

## 4.5 AIR QUALITY

This section evaluates air quality associated with short-and long-term impacts resulting from buildout of the proposed General Plan Update. Information in this section is based primarily on the *CEQA Air Quality Handbook*, prepared by the South Coast Air Quality Management District (SCAQMD), April 1993 (as revised through November 1993), Air Quality Data (SCAQMD 1994 through 1998); and the SCAQMD *Final Air Quality Management Plan* (January 1997).

### 4.5.1 ENVIRONMENTAL SETTING

#### SOUTH COAST AIR BASIN

The City of Cerritos is located in the South Coast Air Basin (Basin), characterized as having a "Mediterranean" climate (a semi-arid environment with mild winters, warm summers and moderate rainfall). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and south and the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. Its terrain and geographical location determine the distinctive climate of the Basin, as the Basin is a coastal plain with connecting broad valleys and low hills.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin.

#### CLIMATE

Moderate temperatures and comfortable humidities characterize the climate with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit. However, with a less pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100 degrees in recent years. January is usually the coldest month at all locations, while July and August are usually the hottest months of the year. Although the Basin has a semi-arid climate, the air near the surface is moist because of the presence of a

shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent; and low stratus clouds, occasionally referred to as “high fog” are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation is typically 9 to 14 inches annually in the Basin and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

## **WIND**

One of the most important climatic factors is the direction and intensity of the prevailing winds. With very light average wind speeds (five to seven miles per hour), the basin has a limited capability to disperse air contaminants horizontally. Typically, the net transport of air on-shore is greater in the summer, while the net offshore transport is greater in the winter. Whether there is air movement or stagnation during the morning and evening hours (before these dominant patterns take effect) is one of the critical factors in determining the smog situation on any given day.

Cerritos' location with respect to these flow patterns and the Pacific Ocean results in relatively good air quality. For the most part, the on-shore winds transport pollutants inland. Since the night drainage winds are less intense, only a limited amount of this pollution is returned to the coastal areas during the summer, leaving a significant amount of pollutants in the inland areas.

## **SUNLIGHT**

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain original, or “primary” pollutants (mainly reactive hydrocarbons and oxides of nitrogen) react to form “secondary” pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind from the emission sources. Because of the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California. However, Cerritos and other cities that are moderately close in proximity to the coast are not exempt on those days with early morning easterly winds.

## **TEMPERATURE INVERSIONS**

A temperature inversion is a reversal in the normal decrease of temperature as altitude increases. In most parts of the country, air near ground level is warmer than the air above it. However, Southern California's daily summertime sunshine and high barometric pressure reverse that pattern, creating warmer air at high elevations, which trap pollutants by preventing cooler air from rising to the upper atmosphere. The

height of the base of the inversion is known as the “mixing height” and controls the volume of air available for the mixing and dispersion of air pollutants.

The interrelationship of air pollutants and climatic factors are most critical on days of greatly reduced atmospheric ventilation. On days such as these, air pollutants accumulate because of the simultaneous occurrence of three unfavorable factors: low inversions, low maximum mixing heights and low wind speeds. Although these conditions may occur throughout the year, the months of July, August and September generally account for more than 40 percent of these occurrences.

The potential for high contaminant levels varies seasonally for many contaminants. During late spring, summer and early fall, light winds, low mixing heights and sunshine combine to produce conditions favorable for the maximum production of oxidants, mainly ozone. When fairly deep marine layers frequent the Air Basin during spring and summer, sulfate concentrations achieve yearly peak concentrations. When strong surface inversions are formed on winter nights, especially during the hours before sunrise, coupled with near-calm winds, carbon monoxide from automobile exhausts becomes highly concentrated. The highest yearly concentrations of carbon monoxide, oxides of nitrogen and nitrates are measured during November, December and January.

## **RAINFALL**

Winter storms that bring rainfall benefit air quality, since they tend to “scrub” gaseous or particulate pollutants from the air. Precipitation is typically 9 to 14 inches annually in the Basin and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

## **REGULATORY FRAMEWORK**

### **FEDERAL CLEAN AIR ACT OF 1970 AND 1990 CLEAN AIR ACT AMENDMENTS**

The Federal Clean Air Act of 1970 (CAA) was the first legislation that gave the U.S. Environmental Protection Agency (EPA) authority to set Federal primary and secondary ambient air quality standards. Primary or health-based standards are set at levels necessary to protect the public health. Secondary standards are set to protect the public from air pollution effects such as crop damage, visibility reduction, soiling, nuisances, etc. The resultant national ambient air quality standards (NAAQS) included six pollutants: CO (carbon monoxide), O<sub>3</sub> (ozone), PM<sub>10</sub> (fine particulate matter), NO<sub>2</sub> (nitrogen dioxide), SO<sub>2</sub> (sulfur dioxide) and Pb (lead). The Act required states that exceeded the NAAQS to prepare air quality plans showing how they would meet the standards by December 1987. The Act was amended in 1977 and again in 1990 to extend the deadline for compliance and to require that revised State Implementation Programs (SIP's) be prepared. The 1990 Clean Air Act Amendments established

categories of air pollution severity for non-attainment areas (“marginal” to “extreme”). SIP requirements varied based on the degree of severity.

## **THE 1988 CALIFORNIA CLEAN AIR ACT (CCAA)**

This legislation was signed into law on September 30, 1988, became effective on January 1, 1989, and was amended in 1992. Also known as the “Sher Bill” (Assembly Bill 2595), the CCAA observes the requirements of the Federal Clean Air Act and adds three other pollutants to be regulated, including: H<sub>2</sub>S (hydrogen sulfide), SO (sulfates) and vinyl chloride. The CCAA established a legal mandate to achieve health-based State air quality standards at the earliest practicable date. The Act specified that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources. Additionally, it also gives air districts such as the SCAQMD new authority to regulate indirect sources.

Each district plan is to achieve a five-percent annual reduction (averaged over consecutive three-year periods) in district-wide emissions of each non-attainment pollutant or its precursors including the effect of any additional development within the region. A strict interpretation of the CCAA “no net” increase prohibition suggests that any general development within the region, no matter how large or small, may have a significant, project-specific air quality impact unless the development-related emissions are offset by concurrent emissions reductions elsewhere within the airshed. Any planning effort for air quality attainment would thus need to consider both State and Federal planning requirements.

