-10) for CO (weekday only), VOC, and NO_x because of updated emission rates used in for this SEIR that reflect lower emission rates for vehicles. Further, based on the updated emission factors in the UREMIS2007 model, the revised SEIR analysis has identified additional significant impacts associated with PM_{10} and $PM_{2.5}$ that were not identified in the EIR (see Table 5.2-10). The increase in air pollutant emissions would exceed the SCAQMD regional thresholds, and therefore the magnitude of change is considered significant. Modeling based on updated air pollutant emission factors in the URBEMIS2007 model shows that CO, VOC, NO_x, PM_{10}, and $PM_{2.5}$ from the MPMP Precise Plan would exceed the significance thresholds. Since emissions of particulate matter (PM_{10} and $PM_{2.5}$) were not identified in the 2000 MPTP, this is a considered a new significant impact. Consequently, impacts from air pollutant emissions from operation of the project would be significant.

Table 5.2-8
Project-Related Regional Operational Phase Emissions: Weekday
(in pounds per day)

Operations Phase	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
MPMP Precise Plan – Summer						
Stationary Sources	5	6	14	<1	<1	<1
Mobile Sources	80	113	1,049	2	306	59
Maximum Daily Operation Emissions	85	119	1,064	2	306	59
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
2000 MPTP – Summer						
Stationary Sources	3	5	6	0	0	0
Mobile Sources	76	107	992	2	289	56
Maximum Daily Operation Emissions	79	112	998	2	289	56
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Increase in Emissions	6	7	66	<1	17	3
Percent Increase in Emissions	7%	6%	7%	5%	6%	5%
MPMP Precise Plan – Winter						
Stationary Sources	4	6	5	<1	<1	<1
Mobile Sources	90	136	988	2	306	59
Maximum Daily Operation Emissions	94	142	993	2	306	59
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
2000 MPTP – Winter						
Stationary Sources	3	5	4	0	0	0
Mobile Sources	85	129	934	1	289	56
Maximum Daily Operation Emissions	88	134	938	1	289	56
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Increase in Emissions	6	8	54	<1	17	3
Percent Increase in Emissions	7%	6%	6%	6%	6%	5%

Source: URBEMIS2007, Version 9.2.4.
Operation emissions are distinguished between summer and winter to account for changes in temperature, differences in gasoline blend, and other factors that may affect emissions from stationary and mobile sources.

Table 5.2-9
Project-Related Regional Operational Phase Emissions: Weekend
(in pounds per day)

Operations Phase	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
MPMP Precise Plan – Summer						
Stationary Sources	5	6	14	0	0	0
Mobile Sources	108	154	1,428	3	416	81
Maximum Daily Operation Emissions	113	160	1,442	3	416	81
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
2000 MPTP – Summer						
Stationary Sources	3	5	6	0	0	0
Mobile Sources	76	107	992	2	289	56
Maximum Daily Operation Emissions	79	112	998	2	289	56
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Increase in Emissions	34	48	444	1	127	25
Percent Increase in Emissions	43%	43%	44%	43%	44%	45%
MPMP Precise Plan – Winter						
Stationary Sources	4	6	5	0	0	0
Mobile Sources	122	185	1,345	2	416	81
Maximum Daily Operation Emissions	126	191	1,349	2	416	81
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
2000 MPTP – Winter						
Stationary Sources	3	5	4	0	0	0
Mobile Sources	85	129	934	1	289	56
Maximum Daily Operation Emissions	88	134	938	1	289	56
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	**Yes**	**Yes**	**Yes**	No	**Yes**	**Yes**
Increase in Emissions	38	57	411	1	127	25
Percent Increase in Emissions	43%	43%	44%	44%	44%	45%

Source: URBEMIS2007, Version 9.2.4.
Operation emissions are distinguished between summer and winter to account for changes in temperature, fireplace use, differences in gasoline blend, and other factors that may affect emissions from stationary and mobile sources.

Table 5.2-10
Comparison of Air Quality Impacts of the 2000 MPTP to the MPMP Precise Plan
(in pounds per day)

Operations Phase	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Weekday Comparison of 2000 MPTP to MPMP Precise Plan						
Maximum Emissions – MPMP Precise Plan	94	142	1,064	2	306	59
Maximum Emissions – 2000 MPTP[1]	142	329	1,155	<1	118	NA
Increase in Emissions	-48	-187	-91	2	188	59
Percent Increase in Emissions	-34%	-57%	-8%	1,740%	159%	NA
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Significantly Higher than Impacts Identified in 2000 MPTP?	No	No	No	No	**Yes**	**Yes**
Weekend Comparison of 2000 MPTP to MPMP Precise Plan						
Maximum Emissions – MPMP Precise Plan	126	191	1,442	3	416	81
Maximum Emissions – 2000 MPTP[1]	142	329	1,155	<1	118	NA
Increase in Emissions	-16	-138	287	2	298	NA
Percent Increase in Emissions	-12%	-42%	25%	2,410%	253%	NA
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Significantly Higher than Impacts Identified in 2000 MPTP?	No	No	No	No	**Yes**	**Yes**

Source: URBEMIS2007, Version 9.2.4.
Operation emissions are distinguished between summer and winter to account for changes in temperature, differences in gasoline blend, and other factors that may affect emissions from stationary and mobile sources.
[1] Based on 2000 EIR.

