C. Air Quality and Noise Technical Study

THE PLAZA AT THE GLEN
AIR QUALITY AND NOISE IMPACT REPORT

taha
environmental planners

Prepared for

ENVIRONMENTAL PLANNING ASSOCIATES

Prepared by

TERRY A. HAYES ASSOCIATES LLC

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TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

TABLE OF CONTENTS

Page No.

List of Tables (Cont'd)

LIST OF FIGURES

1.0 SUMMARY OF FINDINGS

Terry A. Hayes Associates LLC completed an air quality and noise impact analysis for a proposed mixed-use development project, The Plaza at the Glen (proposed project). Key findings are listed below.

1.1 AIR QUALITY

- Construction of the proposed project would result in maximum daily regional emissions of approximately 155 pounds per day (ppd) of volatile organic compounds (VOC), 365 ppd of nitrogen oxides (NO_X), 339 ppd of carbon monoxide (CO), less than one ppd of sulfur oxides (SO_X), 21 ppd of particulate matter 2.5 microns or less in diameter ($PM_{2.5}$), and 40 ppd of particulate matter ten microns or less in diameter (PM_{10}). Daily construction emissions are anticipated to exceed the South Coast Air Quality Management District's (SCAQMD) regional significance thresholds for VOC and NO_x and, as such, would result in a significant and unavoidable regional construction impact. The regional construction analysis assumed the project would comply with SCAQMD Rule 403 for fugitive dust control. Mitigation Measures **AQ1** through **AQ9** would ensure proper implementation of Rule 403.

- Construction of the proposed project would result in maximum daily localized emissions of approximately 76 ppd of NO_X, 64 ppd of CO, 10 ppd of $PM_{2.5,}$ and 26 ppd of PM_{10}. Daily construction emissions for the proposed project are anticipated to exceed the SCAQMD localized significance thresholds for $PM_{2.5}$ and PM_{10} and, as such, would result in a significant and unavoidable localized construction impact. The localized construction analysis assumed the project would comply with SCAQMD Rule 403 for fugitive dust control. Mitigation Measures **AQ1** through **AQ9** would ensure proper implementation of Rule 403.

- Operation of the proposed project would result in daily emissions of approximately 135 ppd of VOC, 197 ppd of NO_X, 1,347 ppd of CO, one ppd of SO_X, 59 ppd of $PM_{2.5}$, and 303 ppd of PM_{10}. Daily operational emissions are anticipated to exceed the SCAQMD regional significance thresholds for VOC, NO_x, CO, $PM_{2.5}$, and PM_{10} and, as such, would result in a significant and unavoidable operational impact.

- One-hour CO concentrations for the proposed project would be approximately 4 parts per million (ppm) at worst-case sidewalk receptors. Eight-hour CO concentrations for the proposed project would range from approximately 2.4 ppm to 2.7 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded. Thus, a less-than-significant impact is anticipated.

- The proposed project would not expose sensitive receptors to significant emissions of toxic air contaminants (TAC) as a result of activities associated with proposed project construction or operations. TAC emissions would result in a less-than-significant impact.

- The proposed project would not expose people to objectionable odors.

- The proposed project would be consistent with the SCAQMD's 2007 Air Quality Management Plan (AQMP) Consistency Criteria No. 1 and No. 2, and, therefore, a less-than-significant impact is anticipated.

- The proposed project would result in a significant VOC, $PM_{2.5}$, $PM_{10,}$ NO_X and CO impact during operations. Therefore, the proposed project would result in a regional cumulative operations impact given that the Basin is in nonattainment for O_3, $PM_{2.5}$, and PM_{10} and the proposed project would exceed the regional daily emissions threshold for PM_{10}, $PM_{2.5}$, and an ozone precursor, (NO_X).

- The proposed project would result in net carbon equivalent emissions of 46,623 tons per year. The proposed project would have an overall net increase in GHG emissions from vehicle, electrical, and natural gas usage of approximately 0.009 percent of the 2004 emission level. As such, the proposed project would have a negligible effect on any increase in regional and national greenhouse gas emissions.

1.2 NOISE

- Construction activity would comply with the guidelines set forth in the Los Angeles Municipal Code. The highest project-related construction noise levels would increase at the single-family residences along Kittridge Street and Morse Avenue by 9.1 and 6.7 dBA L_{eq}, respectively. Construction-related noise levels would exceed the 5-dBA significance threshold at nearby sensitive receptors for storied construction. Implementation of Mitigation Measures **N1** through **N4** would reduce construction noise and provide a way for project-related community noise complaints to be addressed. However, the proposed project would result in a significant impact related to construction noise.

- With implementation of Mitigation Measure **N9**, vibration levels would not exceed the 0.5 inches per second PPV significance threshold. As such, construction-related vibration associated with the proposed project would result in a less-than-significant building damage impact. Construction-related vibration levels would exceed the 78 VdB RMS annoyance significance threshold. As such, construction-related vibration associated with the proposed project would result in a significant and unavoidable annoyance impact.

- The greatest project-related mobile noise increase would be 2.1 dBA CNEL and would occur along Erwin Street between Fulton and Ethel Avenues. The roadway noise increase attributed to the proposed project would be less than the 3-dBA CNEL incremental threshold at all analyzed segments. As such, there would not be a perceptible change in audible noise as a result of increased traffic.

- Non-vehicular noise (e.g. mechanical equipment and parking activity) would not increase ambient noise levels by more than 5 dBA. This impact would be less than significant.

- Delivery truck noise would increase ambient noise levels by more than 5 dBA at adjacent sensitive receptors. Mitigation Measures **N6** and **N7** would reduce truck noise. Mitigation Measure **N8** would eliminate the truck-related noise impacts at the St. Francis Church and School. However, truck noise would remain significant and unavoidable impact.

- Mitigation Measure **N5** would ensure that new sensitive receptors would not be exposed to significant on-site noise levels.

- The proposed project would not include any significant sources of ground-borne vibration. The ground-borne vibration operational impact would be less than significant.

- The proposed project would not significantly contribute to a cumulative noise or vibration impact.

2.0 INTRODUCTION

2.1 PURPOSE OF STUDY

The purpose of this study is to evaluate the potential air quality and noise impacts of the proposed mixed-use development project in the North Hollywood-Valley Village community of the City of Los Angeles. The proposed mixed-use development project is called The Plaza at the Glen. Potential air quality and noise impacts are analyzed for construction and operation of the proposed project. Mitigation measures for air quality and noise are recommended, where necessary.

2.2 PROJECT DESCRIPTION

The project site is located in the North Hollywood-Valley Village community of the City of Los Angeles at properties encompassing multiple lots from 13007 to 13075 West Victory Boulevard. The 12.53- (gross) and 12.24-(net) acre site is an irregularly shaped property with a narrow frontage on Victory Boulevard on the south, bounded by the Tujunga Wash channel on the west, and single-family residential development along Morse Avenue and Kittridge Street on the north and east. A self-storage facility and adjacent church school are also located on the east.

The proposed project would replace the existing 152,000-square-foot shopping center with a mixed-use development consisting of 150 condominium units, a 230-room hotel, 450,000 square feet of general office space, 100,000 square feet of medical office space, a 45,000-square-foot health and fitness center, a 2,700-seat theater, and a 285,000-square-foot shopping center.

In addition to the proposed project, an add area is included in the entitlement request as potential development. The add area contains the following four parcels:

- **Parcel 1**. This area is located at 13005 Victory Boulevard, east of the project site, along the southwest side of Morse Avenue and northwest of Parcel 2. The existing 18,414 square-foot self-storage building could be replaced with a four-story, 39-unit condominium project.

- **Parcel 2**. This area is located at 13001 Victory Boulevard, immediately east of the project site, between Victory Boulevard and Hamlin Street and west of Parcels 3 and 4. The existing school and church would remain in this area.

- **Parcel 3**. This area is located at 6455 Coldwater Canyon Avenue, on the southwest corner of Coldwater Canyon Avenue and Hamlin Street. It is east of Parcel 2 and north of Parcel 4. The existing 43,026-square-foot private school could be replaced with a 36,000-square-foot shopping center, a 56,000-square-foot office building, and 143 units of multiple-family housing.

- **Parcel 4**. This area is located at 12091-12929 Victory Boulevard on the northwest corner of Coldwater Canyon Avenue and Victory Boulevard, south of Parcel 3 and east of Parcel 2. The existing 4,792-square-foot fast food restaurant and 5,766-square-foot retail use could be replaced with a 21,000-square-foot shopping center, and a 112,000-square-foot office building.

3.0 AIR QUALITY

This section examines the degree to which the proposed project may result in significant adverse changes to air quality. Both short-term construction emissions occurring from activities, such as site grading and haul truck trips, and long-term effects related to the ongoing operation of the proposed project are discussed in this section. The analysis contained herein focuses on air pollution from two perspectives: daily emissions and pollutant concentrations. "Emissions" refer to the quantity of pollutant released into the air, measured in ppd. "Concentrations" refer to the amount of pollutant material per volumetric unit of air, measured in ppm or micrograms per cubic meter ($\mu g/m^3$).

3.1 POLLUTANTS & EFFECTS

Criteria air pollutants are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and State standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include CO, ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), $PM_{2.5}$, PM_{10}, and lead (Pb). These pollutants are discussed below.

Carbon Monoxide. CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February.[1] The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

Ozone. O_3 is a colorless gas that is formed in the atmosphere when reactive organic gases (ROG), which include VOC and NO_X, react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of ROG and NO_X, the components of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

[1] Inversion is an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air.

Nitrogen Dioxide. NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. NO_2 also contributes to the formation of PM_{10}. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase of bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 ppm.

Sulfur Dioxide. SO_2 is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO_2 are coal and oil used in power plants and industries. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

Particulate Matter. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g. motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as SO_2, NO_X, and VOC. Inhalable particulate matter, or PM_{10}, is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning, industrial sources, windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream, cause damage elsewhere in the body, and can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

Lead. Pb in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturers of batteries, paint, ink, ceramics, and ammunition and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

Toxic Air Contaminants. A substance is considered toxic if it has the potential to cause adverse health effects in humans. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by State and federal agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act, Assembly Bill 1807, Tanner. This two-step process of risk identification and risk management was designed to protect residents from the health effects of toxic substances in the air.

The SCAQMD has a long and successful history of reducing air toxics and criteria emissions in the South Coast Air Basin (Basin). SCAQMD has an extensive control program, including traditional and innovative rules and policies. These policies can be viewed in the SCAQMD's *Air Toxics Control Plan for the Next Ten Years* (March 2000).

To date, the most comprehensive study on air toxics in the Basin is the Multiple Air Toxics Exposure Study (MATES-III), conducted by the SCAQMD. The monitoring program measured more than 30 air pollutants, including both gases and particulates. The monitoring study was accompanied by a computer modeling study in which SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. MATES-III found that the average cancer risk in the region from carcinogenic air pollutants ranges from about 870 in a million to 1,400 in a million, with an average regional risk of about 1,200 in one million.

Greenhouse Gases. Greenhouse gases (GHG) refer to a group of emissions that are generally believed to affect global climate conditions. Simply put, the greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHG such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) keep the average surface temperature of the Earth close to 60 degrees Fahrenheit (°F). Without the greenhouse effect, the Earth would be a frozen globe with an average surface temperature of about 5 °F.

In addition to CO_2, CH_4, and N_2O, GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and water vapor. Of all the GHGs, CO_2 is the most abundant pollutant that contributes to climate change through fossil fuel combustion. CO_2 comprised 81.0 percent of the total GHG emissions in California in 2002 and non-fossil fuel CO_2 comprised 2.3 percent.[2] The other GHGs are less abundant but have higher global warming potential than CO_2. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO_2, denoted as CO_2e. The CO_2e of CH_4 and N_2O represented 6.4 and 6.8 percent, respectively, of the 2002 California GHG emissions. Other high global warming

[2]California Environmental Protection Agency, Climate Action Team Report to Governor Schwarzenegger and the Legislature, p. 11, March 2006.

potential gases represented 3.5 percent of these emissions.[3] In addition, there are a number of man-made pollutants, such as CO, NO_X, non-methane VOC, and SO_2, which have indirect effects on terrestrial or solar radiation absorption by influencing the formation or destruction of other climate change emissions.

3.2 REGULATORY SETTING

The Federal Clean Air Act (CAA) governs air quality in the United States. In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). At the federal level, CAA is administered by the United States Environmental Protection Agency (USEPA). In California, the CCAA is administered by the California Air Resources Board (CARB) at the State level and by the air quality management districts and air pollution control districts at the regional and local levels.

United States Environmental Protection Agency. USEPA is responsible for enforcing the federal CAA. USEPA is also responsible for establishing the National Ambient Air Quality Standards (NAAQS). NAAQS are required under the 1977 CAA and subsequent amendments. USEPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. USEPA has jurisdiction over emission sources outside State waters (e.g., beyond the outer continental shelf) and establishes various emission standards, including those for vehicles sold in States other than California. Automobiles sold in California must meet stricter emission standards established by CARB.