## **1997 AIR QUALITY MANAGEMENT PLAN**

The SCAQMD has prepared multiple Air Quality Management Plans (AQMPs) to accomplish the five percent annual reduction goal. The most recent AQMP was published in 1997. To accomplish its task, the AQMP relies on a multi-level partnership of governmental agencies at the federal, state, regional and local level. These agencies (EPA, CARB, local governments, Southern California Association of Governments (SCAG) and the SCAQMD) are the cornerstones that implement the AQMP programs.

1997 AQMP. A 1997 AQMP was prepared by the SCAQMD and adopted by the District on November 15, 1996. The 1997 AQMP was then adopted by CARB on January 23, 1997. The 1997 Plan contains two tiers of control measures. Short-term and intermediate-term measures are scheduled to be adopted between 1997 and the year 2005. These measures rely on known technologies and other actions to be taken by several agencies that currently have the statutory authority to implement the measures. They are designed to satisfy the Federal CAA requirement of Reasonably Available Control Technology (RACT) and the CCAA requirement of Best Available Retrofit Control Technology (BARCT). There are 37 stationary source and 24 mobile source control measures in this group.

The 1997 AQMP continues to include most of the control measures outlined in the previous 1994 Ozone Plan with minor exceptions, but postpones many marginal measures found to be less cost-effective, drops future indirect-source rules that are now deemed infeasible, and focuses the SCAQMD's efforts on about ten major emission-reduction rules over the next two years. The SCAQMD will focus its efforts on seven major rules to reduce reactive organic compounds (ROC), a key ingredient in smog; and the Plan includes new market-based measures giving businesses greater flexibility in meeting emission-reduction requirements, such as intercredit trading and additional credits for mobile source emission reductions.

The 1997 AQMP shows that measures outlined in the 1994 Ozone Plan are more than sufficient to attain the Federal health standards for the two most difficult ingredients in smog, PM<sub>10</sub> and ground-level O<sub>3</sub>, by the years 2006 and 2010, respectively. Although the AQMP states that the Federal CO standard will be met by 2000, the Basin is still designated as a Federal non-attainment area. The region already has met the three other Federal health standards for Pb, SO<sub>2</sub> and NO<sub>2</sub>.

To help reduce PM<sub>10</sub> pollution, the 1997 Plan outlines seven control measures for directly emitted particulates which will reduce emissions from agricultural areas, livestock wastes, wood-working operations, construction and restaurants. The measures will also help control dust from paved and unpaved roads, which accounts for two-thirds of the directly-emitted particulates.

The 1997 Plan shows that both emissions and ambient pollution levels have continued their downward path toward healthful levels. The number of Stage I smog episodes for O<sub>3</sub> declined from 41 days in 1990 to just 14 days in 1995. CO also has declined, with the number of days over the standard down from 42 in 1990 to 13 in 1995. The average number of days exceeding the Federal 24-hour PM<sub>10</sub> standard also declined between 1990 and 1995 by 9 percent.<sup>1</sup>

1997 AQMP Control Strategies. The 1997 AQMP includes two tiers of emission reduction measures (short/intermediate and long-term measures), based on availability and readiness of technology. Short- and intermediate-term measures include the application of available technologies and management practices between 1994 and the year 2005. These short- and intermediate-term measures are designed to satisfy the Federal CAA requirement of RACT, and the CCAA requirements of BARCT.

To ultimately achieve ambient air quality standards, further development and refinement of known low- and zero-emission control technologies, in addition to technological breakthroughs, would be necessary. Long-term measures rely on the advancement of technologies and control methods that can reasonably be expected to occur between 1994 and 2010.

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<sup>1</sup> Article entitled "AQMD Sees Progress in Attaining Federal Clean Air Standards", AQMD Advisor, Volume 3, Number 7, September 1996.

Because of the EPA's principal authority over many off-road sources, the 1997 AQMP's off-road mobile source control measures are based on the EPA's proposed Federal Implementation Plan (FIP) for the Basin. The FIP's proposed control measures are based on a combination of stringent emission standards, declining caps on emission levels and emission/user fees.

In December 1999, the SCAQMD amended the 1997 AQMP. The 1999 Amendment provides revisions to the ozone portion of the 1997 AQMP specifically in the area of short-term stationary source control measures. In addition, the Amendment revises the adoption and implementation schedule for the short-term stationary source control measures that AQMD is responsible to implement. The 1999 Amendment does not revise the PM<sub>10</sub> portion of the 1997 AQMP, emission inventories, the mobile source portions of the 1997 Ozone SIP Revision, or the ozone attainment demonstration. Specifically, the 1999 Amendment includes new short-term stationary source control measures:

- ❑ Revises the adoption/implementation schedule for 13 short-term volatile organic compounds (VOC's), nitrogen oxides (NO<sub>x</sub>), and stationary source control measures from the 1997 Ozone SIP Revision;
- ❑ Provides further VOC emission reductions in the near-term; and
- ❑ Revises the emission reduction commitments for the long-term control measures in the 1997 Ozone SIP Revision for long-term stationary source control measures that the SCAQMD is responsible to implement.

## **AMBIENT AIR QUALITY STANDARDS**

### **AIR QUALITY STANDARDS**

Ambient air quality is described in terms of compliance with Federal and State standards. Ambient air quality standards are the levels of air pollutant concentration considered safe to protect the public health and welfare. They are designed to protect people most sensitive to 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. National Ambient Air Quality Standards (NAAQS) were established by the United States (U.S.) Environmental Protection Agency (EPA) in 1971 for six air pollutants. States have the option of adding other pollutants, to require more stringent compliance, or to include different exposure periods. California Ambient Air Quality Standards (CAAQS) for these pollutants and NAAQS are included in Table 4.5-1, *Local Air Quality Levels for the City of Cerritos*.