IMPACT 5.2-4: CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE MPMP PRECISE PLAN WOULD EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS OF PM_{10}, WHICH IS A NEW SIGNIFICANT IMPACT THAT WAS NOT IDENTIFIED IN THE 2000 MPTP EIR. [THRESHOLD AQ-4]

Impact Analysis: Since the 2000 MPTP EIR, SCAQMD has also adopted localized significance thresholds for onsite emissions associated with construction activities. The proposed project could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike the mass (pounds per day) of construction emissions shown in Table 5.2-7, described as pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or $\mu g/m^3$) and can be correlated to potential health effects. The 2000 MPTP EIR did not evaluate SCAQMD's LSTs because they were not adopted at that time.

Localized Significance Thresholds

Table 5.2-11 (also described in pounds per day), calculates the amount of project-related emissions at which localized concentrations (ppm or $\mu g/m^3$) would exceed the ambient air quality standards according to the size of the project site and distance to the nearest sensitive receptor. Thresholds are based on the California AAQS, which are the most stringent. They are designed to protect those sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise.

Table 5.2-11
Maximum Daily Onsite Construction Emissions: Screening Criteria

Source	Pollutants			
	NO_X	CO	PM_{10}[1]	$PM_{2.5}$[1]
Maximum Daily Construction Emissions	151	69	83	22
SCAQMD LST	183	1,814	14	9
Potentially Significant?	No	No	**Yes**	**Yes**

Source: URBEMIS2007 Version 9.2.4, and SCAQMD, Localized Significance Methodology, 2003, June, Appendix G: Based on LSTs for a project site in SRA 11 for a 5-acre site and a distance of 25 meters (82 feet) between the source and receptor. Excludes emissions from on-road emissions.
All values are in pounds per day. Values represent the maximum daily emissions less on-road emissions from construction activities.
[1] Fugitive dust emissions assume application of Rule 403, which includes quickly replacing groundcover in disturbed areas, watering exposed surfaces at least two times daily, implementation of equipment loading/unloading procedures to reduce fugitive dust, managing haul road dust by water two times daily, and reducing speed on unpaved roads to less than 15 mph.

As shown in this table, maximum daily combined emissions would exceed the LST screening level criteria for PM_{10} and $PM_{2.5}$. Consequently, the EPA's ISCST3 dispersion model was used to estimate pollutant concentrations at adjacent sensitive land uses, including compared to SCAQMD's thresholds. For PM_{10} and $PM_{2.5}$, SCAQMD's localized significance threshold is based on SCAQMD Rule 403 and is 10.4 $\mu g/m^3$. Maximum concentrations at the nearby sensitive receptors are shown in Figure 5.2-1 and Figure 5.2-2 for PM_{10} and $PM_{2.5}$, respectively. Figure 5.2-2 shows that $PM_{2.5}$ would not exceed 10.4 $\mu g/m^3$ at the residential homes across from the site, and no significant impacts would occur. However, concentrations of PM_{10} would exceed 10.4 $\mu g/m^3$ at the apartment complex to the northeast. Additional mitigation measures are necessary to reduce fugitive dust during grading operations.

The 2000 MPTP EIR did not identify significant localized construction emissions because SCAQMD had not yet developed criteria to evaluate them. Because approximately the same area would be disturbed in the grading process as analyzed in the 2000 MPTP EIR, grading and fugitive dust emissions would be comparable with those from the MPMP Precise Plan. Consequently, construction air quality impacts would be similar to those of the 2000 MPTP EIR. Because SCAQMD now requires an evaluation of localized significance thresholds, impacts from regional air pollutant emissions from construction-related activities would be considered significant. Localized construction emissions from PM_{10} are a new significant impact that was not identified in the 2000 MPTP EIR.

IMPACT 5.2-5: OPERATION OF THE PROPOSED PROJECT WOULD NOT EXPOSE OFFSITE SENSITIVE RECEPTORS TO SUBSTANTIAL CONCENTRATIONS OF AIR POLLUTANTS. [THRESHOLD AQ-4]

Impact Analysis: The project would expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike the mass (pounds per day) of operational emissions shown in Table 5.2-8 (pounds per day), localized concentrations refer to the amount of pollutant in a volume of air (ppm or $\mu g/m^3$) and can be correlated to potential health effects. The 2000 MPTP EIR evaluated impacts of the project related to CO hotspots and air quality compatibility with regard to air toxics. At the time of the analysis, SCAQMD had yet to develop LSTs and therefore localized emissions from onsite activities were not evaluated. The 2000 MPTP EIR evaluated but did not find localized impacts (microscale) associated with CO hotspots generated by project-related vehicles at congested intersections. The 2000 MPTP EIR also did not find a significant cancer risk associated with proximity to the OII Landfill for employees and patrons at the commercial site or TAC impacts from landfill remediation activities.

Localized Significance Thresholds

Since the 2000 MPTP EIR, SCAQMD has also adopted LSTs for onsite emissions. LSTs are based on the California AAQS, which are the most stringent AAQS. To estimate concentrations of air pollutants generated from operation of the project at nearby existing and proposed sensitive receptors, the project's maximum daily operational emissions were compared to the operational LSTs. In accordance with SCAQMD methodology, only onsite stationary sources are included in the analysis. Project-related vehicles traveling on- and offsite are not included in the analysis. Table 5.2-12 shows maximum daily operational emissions generated by the project compared to the LSTs. As shown in this table, project emissions would not exceed the LST screening level criteria for CO, NO_2, PM_{10}, or $PM_{2.5}$, and therefore operation of the proposed project would not expose offsite and onsite sensitive receptors to substantial pollutant concentrations.

Table 5.2-12
Maximum Daily Operational Emissions Compared with the LST

Source	Pollutants (lbs/day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Stationary Source	6	14	<1	<1
SCAQMD LST	183	1,814	4	2
Potentially Significant?	No	No	No	No

Source: URBEMIS2007 Version 9.2.4, and SCAQMD, Appendix A of *Localized Significance Methodology*, June 2003. Based on LSTs for a 5-acre project site in SRA 11 with sensitive receptors within 25 meters (82 feet).