California Air Resources Board. In California, CARB, which became part of the California Environmental Protection Agency (Cal/EPA) in 1991, is responsible for meeting the State requirements of the Federal CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to endeavor to achieve and maintain the CAAQS. CAAQS are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride and visibility reducing particles. CARB regulates mobile air pollution sources, such as motor vehicles. CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective on March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which in turn administer air quality activities at the regional and county level.

On July 26, 2007, the CARB approved a regulation to reduce emissions from existing off-road diesel vehicles used in California in construction, mining, and other industries. The regulation applies to diesel-powered off-road vehicles with engines of 25 horsepower or greater. Each year, the regulation requires each fleet to meet the fleet average emission rate targets for particulate matter (PM) or apply the highest level of verified diesel emission control system to 20 percent of its horsepower. In addition, large and medium fleets are required each year to meet the fleet average emission rate targets for NO_X or to turn over a certain percent of their horsepower (eight percent in earlier years, and ten percent in later years). In total, the regulation is expected to reduce 187,000 tons of NO_X emissions and 33,000 tons of PM emissions between 2009 and 2030. The regulation is expected to achieve the 2020 goal of reducing PM emissions 85 percent from 2000 baseline levels set forth in CARB's 2000 Diesel

[3] *Ibid*.

Risk Reduction Plan. It is also projected to reduce PM emissions 37 percent from the 2000 baseline by 2010, and 92 percent by 2020. NO_X is expected to be approximately 13 percent lower in 2015 as a result of the regulation, and by 2020, NO_X emissions would be 32 percent lower than would occur in the absence of the regulation.

South Coast Air Quality Management District. SCAQMD monitors air quality within the project area. SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of Orange County, the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The 1977 Lewis Air Quality Management Act created SCAQMD to coordinate air quality planning efforts throughout Southern California. This Act merged four county air pollution control agencies into one regional district to better address the issue of improving air quality in Southern California. Under the Act, renamed the Lewis-Presley Air Quality Management Act in 1988, SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards in the district. Programs that were developed include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The Basin is a subregion of the SCAQMD and covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Basin is bounded by Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south (**Figure 3-1**).

Global Climate Change. In response to growing scientific and political concern with global climate change, California has recently adopted a series of laws to reduce emissions of GHGs to the atmosphere from commercial and private activities within the State. In September 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493, requiring the development and adoption of regulations to achieve “the maximum feasible reduction of greenhouse gases” emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. California Governor Arnold Schwarzenegger announced, on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels. In response to the Executive Order, the Secretary of the California Environmental Protection Agency created the Climate Action Team (CAT), which, in March 2006, published the *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (the “2006 CAT Report”). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change greenhouse gas emissions. These are strategies that could be implemented by various State agencies to ensure that the Governor’s targets are met and can be met with existing authority of the State agencies.

LEGEND:

South Coast Air Basin

State of California

SOURCE: California Air Resources Board, State and Local Air Monitoring Network Plan, October 1998

FIGURE 3-1

SOUTH COAST AIR BASIN

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act of 2006, also known as AB 32, into law. AB 32 focuses on reducing GHG emissions in California, and requires the CARB, the State agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020. To achieve this goal, AB32 mandates that the ARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. Because, the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, and the present year (2008) is near the midpoint of this timeframe, it is expected that the regulations would affect many existing sources of greenhouse and not just new general development projects. Senate Bill (SB) 1368, a companion bill to AB 32, requires the California Public Utilities Commission and CEC to establish GHG emission performance standards for the generation of electricity. These standards will also apply to power that is generated outside of California and imported into the State.

AB 32 charges CARB with the responsibility to monitor and regulate sources of GHG emissions in order to reduce those emissions. On June 1, 2007, CARB adopted three discrete early action measures to reduce GHG emissions. These measures involved complying with a low carbon fuel standard, reducing refrigerant loss from motor vehicle air conditioning maintenance, and increasing methane capture from landfills.[4] On October 25 2007, the CARB tripled the set of previously approved early action measures. The approved measures include Smartway truck efficiency (i.e., reducing aerodynamic drag), port electrification, reducing perfluorocarbons from the semiconductor industry, reducing propellants in consumer products, promoting proper tire inflation in vehicles, and reducing sulfur hexaflouride emission from the non-electricity sector. AB 32 also required CARB to define the 1990 baseline emissions for California and adopt that baseline as the 2020 statewide emissions cap. CARB has determined that the total statewide aggregated greenhouse gas 1990 emissions level and 2020 emissions limit is 427 million metric tons of CO_2e. The 2020 target reductions are currently estimated to be 174 million metric tons CO_2e.

On June 27, 2008, CARB released its *Draft AB 32 Scoping Plan*, which contains the main strategies to achieve the 2020 emissions cap. The *Draft Scoping Plan* was developed by CARB with input from the Climate Action Team and proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce oil dependency, diversify energy sources, and enhance public health while creating new jobs and enhancing the growth in the State economy. GHG reduction strategies contained in the *Draft Scoping Plan* include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. *The Draft Scoping Plan* was released for public review and comment and will go to the board for adoption in November of 2008. The measures in the *Scoping Plan* adopted by the Board will be developed and put in place by 2012.

The CARB has also developed the greenhouse gas mandatory reporting regulation, which required reporting beginning on January 1, 2008 pursuant to requirements of AB 32. The regulations require reporting for certain types of facilities that make up the bulk of the stationary source emissions in California. The regulation language identifies major facilities as those that generate more than 25,000 metric tons of CO_2 per year. Cement plants, oil refineries, electric

[4]California Air Resources Board, Proposed Early Action Measures to Mitigate Climate Change in California, April 20, 2007.

generating facilities/providers, co-generation facilities, and hydrogen plants and other stationary combustion sources that emit more than 25,000 metric tons of CO_2 per year, make up 94 percent of the point source CO_2 emissions in California.

California Senate Bill (SB) 97, passed in August 2007, is designed to work in conjunction with the California Environmental Quality Act (CEQA) and AB 32. CEQA requires the State Office of Planning and Research (OPR) to prepare and develop proposed guidelines for the implementation of CEQA by public agencies. SB 97 requires OPR, by July 1, 2009, to prepare, develop, and transmit to the Resource Agency guidelines for the feasible mitigation of GHG emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. The Resource Agency would be required to certify and adopt the guidelines by January 1, 2010 and OPR would be required to periodically update the guidelines to incorporate new information or criteria established by the CARB pursuant to the California Global Warming Solutions Act of 2006. SB 97 would apply retroactively to any environmental impact report, negative declaration, mitigated negative declaration, or other document under CEQA that has not been certified or adopted by the CEQA lead agency. In addition, SB 97 exempts transportation projects funded under the Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006, or projects funded under the Disaster Preparedness and Flood Prevention Bond Act of 2006.

The OPR CEQA guidelines will provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents. In the interim, OPR has published informal guidance regarding the steps lead agencies should take to address climate change in their CEQA documents.[5] According to the OPR, lead agencies should determine whether GHG may be generated by a proposed project, and if so, quantify or estimate the GHG emissions by type and source. The lead agency must assess whether those emissions are individually or cumulatively significant. When assessing whether a project's effects on climate change are "cumulatively considerable" even though its GHG contribution may be individually limited, the lead agency must consider the impact of the project when viewed in connection with the effects of past, current, and probable future projects. Finally, if the lead agency determines that the GHG emissions from the project as proposed are potentially significant, it must investigate and implement ways to avoid, reduce, or otherwise mitigate the impacts of those emissions.

The SCAQMD has convened a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that will provide input to the SCAQMD staff on developing GHG CEQA significance thresholds. The working group is currently discussing multiple methodologies for determining project significance. These methodologies include categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets.

The City of Los Angeles has issued guidance promoting green building to reduce GHG emissions. The goal of the Green LA Action Plan (Plan) is to reduce greenhouse gas emissions 35 percent below 1990 levels by 2030.[6] The Plan identifies objectives and actions designed to make the City a leader in confronting global climate change. The measures would reduce emissions directly from municipal facilities and operations, and create a framework to address

[5]State of California, Governor's Office of Planning and Research, CEQA and Climate Change: Addressing Climate Change through California Environmental Climate Act (CEQA) Review, June 19, 2008.

[6]City of Los Angeles, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, May 2007.

City-wide GHG emissions. The Plan lists various focus areas in which to implement GHG reduction strategies. Focus areas listed in the Plan include energy, water, transportation, land use, waste, port, airport, and ensuring that changes to the local climate are incorporated into planning and building decisions. The Plan discusses City goals for each focus area, as follows:

Energy

- Increase the generation of renewable energy;
- Encouraging the use of mass transit;
- Develop sustainable construction guidelines;
- Increase City-wide energy efficiency; and
- Promote energy conservation.

Water

- Decrease per capita water use to reduce electricity demand associated with water pumping and treatment.

Transportation

- Power the City vehicle fleet with alternative fuels; and
- Promote alternative transportation (e.g., mass transit and rideshare).

Other Goals

- Create a more livable City through land use regulations;
- Increase recycling, reducing emissions generated by activity associated with the Port of Los Angeles and regional airports;
- Create more city parks, promoting the environmental economic sector; and
- Adapt planning and building policies to incorporate climate change policy.

The City adopted an ordinance to establish a green building program in April 2008. The ordinance establishes green building requirements for projects involving 50 or more dwelling units. The Green Building Program was established to reduce the use of natural resources, create healthier living environments and minimize the negative impacts of development on local, regional, and global ecosystems. The program addresses the following five areas:

- Site: location, site planning, landscaping, storm water management, construction and demolition recycling
- Water Efficiency: efficient fixtures, wastewater reuse, and efficient irrigation
- Energy and Atmosphere: energy efficiency, and clean/renewable energy
- Materials and Resources: materials reuse, efficient building systems, and use of recycled and rapidly renewable materials
- Indoor Environmental Quality: improved indoor air quality, increased natural lighting, and thermal comfort/control

3.2.1 National and California Ambient Air Quality Standards and Attainment Status

As required by the federal CAA, NAAQS have been established for seven major air pollutants: CO, NO_2, O_3, $PM_{2.5}$, PM_{10}, SO_2, and Pb. The CAA requires USEPA to designate areas as either attainment or nonattainment for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in **Table 3-1**. The USEPA has classified the Basin as, maintenance for CO and nonattainment for O_3, $PM_{2.5}$, and PM_{10}.

As discussed above, the CAAQS are generally more stringent than the corresponding federal standards (NAAQS) and, as such, are used as the comparative standard in the air quality analysis contained in this report. The State standards are summarized in **Table 3-1**.

The CCAA requires the CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a State standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O_3, $PM_{2.5}$, and PM_{10}.[7]

3.2.2 Air Quality Management Plan

All areas designated as nonattainment under the CCAA are required to prepare plans showing how the area would meet the State air quality standards by its attainment dates. The AQMP is the region's plan for improving air quality in the region. It addresses CAA and CCAA requirements and demonstrates attainment with State and federal ambient air quality standards. The AQMP is prepared by SCAQMD and the Southern California Association of Governments (SCAG). The AQMP provides policies and control measures that reduce emissions to attain both State and federal ambient air quality standards by their applicable deadlines. Environmental review of individual projects within the Basin must demonstrate that daily construction and operational emissions thresholds, as established by the SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

The 2007 AQMP was adopted by the SCAQMD on June 1, 2007. The 2007 AQMP proposes attainment demonstration of the federal PM2.5 standards through a more focused control of SOX, directly-emitted PM2.5, and NOX supplemented with VOC by 2015. The eight-hour ozone control strategy builds upon the PM2.5 strategy, augmented with additional NOX and VOC reductions to meet the standard by 2024. The 2007 AQMP also addresses several 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 2007 AQMP is consistent with and builds upon the approaches taken in the 2003 AQMP. However, the 2007 AQMP highlights the significant amount of reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the time frames allowed under the CAA.

[7]CARB, http://www.arb.ca.gov/desig/adm/adm.htm, accessed May 13, 2008.

TABLE 3-1: STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS FOR THE SOUTH COAST AIR BASIN

Pollutant	Averaging Period	California		Federal	
		Standards	Attainment Status	Standards	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm (180 μg/m^3)	Nonattainment	--	--
	8-hour	0.070 ppm (137 μg/m^3)	n/a	0.075 ppm (147 μg/m^3)	Nonattainment
Respirable Particulate Matter (PM_{10})	24-hour	50 μg/m^3	Nonattainment	150 μg/m^3	Nonattainment
	Annual Arithmetic Mean	20 μg/m^3	Nonattainment	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	--	35 μg/m^3	Nonattainment
	Annual Arithmetic Mean	12 μg/m^3	Nonattainment	15 μg/m^3	Nonattainment
Carbon Monoxide (CO)	8-hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Maintenance
	1-hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Maintenance
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 μg/m^3)	Attainment	0.053 ppm (100 μg/m^3)	Attainment
	1-hour	0.18 ppm (339 μg/m^3)	Attainment	--	--
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	--	0.030 ppm (80 μg/m^3)	Attainment
	24-hour	0.04 ppm (105 μg/m^3)	Attainment	0.14 ppm (365 μg/m^3)	Attainment
	3-hour	--	--	--	--
	1-hour	0.25 ppm (655 μg/m^3)	Attainment	--	--
Lead (Pb)	30-day average	1.5 μg/m^3	Attainment	--	--
	Calendar Quarter	--	--	1.5 μg/m^3	Attainment

n/a = not available
SOURCE: CARB, *Ambient Air Quality Standards*, April 1, 2008.

