

### 5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for the Industry General Plan Update (proposed project) to impact air quality in a local and regional context. The analysis in this section is based on land uses associated with the General Plan Update and trip generation provided by Linscott Law and Greenspan Engineers (LLG) in its traffic study for the proposed project (see Appendix F). The air quality model output sheets are included in Appendix C of this DEIR.

#### 5.2.1 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 SoCAB 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 (SCAQMD 2005).

##### 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 project site is the Montebello Monitoring Station (ID 045790). The average low is reported at 47.2°F in December while the average high is 89.7°F in August (WRCC 2012).

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 14.78 inches per year in the project area (WRCC 2012).

##### Humidity

Although the SoCAB has a semiarid climate, the air near the earth's 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 coast, are frequent. Low 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 (SCAQMD 2005).

##### Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by 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,



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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 their eastward transport. 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 (SCAQMD 2005).

#### **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 (SCAQMD 2005).

#### **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 categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), and lead (Pb) are primary air pollutants. Of these, CO, SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO<sub>x</sub>) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O<sub>3</sub>) and NO<sub>2</sub> are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

**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 traffic-congested 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 being in attainment of CO criteria levels.

**Volatile Organic Compounds (VOC)** are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to forms of secondary pollutants such as ozone (SCAQMD 2005). There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of O<sub>3</sub>, the South Coast Air Quality Management District (SCAQMD) has established a significance threshold for this pollutant (SCAQMD 2005).

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**Nitrogen Oxides (NO<sub>x</sub>)** are a byproduct of fuel combustion and contribute to the formation of O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The two major forms of NO<sub>x</sub> are nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). The principal form of NO<sub>2</sub> produced by combustion is NO, but NO reacts with oxygen to form NO<sub>2</sub>, creating the mixture of NO and NO<sub>2</sub> commonly called NO<sub>x</sub>. NO<sub>2</sub> acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO<sub>2</sub> is only potentially irritating. There is some indication of a relationship between NO<sub>2</sub> 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). NO<sub>2</sub> absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure (SCAQMD 2005). The SoCAB is designated as an attainment area for NO<sub>2</sub> under the National AAQS and nonattainment under the California AAQS.

**Sulfur Dioxide (SO<sub>2</sub>)** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO<sub>2</sub> (SCAQMD 2005). When sulfur dioxide forms sulfates (SO<sub>4</sub>) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO<sub>x</sub>). Thus, SO<sub>2</sub> is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO<sub>2</sub> may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO<sub>2</sub> may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS.

**Suspended Particulate Matter (PM<sub>10</sub> and PM<sub>2.5</sub>)** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM<sub>10</sub>, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or PM<sub>2.5</sub>, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM<sub>10</sub> and PM<sub>2.5</sub> may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (SCAQMD 2005).



The US Environmental Protection Agency's (EPA) scientific review concluded that PM<sub>2.5</sub>, which penetrates deeply into the lungs, is more likely than PM<sub>10</sub> to contribute to health effects and at concentrations that extend well below those allowed by the current PM<sub>10</sub> 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 particulate matter (DPM) is classified by the California Air Resources Board (CARB) as a carcinogen. The SoCAB is a nonattainment area for PM<sub>2.5</sub> and PM<sub>10</sub> under California and National AAQS.<sup>1</sup>

**Ozone (O<sub>3</sub>)** is commonly referred to as "smog" and is a gas that is formed when VOCs and NO<sub>x</sub>, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O<sub>3</sub> is a secondary criteria air pollutant. O<sub>3</sub> 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<sub>3</sub> poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Additionally, O<sub>3</sub> has been tied to crop damage, typically in the form of stunted

<sup>1</sup> CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM<sub>10</sub> to attainment for PM<sub>10</sub> under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM<sub>10</sub> standards during the period from 2004 to 2007. However, the EPA has not yet approved this request.

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growth and premature death. O<sub>3</sub> 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 AAQS (1-hour and 8-hour) and National AAQS (8-hour).

**Lead (Pb)** concentrations decades ago exceeded the state and federal AAQS by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982 (SCAQMD 2005). However, in 2008 the EPA and CARB adopted more strict lead standards and special monitoring sites immediately downwind of lead sources<sup>2</sup> recorded very localized violations of the new state and federal standards. As a result of these localized violations, the Los Angeles County portion of the SoCAB was designated in 2010 as nonattainment under the California and National AAQS for lead (SCAQMD 2010). Most development and industrial projects would not emit lead. Furthermore, release of this pollutant would be regulated by SCAQMD as part of the permitting requirements for new source review.

### **Toxic Air Contaminants**

The public's exposure to air pollutants classified as 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 California 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 Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that 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 (i.e., 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. To date, CARB has 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.

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<sup>2</sup> Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 identified that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2010).

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By 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 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.

#### *Union Pacific Railroad City of Industry Railyard*

The Union Pacific Railroad (UPRR) owns and operates the City of Industry Railyard at 17225 East Areneh Avenue along the Los Angeles Subdivision main line and the Alhambra Subdivision main line. The railyard is approximately 2.8 miles in length and a quarter-mile wide. The City of Industry Railyard is a domestic intermodal container handling facility and a classification yard<sup>3</sup> for manifest (mixed-freight) trains. In 2008, UPRR conducted a health risk assessment (HRA) of the City of Industry Railyard under a statewide railroad pollution reduction agreement with CARB. The HRA prepared for the City of Industry Railyard is used to identify the most effective measures that could be implemented by UPRR to reduce railyard emissions and public health risks. Locomotive emissions accounted for approximately 54 percent of the railyard's DPM emissions and are primarily from switch locomotives. The remaining 46 percent of the DPM emissions at the railyard are from cargo handling equipment (25 percent), on-road trucks (18 percent), transport refrigeration units (TRUs), and rail cars equipped with generator sets (reefer cars) (2 percent). Potential cancer risk associated with the City of Industry Railyard was estimated. The highest cancer risk was estimated at 450 in a million at the maximally exposed individual resident, above background levels. Within a half-mile of the railyard boundaries, the estimated risk lowers to 50 in a million above background levels. At approximately two miles from the railyard boundaries, the cancer risk lowers to 10 in a million above background levels (CARB 2008).