CO Hotspot Analysis

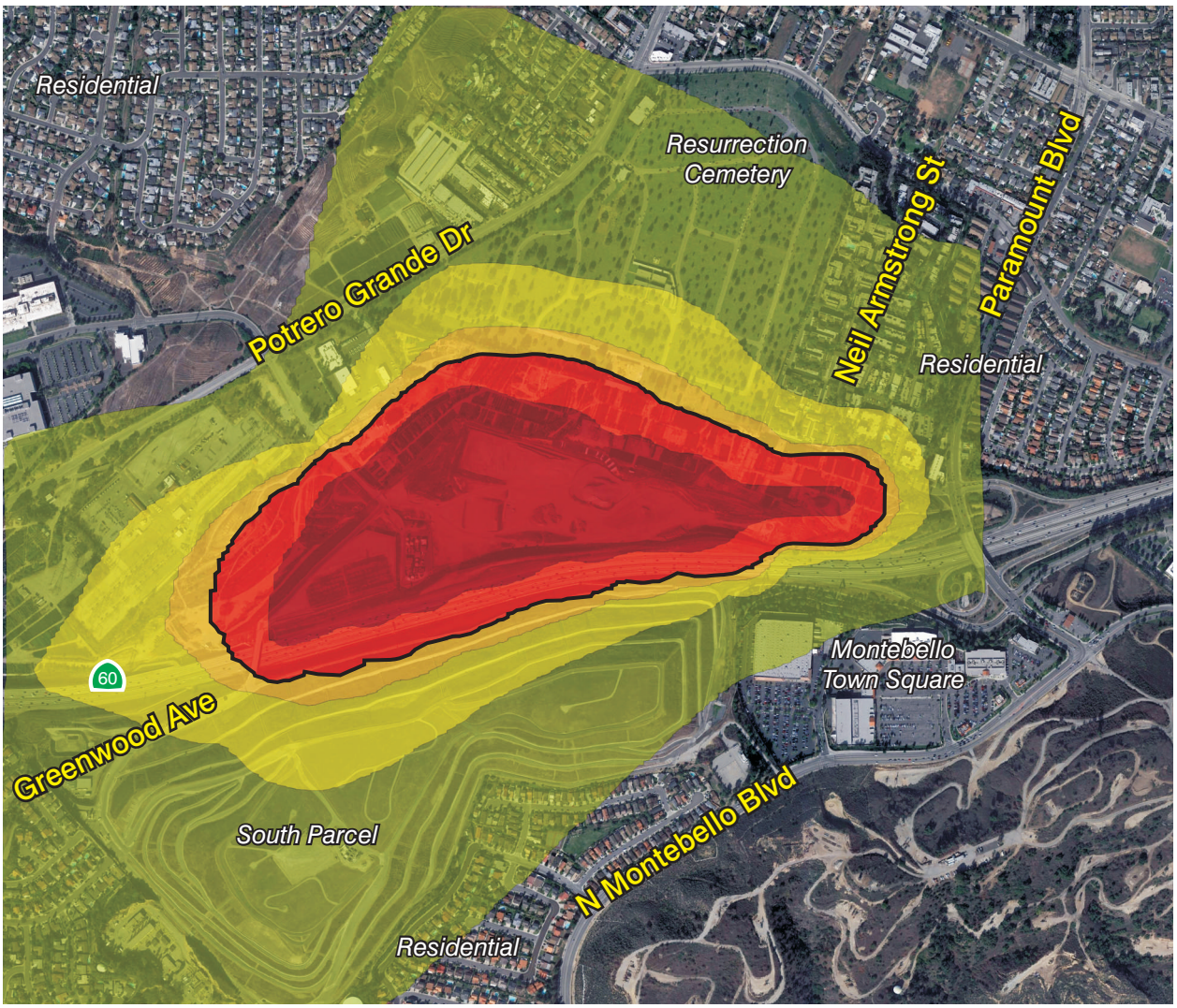
An air quality impact would be significant if emission levels exceed the state or federal AAQS, thereby exposing receptors to substantial pollutant concentrations. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations.

Vehicle congestion has the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Note that the federal one-hour standard is 35 ppm and the eight-hour standard is 9 ppm. Thus, an exceedance condition would occur based on the state standards prior to exceedance of the federal standard. The SoCAB was designated in attainment under the federal AAQS on June 11, 2007.

Because traffic congestion is highest where vehicles queue, hot spots are usually produced at intersections. Typically, for an intersection to exhibit a significant CO concentration, it would operate at level of service (LOS) E or worse in years 2015 and 2025. The following intersections are projected to operate at LOS E or worse without the project (see Section 5.4, *Transportation and Traffic*).