**Table 4.5-1  
Local Air Quality Levels for the City of Cerritos<sup>1</sup>**

Pollutant	California Standard	Federal Primary Standard	Year	Maximum <sup>2</sup> Concentration	Days (Samples) State/Federal Std. Exceeded
Carbon Monoxide (CO)	20 ppm for 1 hour	35 ppm for 1 hour	1997	8.6	0/0
			1998	8.1	0/0
			1999	7.5	0/0
			2000	9.7	0/0
			2001	6.0	0/0
			2002	5.8	0/0
	9 ppm for 8 hours	9 ppm for 8 hours	1997	6.63	0/0
			1998	6.46	0/0
			1999	5.49	0/0
			2000	5.73	0/0
			2001	4.74	0/0
			2002	4.56	0/0
Ozone (O3)	0.09 ppm for 1 hour	0.12 ppm for 1 hour	1997	0.095	1/0
			1998	0.116	2/0
			1999	0.131	2/1
			2000	0.118	3/0
			2001	0.091	0/0
			2002	0.084	0/0
Nitrogen Dioxide (NO2)	0.25 ppm for 1 hour	0.053 ppm annual average	1997	0.200	0/0
			1998	0.160	0/0
			1999	0.151	0/0
			2000	0.140	0/0
			2001	0.122	0/0
			2002	0.130	0/0
Sulfur Dioxide (SO2)	0.25 ppm for 1 hour	0.14 ppm for 24 hours or 80 µg/m <sup>3</sup> (0.03 ppm) annual average	1997	0.011	0/0
			1998	0.014	0/0
			1999	0.011	0/0
			2000	0.007	0/0
			2001	0.009	0/0
			2002	0.008	0/0
Particulate Matter (PM10) <sup>3,4</sup>	50 µg/m <sup>3</sup> for 24 hours	150 µg/m <sup>3</sup> for 24 hours	1997	87.0	10/0
			1998	69.0	6/0
			1999	79.0	13/0
			2000	105.0	13/0
			2001	91.0	10/0
			2002	74.0	5/0
Fine Particulate Matter (PM2.5) <sup>4</sup>	N/A	65 µg/m <sup>3</sup> for 24 hours	1997	N/M	N/A
			1998	N/M	N/A
			1999	66.9	N/A/1
			2000	81.5	N/A/4
			2001	72.9	N/A/1
			2002	62.7	N/A/0
ppm = parts per million      PM <sub>10</sub> = particulate matter 10 microns in diameter or less      N/M = not measured µg/m <sup>3</sup> = micrograms per cubic meter      PM <sub>2.5</sub> = particulate matter 2.5 microns in diameter or less					
NOTES: 1. Data is based on measurements taken at the North Long Beach monitoring station located at 3648 North Long Beach Boulevard, Long Beach, California. 2. Maximum concentration is measured over the same period as the California Standard. 3. PM10 exceedances are based on state thresholds established prior to amendments adopted on June 20, 2002. 4. PM10 and PM2.5 exceedances are derived from the number of samples exceeded, not days.					
Source: Data obtained from the California Air Resources Board ADAM Data Summaries Website, <a href="http://www.arb.ca.gov/adam/welcome.html">www.arb.ca.gov/adam/welcome.html</a> .					

The California Air Resource Board (CARB) is required to designate areas of the State as attainment, non-attainment, or unclassified for any State standard. An “attainment” designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant in that area. A “non-attainment” designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An “unclassified” designation signifies that the data does not support either an attainment or non-attainment status.

State and Federal ambient air quality standards have been established for the following pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and lead (Pb). For some of these pollutants, notably O<sub>3</sub> and PM<sub>10</sub>, the State standards are more stringent than the Federal standards. The State has also established ambient air quality standards for sulfates, hydrogen sulfide and vinyl chloride. The above-mentioned pollutants are generally known as “criteria pollutants.”

## **ATTAINMENT STATUS**

Despite implementing many strict controls, the SCAQMD portion of the Basin still fails to meet both Federal and State air quality standards for three of the six criteria pollutants: ozone (O<sub>3</sub>), carbon monoxide (CO) and fine particulate matter (PM<sub>10</sub>). Because these pollution standards have not been achieved, the Los Angeles County portion of the Basin is considered a non-attainment area for Federal and State standards for these pollutants.

## **LOCAL AMBIENT AIR QUALITY**

The SCAQMD operates several air quality monitoring stations within the Basin. The City of Cerritos is located within Source Receptor Area (SRA) 4, one of 28 areas under the jurisdiction of the SCAQMD. The communities within an SRA are expected to have similar climatology and subsequently, similar ambient air pollutant concentrations. The ambient air monitoring station within SRA 4 is within the northern portion of the City of Long Beach. The following air quality information briefly describes the various types of pollutants that are found within SRA 4.

### **Ozone**

Ozone (O<sub>3</sub>) is a colorless toxic gas that can irritate the lungs and damage materials and vegetation. Levels of O<sub>3</sub> exceed Federal and State standards throughout the Basin. Because O<sub>3</sub> formation is the result of photochemical reactions between NO<sub>x</sub> and reactive organic compounds (ROC), typically produced by combustion sources, peak concentrations of O<sub>3</sub> occur downwind of precursor emission sources. The entire Air Basin is designated as a non-attainment area for State and Federal O<sub>3</sub> standards. As indicated in Table 4.5-1, some exceedances of State standards for O<sub>3</sub> occurred at local air monitoring stations from 1997 through 2001. The State O<sub>3</sub> standard was

exceeded between one and three times over this period. The Federal O<sub>3</sub> standard was exceeded once during the last five years.

### **Carbon Monoxide**

Carbon Monoxide (CO) is an odorless, colorless toxic gas, produced almost entirely from combustion sources (automobiles). This pollutant interferes with the transfer of oxygen to the brain and it is generally associated with areas of high traffic density. At high concentrations, CO can reduce the oxygen-carrying capacity of the blood and cause headaches, dizziness, unconsciousness and even death. CO also can aggravate cardiovascular disease. The Los Angeles County portion of the Basin is designated a non-attainment area for Federal and State CO standards. The 8-hour and 1-hour Federal and State standard have not been exceeded at the North Long Beach station in the last five years.

### **Nitrogen Oxides**

Nitrogen Oxides (NO<sub>x</sub>), the term used to describe the sum of nitrogen oxide (NO), nitrogen dioxide (NO<sub>2</sub>) and other oxides of nitrogen, are produced by high-temperature combustion processes (e.g., motor vehicle engines, power plants, refineries and other industrial operations).<sup>2</sup> NO<sub>2</sub>, a term often used interchangeably with NO<sub>x</sub>, is a reddish-brown gas that can cause breathing difficulties at high levels. The entire Basin is designated as an Unclassified/Attainment area for Federal and State NO<sub>2</sub> standards (the Basin was redesignated from Federal non-attainment to Unclassified/Attainment on July 24, 1998). The NO<sub>x</sub> standard was not exceeded at the North Long Beach station over the last five years.