#### *MATES III*

In 2000, 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, SCAQMD conducted its third update to its 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 one million. The largest contributor to this risk was diesel exhaust, accounting for approximately 84 percent of the air toxics risk (SCAQMD 2008). In the vicinity of the City of Industry, excess cancer risk is 985 to 1,499 in a million (SCAQMD 2012).

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<sup>3</sup> A classification yard receives trains, breaks them into sections, and reconnects them to make new trains for the rail cars' ultimate destinations.

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#### **Regulatory Framework**

AAQS have been promulgated at the local, state, and federal levels for criteria pollutants. The project area is in the SoCAB and is subject to the rules and regulations imposed by the SCAQMD, as well as the California CAAQS adopted by CARB and federal NAAQS.

#### **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, based on even greater health and welfare concerns.

These National AAQS and California AAQS 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 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<sub>3</sub>, NO<sub>2</sub>, CO, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, 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.

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**Table 5.2-1  
Ambient Air Quality Standards for Criteria Pollutants**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>California Standard</i>	<i>Federal Primary Standard</i>	<i>Major Pollutant Sources</i>
Ozone (O <sub>3</sub> )	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 <sub>2</sub> )	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 <sub>2</sub> )	Annual Arithmetic Mean	*	0.030 ppm <sup>2</sup>	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm <sup>1</sup>	
	24 hours	0.04 ppm	0.014 ppm <sup>2</sup>	
Respirable Coarse Particulate Matter (PM <sub>10</sub> )	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	*	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 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	
Respirable Fine Particulate Matter (PM <sub>2.5</sub> )	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	15 µg/m <sup>3.3</sup>	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 µg/m <sup>3</sup>	
Lead (Pb)	Monthly	1.5 µg/m <sup>3</sup>	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	*	1.5 µg/m <sup>3</sup>	
	3-Month Average	*	0.15 µg/m <sup>3</sup>	
Sulfates (SO <sub>4</sub> )	24 hours	25 µg/m <sup>3</sup>	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo = 0.23/km visibility of 10 ≥ miles <sup>1</sup>	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.



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**Table 5.2-1  
Ambient Air Quality Standards for Criteria Pollutants**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>California Standard</i>	<i>Federal Primary Standard</i>	<i>Major Pollutant Sources</i>
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H <sub>2</sub> S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2012.

ppm: parts per million;  $\mu\text{g}/\text{m}^3$ : micrograms per cubic meter

<sup>1</sup> When relative humidity is less than 70 percent.

<sup>2</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established and the existing 24-hour and annual primary standards were revoked. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

<sup>3</sup> On December 14, 2012, EPA lowered the federal primary PM<sub>2.5</sub> annual standard from 15.0  $\mu\text{g}/\text{m}^3$  to 12.0  $\mu\text{g}/\text{m}^3$ . The new annual standard will become effective 60 days after publication in the Federal Register. EPA made no changes to the primary 24-hour PM<sub>2.5</sub> standard or to the secondary PM<sub>2.5</sub> standards.

\* Standard has not been established for this pollutant/duration by this entity.

### Air Quality Management Planning

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.

#### 2012 AQMP

On December 7, 2012, SCAQMD adopted the 2012 AQMP, which employs the most up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources. It also addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The 2012 AQMP builds upon the approach identified in the 2007 AQMP for attainment of federal PM and ozone standards and highlights the significant amount of reductions needed and the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria air pollutant standards within the timeframes allowed under the CAA. The 2012 AQMP demonstrates attainment of federal 24-hour PM<sub>2.5</sub> standard by 2014 and the federal 8-hour ozone standard by 2023. It includes an update to the revised EPA 8-hour ozone control plan with new commitments for short-term NO<sub>x</sub> and VOC reductions. The plan also identifies emerging issues of ultrafine (PM1.0) particulate matter and near-roadway exposure, and an analysis of energy supply and demand.

### *Lead State Implementation Plan*

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remain in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

### *Nonattainment Areas*

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the SIP. Areas are classified attainment or nonattainment for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range from marginal, moderate, and serious to severe and extreme.

Transportation conformity for nonattainment and maintenance areas is required under the federal CAA to ensure federally supported highway and transit projects conform to the SIP. The EPA approved California's SIP revisions for attainment of the 1997 8-hour O<sub>3</sub> National AAQS for the SoCAB in March 2012. Findings for the new 8-hour O<sub>3</sub> emissions budgets for the SoCAB and consistency with the recently adopted 2012 RTP/SCS were submitted to the EPA for approval.

The attainment status for the SoCAB is shown in Table 5.2-2. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB will have to meet the new federal 8-hour O<sub>3</sub> standard by 2023, and the federal 24-hour PM<sub>2.5</sub> standards by 2014 (with the possibility of up to a five-year extension to 2019, if needed). SCAQMD has recently designated the SoCAB nonattainment for NO<sub>2</sub> (entire basin) and lead (Los Angeles County only) under the California AAQS.



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

<i>Pollutant</i>	<i>State</i>	<i>Federal</i>
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Severe-17 Nonattainment <sup>1</sup>
PM <sub>10</sub>	Serious Nonattainment	Nonattainment <sup>2</sup>
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO <sub>2</sub>	Nonattainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Nonattainment (Los Angeles County only) <sup>3</sup>	Nonattainment (Los Angeles County only) <sup>3</sup>
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2011.

Notes:

<sup>1</sup> SCAQMD may petition for Extreme Nonattainment designation.

<sup>2</sup> Annual standard revoked September 2006. CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM<sub>10</sub> to attainment for PM<sub>10</sub> under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM<sub>10</sub> standards from 2004 to 2007. However, the EPA has not yet approved this request.

<sup>3</sup> 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 unclassified.