- Garfield Avenue at Pomona Boulevard (2015 PM Peak)
- Garfield Avenue at Via Campo (2015 PM Peak)
- Markland Drive at Vail Avenue/Via Campo (2015 PM Peak)
- Paramount Boulevard at SR-60 westbound ramps (2015 PM Peak)
- Paramount Boulevard at Montebello Boulevard (2015 PM Peak)
- Montebello Boulevard at Beverly Boulevard (2015 PM Peak)
- Rosemead Boulevard at San Gabriel Boulevard (2015 PM Peak)

Construction-Related PM_{10} Concentrations



≥20.8 μg/m³
≥10.4 μg/m³
≥8 μg/m³
≥5 μg/m³
≥2 μg/m³

10.4 μg/m³ Significance Threshold

0 2,000
Scale (Feet)

Source: EPA, Industrial Source Complex Short-Term Dispersion Model (ISCST3)

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Construction-Related $PM_{2.5}$ Concentrations



≥20.8 μg/m³
≥10.4 μg/m³
≥8 μg/m³
≥5 μg/m³
≥2 μg/m³

10.4 μg/m³ Significance Threshold

0 2,400
Scale (Feet)

Source: EPA, Industrial Source Complex Short-Term Dispersion Model (ISCST3)

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Table 5.2-13 lists the one- and eight-hour CO concentrations that would occur at the study area intersections operating under LOS E or worse with project-related traffic volumes at year 2015. Because newer cars emit less air pollution as a result of federal and state regulations, vehicle emissions are lower in future years (e.g., 2025). As shown in these tables, at even the most congested intersections, project-related traffic is not anticipated to exceed any of the state one- or eight-hour CO AAQS. Consequently, sensitive receptors in the area would not be significantly affected by CO emissions generated by operation of the proposed project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

Table 5.2-13
CO Concentrations at Congested Intersections in the Project Vicinity
(parts per million)

Intersection	*Highest 1-Hour CO Concentration*	*1-Hour CAAQS*	*Highest 8-Hour CO Concentration*	*8-Hour CAAQS*	*Exceeds CAAQS*	
					1-Hour	*8-Hour*
Garfield at Pomona	5.7	20	4.0	9	No	No
Garfield at Via Campo	5.9	20	4.1	9	No	No
Markland at Potrero Grande	5.6	20	3.9	9	No	No
Markland at Vail	5.6	20	3.9	9	No	No
Paramount at SR-60 WB Ramps	5.8	20	4.1	9	No	No
Paramount at Montebello	6.0	20	4.2	9	No	No
Montebello at Beverly	5.8	20	4.1	9	No	No
Rosemead at San Gabriel	5.9	20	4.1	9	No	No

Source: CALINE4. Version 1.31. Based on traffic volumes, roadway configurations, and speed limits obtained from the traffic study prepared by ArchBeach Consulting (2010).
Notes:
CO concentrations include a background ambient one-hour CO concentration of 5.2 ppm obtained from the SCAQMD, http://www.aqmd.gov/ceqa/handbook/CO/CO.html, for SRA 11 in year 2015.
CO emissions were modeled for emissions based on the buildout date.
8-Hour CO concentrations obtained by multiplying 1-Hour CO concentrations by a persistence factor of 70 percent.

Toxic Air Contaminants

The 2000 MPTP EIR did not identify a significant cancer risk associated with proximity to the OII Landfill for employees and patrons at the commercial site. In addition, the 2000 MPTP EIR did not identify impacts associated with landfill remediation activities.

Truck Deliveries

Commercial uses associated with the proposed project would result in daily and weekly truck deliveries. Heavy-duty trucks at the project site are subject to CARB Rule 2485. This Airborne Toxics Control Measure requires that the engine of a commercial motor vehicle be turned off upon arriving at its destination and restarted no more than 30 seconds before departing. A driver of a transit bus or other commercial motor vehicle is prohibited from idling more than five minutes. Idling necessary for health, safety, or operational concerns is exempt from these restrictions. With compliance to CARB Rule 2485, idling emissions from heavy-duty trucks associated with the commercial materials deliveries would be extremely limited and would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be the same as identified in the 2000 MPTP EIR. Truck idling impacts would be less than significant.

Land Use Compatibility

Recent air pollution studies have shown an association between proximity to major air pollution sources and a variety of health effects. Because sensitive land uses fall outside CARB jurisdiction, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* in May 2005 to address the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed as a tool for assessing compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were developed from a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that close proximity to air pollution sources substantially increases exposure and the potential for adverse health effects compared to the existing background concentrations in the air basin. However, the impact of air pollution from these sources is on a gradient that at some point becomes indistinguishable from the regional air pollution problem. The project site is adjacent to SR-60, but land uses associated with the project are not sensitive land uses that would be affected by proximity to the freeway. Health risk is calculated over a 70-year lifetime, and patrons of the land uses would have short exposure. Impacts would be the same as identified in the 2000 MPTP EIR. Therefore, no significant impacts would occur.

5.2.6 Cumulative Impacts

In accordance with the SCAQMD methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects within the local area include new development and general growth within the project area. Most emissions within the SoCAB are from mobile sources. Because cumulative project emissions potentially impact the entire air basin, the SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds shown in Table 5.2-4. The 2000 MPTP EIR identified that regional operational emissions of CO, VOC, and NO_x would be cumulatively considerable. No significant cumulative impacts were identified with regard to CO hot spots.

Construction

The SoCAB is designated nonattainment for O_3 and $PM_{2.5}$ under the California and national AAQS, and nonattainment for PM_{10}, NO_2, and lead (Los Angeles County only) under the California AAQS. Construction of cumulative projects would further degrade the regional and local air quality. Air quality would be temporarily impacted during construction activities. Implementation of mitigation measures would reduce cumulative impacts, however, project-related construction emissions would still exceed the SCAQMD significance thresholds for NO_X, even with mitigation, and cumulative emissions would result in greater exceedances. Consequently, the project's contribution to cumulative air quality impacts would be cumulatively considerable and therefore significant. Cumulative construction emissions are a new significant impact that was not identified in the 2000 MPTP EIR.

Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values is not considered by the SCAQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Operation of the project would result in emissions in excess of the SCAQMD regional emissions thresholds for long-term operation for VOC, NO_x, CO, SO_X, PM_{10}, and $PM_{2.5}$. The 2000 MPTP EIR determined that regional emissions would be cumulatively considerable. Impacts would be similar to the 2000 MPTP.