### **Fine Particulate Matter**

On July 1, 1987, the EPA replaced the total suspended particulate (TSP) standard with a new particulate standard known as PM<sub>10</sub>. PM<sub>10</sub> includes particulate matter 10 microns or less in diameter (a micron is one millionth of a meter). Sources of PM<sub>10</sub> include agricultural operations, industrial processes, combustion of fossil fuels, construction and demolition, windblown dust and wildfires. The entire Air Basin is designated as a non-attainment area for State and Federal PM<sub>10</sub> standards. Particulates substantially reduce visibility and adversely affect the respiratory tract. As indicated in Table 4.5-1, some exceedances of State standards for PM<sub>10</sub> occurred at local air monitoring stations from 1997 through 2001, ranging from six to 13 times in a given year (state standards for PM<sub>2.5</sub> did not exist during the monitoring period of 1997 through 2001 as shown in Table 4.5-1, *Local Air Quality Levels for the City of Cerritos*).

Due to recent increased concerns over health impacts due to fine particulate matter, both State and Federal PM<sub>2.5</sub> standards have been created. In 1997, the EPA announced new PM<sub>2.5</sub> standards. Industry groups challenged the new standard in

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<sup>2</sup> Environmental Protection Agency Website, [www.epa.gov/oar/aqtrnd97/brochure/no2.html](http://www.epa.gov/oar/aqtrnd97/brochure/no2.html).

court and the implementation of the standard was blocked. However, upon appeal by the EPA, the U.S. Supreme Court reversed this decision and upheld the EPA's new standards. Beginning in 2002, based on three years of monitoring data, the EPA will designate areas as non-attainment that do not meet the new PM<sub>2.5</sub> standards.<sup>3</sup>

Following the announcement of the new national standards, the SCAQMD began collecting monitoring data to determine the region's attainment status with respect to the new standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. The ambient annual PM<sub>10</sub> standard was lowered from 30 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 20  $\mu\text{g}/\text{m}^3$ . As no ambient annual state standard existed for PM<sub>2.5</sub>, a new annual standard was established at 12  $\mu\text{g}/\text{m}^3$ . A 24-hour average standard for both PM<sub>10</sub> and PM<sub>2.5</sub> was retained. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State PM<sub>10</sub> standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.<sup>4</sup> Particulate matter impacts primarily affect infants, children, the elderly and those with pre-existing cardiopulmonary disease.

### **Sulfur Dioxide and Lead**

Sulfur dioxide (SO<sub>2</sub>), often used interchangeably with sulfur oxides (SO<sub>x</sub>), and lead (Pb) levels in all areas of the Basin do not exceed Federal or State standards. The Basin is designated as attainment for both State and Federal SO<sub>2</sub> standards. There is no NAAQS for lead. The North Long Beach Station did not exceed State standards for SO<sub>x</sub> during the last five years.

## **TOXIC AIR CONTAMINANTS (TACs)**

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern in Southern California. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations, dry cleaners and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases of hazardous materials during upset conditions. Health effects of TACs include cancer, birth defects, neurological damage and death.

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<sup>3</sup> Environmental Protection Agency Website, <http://www.epa.gov/air/aqtrnd97/brochure/pm10.html>

<sup>4</sup> Staff Report: *Public Hearing to Consider Amendments to the Ambient Air Quality Standards for Particulate Matter and Sulfates*. California Environmental Protection Agency, Air Resources Board, May 3, 2002.

The SCAQMD implements TAC controls through Federal, State and local programs. Federally, TACs are regulated by EPA under Title III of the CAA. At the State level, the CARB has designated the Federal hazardous air pollutants as TACs, under the authority of AB 1807. The Air Toxic Hot Spots Information and Assessment Act (AB 2588) requires inventories and public notices for facilities that emit TAC's. Senate Bill 1731 amended AB 2588 to require facilities with "significant risks" to prepare a risk reduction plan (reflected in SCAQMD Rule 1402). SCAQMD also regulates source-specific TAC's.

Diesel exhaust is a growing concern in the Basin area and throughout California. The CARB in 1998 identified diesel engine particulate matter as a TAC. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Many of these toxic compounds adhere to the particles, and because diesel particles are very small, they penetrate deeply into the lungs. Diesel engine particulate matter has been identified as a human carcinogen. Mobile sources (including trucks, buses, automobiles, trains, ships and farm equipment) are by far the largest source of diesel emissions. Studies show that diesel particulate matter concentrations are much higher near heavily traveled highways and intersections. The cancer risk from exposure to diesel exhaust may be much higher than the risk associated with any other toxic air pollutant routinely measures in the region.<sup>5</sup>

Prior to the listing of diesel exhaust as a TAC, California had already adopted various regulations that would reduce diesel emissions. These regulations include new standards for diesel fuel, emission standards for new diesel trucks, buses, autos, utility equipment and inspection and maintenance requirements for health duty vehicles. Following the listing of diesel engine particulate matter as a TAC, the ARB has been evaluating what additional regulatory action is needed to reduce public exposure. The ARB does not plan on banning diesel fuel or engines. The ARB may consider additional requirements for diesel fuel and engines, however, as well as other measures to reduce public exposure.

Other air quality issues of concern in the Basin include nuisance impacts of odors and dust. Objectionable odors may be associated with a variety of pollutants. Common sources of odors include wastewater treatment plants, landfills, composting facilities, refineries and chemical plants. Similarly, nuisance dust may be generated by a variety of sources including quarries, agriculture, grading and construction. Odors rarely have direct health impacts, but they can be unpleasant and can lead to anger and concern over possible health effects among the public. Each year, the SCAQMD receives thousands of citizen complaints about objectionable odors. Dust emissions can contribute to increased ambient concentrations of PM<sub>10</sub>, particularly when dust settles on roadways where it can be pulverized and re-suspended by traffic. Dust emissions also contribute to reduced visibility and soiling of exposed surfaces.

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<sup>5</sup> BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans, Bay Area Air Quality Management District, Revised December 1999, page 6.

## SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than are the general population. Sensitive populations (sensitive receptors) who are in proximity to localized sources of toxics and carbon monoxide are of particular concern. Land uses considered sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent center and retirement homes.