3.3 EXISTING AIR QUALITY

3.3.1 Air Pollution Climatology

The project site is located within the Los Angeles County portion of the Basin. Ambient pollution concentrations recorded in Los Angeles County are among the highest in the four counties comprising the Basin.

The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. This Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions. Temperature typically decreases with height. However, under inversion conditions, temperature increases as altitude increases, thereby preventing air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO_2 react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to CO and NO_2 emissions. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.). In the morning, CO levels are relatively high due to cold temperatures and the large number of cars traveling. High CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO is produced almost entirely from automobiles, the highest CO concentrations in the Basin are associated with heavy traffic. NO_2 levels are also generally higher during fall and winter days.

3.3.2 Local Climate

The mountains and hills within the Basin contribute to the variation of rainfall, temperature, and winds throughout the region. Within the project site and its vicinity, the average wind speed, as recorded at the Burbank Wind Monitoring Station, is approximately four miles per hour, with calm winds occurring approximately ten percent of the time. Wind in the vicinity of the project site predominately blows from the southeast.[8]

The annual average temperature in the project area is 64.1 °F. The project area experiences an average winter temperature of approximately 55°F and an average summer temperature of approximately 73°F. Total precipitation in the project area averages approximately 17 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer. Precipitation averages approximately ten inches during the winter, approximately four inches during the spring, approximately two inches during the fall, and less than one inch during the summer.[9]

3.3.3 Air Monitoring Data

[8]SCAQMD, available at http://www.aqmd.gov/smog/metdata/MeteorologicalData.html, accessed April 30,2008.

[9]Western Regional Climate Center, http:// www.wrrc.dri.edu, accessed March 19, 2008.

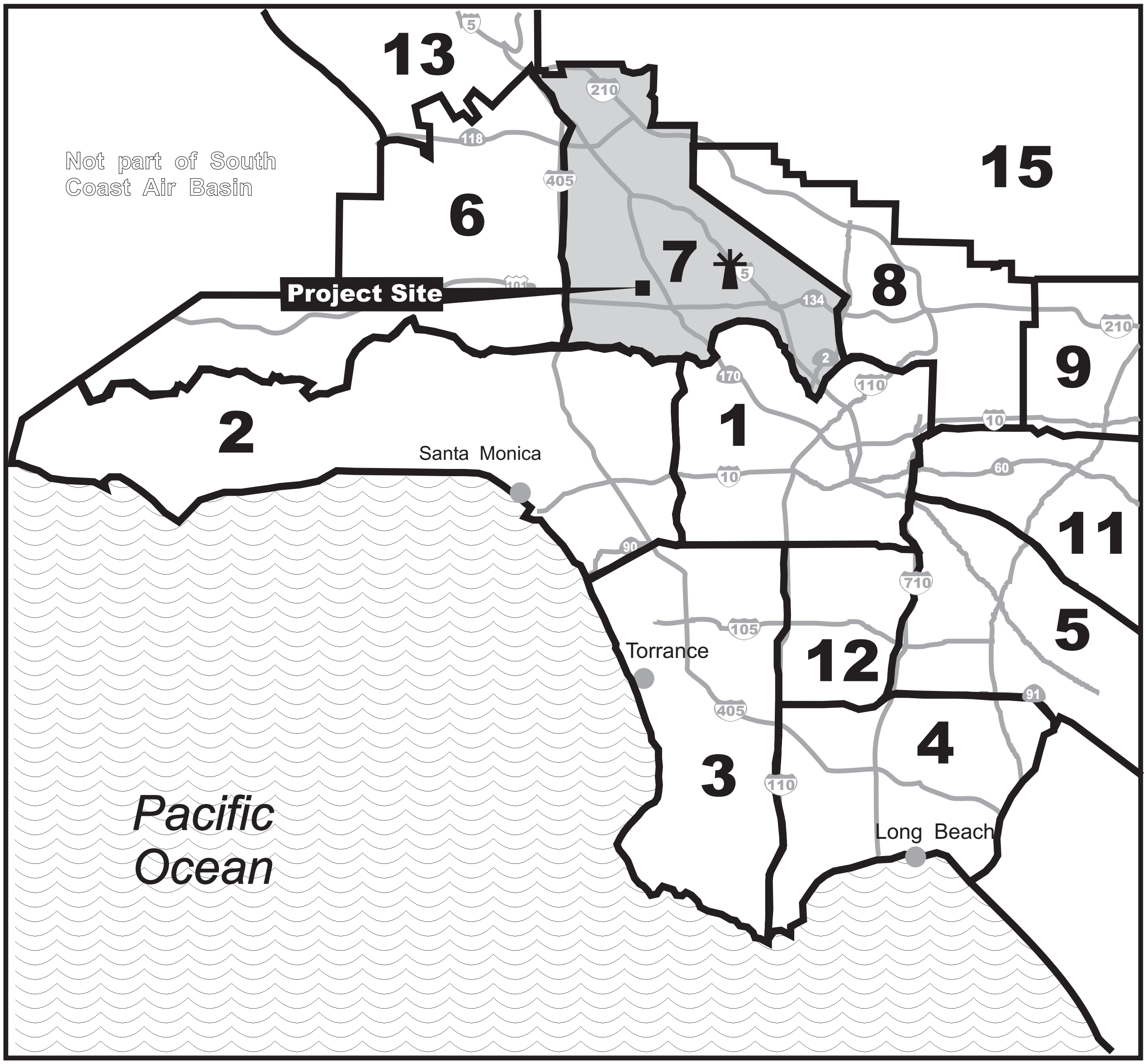
The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The project site is located in SCAQMD's East San Fernando Valley Air Monitoring Subregion, which is served by the Burbank Monitoring Station. The Burbank Monitoring Station is located approximately six miles east of the project site at 228 West Palm Avenue, in the City of Burbank (**Figure 3-2**). Historical data from the Burbank Monitoring Station were used to characterize the existing conditions in the vicinity of the project area. Criteria pollutants monitored at the Burbank Monitoring Station include CO, O_3, SO_2, NO_2, $PM_{2.5}$, and PM_{10}.

Table 3-2 shows pollutant levels, the State standards, and the number of exceedances recorded at the Burbank Monitoring Station from 2005 to 2007. The CAAQS for the criteria pollutants are also shown in the table. As **Table 3-2** indicates, criteria pollutants CO, NO_2, and SO_2 did not exceed the CAAQS during the 2005 through 2007 period. However, the one-hour State standard for O_3 was exceeded 51 times during this period, and the eight-hour State standard for O_3 was exceeded 54 times. Additionally, the 24-hour State standard for PM_{10} was exceeded 26 times from 2005 to 2007, and the annual State standard for $PM_{2.5}$ was exceeded every year from 2005 through 2007. A summary of the data recorded at the monitoring station is located in Appendix A.

TABLE 3-2: 2005-2007 AMBIENT AIR QUALITY DATA IN PROJECT VICINITY

Pollutant	Pollutant Concentration & Standards	Number of Days Above State Standard		
		2005	2006	2007
Ozone	Maximum 1-hr Concentration (ppm) Days > 0.09 ppm (State 1-hr standard) Maximum 8-hr Concentration (ppm) Days > 0.07 ppm (State 8-hr standard)	0.14 13 0.11 12	0.17 25 0.13 23	0.12 13 0.10 19
Carbon Monoxide	Maximum 1-hr concentration (ppm) Days > 20 ppm (State1-hr standard) Maximum 8-hr concentration (ppm) Days > 9.0 ppm (State 8-hr standard)	4 0 3.4 0	4 0 3.5 0	4 0 2.8 0
Nitrogen Dioxide	Maximum 1-hr Concentration (ppm) Days > 0.18 ppm (State 1-hr standard)	0.09 0	0.10 0	0.09 0
PM_{10}	Maximum 24-hr concentration (μg/m^3) Estimated Days > 50 μg/m^3 (State 24-hr standard)	92 5	71 10	109 11
$PM_{2.5}$	Annual Arithmetic Mean (μg/m^3) Exceed Standard (12 μg/m^3 Annual Arithmetic Mean)?	18 Yes	17 Yes	17 Yes
Sulfur Dioxide	Maximum 24-hr Concentration (ppm) Days > 0.04 ppm (State 24-hr standard)	0.006 0	0.004 0	0.003 0

SOURCE: SCAQMD, http://www.aqmd.gov/smog/historicaldata.htm, 2008.



LEGEND: Burbank Monitoring Station

Air Monitoring Areas in Los Angeles County:

1. Central Los Angeles
2. Northwest Coastal
3. Southwest Coastal
4. South Coastal
5. Southeast Los Angeles County
6. West San Fernando Valley
7. East San Fernando Valley
8. West San Gabriel Valley
9. East San Gabriel Valley
10. Pomona/Walnut Valley (not shown)
11. South San Gabriel Valley
12. South Central Los Angeles
13. Santa Clarita Valley
15. San Gabriel Mountains

APPROX. SCALE N 0 3.0 6.0 9.0 MILES

SOURCE: South Coast Air Quality Management District Air Monitoring Areas Map, 1999

The Plaza at the Glen
Air Quality and Noise Impact Report

taha 2007-075 ENVIRONMENTAL PLANNING ASSOCIATES, INC.

FIGURE 3-2

AIR MONITORING AREAS

3.3.4 Background Carbon Monoxide Conditions

CO concentrations are typically used as an indicator of conformity with CAAQS because CO is the primary component of automobile exhaust (tailpipe emissions), and it does not readily react with other pollutants. In other words, operational air quality impacts associated with a project are generally best reflected through estimated changes in CO concentrations.

For purposes of this assessment, the ambient, or background CO concentration, is first established. SCAQMD defines the background level as the highest reading over the past three years. A review of data from the Burbank Station for the 2005 to 2007 period indicates that the one- and eight-hour background concentrations are approximately 4 and 2.8 ppm, respectively. Accordingly, the existing one- and eight-hour background concentrations do not exceed the State CO standard of 20 ppm and 9.0 ppm, respectively.

3.3.5 Existing Carbon Monoxide Concentrations at Project Area Intersections

There is a direct relationship between traffic/circulation congestion and CO impacts since exhaust fumes from vehicular traffic are the primary source of CO. CO is a localized gas that dissipates very quickly under normal meteorological conditions. Therefore, CO concentrations decrease substantially as distance from the source (intersection) increases. The highest CO concentrations are typically found in areas directly adjacent to congested roadway intersections.

Existing CO concentrations adjacent to ten study intersections were modeled. The study intersections were selected to be representative of the project area and were based on traffic volume to capacity (V/C) ratio and the traffic level of service (LOS) as indicated in the traffic analysis.[10,11]

The selected intersections are as follows:

- Coldwater Canyon Avenue/Hamlin Street – PM Peak Hour
- Coldwater Canyon Avenue/Vanowen Street – PM Peak Hour
- Coldwater Canyon Avenue/Victory Boulevard – PM Peak Hour
- Ethel Avenue/Victory Boulevard – PM Peak Hour
- Morse Avenue/Victory Boulevard – PM Peak Hour
- Whitsett Avenue/Vanowen Street – PM Peak Hour
- Whitsett Avenue/Victory Boulevard – PM Peak Hour
- Woodman Avenue/Victory Boulevard – PM Peak Hour
- 170 Freeway Southbound (North Side)/Victory Boulevard – PM Peak Hour
- 170 Freeway Southbound (South Side)/Victory Boulevard – PM Peak Hour

At each intersection, traffic-related CO contributions were added to background CO conditions. Traffic CO contributions were estimated using the USEPA CAL3QHC dispersion model, which utilizes traffic volume inputs and CARB EMFAC2007 emissions factors. Consistent with the California Department of Transportation (Caltrans) *Transportation Project-Level Carbon Monoxide Protocol*, receptors for the analysis were located 3 meters (approximately 10 feet) from each intersection corner.[12] Existing CO concentrations at the study intersections are

[10]Level of service is used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service ranges from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion).
[11]Overland Traffic Consultants, Inc., *Traffic Impact Analysis for the Plaza at the Glen*, July 30 2008.
[12]Caltrans, Transportation Project-Level Carbon Monoxide Protocol, 1997.

shown in **Table 3-3**. As shown, one-hour CO concentrations are approximately 5 ppm and eight-hour CO concentrations range from approximately 3.2 ppm to 3.7 ppm. Presently, none of the study intersections exceed the State one- and eight-hour CO standards of 20 ppm and 9.0 ppm, respectively.