5.2.7 Existing Regulations and Standard Conditions

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation Activities
- SCAQMD Rule 1186: Street Sweeping
- CARB Rule 2480 (13 CCR 2480): Airborne Toxics Control Measure to Limit School Bus Idling and Idling at Schools, limits nonessential idling for commercial trucks and school buses within 100 feet of a school.
- CARB Rule 2485(13 CCR 2485): Airborne Toxic Control Measure to Limit Diesel-Fuel Commercial Vehicle Idling, limits nonessential idling to five minutes or less for commercial trucks.
- CARB Rule 2449(13 CCR 2449): In-Use Off-Road Diesel Idling Restricts, limits nonessential idling to five minutes or less for diesel-powered off-road equipment.
- Building Energy Efficiency Standards (Title 24)
- Appliance Energy Efficiency Standards (Title 20)
- Motor Vehicle Standards (AB 1493)

Development Guidelines and Standards (from MPMP Precise Plan)

PDF-2-1 The landscape concept for the project is urban in nature and has elements associated both with the "Prairie Style" design and Southern California décor. Landscape selections shall be made to accentuate the design style, but issues such as long-term life span of the trees, drought tolerance, colors, and maintenance requirements shall also be incorporated into the overall design. Landscape plans are subject to the approval of the Planning Division and Design Review process.

1. Plant Materials – All plant materials shall be drawn from the list of suitable plant materials provided in the following table and as stipulated in the Conditions of Approval. Exceptions for the use of other plant materials shall be allowed. Interior trees shall have minimum height of approximately 8-feet during installation, measured to the top of branches from ground service at tree trunk, with maximum growth height of approximately 30-feet. Exterior trees located along the entryways of the Market Place shall have minimum height of approximately 10-feet installation, and a maximum growth height of approximately 50-feet. SCE has a 15-foot height limit for any plant material under the overhead power lines.

2. Planting Design – Landscaping would be provided along project roadways to accent the entrance and create a framework for the entry that would follow through the entire project site. Various trees would be planted for aesthetic value, as well as for shade in the parking areas. Additional landscaping would be placed near proposed buildings to accentuate its

architecture style. Landscaping and irrigation plans signed by a landscape architect and/or landscape contractor shall be submitted, subject to the review and approval of the Planning Division of the City. The design patterns of the project's landscaping will provide both formal and informal groupings of deciduous and evergreen shade trees, flowering shrubbery, and ground cover. The following measures incorporate the landscape design character and visual qualities for development with the project.

a. Landscaping in the interior of the parking area shall be required equal to at least ten percent (10 percent) of the total area of the parking area. A minimum of three-foot-wide landscaped planter and/or grass area shall be located adjacent to all rights-of-way, and continuously maintained.

b. Landscape plans shall include plans for the Landfill Cap area, where no water percolation is permitted. Raised planters and pots shall be used to introduce trees, shrubs and floral materials in this area. Raised planters shall be designed to drain into the storm water drainage system.

c. The plans shall show the location of turf, trees, shrubs, walks, fences, and any ponds, fountains or other decorative landscaping features:

i. Indicate soils preparation where necessary;

ii. Provide a typical planting detail for trees and shrubs;

iii. List the botanical and common names of all plants with the quantity of each and their container size;

iv. Clearly portray the location, coverage and specifications of the permanent automatic irrigation system.

d. Landscaping and irrigation systems shown on approved plans shall be installed as required by the Planning Division.

e. An automatic irrigation system shall be installed in all landscaped areas to insure proper maintenance year round. The developer will provide all irrigation systems. These will be segregated into metering zones with individual meters and timers that will provide appropriate irrigation for landscaping throughout the site. These systems will also have rain and moisture detectors in order to prevent over irrigation. All systems will be standard in design with typical pop-up heads and flexible raisers.

PDF-2-2 For proper waste management practices, trash enclosures and/or equipment will be strategically located in the rear of each building as feasible. Solid steel gates shall be utilized as well. Most major tenants will have their own waste management areas within their building footprints in order to maintain the proper visual aesthetics of the center. Public waste management will be accomplished by placing on-site furniture, such as waste receptacles and ash urns, throughout the center. To minimize solid waste generated by the project, the following measures are to be implemented:

1. Construction Phase – During project construction, the following practices should be implemented by the project applicant:

a. Off-site locations for construction waste exported from the project and options for disposal of excess material should be identified. These options may include recycling of materials on-site, sale to a broker or contractor, sale to a project in the vicinity, or transport to an environmentally-cleared landfill.

b. The project applicant should offer recyclable building materials, such as asphalt or concrete for sale or removal by private firms or public agencies for use in construction of other project if all can not be reused on the project site.

2. Operation Phase – During project operations, the following practices should be implemented by the project tenants within their buildings and will be specified in lease agreements with the project application:

a. Recovery of materials such as aluminum and cardboard;

b. Collection of office paper for recycling;

c. Collection of polystyrene (foam) cups for recycling;

d. Collection of glass, plastics, kitchen grease, laser printer toner cartridges, oil, batteries, and scrap metal for recycling or recovery.

3. Design Features – The project applicant, tenants, and/or property owner are strongly encouraged but not required, implement design features to support solid waste reduction programs, suggestions include:

a. Detailing the location and design of on-site recycling facilities;

b. Providing on-site recycling receptacles to encourage recycling;

c. Facilitating cardboard recycling (especially in retail areas) by providing adequate space and centralized locations for collection and bailing;

d. Providing trash compactors for non-recycling materials to reduce the total volume of solid waste and the number of trips required for collection;

e. Providing on-site recycling receptacles in feasible locations accessible to the public to encourage recycling for all business, employees, and patrons.