The ABC Unified District serves the City of Cerritos. Within the city boundaries are nine elementary schools, two junior high schools, four high schools, one community college and several private schools. In addition, there are approximately sixteen pre-kindergarten facilities. Within the City's boundary, there are two senior housing projects, a senior center and an assisted living development. These existing sensitive receptors are located throughout the city.

### 4.5.2 STANDARDS OF SIGNIFICANCE

#### SIGNIFICANCE CRITERIA

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. An EIR is required to focus on these effects and offer mitigation measures to reduce or avoid any significant impacts that are identified. The criteria, or standards, used to determine the significance of impacts may vary depending on the nature of the project. Air quality impacts resulting from the implementation of the proposed General Plan Update could be considered significant if they cause any of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Exposes sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people (refer to Section 7.0, *Effects Found Not To Be Significant*).

Based on these standards, the effects of the proposed Update have been categorized as either a "less than significant" or a "potentially significant impact." Mitigation

measures are recommended for a potentially significant impact. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant and unavoidable impact.

### 4.5.3 IMPACTS AND MITIGATION MEASURES

#### CONSTRUCTION EMISSIONS

- CITYWIDE CONSTRUCTION ACTIVITY UNDER THE PROPOSED GENERAL PLAN UPDATE MAY RESULT IN A CUMULATIVELY CONSIDERABLE INCREASE OF CRITERIA POLLUTANTS, AND THUS MAY VIOLATE AIR QUALITY STANDARDS.

**Level of Significance Before Policies/Mitigation:** Potentially Significant Impact.

**Impact Analysis:** Short-term impacts to air quality would occur during the grading and construction activities associated with implementation of the General Plan, primarily construction associated with new development or redevelopment and related infrastructure. These temporary impacts would include:

- ❑ Particulate (fugitive dust) emissions from demolition, clearing and grading activities;
- ❑ Off-site air pollutant emissions at the power plant serving the construction site, while temporary power lines are needed to operate construction equipment and provide lighting;
- ❑ Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site;
- ❑ Exhaust emissions from the motor vehicles of the construction crew; and
- ❑ Potential release of asbestos from building demolition.

The SCAQMD *CEQA Air Quality Handbook* establishes thresholds for pollutant emissions generated during construction. Each construction project that would occur with buildout of the proposed General Plan Update would be required to implement control measures during construction activities in order to reduce the amount of emissions to below the significance thresholds, when possible. As previously stated, the Los Angeles County portion of the Basin is designated non-attainment for O<sub>3</sub> (State and Federal standards), CO (State and Federal standards) and PM<sub>10</sub> (State and Federal standards). Any increase in these pollutants would create a significant and unavoidable air quality impact.

The proposed General Plan Update includes Air Quality and Circulation Elements. The intent of the Air Quality Element is to protect the public's health and welfare by

implementing measures that allow the South Coast Air Basin to attain Federal and State air quality standards. The intent of the Circulation Element is to document the methods and results of the analysis of the existing and projected future conditions in the City of Cerritos, and to describe the future circulation system needed to support the Land Use Element. Relevant goals and policies within these elements address such construction-related impacts as disruption, regulatory compliance with appropriate air resource agencies, odor/dust control and hazardous emissions.

**Policies in the Proposed General Plan Update:** The Air Quality and Circulation Elements include the following policies:

- AQ-1.1 Cooperate with the South Coast Air Quality Management District, Gateway Cities Council of Governments and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.
- AQ-1.2 Cooperate and participate in regional air quality management plans, programs and enforcement measures.
- AQ-1.3 Reduce air pollutant emissions by mitigating air quality impacts associated with development project to the greatest extent feasible.
- AQ-1.4 Through the City's development review processes, monitor air pollutant emissions by mitigating air quality impacts, to the greatest extent feasible, associated with industrial and commercial uses within the City's jurisdiction.
- AQ-3.1 Adopt incentives, regulations, and/or procedures to minimize particulate emissions from grading operations and building construction.
- CIR-1.4 Evaluate the City's truck routes to ensure that movement of truck traffic is accommodated by and confined to the designated streets to the greatest extent possible.

**Mitigation Measures:** No mitigation measures beyond the policies identified in the proposed General Plan Update or SCAQMD regulations are available to reduce this impact to a less than significant level.

**Level of Significance After Policies/Mitigation:** Significant and Unavoidable Impact.

## VEHICLE MILES TRAVELED AND STATIONARY SOURCE EMISSIONS

- BUILDOUT UNDER THE PROPOSED GENERAL PLAN UPDATE MAY RESULT IN AN OVERALL INCREASE IN MOBILE AND STATIONARY SOURCE EMISSIONS WITHIN THE CITY WHICH MAY EXCEED SCAQMD AIR QUALITY STANDARDS.

**Level of Significance Before Policies/Mitigation:** Potentially Significant Impact.

**Impact Analysis:** Upon buildout, the proposed General Plan Update would permit a maximum of 179 additional dwelling units and 2,427,763 additional square feet of non-residential uses beyond 2001 conditions throughout the City. Ultimately, the proposed General Plan Update would result in a total of 15,871 residential units and 22,793,985 square feet of non-residential uses.

Projected population increases in the City associated with buildout of the proposed General Plan Update would result in a corresponding increase in the number of automobiles and vehicular pollutants. The primary method of reducing pollutants that result either directly or indirectly from vehicular exhaust (including ozone), is to reduce both the number of vehicular trips and the miles traveled each day by local workers and residents. A large fraction of the remaining stationary pollutants (from electricity and gas consumption) can be reduced through energy conservation. In order to minimize the number of vehicle miles traveled (VMT), land uses could encourage the location of jobs, housing, and shopping areas in such a way as to minimize extra automobile trips. Reductions in vehicular trips as well as vehicular miles can be accomplished over time through the application of wise, long-range planning of land uses that provide comprehensive support for residents and workers, such as shopping and employment.

**Mobile Sources.** Table 4.5-2, *Mobile Source Emissions*, cites the amount of mobile source emissions expected at buildout under the proposed General Plan Update. Mobile source emissions are the major source of air pollution in the City of Cerritos. At the source level (a single vehicle), mobile source emissions are expected to decrease during the next 20 years due to technological improvements to engine emission systems, alternative fuels and propulsion systems.

