5.4 AIR QUALITY

Information in this section is based primarily upon the CEQA Air Quality Handbook, (South Coast Air Quality Management District [SCAQMD]), Air Quality Data (California Air Resources Board [CARB], 2000 through 2004), the City of Huntington Beach General Plan (1996) and General Plan Environmental Impact Report (1995) and the SCAQMD Final Air Quality Management Plan (August 2003). This section focuses on potential long-term local and regional air quality impacts associated with the proposed desalination project. Section 5.9, CONSTRUCTION RELATED IMPACTS, analyzes potential short-term air quality impacts associated with construction activity for the proposed project.

***Note:** Potential air quality impacts of the proposed project have remained consistent with those described in the previously circulated EIR (2002). However, due to changes in regulatory standards since 2002, information has been added to this section to better describe the regulatory framework in the State and air basin, as well as additional impact analysis to demonstrate compliance with existing requirements.*

EXISTING CONDITIONS

The proposed project is located within the South Coast Air Basin (SCAB). The SCAB is characterized as having a "Mediterranean" climate (a semi-arid environment with mild winters, warm summers and moderate rainfall). The SCAB is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. Additionally, the SCAQMD jurisdiction includes the San Gorgonio Pass area of Riverside County.

The general region lies in the semi-permanent, high-pressure zone of the eastern Pacific. As a result, the climate is mild and 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 SCAB 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 SCAB.

CLIMATE

Moderate temperatures, comfortable humidity and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the SCAB, averaging 75 degrees Fahrenheit. However, with a less pronounced oceanic influence, the eastern inland portions of the SCAB show greater variability in annual minimum and maximum temperatures. All portions of the SCAB 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 SCAB 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 air is brought into the SCAB 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 SCAB. Precipitation in the SCAB is typically 9 to 14 inches annually 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 SCAB. More specifically, the City of Huntington Beach enjoys a mild climate. The greatest precipitation in the City occurs in January with a rainfall of 3.0 inches. The coolest

month of the year is December with an average low of 40°F. The warmest month is August with an average high of 85°F.[1]

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. Due to the prevailing daytime winds and time-delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

TEMPERATURE INVERSIONS

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air would be mixed and dispersed into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in the southland. The cool, damp and hazy sea air capped by coastal clouds is heavier than the warm, clear air that acts as a lid through which the marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The SCAB has a limited ability to disperse these pollutants due to typically low wind speeds.

The area in which the City of Huntington Beach is located offers clear skies and sunshine, however, it is still susceptible to air inversions. This traps a layer of stagnant air near the ground where it is further loaded with pollutants. These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces and other sources.

GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gasses emitting over 400 million tons of CO_2 a year. Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century.[2] Methane is also an important greenhouse gas that potentially contributes to global climate change. Greenhouse gases are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. Because primary greenhouse gases have a long lifetime in the atmosphere, accumulate over time, and are generally well mixed; their impact on the atmosphere is mostly independent of the point of emission.

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1 Weather Channel, www.weather.com, November 11, 2004.
2 Union of Concerned Scientists and the Ecological Society of America, *Confronting Climate Change in California*, 1999.

In 1988, the United Nations established the Intergovernmental Panel on Climate Change to evaluate the impacts of global warming and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change agreement with the goal of controlling greenhouse gas emissions, including methane. As a result, the Climate Change Action Plan was developed to address the reduction of greenhouse gases in the United States. The plan consists of more than 50 voluntary programs. Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere (i.e. chlorofluorocarbons [CFCs], halons, carbon tetrachloride, and methyl chloroform) were to be phased out by 2000.[3]

SENSITIVE RECEPTORS

Sensitive populations (sensitive receptors) are more susceptible to the effects of air pollution than the general population. Sensitive populations who are in proximity to localized sources of toxins and CO 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 centers, and retirement homes. Existing sensitive receptors are not located within the proposed desalination facility site; however, residential, recreational, and educational uses exist within the vicinity of the project site, and adjacent to the proposed pipeline routes and underground pump stations. It should be noted that an animal shelter and the Wildlife Care Center of Orange County are situated near the project site (along the northern side of Edison Avenue and the northern side of Pacific Coast Highway, respectively), but are not considered sensitive receptors.[4]

LAWS, ORDINANCES, REGULATIONS AND STANDARDS

Regulatory oversight for air quality in the SCAB rests at the regional level with the South Coast Air Quality Management District (SCAQMD), the California Air Resources Board (CARB) at the State level, and the U.S. Environmental Protection Agency (EPA) Region IX office at the Federal level. Laws, ordinances, regulations, and standards applicable to these three agencies are described below.

U.S. ENVIRONMENTAL PROTECTION AGENCY

The principal air quality regulatory mechanism on the federal level is the Federal Clean Air Act (FCAA) and in particular the 1990 amendments to the Federal Clean Air Act (FCAAA) and the National Ambient Air Quality Standards (NAAQS) that it establishes. These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2 is a form of NO_X), sulfur oxides (SO_2 is a form of SO_X), particulate matter less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively) and lead (Pb) (refer to Table 5.4-1, *NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS)*. The EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the Federal government, such as aircraft, locomotives, and interstate trucking.