TABLE 3-3: EXISTING CARBON MONOXIDE CONCENTRATIONS/a/

Intersection	1-hour	8-hour
Coldwater Canyon Avenue/Hamlin Street	5	3.2
Coldwater Canyon Avenue/Vanowen Street	5	3.5
Coldwater Canyon Avenue/Victory Boulevard	5	3.6
Ethel Avenue/Victory Boulevard	5	3.4
Morse Avenue/Victory Boulevard	5	3.2
Whitsett Avenue/Vanowen Street	5	3.5
Whitsett Avenue/Victory Boulevard	5	3.6
Woodman Avenue/Victory Boulevard	5	3.7
170 Freeway Southbound (North Side)/Victory Boulevard	5	3.4
170 Freeway Southbound (South Side)/Victory Boulevard	5	3.4
State Standard	**20**	**9.0**

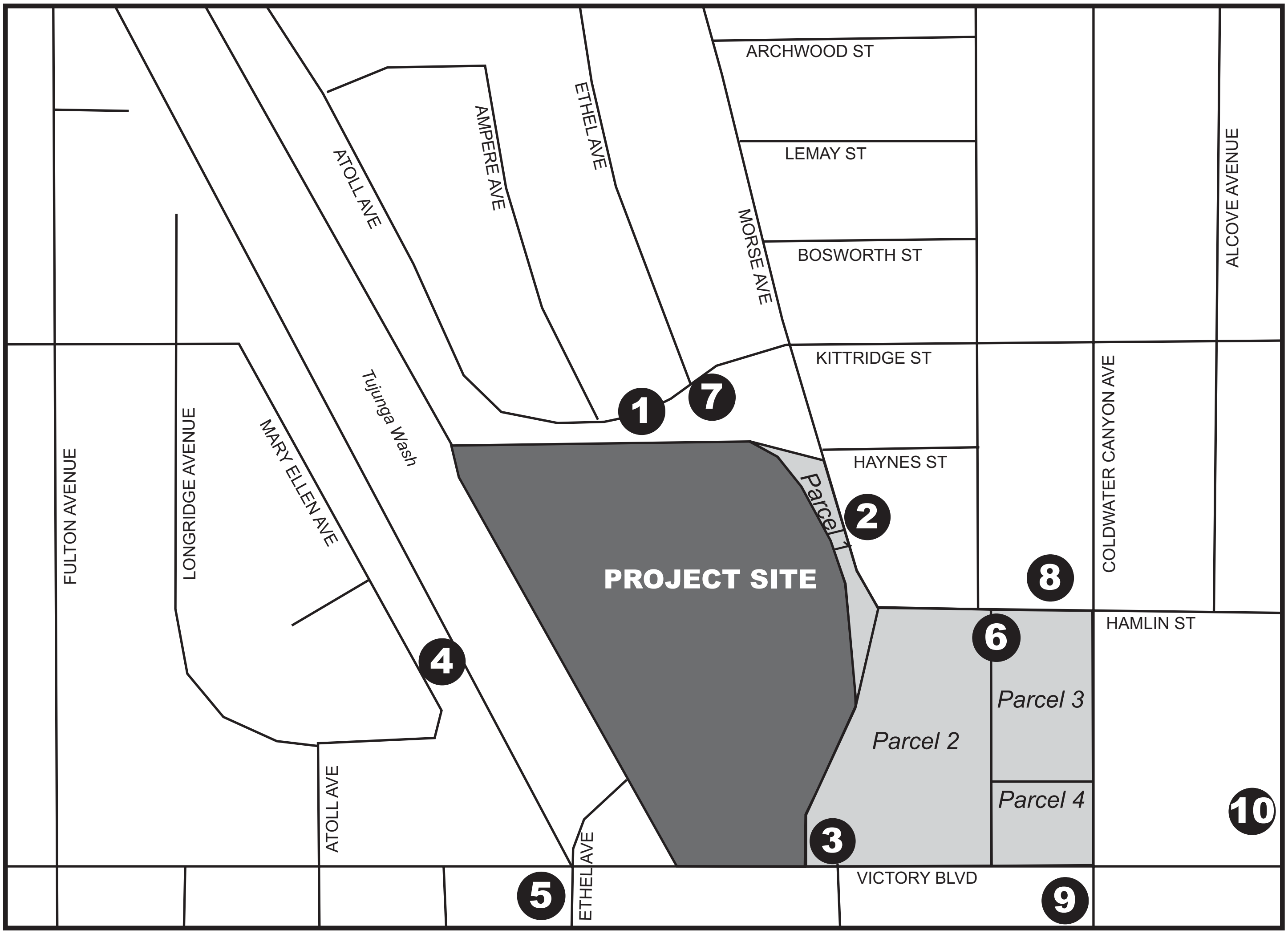
/a/ All concentrations include one- and eight-hour ambient concentrations of 4 ppm and 2.8 ppm, respectively.
SOURCE: TAHA, 2008 (Appendix C).

3.3.6 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children under 14, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

Proposed Project. As shown in **Figure 3-3**, sensitive receptors near the project site include the following:

- Single-family residential buildings located on Kittridge Street, adjacent and to the north of the project site
- Single-family residential buildings located on Morse Avenue, adjacent and to the northeast of the project site
- St. Frances Church and School located on Victory Boulevard, adjacent and to the east of the project site



LEGEND:

Sensitive Receptor Locations

1. Single-Family Residence on Kittridge Street
2. Single-Family Residence on Morse Avenue
3. Saint Frances School and Church on Victory Boulevard
4. Single-Family Residence on Mary Ellen Avenue
5. Multi-Family Residence on Victory Boulevard
6. Summit View School on Hamlin Street
7. Single-Family Residence on Ethel Avenue
8. Single-Family Residence on Hamlin Street
9. Single- and Multi-Family Residences on Coldwater Canyon Avenue
10. Single-Family Residence on Goodland Avenue

Not to Scale

N

SOURCE: TAHA, 2008

FIGURE 3-3

AIR QUALITY SENSITIVE RECEPTOR LOCATIONS

- Single-family residential buildings located on Mary Ellen Avenue, approximately 200 feet west of the project site

- Multi-family residential buildings located on Victory Boulevard, approximately 225 feet southwest of the project site

- Summit View School located on Hamlin Street, approximately 350 feet east of the project site

Add Area. As shown in **Figure 3-3**, sensitive receptors near the add area include the following:

- Single-family residential buildings located on Morse Avenue, adjacent and to the east of Parcel 1 and approximately 250 feet northwest of Parcel 3

- Single-family residential buildings located on Ethel Avenue, approximately 175 feet north of Parcel 1

- Summit View School located Hamlin Street, approximately 250 feet east of Parcel 1 and adjacent and to the north of Parcel 4

- Multi-family residential buildings located on Victory Boulevard, approximately 775 feet southwest of Parcel 1 and approximately 475 feet south of Parcel 3

- Single-family residential buildings located on Mary Ellen Avenue, approximately 900 feet west of Parcel 1, approximately 1,200 feet west of Parcel 3, and approximately 1,250 feet west of Parcel 4

- St. Frances Church and School located on Victory Boulevard, adjacent and to the west of Parcels 3 and 4

- Single-family residential buildings located on Hamlin Street, approximately 50 feet north of Parcel 3 and approximately 450 feet north of Parcel 4

- Single- and multi-family residential buildings located on Coldwater Canyon Avenue, approximately 150 feet northeast of Parcel 3 and approximately 285 feet south of Parcel 4

- Single-family residential buildings located on Goodland Avenue, approximately 710 feet east of Parcel 4

The above sensitive receptors represent the nearest recreational, residential, and school land uses with the potential to be impacted by the proposed project. Additional single-family and multi-family residences are located in the surrounding community within one-quarter mile of the project site.

3.4 METHODOLOGY

This air quality analysis is consistent with the methods described in the SCAQMD *CEQA Air Quality Handbook* (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website.[13]

Regional and localized construction emissions were analyzed for the proposed project and the add area. Construction emissions (i.e., demolition, grading/excavation, and building construction) were calculated using CARB's URBEMIS2007 model. Regional emissions were compared to SCAQMD regional thresholds to determine project impact significance. The localized construction analysis followed guidelines published by the SCAQMD in the *Localized Significance Methodology for CEQA Evaluations* (SCAQMD Localized Significance Threshold [LST] Guidance Document).[14] In January 2005, the SCAQMD supplemented the SCAQMD LST Guidance Document with *Sample Construction Scenarios for Projects Less than Five Acres in Size*.[15]

URBEMIS2007 was also used to calculate operational emissions (i.e., mobile and area). Localized CO emissions were calculated utilizing USEPA's CAL3QHC dispersion model and CARB's EMFAC2007 model. EMFAC2007 is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This m
odel reflects the CARB's current understanding of how vehicles travel and how much they pollute. The EMFAC2007 model can be used to show how California motor vehicle emissions have changed over time and are projected to change in the future. CAL3QHC is a model developed by USEPA to predict CO and other pollutant concentrations from motor vehicles at roadway intersections. The model uses a traffic algorithm for estimating vehicular queue lengths at signalized intersections.

As part of SCAQMD's environmental justice program, the SCAQMD has developed localized significance thresholds (LST) by air monitoring areas to determine whether a project would generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS for CO, NO_X, $PM_{2.5}$ and PM_{10}. LSTs are based on the ambient concentrations of that pollutant for each air monitoring area and are designed for five acres or less. The LSTs are applicable for the proposed project because less than five acres of land would be disturbed per day during construction activity. According to the project applicant, the project would not disturb more than one acre per day during construction activity.

The proposed project does not contain lead emissions sources. Therefore, emissions and concentrations related to this pollutant are not analyzed in this report.[16]

[13]SCAQMD, available at http://www.aqmd.gov/ceqa/hdbk.html, accesses April 28, 2008.
[14]SCAQMD, Localized Significance Methodology, June 2003.
[15]SCAQMD, Sample Construction Scenarios for Projects Less than Five Acres in Size, January 2005.
[16]Prior to 1978, mobile emissions were the primary source of lead resulting in air concentrations. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. Currently, industrial sources are the primary source of lead resulting in air concentrations. Since the proposed project does not contain an industrial component, lead emissions are not analyzed in this report.

3.5 THRESHOLDS OF SIGNIFICANCE

The following are the significance criteria SCAQMD has established to determine project impacts.

Construction Phase Significance Criteria

The proposed project would have a significant impact if:

- Daily regional and localized construction emissions were to exceed SCAQMD construction emissions thresholds for VOC, NO_X, CO, SO_X, $PM_{2.5}$, or PM_{10}, as presented in **Table 3-4**;
- The proposed project would generate significant emissions of TACs; and/or
- The proposed project would create an odor nuisance.

TABLE 3-4: SCAQMD DAILY CONSTRUCTION EMISSIONS THRESHOLDS

Criteria Pollutant	Regional Emissions (Pounds Per Day)	Localized Emissions (Pounds Per Day)/a/
Volatile Organic Compounds (VOC)	75	--
Nitrogen Oxides (NO_X)	100	103
Carbon Monoxide (CO)	550	151
Sulfur Oxides (SO_X)	150	--
Fine Particulates ($PM_{2.5}$)	55	3
Particulates (PM_{10})	150	4

/a/ The localized significance thresholds were developed using a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: SCAQMD, 2008.

Operations Phase Significance Criteria

The proposed project would have a significant impact if:

- Daily operational emissions were to exceed SCAQMD operational emissions thresholds for VOC, NO_X, CO, SO_X, $PM_{2.5}$, or PM_{10}, as presented in **Table 3-5**;
- Project-related traffic causes CO concentrations at study intersections to violate the CAAQS for either the one- or eight-hour period;
- The proposed project would generate significant emissions of TACs;
- The proposed project would create an odor nuisance; and/or
- The proposed project would not be consistent with the AQMP.

TABLE 3-5: SCAQMD DAILY OPERATIONAL EMISSIONS THRESHOLDS	
Criteria Pollutant	**Pounds Per Day**
Volatile Organic Compounds (VOC)	55
Nitrogen Oxides (NO_X)	55
Carbon Monoxide (CO)	550
Sulfur Oxides (SO_X)	150
Fine Particulates ($PM_{2.5}$)	55
Particulates (PM_{10})	150
SOURCE: SCAQMD, 2008	

3.6 ENVIRONMENTAL IMPACTS

3.6.1 Construction Phase

Regional Impacts

Proposed Project. Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the project site. Fugitive dust emissions would primarily result from demolition and grading/excavation activities. NO_X emissions would primarily result from the use of construction equipment. During the finishing phase, paving operations and the application of architectural coatings (e.g., paints) and other building materials would release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce regional PM_{10} emissions associated with construction activities by approximately 61 percent.

Proposed Project. **Table 3-6** shows the estimated daily emissions associated with each construction phase. As shown, daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, or PM_{10}. However, VOC and NO_X construction emissions would exceed the SCAQMD regional significance threshold. As such, the proposed project would result in a significant regional construction impact without implementation of mitigation measures.

Daily PM_{10} emissions identified in **Table 3-6** assume compliance with SCAQMD Rule 403, implementation of which would be ensured by Mitigation Measures **AQ1** through **AQ9** (see "Construction Phase Mitigation Measures" below).