PDF-2-3 Reduction of trip and travel demand measures are provided in accordance with State Government Code Sections 65089 and 65089.3 (Ord.1852 § 3 (2), 1993). Prior to approval of any development project, the project applicant shall make provision for all of the following applicable transportation demand management and trip reduction measures to promote better air quality. Development Standards for Nonresidential Development of one hundred thousand square feet or more shall comply with this section, and shall additionally provide all of the following measures to the satisfaction of the Planning and Engineering Divisions.

1. Displayed Information – A bulletin board, display case, or kiosk displaying transportation information located where the greatest number of employees are likely to see it. Information shall include, but is not limited to, the following:

a. Current maps, routes and schedules for public transit routers serving the site;

b. Telephone numbers for referrals on transportation information, including numbers for regional ridesharing agency and local transit operators;

c. Ridesharing promotional materials supplied by commuter-oriented organizations;

d. Bicycle route and facility information, including regional/local bicycle maps and bicycle information;

e. A listing of facilities available for car-poolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.

2. Van Pool – Not less than 10 percent of employee parking area shall be located as close as is practical to the employee entrance(s), and shall be reserved for use by potential carpool/vanpool vehicles, without displacing handicapped and customer parking needs. A statement that preferential carpool/vanpool spaces for employees are available and a description of the method for obtaining such spaces must be included on the required transportation information board. This occurs primarily at the rear of the major retail tenants.

a. Spaces will be signed / striped as demand warrants;

b. At all times at least one space for projects of fifty thousand square feet to one hundred thousand square feet shall be provided;

c. Two (2) spaces for projects over one hundred thousand square feet will be signed/striped for carpool/vanpool vehicles;

d. Adequate turning radii and parking space dimensions shall also be included in van pool parking areas.

3. Bicycles – Bicycle racks or other secure bicycle parking shall be provided to accommodate four bicycles per the first fifty thousand square feet of nonresidential development:

a. Bicycle racks shall accommodate one additional bicycle per each additional fifty thousand square feet of nonresidential development. Calculations, which result in a fraction of 0.5 or higher, shall be rounded up to the nearest whole number;

b. A bicycle parking facility may also be fully enclosed pace or locker accessible only to the owner or operator of the bicycle, which protects the bike from inclement weather;

c. Specific facilities and location (e.g. provision of racks, lockers, or locked room) shall be to the satisfaction of the Director of Community Development.

4. Safety – A safe and convenient zone in which vanpool and carpool vehicles may deliver or board their passenger.

5. Sidewalks – Sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development.

6. Bus Stop –The City will consult with the local bus service providers in determining appropriate improvements. When locating bus stops and /or planning building entrances, entrances must be designed to provide safe efficient access to nearby transit stations/stops.

7. Circulation – Safe and convenient access from the external circulation system to bicycle parking facilities on site.

8. Employee Parking - Employee parking shall be adequately provided within the total number of parking spaces planned for this center. This primarily is located to the rear of the Major retail tenants. During peak shopping periods, off-site parking for employees may be instituted.

5.2.8 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.2-1 and 5.2-5.

Without mitigation, the following impacts would be **potentially significant**:

- Impact 5.2-2 Construction activities associated with the MPMP Precise Plan would generate short-term emissions that exceed SCAQMD'S regional significance threshold for NO_x, which is a new significant impact not identified in the 2000 MPTP EIR.

- Impact 5.2-3 Long-term operation of the MPMP Precise Plan would generate air pollutant emission that would continue to exceed the SCAQMD's regional significance thresholds for VOC, NO_x, and CO and cumulatively contribute to the SoCAB's nonattainment designations. In addition, the MPMP Precise Plan would exceed SCAQMD's regional significance thresholds for particulate matter (PM_{10} and $PM_{2.5}$). Since emissions of particulate matter (PM_{10} and $PM_{2.5}$) were not identified in the 2000 MPTP EIR, this is considered a new significant impact.

- Impact 5.2-4 Construction activities associated with the MPMP Precise Plan would expose sensitive receptors to substantial pollutant concentrations of PM_{10}, which is a new significant impact that was not identified in the 2000 MPTP EIR.

5.2.9 Mitigation Measures

Impact 5.2-2

Mitigation Measures from the 2000 MPTP EIR

The following mitigation measures have been carried through from the 2000 MPTP EIR and have been renumbered for the purposes of this SEIR. Modifications to the original mitigation measures are identified in ~~strikeout text~~ to indicate deletions and underlined to signify additions.

2-1 The construction contractor shall ~~Use adequate~~ water a minimum of three times daily for dust control (preferably using reclaimed water) during ground-disturbing activities.

2-2 The construction contractor shall operate PM_{10}-efficient ~~Operating~~ street sweepers or roadway washing trucks on adjacent roadways to remove dirt dropped by construction vehicles or dried

mud carried off by trucks moving or bringing construction materials at least once a day during ground-disturbing activities.

2-3 The construction contractor shall cover ~~Covering~~ trucks or ~~wetting~~ wet down loads of any dirt hauled to or from the project site. A minimum of 24 inches of freeboard shall be maintained on any soil haul truck.

2-4 The construction contractor shall perform ~~Performing~~ low-NO_X emissions tune-ups on onsite equipment operating onsite for more than 60 days.

2-5 The construction contractor shall utilize ~~Utilize~~ electrical line power instead of portable construction equipment, where feasible.