[3] Methyl chloroform is not slated to be phased out until 2005.

Table 5.4-1
NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards [1]	Federal Standards[2]	
		Concentration [3]	Primary [3, 4]	Secondary [3, 5]
Ozone (O_3)	1 Hour	0.09 ppm (180 μg/m)	0.12 ppm (235 μg/m^3)	0.12 ppm (235 μg/m^3)
	8 Hour	N/A	0.08 ppm (157 μg/m^3)	0.08 ppm (157 μg/m^3)
Particulate Matter (PM_{10})	24 Hour	50 μg/m^3	150 μg/m^3	150 μg/m^3
	Annual Arithmetic Mean	20 μg/m^3	50 μg/m^3	50 μg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard	65 μg/m^3	65 μg/m^3
	Annual Arithmetic Mean	12 μg/m^3	15 μg/m^3	15 μg/m^3
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)
	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	35 ppm (40 mg/m^3)
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	N/A	0.053 ppm (100 μg/m^3)	0.053 ppm (100 μg/m^3)
	1 Hour	0.25 ppm (470 μg/m^3)	N/A	N/A
Lead	30 days average	1.5 μg/m^3	N/A	N/A
	Calendar Quarter	N/A	1.5 μg/m^3	1.5 μg/m^3
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	N/A	0.030 ppm (80 μg/m^3)	N/A
	24 Hour	0.04 ppm (105 μg/m^3)	0.14 ppm (365 μg/m^3)	N/A
	3 Hour	N/A	N/A	0.5 ppm (1300 μg/m^3)
	1 Hour	0.25 ppm (655 μg/m^3)	N/A	N/A
Visibility Reducing Particles	8 Hour (10 am to 6 pm, PST)	Extinction Coeff. = 0.23 km@<70% RH	**No Federal Standards**	
Sulfates	24 Hour	25 μg/m3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m3)		

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter-PM_{10}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In 1990, the CARB identified vinyl chloride as a Toxic Air Contaminant and determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. EPA also may designate an area as *attainment/unclassifiable*, if it has: 1) monitored air quality data that show that an area has not violated the ozone standard over a three-year period; or if 2) there is not enough information to determine the air quality in the area. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over the three years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
5. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
6. N/A = Not Applicable

Source: California Air Resources Board, November 2004.

CALIFORNIA AIR RESOURCES BOARD

The California Air Resources Board, (CARB), a department of the California Environmental Protection Agency (CalEPA), oversees air quality planning and control throughout California. Its responsibility lies with ensuring implementation of the 1989 amendments to the California Clean Air

[4] Mike Krause, South Coast Air Quality Management District, May 8, 2002.

Act (CCAA), responding to the FCAA requirements and regulating emissions from motor vehicles sold in California. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish California Ambient Air Quality Standards (CAAQS), and a legal mandate to achieve these standards by the earliest practicable date. These standards apply to the same criteria pollutants as the Federal CAA, and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride (refer to Table 5.4-1).

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

The SCAQMD is one out of 35 air quality management districts that have prepared Air Quality Management Plans (AQMPs) to accomplish a five percent annual reduction in emissions. The most recent AQMP was adopted in 2003. The 2003 AQMP relies on a multi-level partnership of governmental agencies at the federal, state, regional and local level. The 2003 AQMP proposes policies and measures to achieve federal and state standards for improved air quality in the SCAB and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under SCAQMD jurisdiction.

The 2003 AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone State Implementation Plan (SIP) for the SCAB for the attainment of the federal ozone air quality standard. However, the 2003 AQMP points to the urgent need for additional emission reductions (beyond those incorporated in the 1997/99 Plan) to offset increased emission estimates from mobile sources and meet all federal criteria pollutant standards within the time frames allowed under the FCAA.

SCAG is responsible under the FCAA for determining conformity of projects, plans and programs with the SCAQMD AQMP. As indicated in the SCAQMD *CEQA Air Quality Handbook*, there are two main indicators of consistency:

- Whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and
- Whether the project would exceed the AQMP's assumptions for 2020 or increments based on the year of project build-out and phase.

Applicable Rules and Regulations

The following rules and regulations listed in Table 5.4-2, *SCAQMD RULES AND REGULATIONS*, would be applicable to the proposed project:[5]

[5] Telephone Conversation with Charles Blankson, South Coast Air Quality Management District, November 23, 2004.