TABLE 3-6: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PROPOSED PROJECT UNMITIGATED

Construction Phase	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$ /a/	PM_{10} /a/
Demolition						
On-Site	6	46	23	<1	6	16
Off-Site	1	14	8	<1	<1	<1
Total	*7*	*60*	*31*	*<1*	*6*	*16*
Trenching						
On-Site	2	18	8	<1	1	1
Off-Site	<1	<1	1	<1	<1	<1
Total	2	18	9	<1	1	1
Grading/Excavation						
On-Site	5	36	17	<1	3	10
Off-Site	22	268	110	<1	11	13
Total	*27*	*304*	*127*	*<1*	*14*	*23*
Buildings Construction						
On-Site	7	64	25	<1	3	3
Off-Site	5	21	99	<1	1	1
Total	*12*	*85*	*124*	*<1*	*4*	*4*
Paving						
On-Site	3	19	13	<1	1	2
Off-Site	<1	<1	1	<1	<1	<1
Total	*4*	*19*	*14*	*<1*	*1*	*2*
Architectural Coating						
On-Site	158	<1	2	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*158*	*<1*	*2*	*<1*	*<1*	*<1*
Maximum Regional Total	**170**	**406**	**339**	**<1**	**21**	**40**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	No	No	No	No
Maximum On-Site Total	**165**	**118**	**64**	**<1**	**10**	**26**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	Yes	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Add Area. **Table 3-7** shows the estimated daily emissions associated with each construction phase. Daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 1 would result in a less-than-significant regional construction impact.

TABLE 3-7: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 1 UNMITIGATED

Construction Phase	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	30	14	<1	3	10
Off-Site	1	9	5	<1	<1	<1
Total	*4*	*39*	*19*	*<1*	*3*	*10*
Grading/Excavation						
On-Site	2	22	9	<1	3	9
Off-Site	3	36	16	<1	1	2
Total	*5*	*58*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	5	52	18	<1	2	2
Off-Site	<1	1	3	<1	<1	<1
Total	*5*	*53*	*21*	*<1*	*2*	*2*
Paving						
On-Site	3	17	9	<1	1	1
Off-Site	<1	1	2	<1	<1	<1
Total	*3*	*18*	*11*	*<1*	*1*	*1*
Architectural Coating						
On-Site	4	<1	<1	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*4*	*<1*	*<1*	*<1*	*<1*	*<1*
Maximum Regional Total	**5**	**58**	**25**	**<1**	**4**	**11**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**5**	**52**	**18**	**<1**	**3**	**10**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	No	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Construction activity would not occur in Parcel 2. As such, no regional construction impact is anticipated in Parcel 2.

Table 3-8 shows the estimated daily emissions associated with each construction phase for Parcel 3.

TABLE 3-8: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 3 UNMITIGATED

Construction Phase	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	30	14	<1	5	18
Off-Site	2	18	8	<1	<1	1
Total	*5*	*48*	*22*	*<1*	*5*	*19*
Grading/Excavation						
On-Site	2	22	9	<1	3[1]	9[1]
Off-Site	3	36	16	<1	1	2
Total	*5*	*58*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	6	55	21	<1	2	2
Off-Site	1	5	21	<1	1	<1
Total	*7*	*60*	*42*	*<1*	*3*	*2*
Paving						
On-Site	5	23	12	<1	2	2
Off-Site	<1	3	4	<1	<1	<1
Total	*5*	*26*	*16*	*<1*	*2*	*2*
Architectural Coating						
On-Site	43	<1	<1	<1	<1	<1
Off-Site	<1	1	<1	<1	<1	<1
Total	*43*	*1*	*<1*	*<1*	*<1*	*<1*
Maximum Regional Total	**43**	**60**	**42**	**<1**	**5**	**19**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**43**	**55**	**21**	**<1**	**5**	**18**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B)

Daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 3 would result in a less-than-significant regional construction impact.

Table 3-9 shows the estimated daily emissions associated with each construction phase for Parcel 4.

TABLE 3-9: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 4 UNMITIGATED

Construction Phase	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	30	14	<1	3	10
Off-Site	1	9	5	<1	<1	<1
Total	*4*	*39*	*19*	*<1*	*3*	*10*
Grading/Excavation						
On-Site	2	22	9	<1	3	9
Off-Site	3	36	16	<1	1	2
Total	*5*	*58*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	7	55	21	<1	2	2
Off-Site	<1	2	10	<1	<1	<1
Total	*7*	*57*	*31*	*<1*	*2*	*2*
Paving						
On-Site	3	21	11	<1	1	2
Off-Site	<1	2	3	<1	<1	<1
Total	*4*	*23*	*14*	*<1*	*1*	*2*
Architectural Coating						
On-Site	43	<1	1	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*43*	*<1*	*1*	*<1*	*<1*	*<1*
Maximum Regional Total	**43**	**58**	**31**	**<1**	**4**	**11**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**43**	**55**	**21**	**<1**	**3**	**9**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	No	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 4 would result in a less-than-significant regional construction impact.

Proposed Project with Add Area. **Table 3-10** shows the estimated daily emissions associated with each construction phase. Daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, or PM_{10}. However, VOC and NO_X construction emissions would exceed the SCAQMD regional significance threshold. As such, the proposed project with add area would result in a significant regional construction impact without implementation of mitigation measures.

Localized Impacts

Localized Impacts. Emissions for the localized construction air quality analysis of $PM_{2.5}$, PM_{10}, CO, and NO_2 were compiled using LST methodology promulgated by the SCAQMD.[17] Localized on-site emissions were calculated using similar methodology as the regional emission calculations. LSTs were developed based upon the size or total area of the emissions source, the ambient air quality in each source receptor area, and the distance to the sensitive receptor. LSTs for CO and NO_2 were derived by using an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any ambient air quality standard for a particular source receptor area. The construction PM_{10} LST was derived using a dispersion model to back-calculate the emissions necessary to exceed a concentration equivalent to 50 $\mu g/m^3$ over five hours, which is the SCAQMD Rule 403 control requirement.

Proposed Project. **Table 3-6** shows the estimated daily localized emissions associated with each construction phase. Daily construction emissions would not exceed the SCAQMD localized thresholds for CO. However, NO_2, $PM_{2.5}$, and PM_{10} construction emissions would exceed the SCAQMD localized significance threshold. As such, the proposed project would result in a significant localized construction impact without implementation of mitigation measures.

Add Area. **Table 3-7** shows the estimated daily localized emissions associated with each construction phase for Parcel 1. Daily construction emissions would not exceed the SCAQMD localized thresholds for NO_2, $PM_{2.5}$, or CO. However, PM_{10} construction emissions would exceed the SCAQMD localized significance threshold. As such, Parcel 1 would result in a significant localized construction impact without implementation of mitigation measures.

Construction activity would not occur in Parcel 2 and, as such, no localized construction impact is anticipated.

Table 3-8 shows the estimated daily localized emissions associated with each construction phase for Parcel 3. Daily construction emissions would not exceed the SCAQMD localized thresholds for NO_2, or CO. However, $PM_{2.5}$ and PM_{10} construction emissions would exceed the SCAQMD localized significance threshold. As such, Parcel 3 would result in a significant localized construction impact without implementation of mitigation measures.

[17]The concentrations of SO_2 are not estimated because construction activities would generate a small amount of SO_X emissions. No State standard exists for VOC. As such, concentrations for VOC were not estimated.

TABLE 3-10: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PROPOSED PROJECT WITH ADD AREA

Construction Phase	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$ /a/	PM_{10} /a/
Demolition						
On-Site	15	136	65	<1	17	54
Off-Site	5	50	26	<1	<1	1
Total	20	186	91	<1	17	55
Trenching						
On-Site	2	18	8	<1	1	1
Off-Site	<1	<1	1	<1	<1	<1
Total	2	18	9	<1	1	1
Grading/Excavation						
On-Site	11	102	44	<1	12	53
Off-Site	31	376	158	<1	14	19
Total	42	478	202	<1	26	72
Buildings Construction						
On-Site	25	226	85	<1	9	9
Off-Site	6	29	133	<1	2	1
Total	31	255	218	<1	11	10
Paving						
On-Site	14	80	45	<1	5	7
Off-Site	<1	6	10	<1	<1	<1
Total	14	86	55	<1	5	7
Architectural Coating						
On-Site	248	<1	2	<1	<1	<1
Off-Site	<1	1	<1	<1	<1	<1
Total	248	1	2	<1	<1	<1
Maximum Regional Total	**261**	**582**	**437**	**<1**	**34**	**81**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	No	No	No	No
Maximum On-Site Total/	**256**	**280**	**124**	**<1**	**21**	**63**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	Yes	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Table 3-9 shows the estimated daily localized emissions associated with each construction phase for Parcel 4. Daily construction emissions would not exceed the SCAQMD localized thresholds for NO_2, $PM_{2.5}$, or CO. However, PM_{10} construction emissions would exceed the SCAQMD localized significance threshold. As such, Parcel 4 would result in a significant localized construction impact without implementation of mitigation measures.

Proposed Project with Add Area. **Table 3-10** shows the estimated daily localized emissions associated with each construction phase. Daily construction emissions would not exceed the SCAQMD localized thresholds for CO. However, NO_2, $PM_{2.5}$, and PM_{10} construction emissions would exceed the SCAQMD localized significance threshold. As such, the proposed project with add area would result in a significant localized construction impact without implementation of mitigation measures.

Toxic Air Contaminant Impacts

Proposed Project. The greatest potential for TAC emissions during construction would be diesel particulate emissions associated with heavy equipment operations. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. “Individual Cancer Risk” is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer. Given the short-term construction schedule of approximately 30 months, the proposed project would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction. As such, project-related TAC emission impacts during construction would be less than significant.

Add Area. Similar to the proposed project, construction activity on Parcels 1, 3, and 4 would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction and Parcels 1, 3, and 4 TAC emission impacts during construction would be less than significant.

Construction activity would not occur in Parcel 2. As such, no TAC impact is anticipated in Parcel 2.

Proposed Project with Add Area. Similar to the proposed project, the proposed project with add area construction activity would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction and the proposed project with add area TAC emission impacts during construction would be less than significant.

Odors

Proposed Project. Potential sources that may emit odors during construction activities include equipment exhaust and architectural coatings. Odors from these sources would be localized and generally confined to the project site. The proposed project would utilize typical construction techniques, resulting in odors that would be typical of most construction sites and temporary. The proposed project construction would not cause an odor nuisance, and construction odors would result in a less-than-significant impact.

Add Area. Similar to the proposed project, construction activity on Parcels 1, 3 and 4 would not cause an odor nuisance, and construction odors would result in a less-than-significant impact.

Construction activity would not occur in Parcel 2. Therefore, no odor impact is anticipated in Parcel 2.

Proposed Project with Add Area. Similar to the proposed project, the proposed project with add area construction activity would not cause an odor nuisance, and construction odors would result in a less-than-significant impact.

Construction Phase Mitigation Measures

AQ1 Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.

AQ2 Track-out shall not extend 25 feet or more from an active operation, and track-out shall be removed at the conclusion of each workday.

AQ3 A wheel washing system shall be installed and used to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.

AQ4 All haul trucks hauling soil, sand, and other loose materials shall maintain at least six inches of freeboard in accordance with California Vehicle Code Section 23114.

AQ5 All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).

AQ6 Traffic speeds on unpaved roads shall be limited to 15 miles per hour.

AQ7 Operations on unpaved surfaces shall be suspended when winds exceed 25 miles per hour.

AQ8 Heavy-equipment operations shall be suspended during first and second stage smog alerts.

AQ9 On-site stockpiles of debris, dirt, or rusty materials shall be covered or watered at least three times per day.

AQ10 Construction equipment utilized for grading and excavation shall be equipped with a diesel oxidation catalyst capable of reducing NO_X emissions by 40 percent.

AQ11 Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications.

AQ12 Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.

AQ13 Heavy-duty haul/delivery trucks shall be prohibited from idling in excess of five minutes, both on- and off-site, to be consistent with State law.

AQ14 Construction parking shall be configured to minimize traffic interference.

AQ15 Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible.

AQ16 Architectural coatings shall be purchased from a super-compliant architectural coating manufacturer as identified by the SCAQMD (http://www.aqmd.gov/-prdas/brochures/Super-Compliant_AIM.pdf).

AQ17 Spray equipment with high transfer efficiency, such as the electrostatic spray gun or manual coatings application (e.g., paint brush and hand roller), shall be used to reduce VOC emissions.

Impacts After Mitigation

Fugitive dust emissions are responsible for approximately 78 percent of localized PM_{10} concentrations. As such, mitigating exhaust emissions would do little to lower PM_{10} concentrations. Mitigation Measures **AQ1** through **AQ9** would ensure that the proposed project would comply with SCAQMD Rule 403 and fugitive dust emissions would be reduced by approximately 61 percent. However, as shown in **Table 3-11**, mitigated localized $PM_{2.5}$ and PM_{10} concentrations would exceed the SCAQMD localized significance threshold and, as such, would result in a significant and unavoidable localized impact.

Approximately 32 percent of NO_X emissions during the site preparation phase would result from equipment emissions and 68 percent of NO_X emissions would result from on-road truck travel associated with hauling dirt. Mitigation Measure **AQ10** would reduce regional NO_X emissions from equipment by 40 percent. Mitigation Measures **AQ11** and **AQ12**, while difficult to quantify, would also reduce equipment NO_X emissions. Mitigation Measure **AQ16** would reduce VOC emissions during the architectural coating activity by approximately 64 percent. Mitigation Measures **AQ13**, **AQ14**, **AQ15**, and **AQ17**, while difficult to quantify, would reduce on-road NO_X and VOC emissions.