Additionally, Transportation Demand Management (TDM) would play an increasingly important role. However, with implementation of appropriate policies and technological improvements during the next 20 years, mobile source emissions are still anticipated to increase, mainly due to the increase in population.

**Table 4.5-2  
Mobile Source Air Emissions**

Project	Pollutant (Pounds/Day)			
	ROG	NOx	CO	PM <sub>10</sub>
(unmitigated) • Vehicle Emissions <sup>1</sup>	1,137.0	1,627.9	13,053.0	3,032.0
ROG = reactive organic gases CO = carbon monoxide	NOx = nitrogen oxides PM <sub>10</sub> = fine particulate matter			
NOTE: 1 – Based on UREBMIS 2001 modeling results, worst-case seasonal emissions for area and mobile emissions, and trip rate data provided in the Project Traffic Study.				

**Area Sources.** Table 4.5-3, *Stationary Source Emissions*, cites the amount of stationary source emissions that are anticipated to result from the increased development under the proposed General Plan Update. Stationary source emissions would be generated due to an increased demand for electrical energy, which is generated from power plants utilizing fossil fuels. Electric power generating plants are distributed throughout the Basin, and their emissions contribute to the total regional pollutant burden. The primary use of natural gas by the land uses throughout the City would be for combustion to produce space heating, water heating and other miscellaneous heating or air conditioning.

**Table 4.5-3  
Area Source Air Emissions**

Project	Pollutant (Pounds/Day)			
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>
(unmitigated) • Area Source Emissions <sup>1</sup>	806.8	659.9	203.4	10.7
ROG = reactive organic gases CO = carbon monoxide	NO <sub>x</sub> = nitrogen oxides PM <sub>10</sub> = fine particulate matter			
NOTE: 1 – Area Source emissions excludes the use of fireplaces and wood burning stoves.				

Air quality impacts would be regional and not confined to the Cerritos city limits. The destination of motor vehicles, which are the primary contributors to air pollution, vary widely and cross many jurisdictional boundaries. Future site-specific development proposals would be evaluated for potential air emissions once development details have been designed and are available. Individual projects may not result in significant air quality emissions, although Citywide buildout under the proposed General Plan Update would result in a significant cumulative air quality impact as explained below.

**Combined Operational Emissions.** Table 4.5-4, *Combined Operational Air Emissions*, cites the cumulative air pollution impacts from implementation of the proposed General Plan Update. The combined emissions are considered significant because they would generate emissions of O<sub>3</sub> (made up by ROG and NO<sub>x</sub>), CO and PM<sub>10</sub> within an area designated as non-attainment for these pollutants. Policies proposed in the General Plan Update would reduce the significance of such impacts; however, the impacts would remain significant on a cumulative level even after mitigation.

The proposed Air Quality, Land Use and Circulation Elements include goals and policies intended to minimize mobile and stationary source impacts. Goals and policies within the Air Quality Element encourage pedestrian traffic, alternate forms of transportation and incentive programs. The Land Use Element includes goals and policies that are aimed at reducing the amount of vehicular traffic and ensuring the compatible placement of land uses. The Circulation Element includes goals and policies to reduce trip time requirements and establish alternative transportation methods and systems.

**Table 4.5-4  
Combined Operational Air Emissions**

Project	Pollutant (Pounds/Day)			
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>
(unmitigated)				
• Area Source Emissions <sup>2</sup>	806.8	659.9	203.4	10.7
• Vehicle Emissions	1,137.0	1,627.9	13,053.0	3,032.0
Total Unmitigated Emissions	1,943.8	2,287.8	13,256.4	3,042.7
SCAQMD Threshold	55	55	550	150
Is Threshold Exceeded? (Significant Impact?)	Yes	Yes	Yes	Yes
ROG = reactive organic gases                      NO <sub>x</sub> = nitrogen oxides CO = carbon monoxide                                  PM <sub>10</sub> = fine particulate matter				
NOTE: 1 – Based on UREBMIS 2001 modeling results, worst-case seasonal emissions for area and mobile emissions, and trip rate data provided in the Project Traffic Study. 2 – Area Source emissions excludes the use of fireplaces and wood burning stoves.				

**Policies in the Proposed General Plan Update:** The Air Quality, Land Use and Circulation Elements include the following policies:

Mobile Emission Reduction

- AQ-1.1 Cooperate with the South Coast Air Quality Management District, Gateway Cities Council of Governments and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.
- AQ-1.2 Cooperate and participate in regional air quality management plans, programs and enforcement measures.
- AQ-1.3 Reduce air pollutant emissions by mitigating air quality impacts associated with development project to the greatest extent feasible.
- AQ-1.6 Support the Gateway Cities Council of Government's legislative efforts to address emission impacts resulting from the movement of goods within and through the Los Angeles Basin.
- AQ-2.1 Promote and encourage ride sharing activities, including such programs as preferential parking and park-and-ride lots on privately owned property within the community.
- AQ-2.2 Encourage employer rideshare and transit incentives programs by local businesses within the community.

- AQ-2.3      Encourage businesses to alter truck delivery routes and local delivery schedules during peak hours, or switch to off-peak delivery hours.
- AQ-2.4      Promote state and federal legislation that would improve vehicle/ transportation technology and cleaner fuels.
- CIR-1.1      Use the Circulation Element to guide detailed planning and implementation of the City's roadway system.
- CIR-1.3      Provide adequate capacity on the Major Arterials to encourage through traffic to stay on the Major Arterial street system, and to discourage diversion onto the secondary and residential street system.
- CIR-1.4      Evaluate the City's truck routes to ensure that movement of truck traffic is accommodated by and confined to the designated streets to the greatest extent possible.
- CIR-1.5      Implement traffic signal coordination to enhance traffic flow, and reduce delay at signalized intersections. Coordinate with neighboring cities and Caltrans, as needed.
- CIR-1.6      Where deemed necessary, upgrade major arterial facilities to accommodate regional traffic demand, improve access to and from freeway ramp facilities, and to facilitate truck movements.
- CIR-2.2      Make arterial or intersection improvements where necessary to accommodate traffic demand that would otherwise divert to secondary and local streets.
- CIR-3.1      Review vicinity of circulation plans of commercial development to minimize conflicts with residential neighborhoods.
- CIR-3.2      Develop mechanisms to periodically monitor local traffic at the neighborhood level.
- CIR-3.4      On an as-needed basis for identified problem areas, test and evaluate traffic calming solutions on neighborhood streets, such as curb lane striping, traffic diverters and street closures.
- CIR-3.5      Continue to implement arterial improvements to draw traffic off of local streets.
- CIR-4.2      Evaluate and upgrade sub-standard intersections or roadway segments.
- CIR-4.6      Update and enforce a defensible city-wide speed limit program.