Table 5.4-2
SCAQMD RULES AND REGULATIONS

Rules/Regulations	Description
Regulation IX – Standards for Performance for New Stationary Sources (NSPS)	Regulation IX incorporates, by reference, the provisions of Part 60, Chapter 1, Title 40 of the Code of Federal Regulations. It requires compliance with federal Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
Regulation XIII – New Source Review	This regulation sets pre-construction review requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities does not interfere with progress in attainment of the national ambient air quality standards, and that future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal of this regulation is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors. In addition to nonattainment air contaminants, this regulation will also limit emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).
Regulation XIV, Rule – Toxics and Other Non-Criteria Pollutants	Regulation XIV includes rules that regulate Toxics and other Non-Criteria Pollutants. It provides specifications for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants. The rules establish allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.
Regulation XX – Regional Clean Air Incentive Market (RECLAIM)	RECLAIM is a market incentive program designed to allow facilities flexibility in achieving emission reduction requirements for Oxides of Nitrogen (NOx), and Oxides of Sulfur (SOx) under the Air Quality Management Plan using methods which include, but are not limited to: add-on controls, equipment modifications, reformulated products, operational changes, shutdowns, and the purchase of excess emission reductions.
Rule 201 – Permit to Construction	Rule 201 establishes an orderly procedure for the review of new and modified sources of air pollution through the issuance of permits. Rule 201 specifies that any facility installing nonexempt equipment that causes or controls the emissions of air pollutant must first obtain a permit to construct from the SCAQMD.
Rule 401 – Visible Emissions	Establishes limit for visible emissions from stationary sources. This rule prohibits visible emissions as dark or darker than Ringlemann No.1 for periods greater than three minutes in any hour.
Rule 402 – Nuisance	Prohibits the discharge from a facility of air pollutants that cause injury, detriment, nuisance, or annoyance to the public or that damage business or property.
Source: South Coast Air Quality Management District, www.aqmd.gov, November 30, 2004. Note that Regulation XIV, Rule 201, Rule 401 and Rule 402 also apply to construction emissions.	

ATTAINMENT STATUS

The SCAB has been designated as attainment for nitrogen dioxide (NO_x) and sulfur oxides (SO_x) for both State and Federal Standards. The SCAB is designated non-attainment for ozone (O_3) and

particulate matter (PM_{10}) under both Federal and State standards (refer to Table 5.4-3, *SOUTH COAST AIR BASIN AMBIENT AIR QUALITY CLASSIFICATIONS*).

Table 5.4-3
SOUTH COAST AIR BASIN AMBIENT AIR QUALITY CLASSIFICATIONS

Pollutant	State	Federal
Carbon Monoxide	Non-Attainment	Attainment
Ozone (1 hour standard)	Non-Attainment/Severe	Non-Attainment/Severe
Ozone (8 hour standard)	Unclassified	Unclassified
Nitrogen Oxides	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Particulate Matter <10 microns	Serious Non-Attainment	Serious Non-Attainment
Source: Telephone conversation with Charles Blankson, South Coast Air Quality Management District, November 2004.		

LOCAL AMBIENT AIR QUALITY

The project area's local ambient air quality is monitored by the SCAQMD and CARB. CARB monitors ambient air quality at approximately 250 air monitoring stations across the state. Air quality monitoring stations usually measure pollutant concentrations ten feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations. The Costa Mesa Monitoring Station, located along Mesa Verde Drive, is the nearest air monitoring station to the project area. The data collected at this Station are considered to be representative of the air quality experienced in the project vicinity. Air quality data from 2000 to 2004 for the Costa Mesa Monitoring Station are provided in Table 5.4-4, *LOCAL AIR QUALITY LEVELS*. As PM_{10} and $PM_{2.5}$ levels were not monitored at the Costa Mesa station, measurements were taken from the Anaheim – Harbor Boulevard and the Anaheim – Pampas Lane monitoring stations. The following air quality information briefly describes the various types of pollutants.

Ozone

Ozone occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric or "good" ozone layer extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays (UV-B).

"Bad" ozone is what is known as a photochemical pollutant, and needs VOC, NO_x, and sunlight to form. VOC and NO_x are emitted from various sources throughout the county. In order to reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors. Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While ozone in the upper atmosphere protects the earth from harmful ultraviolet radiation, high concentrations of ground level ozone can adversely affect the human respiratory system and other tissues. Many respiratory ailments, as well as cardiovascular disease, are aggravated by exposure to high ozone levels. Ozone also damages natural ecosystems such as forests and foothill communities, and damages agricultural crops and some man-made materials, such as rubber, paint, and plastics. Societal costs from ozone damage include increased medical costs, the loss of human and animal life, accelerated replacement of industrial equipment, and reduced crop yields.

The O_3 State standard is 0.09 ppm, averaged over one hour. The eight-hour O_3 levels at the Costa Mesa monitoring station range between 0.086 ppm in 2000 and 0.087 ppm in 2004. The one-hour State standard was exceeded eight days from 2000 to 2004. The Federal standard for O_3 is 0.12 ppm, averaged over one hour. The Federal standard was not exceeded between 2000 and 2004. The SCAB is designated as a nonattainment area for State and Federal O_3 standards.