### 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 City of Industry lies within two Source Receptor Areas (SRA) as a result of the layout of the City in the San Gabriel Valley, including SRA 10 (Pomona/Walnut Valley) and 11 (South San Gabriel Valley). The air quality monitoring station within these SRAs closest to the project is the Pomona Monitoring Station. However, this station does not monitor SO<sub>2</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub>. Consequently, data was obtained from the Los Angeles 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 regularly exceeds the state and federal one-hour and eight-hour O<sub>3</sub> standards and regularly exceeds the state PM<sub>10</sub> and federal PM<sub>2.5</sub> standards. The CO, SO<sub>2</sub>, and NO<sub>2</sub> standards have not been exceeded in the last five years in the project vicinity.

**Table 5.2-3  
Ambient Air Quality Monitoring Summary**

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2006	2007	2008	2009	2010
<b>Ozone (O<sub>3</sub>)<sup>1</sup></b>					
State 1-Hour ≥ 0.09 ppm	34	19	32	25	9
State 8-hour ≥ 0.07 ppm	41	26	47	37	12
Federal 8-Hour > 0.075 ppm	27	19	35	21	4
Max. 1-Hour Conc. (ppm)	0.151	0.153	0.141	0.138	0.115
Max. 8-Hour Conc. (ppm)	0.127	0.109	0.110	0.100	0.082
<b>Carbon Monoxide (CO)<sup>1</sup></b>					
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)	2.23	1.97	1.98	2.21	1.80
<b>Nitrogen Dioxide (NO<sub>2</sub>)<sup>1</sup></b>					
State 1-Hour ≥ 0.18 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.095	0.097	0.105	0.102	0.097
<b>Sulfur Dioxide (SO<sub>2</sub>)<sup>2</sup></b>					
State 1-Hour ≥ 0.04 ppm	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.006	0.005	0.003	0.002	0.002
<b>Coarse Particulates (PM<sub>10</sub>)<sup>2</sup></b>					
State 24-Hour > 50 µg/m <sup>3</sup>	3	5	2	4	0
Federal 24-Hour > 150 µg/m <sup>3</sup>	0	0	0	0	0
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	59.0	78.0	66.0	72.0	42.0
<b>Fine Particulates (PM<sub>2.5</sub>)<sup>2</sup></b>					
Federal 24-Hour > 35 µg/m <sup>3</sup>	11	20	10	7	5
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	56.2	64.1	78.3	61.6	48.6

Source: CARB 2012.

ppm: parts per million; µg/m<sup>3</sup>: or micrograms per cubic meter.

<sup>1</sup> Data obtained from the Pomona Monitoring Station.

<sup>2</sup> Data obtained from the Los Angeles Main Street Monitoring Station.



### 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, as 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.

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#### 5.2.2 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.

#### South Coast Air Quality Management District Thresholds

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website.<sup>4</sup> CEQA allows 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. SCAQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

#### Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5.2-4 lists SCAQMD's regional significance thresholds.

**Table 5.2-4**  
**SCAQMD Significance Thresholds**

<b>Air Pollutant</b>	<b>Construction Phase</b>	<b>Operational Phase</b>
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO <sub>x</sub> )	100 lbs/day	55 lbs/day
Sulfur Oxides (SO <sub>x</sub> )	150 lbs/day	150 lbs/day
Particulates (PM <sub>10</sub> )	150 lbs/day	150 lbs/day

Source: SCAQMD 2011.

<sup>4</sup> SCAQMD's Air Quality Significance Thresholds are current as of March 2011 and can be found here: <http://www.aqmd.gov/ceqa/hdbk.html>.

**CO Hotspots**

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. Typically, for an intersection to exhibit a significant CO concentration, it would operate at level of service (LOS) E or worse without improvements (Caltrans 1997).

**Localized Significance Thresholds**

SCAQMD developed LSTs for emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated at the project site (offsite mobile-source emissions are not included in 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 Source Receptor (SRA) and the distance to the nearest sensitive receptor. LST analysis 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. Table 5.2-5 shows the localized significance thresholds for projects in the SoCAB.

**Table 5.2-5  
SCAQMD Localized Significance Thresholds**

<i>Air Pollutant (Relevant AAQS)</i>	<i>Concentration</i>
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO <sub>2</sub> Standard (CAAQS)	0.18 ppm
24-Hour PM <sub>10</sub> Standard – Construction (SCAQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Construction (SCAQMD) <sup>1</sup>	10.4 µg/m <sup>3</sup>
24-Hour PM <sub>10</sub> Standard – Operation (SCAQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>
24-Hour PM <sub>2.5</sub> Standard – Operation (SCAQMD) <sup>1</sup>	2.5 µg/m <sup>3</sup>

Source: SCAQMD 2011.

ppm – parts per million; µg/m<sup>3</sup> – micrograms per cubic meter

<sup>1</sup> Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM<sub>10</sub> and PM<sub>2.5</sub>, the threshold is established as an “allowable change” in concentration. Therefore, background concentration is irrelevant.



**Health Risk Analysis**

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401, placed on CARB’s air toxics list pursuant to Assembly Bill 1807 (AB 1807), Air Contaminant Identification and Control Act (1983), or placed on the EPA’s National Emissions Standards for Hazardous Air Pollutants, a health risk assessment (HRA) is required by the SCAQMD. Table 5.2-6 lists the SCAQMD’s TAC incremental risk thresholds for operation of a project. Residential, commercial, and office uses do not use substantial quantities of TACs, and these thresholds are typically applied for new industrial projects. It should be noted that these thresholds do not gauge the compatibility of a project with adjacent sources of air pollutants.

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Maximum Individual Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0

Source: SCAQMD 2011

### 5.2.3 Environmental Impacts

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the General Plan Update. SCAQMD has published the CEQA Air Quality Handbook (Handbook) and updates on its website that are intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. The 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. This analysis uses: the California Emissions Estimator Model (CalEEMod), Version 2011.1.1, OFFROAD2007, and EMFAC2011.

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: THEORETICAL BUILDOUT OF THE CITY OF INDUSTRY IN ACCORDANCE WITH THE GENERAL PLAN UPDATE WOULD POTENTIALLY CONFLICT WITH THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S 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 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. There are two key indicators of consistency:

Indicator 1: Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the AAQS or interim emission reductions in the AQMP.

Indicator 2: Whether the project would exceed the assumptions in the AQMP. The AQMP strategy is, in part, based on projections from local general plans.