C E R R I T O S   G E N E R A L   P L A N   E I R

- CIR-5.1 Identify and address bicycle and pedestrian safety hazards, including mid-block crossings, missing or deficient sidewalks or bike lanes and unsafe intersections.
- CIR-6.1 Implement land use and employment strategies to reduce the need for travel.
- CIR-6.2 Promote ridesharing through publicity and provision of information to the public.
- CIR-6.3 Require new development to incorporate design features which facilitate transit service and encourage transit ridership such as bus stop facilities, and efficient pedestrian paths through projects to transit stops.
- CIR-6.4 Require mixed-use projects to provide an internal system of pedestrian and bicycle amenities, linking site uses and providing linkages to surrounding uses.
- CIR-6.5 Encourage a mix of uses within a project designed to maximize internal trip making, maximize the use of parking facilities and to promote a shift from auto use to pedestrian and bicycle modes of travel.
- CIR-6.6 Encourage the provision of additional regional public transportation services and support facilities, including park-and-ride lots near the freeway interchanges and within village centers.
- CIR-6.7 Investigate and encourage innovative transportation solutions to serve the community and/or the region.
- CIR-7.1 Require proper spacing and interconnect traffic signals where feasible to maximize the smooth progression of traffic flows and to minimize delay and stop and go conditions.
- CIR-7.2 Implement time-of-day signal timing plans to be responsive to varying traffic patterns at different times of the day.
- CIR-7.4 Evaluate the use of protected-permissive left-turn phasing at appropriate intersections, to reduce vehicle delay during off-peak periods.
- CIR-8.1 Promote an increase in bus services offered, and a reduction in wait times within City limits.
- CIR-8.2 Promote an increase in the use of public transit and para-transit services.

- CIR-8.3      Provide adequate lane width and capacity, and reduce travel time on streets utilized by fixed-route transit.
- CIR-8.4      Review new developments to include accommodations for Transportation Demand Management (TDM) programs, including public transportation and parking management.
- CIR-8.5      Integrate transit routes and stops into highway, pedestrian and bicycle circulation network.
- CIR-8.6      Participate in local and regional transit system/commuter-rail/transportation demand management planning and implementation activities to improve connections between the systems and ease of use of systems (i.e., reduced waiting times).
- CIR-8.7      Encourage the construction of improved bus stops, as appropriate.
- LU-1.5      Achieve compliance with City ordinances and regulations through education, incentive and other proactive measures, in addition to issuing citations, collecting fines or other punitive measures.
- LU-7.1      Ensure that infill projects contribute to the further development of the surrounding neighborhood (e.g., improve circulation, contribute to or provide neighborhood unity, eliminate a blighted area and enhance the existing quality of life).
- LU-9.5      Develop and implement appropriate traffic controls to protect residential neighborhoods from the impacts of through traffic, such as safety hazards, speeding, noise and other disturbances.

Area Source Emission Reduction

- AQ-1.1      Cooperate with the South Coast Air Quality Management District, Gateway Cities Council of Governments and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.
- AQ-1.2      Cooperate and participate in regional air quality management plans, programs and enforcement measures.
- AQ-1.3      Reduce air pollutant emissions by mitigating air quality impacts associated with development project to the greatest extent feasible.
- AQ-1.4      Through the City's development review processes, monitor air pollutant emissions by mitigating air quality impacts, to the greatest extent feasible, associated with industrial and commercial uses within the City's jurisdiction.

- AQ-1.5 Continue to work with local industries and regulatory agencies to monitor, regulate and provide a quick response and communication with the community in the event of an emergency impacting air quality.
- AQ-3.1 Adopt incentives, regulations, and/or procedures to minimize particulate emissions from grading operations and building construction.
- AQ-3.2 Promote the landscaping and screening of undeveloped and/or underutilized parcels of land to prevent erosion and dust generation.
- AQ-4.1 Promote energy conservation in all sectors of the City including residential, commercial and industrial.
- AQ-4.2 Promote local recycling of wastes and the use of recycled materials.
- AQ-4.3 Adopt incentives and regulations to reduce emissions from swimming pool heaters and residential and commercial water heaters.
- LU-1.1 Encourage high-quality design and construction for development that is a positive addition to and compatible with the City's existing ambiance. Development shall enhance the character and unique identity of existing commercial, industrial and/or residential uses. Development shall be defined to include landscaping, parking, lighting, business identification signs and buildings.
- LU-1.2 Encourage developers to engage in early discussions with the City regarding the design, nature and scope of the project and possible impacts and mitigation requirements. These discussions should occur as early as possible in the project planning stage, preferably preceding land acquisition.
- LU-2.1 Achieve a land use balance through the following methods:
- Provision of incentives for desired commercial and industrial uses;
  - Coordination of land use and circulation patterns to ensure proper circulation capacity and infrastructure;
  - Promotion of a variety of housing types and affordability to meet the development goals of the Housing Element; and
  - Provision of needed housing opportunities to support employment growth.
- LU-2.5 Evaluation of land use intensities in conjunction with the review of any zone change and/or General Plan Amendment to permit density or modify intensity. Factors to be considered include, but are not limited to, the maximum intensity allowed for the applicable land use

designation in the General Plan, circulation patterns, environmental constraints and compatibility with surrounding land uses.

- LU-4.2      Ensure that the siting of any land use that handles, generates and/or transports hazardous substances, as defined by state and federal regulations, will not negatively impact existing sensitive receptors/land uses.
  
- LU-4.3      Coordinate with adjacent landowners, cities and counties in developing compatible land uses for areas adjacent to the City's boundaries.
  
- LU-7.1      Ensure that infill projects contribute to the further development of the surrounding neighborhood (e.g., improve circulation, contribute to or provide neighborhood unity, eliminate a blighted area and enhance the existing quality of life).
  
- LU-7.2      Design infill projects in context with adjacent neighborhood and surrounding uses. The design should consider the existing scale and character of surrounding structures, and should blend rather than compete with the established character of the area.
  