Table 5.4-4
LOCAL AIR QUALITY LEVELS

Pollutant	California Standard	Federal Primary Standard	Year	Maximum Concentration[1]	Days (Samples) State/Federal Standard Exceeded
Carbon Monoxide	9.0 ppm for 8 hour	9.0 ppm for 8 hour	2000[4]	6.3	0/0
			2001[4]	4.7	0/0
			2002[4]	4.3	0/0
			2003[4]	6.0	0/0
			2004[4]	3.1	0/0
Ozone for 8 hours	0.09 ppm (1 hour)	0.12 ppm (1 hour)	2000[4]	0.086	NA1
			2001[4]	0.073	NA0
			2002[4]	0.070	NA/0
			2003[4]	0.088	NA/1
			2004[4]	0.087	NA/1
Ozone for 1 hour	NA (8 hour)	0.08 ppm (8 hour)	2000[4]	0.1	1/0
			2001[4]	0.1	1/0
			2002[4]	0.1	0/0
			2003[4]	0.1	4/0
			2004[4]	0.1	2/0
Nitrogen Dioxide	0.25 ppm for 1 hour	0.053 ppm annual average	2000[4]	0.1	0/0
			2001[4]	0.1	0/0
			2002[4]	0.1	0/0
			2003[4]	0.1	0/0
			2004[4]	0.1	0/0
PM_{10}[2,3]	50 : g/m^3 for 24 hours	150 : g/m^3 for 24 hours	2000[5]	126.0	3/0
			2001[5]	93.0	8/0
			2002[6]	69.0	5/0
			2003[6]	96.0	6/0
			2004[6]	62.0	3/0
$PM_{2.5}$[3]	No Separate State Standard	65 : g/m^3 for 24 hours	2000[5]	113.9	NA/6
			2001[5]	55.0	NA/0
			2002[5]	68.6	NA/1
			2003[5]	115.5	NA/3
			2004[5]	52.9	NA/0
Sulfur Dioxide	0.25 ppm for 1 hour	0.14 ppm for 24 hours or 0.03 ppm annual arithmetic mean	2000[4]	0.0	0/0
			2001[4]	0.0	0/0
			2002[4]	0.0	0/0
			2003[4]	0.0	0/0
			2004[4]	0.0	0/0

PPM = Parts Per Million
: g/m^3 = Micrograms Per Cubic Meter
NM = Not Measured
PM_{10} = particulate matter 10 microns in diameter or less
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
NA = Not applicable

Notes:
1. Maximum concentration is measured over the same period as the California Standards.
2. PM_{10} exceedances are based on state thresholds established prior to amendments adopted on June 20,2002.
3. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
4. The Costa Mesa monitoring station is located on 2850 Mesa Verde Dr East, Costa Mesa, California 92626.
5. The Anaheim – Harbor Boulevard monitoring station is located on 1610 S Harbor Blvd, Anaheim, California 92802
6. The Anaheim – Pampas Lane monitoring station is located in Anaheim, California.

Source: California Air Resources Board, *ADAM Air Quality Data Summaries* from 2000 to 2004 as found at http://www.arb.ca.gov/adam/

Carbon Monoxide

Carbon monoxide (CO) is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. CO is an odorless, colorless toxic gas that is formed by the incomplete combustion of fuels. In cities, automobile exhaust can cause as much as 95% of all CO emissions. At high concentrations, CO can reduce the oxygen-carrying capacity of the blood and cause headaches, dizziness, unconsciousness, and even death. It is generally associated with areas of high traffic density. State and Federal standards were not exceeded between 2000 and 2004. The SCAB is designated as an attainment area for Federal CO standards and non-attainment for State standards.

Nitrogen Dioxide

Nitrogen oxides (NO_x) are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. NO_2, often used interchangeably with NO_X, is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations) in the vicinity.

NO_x can irritate the lungs, cause lung damage, and lower resistance to respiratory infections such as influenza. The effects of short-term exposure are still unclear, but continued or frequent exposure to concentrations that are typically much higher than those normally found in the ambient air may cause increased incidence of acute respiratory illness in children. Health effects associated with NO_X are an increase in the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may lead to eye and mucus membrane aggravation, along with pulmonary dysfunction.

State and Federal standards were not exceeded between 2000 and 2004. The SCAB is designated as an attainment area for State and Federal NO_2 standards.

Particulate Matter

Particulate matter pollution consists of very small liquid and solid particles floating in the air. Some particles are large or dark enough to be seen as soot or smoke. Others are so small they can be detected only with an electron microscope. Particulate matter is a mixture of materials that can include smoke, soot, dust, salt, acids, and metals. Particulate matter also forms when gases emitted from motor vehicles and industrial sources undergo chemical reactions in the atmosphere. PM_{10} refers to particles less than or equal to 10 microns in aerodynamic diameter. $PM_{2.5}$ refers to particles less than or equal to 2.5 microns in aerodynamic diameter and are a subset, or portion of PM_{10}.

PM_{10} and $PM_{2.5}$ particles are small enough to be inhaled into, and lodge in, the deepest parts of the lung. Health problems begin as the body reacts to these foreign particles. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, coughing, bronchitis and respiratory illnesses in children. Recent mortality studies have shown a statistically significant direct association between mortality and daily concentrations of particulate matter in the air. Non health-related effects include reduced visibility and soiling of buildings.