Proposed Project. Mitigation Measures **AQ10** through **AQ15** would reduce maximum daily regional NO_X emissions to 365 pounds per day. Mitigation Measure **AQ16** and **AQ17** would reduce maximum daily regional VOC emissions to 155 pounds per day. As shown in **Table 3-11**, mitigated NO_X and VOC emissions would still exceed the SCAQMD regional significance thresholds of 100 and 75 pounds per day, respectively; and, as such, the proposed project would result in a significant and unavoidable regional impact.

Add Area. **Table 3-12**, shows the estimated daily emissions associated with each construction phase for Parcel 1. As shown, daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 1 would result in a less-than-significant regional construction impact.

The existing uses within Parcel 2 would remain. No net development or emissions are anticipated within this parcel. Thus, no impact is anticipated within Parcel 2.

Table 3-13 shows the estimated daily emissions associated with each construction phase for Parcel 3. As shown, daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 3 would result in a less-than-significant regional construction impact.

TABLE 3-11: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PROPOSED PROJECT MITIGATED

Construction Phase	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$ /a/	PM_{10} /a/
Demolition						
On-Site	6	28	23	<1	6	16
Off-Site	1	13	8	<1	<1	<1
Total	*7*	*41*	*31*	*<1*	*6*	*16*
Trenching						
On-Site	2	13	8	<1	1	1
Off-Site	<1	<1	1	<1	<1	<1
Total	2	13	9	<1	1	1
Grading/Excavation						
On-Site	5	21	17	<1	3	10
Off-Site	22	268	110	<1	11	13
Total	*27*	*289*	*127*	*<1*	*14*	*23*
Buildings Construction						
On-Site	7	41	25	<1	3	3
Off-Site	5	21	99	<1	1	1
Total	*12*	*62*	*124*	*<1*	*4*	*4*
Paving						
On-Site	3	11	13	<1	1	2
Off-Site	<1	<1	1	<1	<1	<1
Total	*4*	*11*	*14*	*<1*	*1*	*2*
Architectural Coating						
On-Site	143	<1	2	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*143*	*<1*	*2*	*<1*	*<1*	*<1*
Maximum Regional Total	**155**	**365**	**339**	**<1**	**21**	**40**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	No	No	No	No
Maximum On-Site Total	**150**	**76**	**64**	**<1**	**10**	**26**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

TABLE 3-12: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 1 MITIGATED						
	Pounds per Day					
Construction Phase	**VOC**	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	18	14	<1	3	10
Off-Site	1	9	5	<1	<1	<1
Total	*4*	*27*	*19*	*<1*	*3*	*10*
Grading/Excavation						
On-Site	2	13	9	<1	3	9
Off-Site	3	36	16	<1	1	2
Total	*5*	*49*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	5	43	18	<1	2	2
Off-Site	<1	1	3	<1	<1	<1
Total	*5*	*43*	*21*	*<1*	*2*	*2*
Paving						
On-Site	3	12	9	<1	1	1
Off-Site	<1	<1	2	<1	<1	<1
Total	*3*	*12*	*11*	*<1*	*1*	*1*
Architectural Coating						
On-Site	4	<1	<1	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*4*	*<1*	*<1*	*<1*	*<1*	*<1*
Maximum Regional Total	**5**	**49**	**25**	**<1**	**4**	**11**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**5**	**43**	**18**	**<1**	**3**	**10**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	No	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

TABLE 3-13: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 3 MITIGATED						
	Pounds per Day					
Construction Phase	**VOC**	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	18	14	<1	5	18
Off-Site	2	18	8	<1	<1	1
Total	*5*	*36*	*22*	*<1*	*5*	*19*
Grading/Excavation						
On-Site	2	13	9	<1	3[1]	9[1]
Off-Site	3	36	16	<1	1	2
Total	*5*	*49*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	6	46	21	<1	2	2
Off-Site	1	6	21	<1	1	<1
Total	*7*	*52*	*42*	*<1*	*3*	*2*
Paving						
On-Site	5	23	12	<1	2	2
Off-Site	<1	3	4	<1	<1	<1
Total	*5*	*26*	*16*	*<1*	*2*	*2*
Architectural Coating						
On-Site	40	<1	<1	<1	<1	<1
Off-Site	<1	1	<1	<1	<1	<1
Total	*40*	*1*	*<1*	*<1*	*<1*	*<1*
Maximum Regional Total	**40**	**52**	**42**	**<1**	**5**	**19**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**40**	**46**	**21**	**<1**	**5**	**18**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Table 3-14 shows the estimated daily emissions associated with each construction phase for Parcel 4. As shown, daily construction emissions would not exceed the SCAQMD regional significance thresholds for CO, SO_X, $PM_{2.5}$, PM_{10}, VOC, or NO_X. As such, Parcel 4 would result in a less-than-significant regional construction impact.

TABLE 3-14: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PARCEL 4 MITIGATED						
	Pounds per Day					
Construction Phase	**VOC**	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$ /a/**	**PM_{10} /a/**
Demolition						
On-Site	3	18	14	<1	3	10
Off-Site	1	9	5	<1	<1	<1
Total	*4*	*27*	*19*	*<1*	*3*	*10*
Grading/Excavation						
On-Site	2	13	9	<1	3	9
Off-Site	3	36	16	<1	1	2
Total	*5*	*49*	*25*	*<1*	*4*	*11*
Buildings Construction						
On-Site	7	46	21	<1	2	2
Off-Site	<1	2	10	<1	<1	<1
Total	*7*	*48*	*31*	*<1*	*2*	*2*
Paving						
On-Site	3	15	11	<1	1	2
Off-Site	<1	2	3	<1	<1	<1
Total	*4*	*17*	*14*	*<1*	*1*	*2*
Architectural Coating						
On-Site	39	<1	1	<1	<1	<1
Off-Site	<1	<1	<1	<1	<1	<1
Total	*39*	*<1*	*1*	*<1*	*<1*	*<1*
Maximum Regional Total	**39**	**49**	**31**	**<1**	**4**	**11**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No
Maximum On-Site Total	**39**	**46**	**21**	**<1**	**3**	**10**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	No	No	--	No	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

Proposed Project with Add Area. Mitigation Measures **AQ10** through **AQ16** would reduce maximum daily regional NO_X emissions to 515 pounds per day and VOC emissions to 239 pounds per day. As shown in **Table 3-15**, mitigated NO_X and VOC emissions would still exceed the SCAQMD regional NO_X and VOC significance thresholds, and the proposed project with add area would result in a significant and unavoidable regional impact.

TABLE 3-15: ESTIMATED DAILY CONSTRUCTION EMISSIONS – PROPOSED PROJECT WITH ADD AREA MITIGATED

Construction Phase	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$ /a/	PM_{10} /a/
Demolition						
On-Site	15	82	65	<1	17	54
Off-Site	5	50	26	<1	<1	1
Total	20	132	91	<1	17	55
Trenching						
On-Site	2	13	8	<1	1	1
Off-Site	<1	<1	1	<1	<1	<1
Total	2	13	9	<1	1	1
Grading/Excavation						
On-Site	11	60	44	<1	18	53
Off-Site	31	376	158	<1	17	19
Total	42	436	202	<1	35	72
Buildings Construction						
On-Site	25	176	85	<1	9	9
Off-Site	6	29	133	<1	2	1
Total	31	205	218	<1	11	10
Paving						
On-Site	14	61	45	<1	5	7
Off-Site	<1	6	10	<1	<1	<1
Total	14	67	55	<1	5	7
Architectural Coating						
On-Site	226	<1	2	<1	<1	<1
Off-Site	<1	1	<1	<1	<1	<1
Total	226	1	2	<1	<1	<1
Maximum Regional Total	**239**	**515**	**437**	**<1**	**34**	**81**
Regional Significance Threshold	**75**	**100**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	No	No	No	No
Maximum On-Site Total /c/	**226**	**211**	**124**	**<1**	**21**	**56**
Localized Significance Threshold /b/	**--**	**103**	**151**	**--**	**3**	**4**
Exceed Threshold?	--	Yes	No	--	Yes	Yes

/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.
/b/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance.
SOURCE: TAHA, 2008 (Appendix B).

3.6.2 Operational Phase

Regional Impacts

Long-term emissions associated with the proposed project and the add area would be generated by area sources, such as natural gas combustion and consumer products (e.g., aerosol sprays), and mobile sources. Motor vehicle trips generated by the proposed project and the add area would be the predominate source of long-term project emissions. Mobile and area source emissions for the proposed project and the add area were estimated using URBEMIS2007.

Proposed Project. According to the traffic report, the proposed project would generate 18,763 net daily vehicle trips.[18] The estimated daily operational emissions are shown in **Table 3-16**. The net regional operational emissions would exceed SCAQMD significance thresholds for VOC, NO_X, CO, $PM_{2.5}$, and PM_{10}. Therefore, proposed project operational emissions would result in a significant impact.

TABLE 3-16: ESTIMATED DAILY OPERATIONS EMISSIONS – PROPOSED PROJECT

Emission Source	Pounds per Day					
	VOC	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$**	**PM_{10}**
Proposed Uses						
Area Sources /a/	15	11	8	<1	<1	<1
Mobile Sources	170	267	1,895	2	83	428
Total	*185*	*278*	*1,903*	*2*	*83*	*428*
Existing Uses						
Area Sources /a/	1	1	1	<1	<1	<1
Mobile Sources	49	80	555	1	24	125
Total	*50*	*81*	*556*	*1*	*24*	*125*
Net Emissions	***135***	***197***	***1,347***	***1***	***59***	***303***
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	Yes	No	Yes	Yes

/a/ Area sources include emissions from natural gas combustion and consumer product (e.g., aerosol sprays).
SOURCE: TAHA, 2008 (Appendix C).

Add Area. According to the traffic report, the proposed uses in Parcel 1 would generate 183 net daily vehicle trips.[19] The estimated daily operational emissions are shown in **Table 3-17**. The net regional operational emissions would not exceed the SCAQMD significance thresholds and Parcel 1 operational emissions would result in a less-than-significant impact.

[18] Overland Traffic Consultants, Inc., *Traffic Impact Analysis for the Plaza at the Glen*, July 30, 2008.
[19] *Ibid*.

TABLE 3-17: ESTIMATED DAILY OPERATIONS EMISSIONS – PARCEL 1						
Emission Source	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$	PM_{10}
Proposed Uses						
Area Sources /a/	2	<1	<1	<1	<1	<1
Mobile Sources	2	3	18	<1	1	4
Total	*4*	*3*	*18*	*<1*	*1*	*4*
Existing Uses						
Area Sources /a/	<1	1	1	<1	<1	<1
Mobile Sources	<1	<1	1	<1	<1	<1
Total	*<1*	*1*	*2*	*<1*	*<1*	*<11*
Net Emissions	***4***	***2***	***16***	***<1***	***1***	***4***
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No

/a/ Area sources include emissions from natural gas combustion and consumer product (e.g., aerosol sprays).
SOURCE: TAHA, 2008 (Appendix C).

According to the traffic report, the proposed uses in Parcel 2 would not generate new daily vehicle trips since the existing uses would not change.[20] Therefore, no regional operational impact is anticipated in Parcel 2.

According to the traffic report, Parcel 3 would generate 1,887 net daily vehicle trips.[21] The estimated daily operational emissions are shown in **Table 3-18**. The net regional operational emissions would not exceed the SCAQMD significance thresholds and Parcel 3 operational emissions would result in a less-than-significant impact.

According to the traffic report, Parcel 4 would generate 550 net daily vehicle trips.[22] The estimated daily operational emissions are shown in **Table 3-19**. The net regional operational emissions would not exceed the SCAQMD significance thresholds and Parcel 4 operational emissions would result in a less-than-significant impact.

Proposed Project with Add Area. According to the traffic report, the proposed project with add area would generate 21,383 net daily vehicle trips.[23] The estimated daily operational emissions are shown in **Table 3-20**. The net regional operational emissions would exceed the SCAQMD significance thresholds for VOC, NO_X, CO, $PM_{2.5}$ and PM_{10} and operational emissions from the proposed project with add area would result in a significant impact.

[20] *Ibid*.
[21] *Ibid*.
[22] *Ibid*.
[23] *Ibid*.

TABLE 3-18: ESTIMATED DAILY OPERATIONS EMISSIONS – PARCEL 3

Emission Source	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$	PM_{10}
Proposed Uses						
Area Sources /a/	8	2	1	<1	<1	<1
Mobile Sources	18	27	192	<1	8	43
Total	*26*	*29*	*193*	*<1*	*8*	*43*
Existing Uses						
Area Sources /a/	<1	<1	<1	<1	<1	<1
Mobile Sources	13	20	140	<1	6	32
Total	*13*	*20*	*140*	*<1*	*6*	*32*
Net Emissions	***13***	***9***	***53***	***<1***	***2***	***11***
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No

/a/ Area sources include emissions from natural gas combustion and consumer product (e.g., aerosol sprays).
SOURCE: TAHA, 2008 (Appendix C).