#### Indicator 1

The SoCAB is designated nonattainment for O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and lead (Los Angeles County only) under the

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California and National AAQS and nonattainment for NO<sub>2</sub> under the California AAQS.<sup>5</sup> Because the proposed project involves long-term growth associated with theoretical buildout (post-2035 scenario) of the City of Industry, cumulative emissions generated by construction and operation of individual development projects would exceed the SCAQMD regional and localized thresholds (see Impact 5.2-2 and Impact 5.2-3). Consequently, emissions generated by development projects in addition to existing sources within the City are considered to cumulatively contribute to the nonattainment designations of the SoCAB. Theoretical buildout of the General Plan Update would therefore contribute to an increase in frequency or severity of air quality violations and delay attainment of the AAQS or interim emission reductions in the AQMP, and emissions generated from buildout of the General Plan Update would result in a significant air quality impact. The proposed project would not be consistent with the AQMP under the first indicator.

### Indicator 2

The land use designations in the General Plan form, in part, the foundation for the emissions inventory for 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. Table 5.2-7 compares the population and employment generation of the General Plan Update compared to the existing conditions and projections based on SCAG forecasts.

**Table 5.2-7  
Comparison of Population and Employment Forecast**

<b>Scenario</b>	<b>Existing Land Uses 2008</b>	<b>SCAG 2035 Forecast<sup>1</sup></b>	<b>Proposed General Plan Update Post-2035</b>	<b>Change from Existing</b>	<b>Increase Compared to the SCAG Forecast</b>
Population	503	799	463	-40	-366
Employment	68,741	88,404	109,715	40,974	21,311

VMT: Vehicle Miles Traveled

<sup>1</sup> SCAG Local Input/General Plan Growth Forecast for the 2012 RTP, excludes the SOI. <http://www.scag.ca.gov/forecast/index.htm>.



SCAG projections for the City are partially based on the current General Plan. As shown in Table 5.2-7, the General Plan Update would generate substantially more employment for the City of Industry than SCAG forecasts. It should be noted that the growth projected by SCAG is based on demographic trends in the region; whereas, growth projections of the General Plan Update assume full theoretical buildout of the City post-2035, since there is no schedule for when this development would occur. As a result, the growth projections that are based on SCAG's Regional Transportation Plan and the associated emissions inventory in SCAQMD's AQMP do not include the additional growth forecast in the General Plan Update. Consequently, the 2012 AQMP does not consider emissions associated with the General Plan Update. Once the General Plan Update is adopted and the AQMP is revised, SCAG and SCAQMD will incorporate the growth projections associated with theoretical buildout of the General Plan Update in their regional planning projections and the General Plan Update would be consistent with the AQMP. However, since full buildout associated with the General Plan Update is not currently included in the emissions inventory for the SoCAB, impacts associated with the second indicator are also considered significant.

<sup>5</sup> CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM<sub>10</sub> to attainment for PM<sub>10</sub> under the national AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM<sub>10</sub> standards during the period from 2004 to 2007. However, the EPA has not yet approved this request.

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#### Summary

As described above, the proposed project would not be consistent with the AQMP because air pollutant emissions associated with theoretical buildout of the City in accordance with the General Plan Update would cumulatively contribute to the existing nonattainment designations in the SoCAB. Furthermore, theoretical buildout of the General Plan Update would exceed current estimates of employment for Industry, which are based on regional trends and will be updated to reflect the proposed General Plan Update, and therefore these emissions are not included in the current regional emissions inventory for the SoCAB. Therefore, the proposed project would be considered inconsistent with the AQMP, resulting in a significant impact in this regard.

**IMPACT 5.2-2: CONSTRUCTION ACTIVITIES ASSOCIATED WITH THEORETICAL BUILDOUT OF THE GENERAL PLAN UPDATE WOULD GENERATE SHORT-TERM EMISSIONS THAT EXCEED SCAQMD'S REGIONAL AND LOCALIZED SIGNIFICANCE THRESHOLDS FOR VOC, CO, NO<sub>x</sub>, PM<sub>10</sub>, AND PM<sub>2.5</sub> AND CUMULATIVELY CONTRIBUTE TO THE SOCAB NONATTAINMENT DESIGNATIONS. [THRESHOLDS AQ-2, AQ-3, AND AQ-4]**

**Impact Analysis:** Construction activities associated with development that would be accommodated by the General Plan Update would occur over the buildout horizon (post-2035) of the General Plan Update and cause short-term emissions of criteria air pollutants. The primary source of NO<sub>x</sub>, CO, and SO<sub>x</sub> emissions is the operation of construction equipment. The primary sources of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) emissions include activities that disturb the soil, such as grading and excavation road construction, and building demolition and construction. The primary source of VOC emissions is the application of architectural coating and off-gas emissions associated with asphalt paving. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included under *Air Pollutants of Concern* in section 5.2-1, *Environmental Setting*.

Information regarding specific development projects, soil types, and the locations of receptors would be needed in order to quantify the level of impact associated with construction activity. Due to the scale of development activity associated with theoretical buildout of the General Plan Update, emissions would likely exceed the SCAQMD regional significance thresholds and therefore, in accordance with the SCAQMD methodology, would cumulatively contribute to the nonattainment designations of the SoCAB. The SoCAB is currently designated nonattainment for O<sub>3</sub> and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Emissions of VOC and NO<sub>x</sub> are precursors to the formation of O<sub>3</sub>. In addition, NO<sub>x</sub> is a precursor to the formation of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Therefore, the proposed project would cumulatively contribute to the existing nonattainment designations of the SoCAB for O<sub>3</sub>, NO<sub>2</sub>, and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>).

Air quality emissions related to construction must be addressed on a project-by-project basis. For this broad-based General Plan Update, it is not possible to determine whether the scale and phasing of individual projects would result in the exceedance of SCAQMD's short-term regional or localized construction emissions thresholds. An estimate of construction emissions is included in the operational phase regional criteria air pollutant emissions inventory in Impact 5.2-3 below. In addition to regulatory measures (e.g., SCAQMD Rule 201, Rule 403, Rule 1113, Rule 1403, and CARB Rule 2840), mitigation may include extension of construction schedules and/or use of special equipment. Nevertheless, because of the likely scale and extent of construction activities pursuant to the future development that would be accommodated by the General Plan Update, at least some projects would likely continue to exceed the relevant SCAQMD thresholds. Consequently, construction-related air quality impacts associated with development in accordance with the General Plan Update are deemed to be significant.