The State standard for PM_{10} is 50 micrograms per cubic meter ($\mu g/m^3$) averaged over 24 hours. The State standard was exceeded 25 days between 2000 and 2004. The Federal standard for PM_{10} is 150 $\mu g/m^3$ averaged over 24 hours. The Federal standard for PM_{10} was not exceeded between 2000 and 2004. The SCAB is designated as a nonattainment area for State PM_{10}

standards. Based upon a desire to set clean air goals throughout the State, the CARB created a new annual average standard for $PM_{2.5}$ at 12 $\mu g/m^3$. Currently, the CARB has issued a staff report, which recommends that the SCAB be designated as nonattainment for State and Federal $PM_{2.5}$ standards.[6]

Sulfur Dioxide

Sulfur dioxide is a colorless, pungent gas belonging to the family of sulfur oxide gases (SO_X), formed primarily by combustion of sulfur-containing fossil fuels (primarily coal and oil), and during metal smelting and other industrial processes. Sulfur dioxide (SO_2) often used interchangeably with sulfur oxides (SO_X) did not exceed Federal or State standards between 2000 and 2004. The SCAB is designated as an attainment area for both State and Federal SO_2 standards.

The major health concerns associated with exposure to high concentrations of SOx include effects on breathing, respiratory illness, alterations in pulmonary defenses, and aggravation of existing cardiovascular disease. Major subgroups of the population that are most sensitive to SO_x include individuals with cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) as well as children and the elderly. Emissions of SO_x also can damage the foliage of trees and agricultural crops. Together, SO_x and NO_x are the major precursors to acid rain, which is associated with the acidification of lakes and streams, and accelerated corrosion of buildings and monuments. Sulfur oxides can react to form sulfates, which significantly reduce visibility.

Reactive Organic Gases and Volatile Organic Compounds

Hydrocarbons are organic gases that are formed solely of hydrogen and carbon. There are several subsets of organic gases including Volatile Organic Compounds (VOCs) and Reactive Organic Gases (ROGs). ROGs include all hydrocarbons except those exempted by the California Air Resources Board (CARB). Therefore, ROGs are a set of organic gases based on state rules and regulations. VOCs are similar to ROGs in that they include all organic gases except those exempted by federal law. VOCs are therefore a set of organic gases based on federal rules and regulations. Both VOCs and ROGs are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Combustion engine exhaust, oil refineries, and oil-fueled power plants are the primary sources of hydrocarbons. Another source of hydrocarbons is evaporation from petroleum fuels, solvents, dry cleaning solutions and paint.

The primary health effects of hydrocarbons result from the formation of ozone and its related health effects. High levels of hydrocarbons in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons are considered Toxic Air Contaminants, or air toxics. There are no health standards for ROG separately.

Toxic Air Contaminants

According to section 39655 of the California Health and Safety Code, a toxic air contaminant is "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health". In addition, 189 substances that have been listed as federal hazardous air pollutants (HAPs) pursuant to section 7412 of Title 42 of the United States Code are TACs under the state's air toxics program pursuant to section 39657 (b) of the California Health and Safety Code.

[6] http://www.epa.gov/pmdesignations/documents/120/table.htm, November 10, 2004.

The TACs can cause various cancers depending on the particular chemicals, type and duration of exposure. Additionally, some of the TACs may cause short-term and/or long-term health effects. The ten TACs posing the greatest health risk in California are acetaldehyde, benzene, 1-3 butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchlorethylene, and diesel particulate matter.

IMPACTS

Significance Criteria

In accordance with CEQA, the effects of a project are evaluated to determine if they would result in a significant impact on the environment. An Environmental Impact Report (EIR) is required to focus on these effects and offer mitigation measures to avoid or lesson 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 implementation of the proposed Project 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);
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

Under CEQA, the SCAQMD is an expert commenting agency on air quality and related matters within its jurisdiction or impacting its jurisdiction. Under the FCAA the SCAQMD has adopted federal attainment plans for ozone and PM_{10}. The SCAQMD reviews projects to ensure that they would not: 1) cause or contribute to any new violation of any air quality standard; 2) increase the frequency or severity of any existing violation of any air quality standard; or 3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

The *SCAQMD CEQA Air Quality Handbook* provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. Exceedance of the SCAQMD thresholds could result in a potentially significant impact. However, ultimately the lead agency determines the thresholds of significance for impacts.[7] If the project proposes development in excess of the established thresholds, as illustrated in Table 5.4-5, *SCAQMD EMISSION THRESHOLDS,* a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

In addition, the significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and Federal CO standards. If the project causes an exceedance of either the state one-hour or eight-hour CO concentrations, the project would be

[7] South Coast Air Quality Management District, *CEQA Air Quality Handbook*, page 6-1, April 1993.

considered to have a significant local impact. If ambient levels already exceed a state or federal standard, then project emissions would be considered significant if they increase one-hour CO concentrations by 1.0 ppm or more, or eight-hour CO concentrations by 0.45 ppm or more.

Table 5.4-5
SCAQMD EMISSIONS THRESHOLDS

Phase	Pollutant (lbs/day)				
	ROG	NO_X	CO	SO_X	PM_{10}
Operational	55	55	550	150	150
Source: SCAQMD, *CEQA Air Quality Handbook,* page 6-1, April 1993.					