TABLE 3-19: ESTIMATED DAILY OPERATIONS EMISSIONS – PARCEL 4

Emission Source	Pounds per Day					
	VOC	NO_X	CO	SO_X	$PM_{2.5}$	PM_{10}
Proposed Uses						
Area Sources /a/	1	1	1	<1	<1	<1
Mobile Sources	13	20	142	<1	6	32
Total	*14*	*21*	*143*	*<1*	*6*	*32*
Existing Uses						
Area Sources /a/	<1	<1	<1	<1	<1	<1
Mobile Sources	8	13	91	<1	4	21
Total	*8*	*13*	*91*	*<1*	*4*	*21*
Net Emissions	***6***	***8***	***52***	***<1***	***2***	***11***
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	No	No	No	No	No	No

/a/ Area sources include emissions from natural gas combustion and consumer product (e.g., aerosol sprays).
SOURCE: TAHA, 2008 (Appendix C).

TABLE 3-20: ESTIMATED DAILY OPERATIONS EMISSIONS – PROJECT WITH ADD AREA						
	Pounds per Day					
Emission Source	**VOC**	**NO_X**	**CO**	**SO_X**	**$PM_{2.5}$**	**PM_{10}**
Proposed Project with Add Area						
Area Sources /a/	26	13	10	<1	<1	<1
Mobile Sources	203	316	2,247	3	98	507
Total	*229*	*329*	*2,257*	*3*	*98*	*507*
Existing Land Uses						
Area Sources /a/	1	2	2	<1	<1	<1
Mobile Sources	70	113	787	1	34	178
Total	*71*	*115*	*789*	*1*	*34*	*178*
Net Emissions	***158***	***214***	***1,468***	***2***	***64***	***329***
SCAQMD Threshold	**55**	**55**	**550**	**150**	**55**	**150**
Exceed Threshold?	Yes	Yes	Yes	No	Yes	Yes

/a/ Area sources include emissions from natural gas combustion and consumer product (e.g., aerosol sprays).
SOURCE: TAHA, 2008 (Appendix C).

Localized Impacts

CO concentrations in 2013 are expected to be lower than existing conditions due to stringent State and federal mandates for lowering vehicle emissions. Although traffic volumes would be higher in the future both without and with the implementation of the proposed project and/or the proposed uses in the add area, CO emissions from mobile sources are expected to be much lower due to technological advances in vehicle emissions systems, as well as from normal turnover in the vehicle fleet. Accordingly, increases in traffic volumes are expected to be offset by increases in cleaner-running cars as a percentage of the entire vehicle fleet on the road.[24]

The State one- and eight-hour CO standards may potentially be exceeded at congested intersections with high traffic volumes. An exceedance of the State CO standards at an intersection is referred to as a CO hotspot. The SCAQMD recommends a CO hotspot evaluation of potential localized CO impacts when V/C ratios are increased by two percent at intersections with a LOS of D or worse. SCAQMD also recommends a CO hotspot evaluation when an intersection decreases in LOS by one level beginning when LOS changes from C to D.

The USEPA CAL3QHC micro-scale dispersion model was used to calculate CO concentrations. Based on the traffic study, a CO hotspot analysis was conducted at the following intersections:

- Coldwater Canyon Avenue/Hamlin Street - PM Peak Hour
- Coldwater Canyon Avenue/Vanowen Street - PM Peak Hour
- Coldwater Canyon Avenue/Victory Boulevard - PM Peak Hour
- Ethel Avenue/Victory Boulevard – PM Peak Hour

[24] Consistent with CARB's vehicle emissions inventory.

- Morse Avenue/Victory Boulevard – PM Peak Hour
- Whitsett Avenue/Vanowen Street – PM Peak Hour
- Whitsett Avenue/Victory Boulevard – PM Peak Hour
- Woodman Avenue/Victory Boulevard – PM Peak Hour
- 170 Freeway Southbound (North Side)/Victory Boulevard
- 170 Freeway Southbound (South Side)/Victory Boulevard

Proposed Project. One- and eight-hour CO concentrations at the ten study intersections are shown in **Tables 3-21** and **3-22,** respectively. As indicated, one-hour CO concentrations for the proposed project would be approximately 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations for the proposed project would range from approximately 2.4 to 2.8 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded at the ten study intersections. Thus, the proposed project would result in a less-than-significant impact.

TABLE 3-21: 2008 AND 2013 ONE-HOUR CARBON MONOXIDE CONCENTRATIONS/a/

Intersection	Existing	No Project	Project	Parcel 1	Parcel 3	Parcel 4	Project with Add Area
Coldwater Canyon Ave/Hamlin St	5	4	4	4	4	4	4
Coldwater Canyon Ave/Vanowen St	5	4	4	4	4	4	4
Coldwater Canyon Ave/Victory Blvd	5	4	4	4	4	4	4
Ethel Ave/Victory Blvd	5	4	4	4	4	4	4
Morse Ave/Victory Blvd	5	4	4	4	4	4	4
Whitsett Ave/Vanowen St	5	4	4	4	4	4	4
Whitsett Ave/Victory Blvd	5	4	4	4	4	4	4
Woodman Ave/Victory Blvd	5	4	4	4	4	4	4
170 Fwy Southbound (N Side)/Victory Blvd	5	4	4	4	4	4	4
170 Fwy Southbound (S Side)/Victory Blvd	5	4	4	4	4	4	4
State Standard							**20**

/a/ Existing concentrations include year 2007 one-hour ambient concentration of 4 ppm. CO concentrations for the no project, proposed project, Parcels 1 through 4 include year 2013 one-hour ambient concentration of 3 ppm.
SOURCE: TAHA, 2008 (Appendix C).

TABLE 3-22: 2008 AND 2013 EIGHT-HOUR CARBON MONOXIDE CONCENTRATIONS/a/							
Intersection	**Existing**	**No Project**	**Project**	**Parcel 1**	**Parcel 3**	**Parcel 4**	**Project with Add Area**
Coldwater Canyon Ave/Hamlin St	3.2	2.4	2.4	2.4	2.4	2.	2.4
Coldwater Canyon Ave/Vanowen St	3.5	2.6	2.6	2.6	2.6	2.	2.6
Coldwater Canyon Ave/Victory Blvd	3.6	2.7	2.8	2.8	2.8	2.8	2.8
Ethel Ave/Victory Blvd	3.4	2.6	2.6	2.6	2.6	2.6	2.7
Morse Ave/Victory Blvd	3.2	2.4	2.8	2.7	2.6	2.7	2.8
Whitsett Ave/Vanowen St	3.5	2.6	2.6	2.6	2.6	2.6	2.6
Whitsett Ave/Victory Blvd	3.6	2.7	2.8	2.8	2.8	2.8	2.8
Woodman Ave/Victory Blvd	3.7	2.7	2.8	2.8	2.8	2.8	2.8
170 Fwy Southbound (N Side)/Victory Blvd	3.4	2.5	2.5	2.6	1.6	2.6	2.5
170 Fwy Southbound (S Side)/Victory Blvd	3.4	2.5	2.6	2.6	2.6	2.6	2.6
State Standard							**9**

/a/ Existing concentrations include year 2007 eight-hour ambient concentrations of 2.8 ppm. CO concentrations for the no project, proposed project, Parcels 1 through 4, and proposed project with add area conditions include year 2013 eight-hour ambient concentrations of 2.0 ppm
SOURCE: TAHA, 2008 (Appendix C).

Add Area. One- and eight-hour CO concentrations at the ten study intersections for Parcel 1 are shown in **Tables 3-21** and **3-22**, respectively. As indicated, one-hour CO concentrations for Parcel 1 would be approximately 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations for Parcel 1 would range from approximately 2.4 to 2.9 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded at the ten study intersections. Thus, Parcel 1 would result in a less-than-significant impact.

One- and eight-hour CO concentrations at the ten study intersections for Parcel 3 are shown in **Tables 3-21** and **3-22**, respectively. The nearest study intersection to Parcel 3 is Coldwater Canyon Avenue and Hamlin Street, which has a one-hour concentration of 4 ppm and an eight-hour CO concentration of 2.4 ppm. As indicated, one-hour CO concentrations for Parcel 3 would be approximately 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations for Parcel 3 would range from approximately 2.4 to 2.8 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded at the ten study intersections. Thus, Parcel 3 would result in a less-than-significant impact.

One- and eight-hour CO concentrations at the ten study intersections for Parcel 4 are shown in **Tables 3-21** and **3-22**, respectively. The nearest study intersection to Parcel 4 is Coldwater Canyon Avenue and Victory Boulevard, which has a one-hour concentration of 4 ppm and an eight-hour CO concentration of 2.8 ppm. As indicated, one-hour CO concentrations for Parcel 4 would be approximately 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations for Parcel 4 would range from approximately 2.8 to 3.2 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded at the ten study intersections. Thus, Parcel 4 would result in a less-than-significant impact.

Proposed Project with Add Area. One- and eight-hour CO concentrations at the ten study intersections for the proposed project and the add area are shown in **Tables 3-21** and **3-22**, respectively. As indicated, one-hour CO concentrations for the proposed project with add area would be approximately 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations for the proposed project with add area would range from approximately 2.4 to 2.8 ppm. The State one- and eight-hour standards of 20 ppm and 9.0 ppm, respectively, would not be exceeded at the ten study intersections. Thus, the proposed project with add area would result in a less-than-significant impact.

Toxic Air Contaminant Impacts

Proposed Project. The SCAQMD recommends that health risk assessments be conducted for substantial sources of diesel particulate emissions (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.[25] The proposed project would develop commercial and residential uses on the project site. The commercial and residential uses are not anticipated to generate a substantial number of daily truck trips. The primary source of potential TACs associated with project operations is diesel particulate from delivery trucks (e.g., truck traffic on local streets and on-site truck idling). The number of heavy-duty trucks (e.g., delivery trucks) accessing the project site on a daily basis would be minimal, and the trucks that do visit the site would not idle on-site for extended periods of time. Based on the limited activity of the TAC sources, the proposed project would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant.

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes and automotive repair facilities. The proposed project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). As such, the proposed project would not release substantial amounts of TACs, and no significant impact on human health would occur.

Proposed Project. The proposed project would include a transit plaza. The transit plaza would not be a regional hub and would not be a major source of new diesel emissions. The transit plaza would generally be serviced by the Los Angeles County Metropolitan Transportation Agency (Metro). The majority of the Metro fleet is fueled with compressed natural gas, which emits less diesel particulate emissions when combusted than diesel fuel. As such, the transit plaza would not be a significant source of diesel emissions.

Add Area. The uses that are proposed for Parcels 1, 3, and 4 are residential and commercial. The land uses are not anticipated to create any substantial sources of TAC, including trucks. As the proposed uses for Parcels 1, 3, and 4 would not involve any substantial sources of TAC, a health risk assessment associated with on-site activities is not warranted, and no TAC impacts are anticipated.

Typical sources of acutely and chronically hazardous TACs include industrial manufacturing processes and automotive repair facilities. The proposed uses for Parcels 1, 3, and 4 would not

[25]SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions, December 2002.

include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). As such, the proposed project would not release substantial amounts of TACs, and no significant impact on human health would occur.

The existing uses within Parcel 2 would not change. No additional sources of TAC are expected be generated, and no new TAC impacts are anticipated within Parcel 2.

Proposed Project with Add Area. The uses for the proposed project and the add area are commercial and residential. The primary source of potential TACs associated with operations of the proposed uses is diesel particulate from delivery trucks (e.g., truck traffic on local streets and on-site truck idling). The number of heavy-duty trucks (e.g., delivery trucks) accessing the project site on a daily basis would be minimal, and the trucks that do visit the site would not idle on-site for extended periods of time. Based on the limited activity of the TAC sources, the proposed project and the uses proposed for the add area would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant.

Similar to the proposed project analysis, the proposed project with add area land uses would not include significant stationary TAC sources.

Odor Impacts

Proposed Project. According to the SCAQMD CEQA Air Quality Handbook, land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. The majority of the project site would be developed with residential and office space and not land uses that are typically associated with odor complaints. On-site trash receptacles would have the potential to create adverse odors. As trash receptacles would be located and maintained in a manner that promotes odor control, no adverse odor impacts are anticipated from these types of land uses.

The proposed project would also include residential buildings and restaurants. Most restaurants generally do not produce adverse odors, as this would not be conducive to having a successful business. Notwithstanding, restaurants do have the potential for the generation of odors from the operation of char-broilers and deep fat fryers. While there is a potential for odors to occur, compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential restaurant objectionable odor impacts to a less-than-significant level.

Add Area. The uses that are proposed for Parcels 1, 3, and 4 are residential, commercial, office, and shopping center. These land uses are not typically associated with odor complaints. On-site trash receptacles would have the potential to create adverse odors. Trash receptacles would be located and maintained in a manner that promotes odor control and no adverse odor impacts are anticipated. The proposed shopping center may contain restaurants. The proposed land uses are not typically associated with odor complaints. Potential operational airborne odors could result from cooking activities associated with the new restaurant uses. Notwithstanding, restaurants do have the potential for the generation of odors from the operation of char-broilers and deep fat fryers. While there is a potential for odors to occur, compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential restaurant objectionable odor impacts to a less-than-significant level. Therefore, Parcels 1, 3, and 4 would not create objectionable odors and would result in a less-than-significant impact.