**IMPACT 5.2-3: THEORETICAL BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE WOULD GENERATE LONG-TERM EMISSIONS THAT WOULD EXCEED SCAQMD'S REGIONAL SIGNIFICANCE THRESHOLDS FOR VOC, CO, NO<sub>x</sub>, PM<sub>10</sub>, AND PM<sub>2.5</sub> AND CUMULATIVELY CONTRIBUTE TO THE SOCAB NONATTAINMENT DESIGNATIONS. [THRESHOLDS AQ-2 AND AQ-3]**

**Impact Analysis:** For the purpose of the following analysis, it is important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

It is also important to note that the General Plan Update is a regulatory document that sets forth the framework for future growth and development and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA; and obtain all necessary clearances and permits.

The General Plan Update guides growth and development within the City of Industry by designating land uses in the proposed Land Use Plan and through implementation of the goals and policies of the General Plan Update. New development would increase air pollutant emissions in the City and contribute to the overall emissions inventory in the SoCAB. A discussion of health impacts associated with air pollutant emissions generated by construction activities is included in the *Air Pollutants of Concern* discussion in section 5.2-1, *Environmental Setting*.

The proposed project sets the direction for the development of commercial, office, and industrial uses within developed and undeveloped portions of the City. No new sensitive land uses would be constructed within the City as a result of the General Plan Update (e.g., residential, nursing homes, or schools). Therefore, air quality land use compatibility impacts for placement of new sensitive receptors adjacent to freeways and major stationary sources of air pollutants are not an air quality impact of the General Plan Update.

The City of Industry includes several permitted sources of air pollution that are not quantified in the criteria air pollutant emissions inventory because these emissions are regulated by SCAQMD and no changes would occur to these facilities as part of the General Plan Update. It should be noted that the characteristics of industrial/manufacturing uses in the City have changed over the last few decades to accommodate a higher demand in the southern California region for the goods movement industry, such as warehousing. Theoretical buildout of the General Plan Update would result in an increase in land use intensity in the City, including warehousing, as shown in Table 3-5, *Estimated Buildout Statistics of Proposed Land Use Plan*.

### City of Industry Emissions Inventory

The increase in air pollutant emissions associated with theoretical buildout of the General Plan Update was estimated using CalEEMod, EMFAC2011, and OFFROAD2007. The increase in criteria air pollutant emissions is based on the difference between existing land uses (see Table 3-3) and land uses associated with buildout of the General Plan Update (see Table 3-5). While buildout would ultimately be market driven, for modeling purposes this analysis is based on the assumption that all uses are on the ground by the year 2035 (Post-2035 emissions scenario).

Emissions within the City of Industry include:



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- **Transportation:** Transportation emissions were modeled using CARB's EMFAC2011. Model runs were based on trips provided by LLG and average trip length for light and medium vehicles and heavy duty trucks derived from the SCAG 2012 Regional Transportation Plan (RTP) model provided by SCAG. Fleet mix for the City of Industry was based on segment counts conducted by LLG.
- **Area Sources:** CalEEMod was used to estimate criteria air pollutant emissions from landscape maintenance equipment and consumer products such as aerosol sprays. Various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the Land Use Plan of the General Plan Update would also be expected to release emissions, some of which could be hazardous. Those emissions would be controlled at the local and regional level through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under SCAQMD Rule 1401. Because the nature of those emissions cannot be determined at this time and they are subject to further regulation and permitting, they will not be addressed further in this analysis. However, an estimate of commercial and industrial equipment use (including transport refrigeration use) and construction equipment use is included based on OFFROAD2007. The area source emissions inventory also includes an estimate of truck idling based on trip generation rates provided by LLG and idle emission rates from CARB's EMFAC2011.
- **Energy:** CalEEMod was used to estimate natural gas used for heating and cooking associated with land uses in the City.

Table 5.2-8 compares the change in the citywide emissions for the City of Industry to the SCAQMD regional emissions thresholds. It should be noted that the SCAQMD regional emissions thresholds were designed for individual projects.

As shown in Table 5.2-7, theoretical buildout of the General Plan Update would generate long-term emissions that exceed the daily SCAQMD thresholds for all criteria pollutants. Emissions of VOC and NO<sub>x</sub> are precursors to the formation of O<sub>3</sub>. In addition, NO<sub>x</sub> is a precursor to the formation of particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). Consequently, emissions of VOC and NO<sub>x</sub> that exceed the SCAQMD regional significance thresholds would contribute to the O<sub>3</sub> nonattainment designation of the SoCAB, while emissions of NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> that exceed the SCAQMD regional significance thresholds would contribute to the particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) nonattainment designation of the SoCAB under the national and California AAQS. Consequently, operational-related air quality impacts associated with future development that would be accommodated by the General Plan Update are significant. It should be noted however that existing land uses in accordance with the current General Plan already exceed SCAQMD regional significance thresholds. Therefore, any future development that would be accommodated by the General Plan Update would also exceed the SCAQMD regional significance thresholds.