ODOR-BASED THRESHOLDS

Projects emanating objectionable odors near existing sensitive receptors or other land uses where people may congregate could constitute a significant air quality impact to existing uses. Also, residential or other sensitive receptor projects built for the intent of attracting people near existing odor sources could also cause a significant air quality impact. The SCAQMD suggests a threshold based on the distance of the odor source from people and complaint records for a facility or similar facility.

SHORT-TERM EMISSIONS

For a discussion of short-term air quality impacts associated with remediation, demolition, grading and construction, refer to Section 5.9, *CONSTRUCTION RELATED IMPACTS*.

LONG-TERM EMISSIONS

The operation of the proposed project involves three primary activities that would generate air emissions. These activities are:

- Electricity generation by others for consumption to operate the project facilities and equipment;
- Electricity generation by others for consumption related to pump station operations; and
- Mobile source emissions from employee and truck delivery operations.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, and PM_{10} are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 or photochemical smog, and PM_{10} is readily transported by wind currents). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

As previously discussed, the SCAB is a non-attainment area for O_3 and PM_{10} (Federal and State). Nitrogen oxides and ROG are regulated O_3 precursors (a precursor is defined as a directly emitted air contaminant that, when released into the atmosphere, forms or causes to be formed or contributes to the formation of a secondary air contaminant for which an ambient air quality standard has been adopted).

Sources of long-term air emissions include machinery, equipment and vehicles within the project site, as well as indirect emissions from electricity and natural gas consumption. All water pumps

associated with the proposed project (including the proposed off-site underground booster pump station) would be electrically powered, and would not directly generate air emissions. However, indirect impacts due to electrical consumption factors of the proposed desalination project are analyzed below.

PROPOSED DESALINATION FACILITY SITE

Mobile Source Emissions

Motor vehicles including potential employee and truck delivery trips associated with the project would constitute the primary source of pollutant emissions. It is anticipated that the project would result in an estimated worst-case of 28 worker trips per day, traveling an estimated maximum distance of 50 miles each way. In addition, truck deliveries have been anticipated to generate approximately four trips per day. Project generated vehicle emissions have been estimated with the EMFAC2002 (version 2.2) emissions model. URBEMIS2002 was not utilized for operational emissions due to the minimal amount of area source and vehicular related activities associated with the project. Thus, the estimated long-term emissions from mobile sources would be well below the SCAQMD thresholds for CO, ROG, NO_x and PM_{10}. Table 5.4-6, *MOBILE SOURCE EMISSIONS*, illustrates the minimal impacts associated with the project. Mobile source emissions from operation of the proposed desalination facility are anticipated to result in less than significant impacts.

Carbon Monoxide

The project is not anticipated to result in air quality impacts from CO hotspots. The project does not generate enough vehicular trips to result in a degradation of the level of service (LOS) of roadways in the site vicinity. Therefore, CO hotspots are not anticipated to result from project operations.

Table 5.4-6
MOBILE SOURCE EMISSIONS

Pollutant	Mobile Source Emissions (lbs/day)	SCAQMD Thresholds (lbs/day)	Threshold Exceedance (Yes/No)
Carbon Monoxide (CO)	43.0	550	**NO**
Reactive Organic Gases (ROG)	4.74	55	**NO**
Nitrogen Oxides (NOx)	9.6	55	**NO**
Sulfur Oxides (SOx)	0.4	150	**NO**
Particulate Matter (PM_{10})	0.08	150	**NO**

Notes:
1.Emissions calculated utilizing the EMFAC2002 (v2.2) model.
2.Operational emissions calculations can be found in Appendix B, *Air Quality*.

Electricity Consumption

Based upon power consumption of 15 kilowatt hours per thousand gallons (4,887 kilowatt hours per acre-foot), the proposed 50 mgd (56,000 AF per year) desalination facility would require approximately 30 to 35 megawatts per hour to produce and distribute potable water. As such, the daily energy consumption of the facility is estimated to be between 720 to 840 megawatt hours per day.

In order to take advantage of lower cost power pricing, the facility may utilize off-peak power to the maximum extent practicable by temporarily halting the production of potable water and only pumping product water from the product water storage tank. No back-up electrical generators would be incorporated into the proposed project site, as back-up power would be drawn from the

electrical power grid and/or AES Huntington Beach Generating Station's (HBGS) auxiliary reserve bank.

The proposed desalination facility's electrical power source would be controlled by a power marketing company, which, in consultation with the California Independent System Operator (Cal ISO), would obtain power from the HBGS and/or the California power market at the lowest cost possible. As such, a variety of base-, intermediate- and peak-load power generating facilities may produce power for the desalination facility. Typically, base-loaded power plants (such as California's two nuclear power plants and out-of-state coal-fired power plants) as well as several large hydroelectric power dams are the primary source of off-peak power serving Southern California. Intermediate and peak load plants are typically fossil fuel generating facilities (predominantly natural gas fired).