- LU-9.1      Protect residential areas from the effects of potentially incompatible uses. Where new commercial or industrial development is allowed adjacent to residentially zoned districts, maintain standards for circulation, setbacks, buffer areas, landscaping and architecture, which ensure compatibility between the uses.
  
- LU-9.6      Allow development only with adequate physical infrastructure (e.g., transportation, sewers, utilities, etc.) and social services (e.g., education, public safety, etc.).
  
- LU-10.2     Discourage the construction of new housing at substantially lower densities than the maximum permitted by the General Plan, particularly on sites designated for medium density housing.
  
- LU-12.1     Balance size and number of units to achieve appropriate (limit) intensity.
  
- LU-13.1     Review all development applications in light of the overall mass and scale of the intensity.

**Mitigation Measures:** No mitigation measures beyond the policies identified in the proposed General Plan Update and SCAQMD regulations are available to reduce this impact to a less than significant level.

**Level of Significance After Policies/Mitigation:** Significant and Unavoidable Impact.

## CONSISTENCY WITH REGIONAL PLANS

- BUILDOUT OF THE PROPOSED GENERAL PLAN UPDATE MAY CONFLICT OR OBSTRUCT IMPLEMENTATION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENT'S REGIONAL COMPREHENSIVE PLAN GUIDELINES (RCP) AND THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT'S AIR QUALITY MANAGEMENT PLAN (AQMP).

**Level of Significance Before Policies/Mitigation:** Potentially Significant Impact.

**Impact Analysis:** The SCAG and SCAQMD actively pursue procedural and structural methods of minimizing air pollutant emissions. Although air quality is not SCAG's primary focus, SCAG publishes a document titled *Regional Comprehensive Plan and Guide* (RCP), which sets forth criteria for lowering regional pollutant emissions. The RCP is based on information that is provided by County transportation commissions, Caltrans, the Metropolitan Water District, the California Energy Commission, the Bureau of Land Management of the Department of Interior, South Coast Air Quality Management District and other parties both public and private. Information in the RCP related to air quality is found within the Growth Management, Regional Mobility, Air Quality and Energy chapters.

The proposed General Plan Update is consistent with the portions of the RCP that cite the necessity to facilitate programs that reduce vehicular miles traveled (VMT) and vehicular emissions. The RCP cites, "SCAG shall encourage existing or proposed local jurisdictions programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle mile traveled, and create opportunities for residents to walk and bike." The proposed General Plan Update is consistent with this as shown in the previous impact discussion. The proposed General Plan Update is also consistent with the RCP policies that cite the necessity to develop or redevelop areas in a manner that discourages additional vehicular traffic.

Different from SCAG, the SCAQMD's sole interest is the preservation and improvement of air resources in the South Coast Air Basin. The SCAQMD publishes a document entitled the *Air Quality Management Plan* (AQMP), which specifies various criteria for air quality management within the South Coast Air Basin (including the City of Cerritos). Issues and requirements within the AQMP are similar to those found in the RCP (the RCP incorporates much of the AQMP in its text). Both documents place heavy reliance on local implementation measures, such as land use decisions and local employment transportation programs. The implementation process stresses the freedom of cities to choose attainment measures that best suit local conditions. Land use strategies contained in the RCP help achieve a jobs/housing balance.

Based on the fact that the City is actively pursuing and implementing programs that reduce air pollutant emissions, the proposed General Plan Update is consistent with the RCP and AQMP, and thus, constitutes a less than significant impact.

Goals and policies within the Air Quality Element encourage cooperation with the South Coast Air Quality Management District and Southern California Association of Governments. The Circulation Element encourages cooperation with County and regional agencies through participation in various transportation programs. Based on the fact that air quality is closely related to transportation, implementation of these policies would set the foundation for emission reduction.

**Policies in the Proposed General Plan Update:** The Air Quality and Circulation Elements include the following policies:

- AQ-1.1      Cooperate with the South Coast Air Quality Management District, Gateway Cities Council of Governments and the Southern California Association of Governments in their effort to implement provisions of the region's Air Quality Management Plan, as amended.
- AQ-1.2      Cooperate and participate in regional air quality management plans, programs and enforcement measures.
- AQ-1.3      Reduce air pollutant emissions by mitigating air quality impacts associated with development project to the greatest extent feasible.
- AQ-1.4      Through the City's development review processes, monitor air pollutant emissions by mitigating air quality impacts, to the greatest extent feasible, associated with industrial and commercial uses within the City's jurisdiction.
- AQ-1.5      Continue to work with local industries and regulatory agencies to monitor, regulate and provide a quick response and communication with the community in the event of an emergency impacting air quality.
- AQ-1.6      Support the Gateway Cities Council of Government's legislative efforts to address emission impacts resulting from the movement of goods within and through the Los Angeles Basin.
- AQ-2.4      Promote state and federal legislation that would improve vehicle/ transportation technology and cleaner fuels.
- CIR-1.1      Use the Circulation Element to guide detailed planning and implementation of the City's roadway system.
- CIR-1.2      Adopt street cross-section standards and ensure all new and upgraded roadway facilities are constructed or upgraded to meet City standards, where feasible.

- CIR-1.3     Provide adequate capacity on the Major Arterials to encourage through traffic to stay on the Major Arterial street system, and to discourage diversion onto the secondary and residential street system.
- CIR-3.3     Encourage citizen notification of areas with through-traffic problems. Implement and evaluate turn restrictions or other measures to reduce or discourage problematic traffic movements or patterns.
- CIR-3.6     Consider implementing a formalized local street protection program with specific petition, review, ranking and test installation procedures.

**Mitigation Measures:** No mitigation measures beyond the policies identified in the proposed General Plan Update are required.

**Level of Significance After Policies/Mitigation:** Less Than Significant Impact.

#### 4.5.4     UNAVOIDABLE SIGNIFICANT IMPACTS

Development under the proposed General Plan Update would create unavoidable significant impacts related to construction, mobile sources and stationary sources. These impacts are primarily based on the premise that the City and pollutant sources within are widely dispersed and numerous. Although measures related to construction and stationary sources would be implemented on a project-by-project basis, and vehicular emission reducing programs would be implemented Citywide, it is anticipated that these impacts would remain significant and unavoidable. All other impacts for air quality would be less than significant by adherence to/compliance with the policies in the proposed General Plan Update.

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