**Table 5.2-8  
City of Industry Regional Emissions Inventory, Post 2035  
(in pounds per day)**

<b>Sector</b>	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Existing Land Uses (per Table 3-3)</b>						
Transportation <sup>1</sup>	2,126	8,017	22,876	107	1,271	613
Area – Landscaping/ Consumer Products	2,568	0	0	0	0	0
Area – Heavy Duty Truck Idling <sup>2</sup>	32	168	231	1	3	3
Area – Commercial/Industrial Equipment <sup>3</sup>	160	731	6,782	2	22	22
Area – Construction <sup>3</sup>	19	74	252	0	3	3
Area Sources subtotal <sup>4, 5</sup>	2,779	973	7,265	3	28	28
Energy	21	195	163	1	15	15
<b>Existing Land Uses Total</b>	<b>4,926</b>	<b>9,184</b>	<b>30,303</b>	<b>111</b>	<b>1,314</b>	<b>656</b>
<b>Proposed Land Use Plan (per Table 3-5)</b>						
Transportation <sup>1</sup>	2,538	9,572	27,313	127	1,518	732
Area – Landscaping/Consumer Products	2,925	0	0	0	0	0
Area – Heavy Duty Truck Idling <sup>2</sup>	48	207	302	1	4	4
Area – Commercial/Industrial Equipment <sup>3</sup>	255	1,167	10,825	3	36	35
Area – Construction <sup>3</sup>	19	74	252	0	3	3
Area Sources subtotal <sup>4, 5</sup>	3,247	1,448	11,379	4	43	42
Energy	25	228	191	1	17	17
<b>Proposed Land Use Plan Total</b>	<b>5,810</b>	<b>11,248</b>	<b>38,883</b>	<b>133</b>	<b>1,577</b>	<b>790</b>
<b>Increase in Emissions</b>	<b>884</b>	<b>2,064</b>	<b>8,580</b>	<b>22</b>	<b>263</b>	<b>135</b>
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
<b>Significant?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>

Source: CalEEMod, Version 2011.1.1 (Area-Landscaping and Consumer Products and Energy based on worst-case summer or winter emissions), OFFROAD2007 (Area-Heavy Duty Truck idling, Area-Commercial/Industrial Equipment, and Area-Construction), and EMFAC2011 (Transportation) base on vehicle miles traveled (VMT) provided by LLG.

Notes:

- <sup>1</sup> VMT per year based on a conversion of VMT x 347 days per year to account for less travel on weekend, consistent with CARB statewide GHG emissions inventory methodology (CARB 2008).
- <sup>2</sup> Includes idling of heavy duty trucks (MHDT and HHDT), light-heavy duty trucks, and medium duty trucks based on EMFAC2011. The annual idling emission rates are composite of winter and summer high idle; the emission rates have been corrected for cleaner fuel and retrofit requirements, but not for the idling rule.
- <sup>3</sup> Includes unpermitted sources: transport refrigeration units, light commercial, industrial and other portable equipment from OFFROAD2007, proportioned based on City vs. county employment data. Also includes construction emissions from OFFROAD2007 proportioned based on City vs. county acreage.
- <sup>4</sup> Various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the proposed Land Use Plan of the General Plan Update would require permitting and would be subject to further study pursuant to SCAQMD Rule 1401. Because the nature of those emissions cannot be determined at this time and they are subject to further regulation and permitting, they will not be included in the table.
- <sup>5</sup> Excludes all emissions from the Union Pacific Railroad (UPRR) rail yard within the City, including trains and yard equipment. These emissions are under the jurisdiction of UPRR and separate agreements with CARB have been made for air pollutant emissions reductions associated with trains and yard equipment.



**IMPACT 5.2-4: OPERATION OF NEW STATIONARY/AREA SOURCES AND TRUCK IDLING WITHIN THE CITY OF INDUSTRY COULD GENERATE SUBSTANTIAL CONCENTRATIONS OF CRITERIA AIR POLLUTANTS THAT EXCEED SCAQMD’S LOCALIZED SIGNIFICANCE THRESHOLDS AND/OR TOXIC AIR CONTAMINANTS. [THRESHOLD AQ-4]**

**Impact Analysis:** Operation of new land uses, consistent with the Land Use Plan of the General Plan Update, would generate new sources of criteria air pollutants and toxic air contaminants (TACs) within the City from area/stationary sources and mobile sources.

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#### **Toxic Air Contaminants**

Various industrial and commercial processes (e.g., manufacturing, dry cleaning) allowed under the General Plan Update would be expected to release TACs. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD for emissions of TACs include industrial land uses, such as chemical processing facilities, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. Emissions of TACs would be controlled by SCAQMD through permitting and would be subject to further study and health risk assessment prior to the issuance of any necessary air quality permits under SCAQMD Rule 1401. Because the nature of those emissions cannot be determined at this time and they are subject to further regulation and permitting, they will not be addressed further in this analysis but are considered a potentially significant impact of the General Plan Update.

In addition to stationary/area sources of TACs, warehousing operations could generate a substantial amount of diesel particulate matter emissions from off-road equipment<sup>6</sup> use and truck idling. In addition, some warehousing and industrial facilities may include rail operations involving switch or main line locomotive activities. DPM accounts for approximately 84 percent of the excess cancer risk in the SoCAB (SCAQMD 2008). New land uses in the City that generate trucks, including trucks with TRUs, and rail activities could generate an increase in DPM that would contribute to cancer and noncancer health risk in the SoCAB. These new land uses could be proximate to existing sensitive receptors within and outside the City of Industry. In addition, trucks would travel on regional transportation routes through the SoCAB contributing to near-roadway DPM concentrations. This is considered a significant impact of the project.

#### **CO Hotspots**

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. At the time of the 1993 Handbook, the SoCAB was designated nonattainment under the California AAQS and National AAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SCAQMD was designated in attainment for CO under both the California AAQS and National AAQS. As identified within SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. A CO hot spot analysis was conducted for four busy intersections in Los Angeles<sup>7</sup> at the peak morning and afternoon time periods and did not predict a violation of CO standards. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2011). Theoretical buildout of the General Plan Update would not produce the volume of traffic required to generate a CO hotspot. Therefore, CO hotspots are not an environmental impact of concern for the proposed project.

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<sup>6</sup> Off-road equipment is a category identified by EPA and includes all motorized equipment (excluding motor vehicles and trucks).

<sup>7</sup> The four intersections were Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day and LOS E in the morning peak hour and LOS F in the evening peak hour.

**IMPACT 5.2-5: INDUSTRIAL LAND USES ASSOCIATED WITH THEORETICAL BUILDOUT OF THE GENERAL PLAN UPDATE HAVE THE POTENTIAL TO GENERATE ODORS THAT COULD AFFECT A SUBSTANTIAL NUMBER OF PEOPLE. [THRESHOLD AQ-5]**

**Impact Analysis:** Construction activity would require the operation of equipment that may generate exhaust from either gasoline or diesel fuel. Construction and development would also require the application of paints and the paving of roads, which could generate odors. As these odors are short term and quickly disperse into the atmosphere, this is not considered significant.