The project would not change any General Plan or Zoning designations, and, as such, air impacts in this regard have been previously accounted for within local and regional planning documents. In addition, emissions resulting from the proposed project's electricity consumption would not be concentrated in the project site vicinity, as such emissions would be distributed throughout the region (with a portion possibly occurring outside of California), and have been previously accounted for through previous environmental documentation prepared for the SCAQMD's Regional Clean Air Incentives Market (RECLAIM) and New Source Review programs (refer to *CONSISTENCY WITH REGIONAL PLANS*, below).[8]

Electric power generating plants are distributed throughout the SCAB and beyond, and their emissions contribute to the total regional pollution burden. As the project is proposed to consume between 720 to 840 megawatt hours per day of electricity, the project may create regional impacts in regards to air quality (especially NO_x, which is typically produced by high temperature combustion processes utilizing fossil fuels, including electricity generating plants).[9] However, it would be speculative to quantify such emissions caused by the proposed project's electricity consumption, as many power sources are located outside of the SCAB or the state, and the time of use by the desalination facility would dictate whether or not off-peak non-fossil fuel electrical power is being consumed.

It should be noted that, although a power plant is located adjacent to the subject site (HBGS), actual project-related emissions are not possible to attribute to any one plant, since the project's electrical demand is met by dozens of power plants connected to a regional power supply grid, with many of those plants located outside of Southern California. It should further be noted that if the HBGS facility were to cease operating, electricity would still be available to the proposed desalination facility, as the proposed project would utilize electricity from the power grid and not directly from HBGS.

Chemical Storage Facilities

8 Jonathan Nadler, South Coast Air Quality Management District, February 22, 2002.

9 In the event that the proposed desalinated water entirely replaces a given water provider's water curtailed from the State Water Project along the West Branch, then the power requirements to move imported water through the Central Valley, over the Tehachapi Mountains, and into the Los Angeles Basin could result in substantial power reductions, thus resulting in air quality offsets. Whereas the proposed facility has an "all in" power rate of 4,887 kilowatt hours per acre-foot for producing water and conveyance into the Orange County system, according to the Department of Water Resources Bulletin 132 (1998), the State Water Project has a power rate of 3,200 kilowatt hours per acre-foot (net of hydroelectric power production in the LA Basin). As such, there is only a 1,687 kilowatt-hour per acre foot difference (or an additional 258 megawatts per day) increase in energy consumption over current supplies into the Metropolitan Water District's (MWD) Diemer water treatment facility.

Various chemicals typically associated with desalination facilities would be stored on-site. These chemicals include sodium hypochlorite, ammonia, lime, carbon dioxide, ferric sulfate, polymer, sulfuric acid, sodium bi-sulfite and the RO membrane-cleaning solution. All chemicals would be stored, handled, and used in accordance with all applicable Federal, State, and local standards. These chemicals are food-grade purity compounds typically used in most conventional water treatment facilities. The seawater desalination facility would use the same type and grade of chemicals as any other conventional surface water treatment plant. However, the seawater desalination facility would use fewer chemicals of lower dosages than existing conventional water treatment plants in Southern California. Chemical storage and the use of chemicals during the desalination process are not anticipated to have significant impacts to air quality in the region. In addition, based on the types of chemicals stored on site and their containment methods, odors are unlikely to emanate from the project site.

Visibility

A visibility analysis of the project's gaseous emissions is required under the Federal Prevention of Significant Deterioration (PSD) permitting program. The analysis addresses the contributions of gaseous emissions (primarily NOx and PM_{10}) to visibility impairment on the nearest Class 1 PSD areas, which are national parks and national wildlife refuges. There are no national parks or refuges in close proximity to the project. The nearest Class 1 areas to the proposed project are the Channel Islands National Park, Joshua Tree National Park, Cabrillo National Park, Santa Monica Mountains National Recreation Area, Seal Beach National Wildlife Refuge and the Salton Sea National Wildlife Refuge.[10,11] Considering the minimal amount of emissions generated by the operation of the proposed project, modeling was not conducted and impacts in this regard would be less than significant.

OFF-SITE PIPELINES AND UNDERGROUND PUMP STATIONS

Off-site project components would include water transmission pipelines and underground booster pump stations. The underground pump stations would convey potable water from the desalination site to the regional distribution system. Two off-site booster pump stations are proposed, which would include surge tanks to protect the distribution system from sudden pressure changes, telemetry equipment, appurtenances and diesel powered electrical generators for emergency backup equipment. The diesel-powered back-up generators would be Caterpillar model 3516 units or similar equipment and would supply approximately seven megawatts of emergency power for adequate operation of the pump station (in regards to flow and pressure). The largest diesel-powered generator, located on the OC-44 booster station would require an 8,700-gallon diesel fuel storage tank (assuming a 24-hour emergency period).