2-6 ~~Requiring on-site contractors to operate~~ The construction contractor shall implement a congestion relief program. ~~Including~~ The congestion relief program shall require the construction contractor to implement the following:

1. Rideshare incentives, such as bus passes, shall be provided for construction personnel by Operating Industries Incorporated or the Construction Contractor.

2. Off-street parking for construction contractors and employees shall be provided.

3. Lane closures shall be limited to non-peak traffic hours, as approved by the affected jurisdiction.

4. Receipt of construction materials shall be scheduled for non-peak traffic periods where possible. In addition, receipt of construction materials shall be limited to hours of 7 AM and 7PM on weekdays, ~~and~~ the hours of 9 AM and 6 PM on Saturdays, and prohibited on Sundays and holidays in accordance with the Monterey Park Municipal Code.

Additional Mitigation

2-7 The construction contractor shall utilize off-road construction equipment that conforms to Tier 3 of the United States Environmental Protection Agency, or higher emissions standards for construction equipment over 50 horsepower that are commercially available during site preparation (i.e., grading, trenching). The construction contractor shall be made aware of this requirement prior to the start of construction activities and shall use commercially available Tier 3 or higher off-road equipment or:

- Year 2006 or newer construction equipment for engines rated equal to 175 horsepower (hp) and greater;

- Year 2007 and newer construction equipment for engines rated equal to 100 hp but less than 175 hp; and

- 2008 and newer construction equipment for engines rated equal to or greater than ~~over~~ 50 hp.

The use of such equipment shall be stated on all grading plans. The construction contractor shall maintain a list of all operating equipment in use on the project site during site preparation

(e.g., grading, trenching). The construction equipment list shall state the makes, models, and numbers of construction equipment onsite.

Impact 5.2-3

Mitigation Measures from the 2000 MPTP EIR

The following mitigation measures have been carried through from the 2000 MPTP EIR and have been renumbered for the purposes of this SEIR. Modifications to the original mitigation measures are identified in ~~strikeout text~~ to indicate deletions and underlined to signify additions.

2-8 ~~Provide preferential~~ Preferential parking spaces for employee carpools and vanpools shall be provided onsite. The location of preferential parking for employees carpool/vanpools shall be shown on the parking plans/Precise Plan for the project to the satisfaction of the Development Services Department.

2-9 ~~Design an~~ The applicant shall submit an onsite circulation plan, ~~in~~ including parking lots, that shows the flow of internal traffic to minimize vehicle queuing blocking parking aisles or public streets. The circulation plan shall be designed to the satisfaction of the Development Services Department.

2-10 The applicant shall construct an ~~Construction~~ on-street bus shelter(s) subject to the approval of transit agency staff. A pedestrian pathway from the bus shelter(s) to the project site shall be illuminated to ensure a safe path of travel ~~and provide a well-lighted, safe path to the center~~. The location of the bus shelter, pedestrian pathways, and lighting shall be submitted to the City on the circulation plan and/or lighting plans to the satisfaction of the Development Services Department.

2-11 The applicant shall connect onsite Class III bicycle lanes with offsite bicycle lanes ~~Construction off-site bicycle facility improvements~~ that will link the facility to designated bicycle paths in Monterey Park. Bicycle circulation shall be shown on circulation plans for the project to the satisfaction of the Development Services Department.

2-12 ~~Include bicycle~~ Bicycle parking facilities, such as bicycle lockers and racks for shoppers and employees, shall be provided onsite to the satisfaction of the Development Services Department. The location of bicycle facilities (e.g., lockers and racks) shall be shown on the Precise Plan for the project.

2-13 The applicant shall construct ~~Construct~~ onsite pedestrian facilities improvements, such as building access that is physically separated from street and parking lot traffic and walk paths. The circulation plan shall include pedestrian connectivity onsite and the plan shall be prepared to the satisfaction of the Public Works Department.

2-14 The applicant shall synchronize or cause to be synchronized ~~Synchronize~~ traffic signals on intersections abutting the development prior to approval of the first occupancy permit.

2-15 The applicant shall request in writing that tenants schedule ~~Schedule~~ truck deliveries and pickups for off-peak hours where feasible.

2-16 The applicant shall provide ~~Provide~~ onsite truck loading zones that are shielded from offsite residential areas. The location of loading zones shall be shown on the Precise Plan to the satisfaction of the Development Services Department.

2-17 The applicant shall work ~~Work~~ with the City to implement or contribute to public outreach programs, which promote alternative methods of transportation such as information kiosks.

The following mitigation measure from the 2000 MPTP EIR has been deleted. This measure is deleted because the project, as proposed, includes services (e.g., restaurants, banks, etc.) that would be available to onsite employees and it is therefore not warranted.

~~Provide on-site employee services such as food services, banks, etc.~~

Impact 5.2-4

Mitigation measures 2-1, 2-2, 2-3, and 1-7 would also reduce concentrations of PM_{10} generated during site preparation activities. The following additional mitigation measures are proposed to further reduce concentrations of PM_{10} during site preparation.

2-18 During all grading activities, the construction contractor shall apply chemical soil stabilizers on inactive areas (i.e., disturbed areas within the site that are unused for four consecutive days).

2-19 Grading operations shall be suspended when wind speeds exceed 25 miles per hour.