Future development would involve minor odor-generating activities, such as lawn mower exhaust and application of exterior paints for building improvement. These types and concentrations of odors are typical of developments and are not considered significant air quality impacts.

Industrial uses, including food processing facilities and waste transfer stations, have the potential to generate substantial odors. Individual projects, including commercial, industrial, and office, associated with the General Plan Update are also required to comply with SCAQMD Rule 402 to prevent occurrence of public nuisances. While these odors would be required to be controlled, additional measures may be warranted to prevent a nuisance, depending on the nature of the proposed use. Consequently, industrial land uses associated with theoretical buildout of the General Plan Update may generate odors that affect a substantial number of people.

### 5.2.4 Relevant General Plan Policies

The following are relevant policies of the General Plan Update that promote the protection of air quality. Policy number references are provided in parentheses.



#### Land Use Element

- Support the use of energy-saving designs and equipment in all new development and rehabilitation or reconstruction programs (LU2-6).
- Minimize impacts (including noxious fumes, air pollutants, excessive noise, and hazardous materials) to non-business uses through the use of land use regulations, site planning, and design controls (LU3-1).
- Support the surrounding population through the sponsorship and/or provision of education-and community-building programs (LU3-2).
- Maintain clear development standards but allow flexibility in their application to achieve the Vision (LU4-1).
- Allow flexibility in the application of development standards for those uses that support the Vision and when necessary to minimize the impacts on surrounding land uses (LU4-2).
- Maintain a high quality appearance and functionality of public lands, properties, and rights-of-way, including sidewalks, street trees/landscaping, curbs, and street lighting (LU5-1).
- Design new and, when necessary, retrofit existing streets and public rights-of-way to maintain a high quality, professional appearance (LU5-2).

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#### Circulation Element

- Roadways in the City of Industry will:
  - Comply with federal, state, and local design and safety standards
  - Meet the needs of multiple transportations modes and users
  - Reflect the context and desired character of the surrounding land uses
  - Be maintained in accordance with best practices and City standards (C1-1)
- Maintain a peak-hour LOS D at intersections identified on the Roadway Classification Plan (C1-2).
- Maintain and rehabilitate the circulation system as necessary and funding is available, with a focus on identifying and improving roadways and intersections that are approaching or have reached unacceptable levels of service (C1-3).
- Coordinate with Caltrans, SCAG, neighboring jurisdictions, and others to identify, fund, and implement needed improvements to roadways identified in the roadway classification plan (C1-5).
- Maintain a multimodal system of trails that connect businesses, schools, and other key destination points (C2-1).
- Provide and designate off-street multipurpose sidewalks and trails as the primary paths of bicycle travel (C2-2).
- Explore opportunities to expand the pedestrian and bicycle networks. This includes consideration of utility easements, drainage corridors, road rights-of-ways, and other potential options (C2-4).
- Encourage and facilitate the use of public transportation to reduce emissions associated with the use of automobiles (C2-5).
- Maintain a proactive working partnership with Metro and Foothill Transit to ensure the continued improvement of transit services provided to the City of Industry. Encourage the extension of Metro and/or Foothill Transit service lines to provide a direct stop at the Industry Metrolink Station (C2-6).
- If dictated by Metro or Foothill Transit, require new development to provide transit facilities, such as bus shelters, transit bays, and turnouts (C2-7).
- Encourage the development and expansion of the Metro Rail Gold Line, Metrolink, and high-speed rail systems that would enhance regional mobility in Southern California and serve the City of Industry (C2-8).
- Encourage the use of ride sharing and public transit for persons employed in the City to reduce traffic congestion and the need for off-street parking in the City (C3-1).
- Help identify and implement feasible solutions to long-term regional transportation problems (C3-2).

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- Coordinate with the railroads, Caltrans, ACSG, Metro, ACE, and other transportation agencies when necessary to design, fund, and complete regional projects (C3-3).
- Work with Caltrans, the Metro, and surrounding jurisdictions to implement the RTP, Master Plan of Arterial highways, and CMP (C3-4).
- Continue to coordinate with the rail companies to provide for efficient rail service that minimizes impacts on the local street system (C4-2).
- Continue to pursue grade separation for railroad crossings on designated streets (C4-3).

#### Resource Management Element

- Encourage the use of recycled water (RM1-2).
- Encourage the conservation of water resources through the use of drought-tolerant plants and water-saving irrigation systems (RM1-3).
- Comply with state building codes relative to indoor air quality (RM2-1).
- Support efforts to reduce pollutants to meet State and Federal Clean Air Standards (RM2-2).
- Collaborate with the CARB and other agencies within the South Coast Air Basin to improve regional air quality and achieve GHG reduction targets (RM2-3).
- Prohibit siting of sensitive land uses within distances defined by CARB unless sufficient mitigation is provided (RM2-4).
- Continue the City's street planting and tree maintenance programs (RM3-5).
- Meet or exceed AB 939 requirements (RM4-1).



#### Safety Element

- Comply with and enforce applicable building codes when reviewing plans and issuing building permits (S3-1).
- Discourage new sensitive land uses from locating near existing sites that use, store, or generate large quantities of hazardous materials (S4-3).