All internal combustion engines (ICEs) greater than 50 brake horsepower (bhp) are required to obtain a permit to construct from the SCAQMD prior to installation of the engines at the project site. NO_X emissions from diesel-fired emergency engines are 200 to 600 times greater, per unit of electricity produced, than new or controlled existing central power plants fired on natural gas. Diesel-fired engines also produce significantly greater amounts of fine particulates and toxics emissions compared to natural gas fired equipment. In order for generators to be considered an emergency backup generator by the SCAQMD, generators cannot operate more than 200 hours a year and can only operate in the event of an emergency power failure or for routine testing and maintenance. Furthermore, the SCAQMD has provided a list of models of equipment as meeting all applicable air quality requirements and have issued permits to the dealer/distributor of these

[10] National Park Service, http://data2.itc.nps.gov/parksearch/state.cfm?st=ca, November 30, 2004.

[11] http://gorp.away.com/gorp/location/ca/wrfsc_ca.htm, November 30, 2004.

engines. The diesel-powered generator anticipated for the project, Caterpillar model 3516, is included within the approved list provided by the SCAQMD.[12]

In addition to applying for a permit to construct from the SCAQMD (Rule 201, refer to table 5.4-2), it would be necessary to apply for a *Special Application for Temporary Emergency Authorization To Operate Electric Backup Generator(s) During Involuntary Power Service Interruptions Permit.*[13] The project would obtain all required air quality permits. Therefore, impacts associated with the operation of diesel- powered generators are anticipated to be less than significant.

Pump stations as well as water transmissions lines would occasionally require maintenance, which would generate worker trips. Maintenance activities would occur at sporadic instances, and therefore modeling was not conducted since trip generation from such activities would not result in any significant air quality impacts. Water transmission lines would not result in criteria pollutant emissions and therefore would not have any significant impacts to air quality.

CONSISTENCY WITH REGIONAL PLANS

The purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region's ability to comply with Federal and State air quality standards. If a project is inconsistent, local governments need to consider project modifications or inclusion of mitigation to eliminate the inconsistency. It is important to note that even if a project has significant operational or cumulative air quality impacts, it can still be found consistent with the regional air quality conformity under the SCAQMD's planning handbook. Therefore, it is necessary to assess the project's consistency with the AQMP and the City of Huntington Beach General Plan.

The subject site has a land use and zoning designation of Public (P). Project implementation would not conflict with the General Plan or Zoning Ordinance, nor would it propose to change any designations. As such, projects consistent with local General Plans are considered consistent with air quality related regional plans, such as the AQMP.[14] Accordingly, air quality emissions and related impacts for the proposed desalination project have been locally and regionally accounted for.[15]

As indicated in SCAQMD's *CEQA Air Quality Handbook*, there are two main indicators of consistency:

- Whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP; and
- Whether the project would exceed the AQMP's assumptions for 2010 or increments based on the year of project build-out and phase.

[12] South Coast Air Quality Management District, http://www.aqmd.gov/permit/docs/Emergency%20Generator%20Fact%20Sheet.doc, November 29, 2004.

[13] South Coast Air Quality Management District, http://www.aqmd.gov/permit/em_back_up_gen.html, November 29, 2004.

[14] CEQA Air Quality Handbook, Chapter 12, page 12-2.

[15] Jonathan Nadler, South Coast Air Quality Management District, February 22, 2002.

As previously stated, since the AQMP is based on the City and County's General Plan assumptions, the proposed desalination project is consistent with these General Plan assumptions. Thus, the project would be considered consistent with the AQMP land use assumptions and goals.

In addition, the region (Los Angeles County, Orange County, and half of Riverside County) is regulated by the SCAQMD's Regional Clean Air Incentives Market (RECLAIM). The RECLAIM program, implemented on January 1, 1994, controls the amount of NO_x and SO_x emissions through financial incentives and involves the trading of emissions credits. The RECLAIM program is designed to guarantee annual reductions in air pollution by requiring industrial and business uses (including power plants) emitting four tons or more per year of NO_x and SO_x to cut their emissions by specific amount each year, resulting in an almost 80 percent reduction of NO_x and SO_x by 2003. As such, future NO_x and SO_x emissions for the region, including those resulting from project implementation, would be offset through the RECLAIM program, and no significant regional air quality planning impacts are anticipated.[16]

The proposed project would also require review by the SCAQMD under Regulation XIII (New Source Review), which establishes pre-construction requirements for new or modified facilities to ensure that operation of such facilities does not interfere with progress toward the attainment of ambient air quality standards (AAQS) without necessarily restricting economic growth. The specific air quality goal of this regulation is to achieve a no net increase from new or modified permitted sources of non-attainment air contaminants or their precursors.[17] This standard review process administered by the SCAQMD would further ensure that the proposed project is consistent with regional air quality plans.

In addition, according to SCAG, the project is consistent with the *Regional Comprehensive Plan and Guide (RCPG).* The following policies taken from the RCPG apply to the project:

Core Growth Management Policies

3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.

3.18 Encourage planned development in location least likely to cause adverse environmental impact.

1.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, sub-regional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflict.

Analysis has shown that the project is consistent with regional plans and therefore would result in less than significant impacts.

MITIGATION MEASURES

LONG-TERM EMISSIONS

None required.

[16] http://www.aqmd.gov/reclaim/reclaim.html

[17] http://www.aqmd.gov/rules/html/r1301.html

CONSISTENCY WITH REGIONAL PLANS

None required.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.