5.2.10 Level of Significance After Mitigation

Impact 5.2-2

Grading emissions would be roughly the same between the 2000 MPTP EIR and the revised MPMP Precise Plan. However, the 2000 MPTP EIR did not identify significant construction emissions because construction activities were compared to screening thresholds and were not modeled. Table 5.2-14 shows regional construction emissions with implementation of Mitigation Measures 2-1 through 2-7. Because SCAQMD now requires comparison to daily emissions thresholds and new air pollutant models (e.g., URBEMIS) have been released to evaluate construction emissions, modeling results show that even with mitigation, impacts from regional air pollutant emissions from construction-related activities would exceed SCAQMD's regional significance thresholds for NO_x as a result of use of heavy construction equipment. Mitigation Measure 2-7 would reduce the potentially significant impact during Phase 1 construction activities to under the significance thresholds; however, construction activities during Phase 2 site preparation would continue to exceed SCAQMD's regional significance thresholds for NO_x. Therefore, impacts are significant and unavoidable. Regional construction emissions impacts are a new significant unavoidable impact not identified in the 2000 MPTP EIR.

Table 5.2-14
Construction Phase Regional Emissions Scenario with Mitigation
(in pounds per day)

Construction Phase[1]	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Phase 1						
Grading[2, 3]	16	98	69	0	35	12
Paving	5	23	13	<1	2	2
Worst-Case Day	16	98	69	<1	35	12
SCAQMD Standard	75	100	550	150	150	55
Significant?	No	No	No	No	No	No
Phase 2						
Site Preparation Maximum Daily Emissions[3]	21	**147**	90	<1	38	14
Grading[2, 3]	20	**142**	87	<1	38	13
Trenching[3]	1	5	3	0	<1	<1
Building Maximum Daily Emissions	19	39	63	<1	3	3
Building	5	23	52	<1	2	1
Paving	3	16	10	<1	1	1
Architectural Coatings	11	<1	<1	0	0	0
Worst-Case Day	21	147	90	<1	38	14
SCAQMD Standard	75	100	550	150	150	55
Significant?	No	**Yes**	No	No	No	No

Source: URBEMIS2007, Version 9.2.4

[1] Construction equipment mix is based on information provided by the applicant and includes 100,000 cubic yards of soil import in Phase 2 based on a maximum of 80 truck trips per day. Where detailed construction information is not available, URBEMIS2007 default construction mix was used.

[2] Grading includes fugitive dust control measures as promulgated by SCAQMD Rule 403 in addition to Mitigation Measures 2-1 through 2-3, requiring an application of water at least three times per day to at least 80 percent of the unstabilized disturbed onsite surface areas (Mitigation Measure 2-1), maintaining at least 24 inches of freeboard (Mitigation Measure 2-1), and placing a protective tarp on haul vehicles, replacing disturbed ground cover quickly, restricting speeds on unpaved roads to less than 15 miles per hour, watering unpaved hauls roads three times per day (Mitigation Measure 2-1), and applying soil stabilizers to inactive areas (Mitigation Measure 2-18).

[3] Assumed use of Tier 3 equipment in accordance with Mitigation Measure 2-7.

Impact 5.2-3

The MPMP Precise Plan would exceed the thresholds for VOC, CO, NO_x, PM_{10}, and $PM_{2.5}$. Mitigation Measures 2-8 through 2-17 would reduce operational emissions, to the extent feasible. Criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds would cumulatively contribute to the NO_x, O_3, and particulate matter nonattainment designations of the SoCAB. While air quality impacts were identified in the 2000 MPTP EIR, the MPMP Precise Plan would result in an approximately 5 to 8 percent increase in air quality impacts for most criteria pollutants on weekdays and an approximately 44 percent increase in air quality impacts for most criteria pollutants on weekends, as compared to the 2000 MPTP (see Table 5.2-8 and Table 5.2-9). However, the project would result in a decrease in air quality impacts based on emissions as identified in the 2000 MPTP EIR (see Table 5.2-10) for CO (weekday only), VOC, and NO_x because updated emission rates used in for this SEIR that reflect of lower emission rates for vehicles. Further, based on the updated emission factors in the UREMIS2007 model, the revised SEIR analysis has identified additional significant impacts associated with PM_{10} and $PM_{2.5}$ that were not identified in the 2000 EIR (see Table 5.2-10). The increase in air pollutant emissions would exceed the SCAQMD regional thresholds, and therefore the magnitude of change is considered significant. Modeling based on updated air pollutant emission factors in the URBEMIS2007 model shows that VOC, CO, NO_x, PM_{10}, and $PM_{2.5}$ would exceed the significance thresholds for the MPMP Precise Plan. Since emissions of particulate matter (PM_{10} and $PM_{2.5}$) were not identified in the 2000 MPTP, this is a considered a new significant impact. Consequently, impacts from air pollutant emissions from operational-related activities would be significant and unavoidable.

Impact 5.2-4

The 2000 MPTP EIR did not identify significant localized construction emissions because SCAQMD had not yet developed criteria to evaluate them. Because approximately the same area would be disturbed in the grading process as analyzed in the 2000 MPTP EIR, grading and fugitive dust emissions would be comparable with those from the MPMP Precise Plan. Consequently, construction air quality impacts would be similar to those of the 2000 MPTP EIR. Figure 5.2-3, *Construction-Related PM_{10} Concentrations with Mitigation,* shows localized construction emissions with implementation of Mitigation Measures 2-1 through 2-3 and Mitigation Measures 2-18 and 2-19. As shown in this figure, concentrations of PM_{10} would not exceed 10.4 $\mu g/m^3$ at the residential homes across from the site, and impacts would be less than significant.

Construction-Related PM_{10} Concentrations with Mitigation



≥20.8 μg/m³
≥10.4 μg/m³
≥8 μg/m³
≥5 μg/m³
≥2 μg/m³

10.4 μg/m³ Significance Threshold

0 2,000
Scale (Feet)

Source: EPA, Industrial Source Complex Short-Term Dispersion Model (ISCST3)

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