#### 5.2.5 Existing Regulations

##### Federal and State

- SCAQMD Rule 201: Permit to Construct
- SCAQMD Rule 402: Nuisance Odors
- SCAQMD Rule 403: Fugitive Dust
- SCAQMD Rule 1113: Architectural Coatings
- SCAQMD Rule 1401: New Source Review of Carcinogenic Air Contaminants
- SCAQMD Rule 1403: Asbestos Emissions from Demolition/Renovation

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- CARB Rule 2840: Airborne Toxics Control Measure
- Building Energy Efficiency Standards (Title 24)
- Appliance Energy Efficiency Standards (Title 20)
- Motor Vehicle Standards (AB 1493)

#### 5.2.6 Level of Significance Before Mitigation

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

- Impact 5.2-1 Theoretical buildout of the City of Industry in accordance with the General Plan Update would potentially conflict with the SCAQMD's AQMP.
- Impact 5.2-2 Construction activities associated with theoretical buildout of the General Plan Update would generate short-term emissions that exceed SCAQMD's regional and localized significance thresholds for VOC, CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>; cumulatively contribute to the SoCAB nonattainment designations.
- Impact 5.2-3 Theoretical buildout of the General Plan Update would generate long-term emissions that would exceed SCAQMD's regional significance thresholds for VOC, CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> and cumulatively contribute to the SoCAB nonattainment designations.
- Impact 5.2-4 Operation of new stationary/area sources and truck idling within the City of Industry could generate substantial concentrations of criteria air pollutants that exceed SCAQMD's localized significance thresholds and/or toxic air contaminants.
- Impact 5.2-5 Industrial land uses associated with theoretical buildout of the General Plan Update have the potential to generate odors that could affect a substantial number of people.

#### 5.2.7 Mitigation Measures

##### Impact 5.2-1

Mitigation measures incorporated into future development projects for operation and construction phases described in Impacts 5.2-2 and 5.2-3 below would reduce criteria air pollutant emissions associated with theoretical buildout of the General Plan Update. Goals and policies included in the General Plan Update would facilitate continued City participation/cooperation with SCAQMD and SCAG to achieve regional air quality improvement goals, promotion of energy conservation design and development techniques, encouragement of alternative transportation modes, and implementation of transportation demand management strategies. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the AQMP due to the magnitude of emissions that would be generated by the theoretical cumulative buildout of the City in accordance with the General Plan Update.

##### Impact 5.2-2

Goals and policies are included in the General Plan Update that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by future construction activities associated with the theoretical cumulative buildout of the General Plan Update, no mitigation measures are available that would reduce impacts below SCAQMD's thresholds.

2-1 If, during subsequent project-level environmental review, construction-related criteria air pollutants are determined to have the potential to exceed the South Coast Air Quality Management District (SCAQMD) adopted thresholds of significance, the City of Industry Planning Department will require that applicants for new development projects incorporate mitigation measures as identified in the CEQA document prepared for the project to reduce air pollutant emissions during construction activities. Mitigation measures that may be identified during the environmental review include, but are not limited to:

- Requiring fugitive dust control measures that exceed SCAQMD's Rule 403, such as:
  - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  - Applying water every four hours to active soil-disturbing activities.
  - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Using construction equipment rated by the United States Environmental Protection Agency as having Tier 3 (model year 2006 or newer) or Tier 4 (model year 2008 or newer) emission limits, applicable for engines between 50 and 750 horsepower.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the SCAQMD's website at: [http://www.aqmd.gov/prdas/brochures/Super-Compliant\\_AIM.pdf](http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf).



### Impact 5.2-3

Goals and policies are included in the General Plan Update that would reduce air pollutant emissions. However, due to the magnitude of emissions generated by the theoretical cumulative buildout of office, commercial, industrial, and warehousing land uses in the City, no mitigation measures are available that would reduce impacts below SCAQMD's thresholds. Mitigation Measure 6-1 requires preparation of a Climate Action Plan to reduce greenhouse gas emissions impacts. Measures considered as part of the Climate Action Plan to reduce idling, natural gas use, and encourage use of alternative-fueled vehicles would also reduce criteria air pollutants within the City.

### Impact 5.2-4

Goals and policies are included in the General Plan Update that would reduce concentrations of criteria air pollutant emissions and air toxics generated by new development. Review of projects by SCAQMD for permitted sources of air toxics would ensure health risks are minimized. The following mitigation measure would ensure mobile sources of TACs not covered under SCAQMD permits are considered during subsequent project-level environmental review. Development of individual projects may achieve the incremental risk thresholds established by SCAQMD. However, the incremental increase in health risk associated with individual projects is considered cumulatively considerable and would contribute to already elevated levels of cancer and non-cancer health risks in the SoCAB.

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2-2 New industrial or warehousing land uses that: 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered transport refrigeration units (TRUs), and 2) are located within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, nursing homes), as measured from the property line of the project to the property line of the nearest sensitive use, will submit a health risk assessment (HRA) to the City of Industry Planning Department prior to future discretionary project approval. The HRA will be prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment and the South Coast Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05) or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that Best Available Control Technologies for Toxics (T-BACTs) are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, restricting idling onsite or electrifying warehousing docks to reduce diesel particulate matter, or requiring use of newer equipment and/or vehicles. T-BACTs identified in the HRA will be identified as mitigation measures in the environmental document and/or incorporated into the development plan as a component of the proposed project.

#### Impact 5.2-5

2-3 If it is determined during project-level environmental review that a project has the potential to emit nuisance odors beyond the property line, an odor management plan may be required, subject to Planning Director review. Facilities that have the potential to generate nuisance odors include but are not limited to:

- Wastewater treatment plants
- Composting, greenwaste, or recycling facilities
- Fiberglass manufacturing facilities
- Painting/coating operations
- Large-capacity coffee roasters
- Food-processing facilities

If an odor management plan is determined to be required through CEQA review, the City will require the project applicant to submit the plan prior to approval to ensure compliance with the South Coast Air Quality Management District's Rule 402, for nuisance odors. If applicable, the Odor Management Plan will identify the Best Available Control Technologies for Toxics (T-BACTs) that will be utilized to reduce potential odors to acceptable levels, including appropriate enforcement mechanisms. T-BACTs may include, but are not limited to, scrubbers (e.g., air pollution control devices) at the industrial facility. T-BACTs identified in the odor management plan will be identified as mitigation measure in the environmental document and/or incorporated into the site plan.

#### 5.2.8 Level of Significance After Mitigation

Despite the application of mitigation measures, Impact 5.2-1, Impact 5.2-2, Impact 5.2-3, and Impact 5.3-4 were found to still result in a **significant and unavoidable** air quality impact due to the magnitude of emissions that would be generated by the theoretical cumulative buildout of the City in accordance with the General Plan Update. However, Mitigation Measure 2-3 would ensure that odor impacts are minimized and facilities would comply with SCAQMD Rule 402. Therefore, Impact 5.2-5 would be less than significant.