Proposed Project with Add Area. The uses that are proposed for the project site and the add area include residential uses, a hotel, offices, a health and fitness center, a theater, and shopping centers. The proposed shopping centers may contain restaurants. The proposed land uses are not typically associated with odor complaints. Potential operational airborne odors could result from cooking activities associated with the new restaurant uses. Notwithstanding, restaurants do have the potential for the generation of odors from the operation of char-broilers and deep fat fryers. While there is a potential for odors to occur, compliance with industry standard odor control practices, SCAQMD Rule 402 (Nuisance), and SCAQMD Best Available Control Technology Guidelines would limit potential restaurant objectionable odor impacts to a less-than-significant level. Therefore, the proposed project with add area would not create objectionable odors and would result in a less-than-significant impact.

Operational Phase Mitigation Measures

The following control measure would help to reduce daily vehicle trips and mobile emissions, and would reduce on-site exposure to air contaminants.

AQ18 The Applicant shall provide informational packets to new residents within the development locating nearby public transportation options, including transportation options provided at the transit plaza.

AQ19 Residential units shall be constructed with air filtration systems meeting or exceeding the ASHRAE Standard 52.2 Minimum Efficiency Reporting Value (MERV) of 11, to the satisfaction of the Department of Building and Safety.

AQ20 Commercial/institutional land uses shall be constructed with air filtration systems meeting or exceeding the ASHRAE Standard 52.2 Minimum Efficiency Reporting Value (MERV) of 12, to the satisfaction of the Department of Building and Safety.

Impacts After Mitigation

Daily operational regional emissions would not exceed the regional thresholds for SO_X, but would exceed the significance thresholds for VOC, NO_X, CO, $PM_{2.5}$, and PM_{10}. The majority of project-related emissions are a result of the estimated 18,763 net average daily trips. The Applicant cannot reasonably impose emission control devices on private vehicle associated with the proposed project. Mitigation Measure **AQ-18** would help to reduce mobile emissions by increasing awareness of public transportation options, which would lower daily vehicle trips. However, the proposed project would result in a significant and unavoidable regional operations impact. Mitigation Measures **AQ-19** and **AQ-20** would reduce on-site exposure to air contaminants.

3.6.3 Consistency with the Air Quality Management Plan

Proposed Project. Development of the proposed project is not expected to result in a significant impact in terms of conflicting with, or obstructing the implementation of the 2007 AQMP. The 2007 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact on the economy. Growth considered to be consistent with the 2007 AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the Basin is within the projections for growth identified in the 2008 RTP, implementation of the 2007 AQMP would not be obstructed by such growth. The project would require a General Plan Amendment and rezoning to increase density on the site from the current neighborhood commercial designation. As discussed in Section H Land Use, the General Plan Framework Element anticipates this change by showing the intersection of Coldwater Canyon and Victory Boulevard and area west, including the project site, as appropriate for Community Commercial, which is the requested land use designation. As growth in the City of Los Angeles and the North Hollywood-Valley Village Community Plan area has not exceeded the growth projections, the proposed project would have a less-than-significant impact related to consistency with the 2007 AQMP.

SCAG locates the project site within the Los Angeles City subregion. The proposed project includes residential units and would result in increased permanent population growth. The proposed project would add 150 new housing units, which represents 0.3 percent of the 58,509 new housing units projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Similarly, the proposed project would result in a population increase of approximately 323 persons, which represents 0.4 percent of the 73,579 new population growth projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. The proposed project, which would add 2,885 employees, represents 6.5 percent of the 44,664 new employees projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Such levels of housing, population, and employment growth are consistent with forecasts for the subregion as adopted by SCAG. The proposed project would be consistent with growth assumptions included in the AQMP and, as such, would comply with Consistency Criterion No. 2.

Add Area. Parcel 1 could add 39 new housing units, which represents less than 0.01 percent of the 58,509 new housing units projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Similarly, the proposed project would result in a population increase of approximately 84 persons, which represents less than 0.01 percent of the 73,579 new population growth projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Such levels of housing and population growth are consistent with housing forecasts for the subregion as adopted by SCAG. Parcel 1 would be consistent with growth assumptions included in the AQMP and, as such, would comply with Consistency Criterion No. 2.

The existing uses within Parcel 2 would likely remain. No net development or emissions are anticipated within this Parcel. Thus, no impact is anticipated within Parcel 2.

Parcel 3 could add 295 employees, which represents 0.1 percent of the 44,664 new employees projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Such levels of employment growth are consistent with forecasts for the subregion as adopted by SCAG. Parcel 3 would be consistent with growth assumptions included in the AQMP and, as such, would comply with Consistency Criterion No. 2.

Parcel 4 could add 436 employees, which represents 0.1 percent of the 44,664 new employees projected in SCAG's RTP between 2010 and 2015 for the Los Angeles City subregion. Such levels of employment growth are consistent with forecasts for the subregion as adopted by SCAG. Parcel 4 would be consistent with growth assumptions included in the AQMP and, as such, would comply with Consistency Criterion No. 2.

3.7 CUMULATIVE IMPACTS

3.7.1 SCAQMD Methodology

The SCAQMD's approach for assessing cumulative operational impacts is based on the SCAQMD's AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal and state CAAs. This forecast also takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the project is consistent with forecasted future regional growth. If a project is consistent with the regional population, housing and employment growth assumptions upon which the SCAQMD's AQMP is based, then future development would not impede the attainment of ambient air quality standards and a significant cumulative air quality impact would not occur. The proposed project would result in a significant VOC, $PM_{2.5}$, $PM_{10,}$ NO_X and CO impact during operations. Therefore, the proposed project would result in a regional cumulative operations impact given that the Basin is in nonattainment for O_3, $PM_{2.5}$, and PM_{10} and the proposed project would exceed the regional daily emissions threshold for PM_{10}, $PM_{2.5}$, and an ozone precursor, (NO_X).

GLOBAL CLIMATE CHANGE

Methodology

The California Climate Action Registry (CCAR) published version 2.2 of its General Reporting Protocol (Protocol) in March 2007 as a means for businesses, government agencies, and non-profit organizations to calculate GHG emissions from a number of general and industry-specific activities and participate in the Registry. This Protocol is not intended for CEQA purposes, but it does provide methods that can be used to quantify the GHG emissions of CO_2, CH_4, and N_2O associated with a project's increase in on-road mobile vehicle operations, electricity consumption, and natural gas consumption.

The consumption of fossil fuels to generate electricity and to provide heating and hot water for the proposed project, as well as the consumption of fuel by on-road mobile vehicles associated with the proposed project, has the potential to create GHG emissions. As such, in generating the GHG emissions for the proposed project, the future fuel consumption rates for the proposed project by these sources are estimated based on the amount of proposed residential units. Natural gas and electricity demand factors derived from the SCAQMD's CEQA Air Quality Handbook are used to project fuel consumption rates. The GHG emission factors from the CCAR Protocol for natural gas and electricity are then applied to the respective consumption rates, to calculate annual GHG emissions in metric tons. Mobile source CO_2 emissions were obtained from the URBEMIS2007 emissions inventory model. Mobile source CH_4 and N_2O emissions were obtained using vehicle miles traveled data generated by URBEMIS2007 and emission factors obtained from the CARB's EMFAC2007 model. It should be noted that it is difficult to identify the specific generating source of electricity. The Los Angeles Department of Water and Power (LADWP) produces power at City-operated plants and also imports power during peak demand periods. The emission factors used in this analysis represent a State-wide average of known power producing facilities, utilizing various technologies and emission control strategies, and do not take into account the LADWP's unique emissions profile nor do they reflect targeted future reductions in GHG emissions under SB 1368 or the LA Green Plan. At this time, these emission factors are considered conservative and representative.

California's water infrastructure uses a tremendous amount of energy to collect, move, and treat water; dispose of wastewater; and power the large pumps that move water throughout the State. California consumers also use energy to heat, cool, and pressurize the water they use in their homes and businesses. Together these water-related energy uses annually account for roughly 20 percent of the state's electricity consumption, one-third of non-power plant natural gas consumption, and about 88 million gallons of diesel fuel consumption. The California Energy Commission has reported that the energy intensity of the water use cycle in Southern California is 12,700 kilowatt-hours per million gallons.[26]

Not all greenhouse gases exhibit the same ability to induce climate change; as a result, greenhouse gas contributions are commonly quantified in carbon dioxide equivalencies (CO_2e). The GHG mass emissions for the proposed project are calculated by converting pollutant specific emissions to CO_2e emissions by applying the applicable global warming potential (GWP) value.[27] These GWP ratios are published in the CCAR Protocol. By applying the GWP ratios, the proposed project-related CO_2e emissions are converted to metric tons per year.

Greenhouse Gas Inventory

Generally, an individual project cannot generate enough GHG emissions to influence global climate change because it is the increased accumulation of GHGs which may result in global climate change. However, an individual project may contribute an incremental amount of GHG emissions that could combine with other emission sources and to create concentrations of GHG that could influence climate change. For most projects, the main contribution of GHG emissions is from motor vehicles, but how much of those emissions are "new" is uncertain. New projects do not create new drivers, and therefore do not create a new mobile source of emissions. Rather, new projects only redistribute the existing traffic patterns. Larger projects will certainly affect a larger geographic area, but again, would not necessarily cause the creation of new drivers. Some mixed-use, urban infill, and mass transit projects could actually reduce the number of vehicle miles traveled.

The GHG emissions generated by the proposed project have been calculated in metric tons per year and are shown in **Table 3-23**.

In addition, the GHG emissions generated at the project site under the "future without project" baseline scenario are also calculated. This scenario represents the future GHG emissions that would be generated should the existing land uses (i.e., 102,817 square feet of retail use, 41,141 square feet of health/fitness use, 4,524 square feet of restaurant use, and 3,324 square feet of bank use) remain. The Future GHG emissions from the existing land use were then subtracted from the future proposed project GHG emissions to obtain the net increase in GHG emissions resulting from implementation of the proposed project. In addition, net GHG emissions were also calculated for the proposed add area. Also included in **Table 3-23** is the California Energy Commission's estimated 2004 State-wide inventory, the latest year for which data are available. As shown in **Table 3-23**, the overall net increase (project with add area minus existing uses) in GHG emissions from vehicle, electrical, and natural gas usage is approximately 0.009 percent of the 2004 emission level.

[26] California Energy Commission, *2005 Integrated Energy Policy Report*, November 2005.

[27] CO_2e was developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its Second Assessment Report (SAR) 1996.

TABLE 3-23: GREENHOUSE GAS EMISSIONS

Scenario	Carbon Equivalent (Tons per Year)		
	CO_2/a/	CH_4/b/	N_2O/b/
Existing Emissions			
Mobile Emissions	11,860	23	454
Natural Gas Emissions	298	1	<1
Electricity Emissions	758	<1	1
Water Cycle Electricity Emissions	110	<1	<1
Total Existing Emissions	***13,581***		
Project Emissions			
Mobile Emissions	43,572	79	1,552
Natural Gas Emissions	2,349	4	1
Electricity Emissions	6,634	1	10
Water Cycle Electricity Emissions	1,026	<1	<1
Total Project Emissions	***55,195***		
Add Area			
Parcel 1 Net Emissions			
Mobile Emissions	379	1	14
Natural Gas Emissions	(89)	<1	<1
Electricity Emissions	51	<1	<1
Water Cycle Electricity Emissions	34	<1	<1
Total Parcel 1 Net Emissions	***428***		
Parcel 3 Net Emissions			
Mobile Emissions	1,158	8	154
Natural Gas Emissions	394	1	<1
Electricity Emissions	644	<1	1
Water Cycle Electricity Emissions	69	<1	<1
Total Parcel 3 Net Emissions	***2,494***		
Parcel 4 Net Emissions			
Mobile Emissions	1,170	6	116
Natural Gas Emissions	186	<1	<1
Electricity Emissions	522	<1	1
Water Cycle Electricity Emissions	34	<1	<1
Total Parcel 4 Net Emissions	***2,087***		
Net Project Emissions	**41,614**		
Net Project With Add Area Emissions	**46,623**		
2004 California GHG Emissions Inventory/c/	**528,820,000/d/**		

/a/ Mobile and natural gas emissions were obtained from URBEMIS2007. Electricity emissions were obtained from *California Climate Action Registry General Reporting Protocol (March 2007)*.
/b/ Emissions were obtained from *California Climate Action Registry General Reporting Protocol (March 2007)*.
/c/ CARB, *DRAFT California Greenhouse Gas Inventory (Millions of Metric Tonnes of CO2 Equivalent) – By IPCC Category*, November 19, 2007.
/d/ Metric tonnes provided by the CARB were converted into tons to allow for the appropriate comparison.
SOURCE: TAHA, 2008 (Appendix C).

Emitting GHGs into the atmosphere is not itself an adverse environmental effect. Rather, it is the increased accumulation of GHGs in the atmosphere from a variety of sources that may result in global climate change; the consequences of which may result in adverse environmental effects. However, there are no available methodologies to predict the specific impact, if any, to global climate change from the relatively small incremental increase in emissions associated with a single development project.

The following planned City actions, as presented in the Green LA Action Plan, when implemented, may further decrease emissions of GHGs from the proposed project:

- Decreasing emissions from LADWP electrical generation and import activities
- Providing compact fluorescent light (CFL) bulbs to encourage acceptance and use of CFLs; and
- Coordinating with local, regional, and State agencies to reduce VMT

The City adopted an ordinance to establish a green building program in April 2008. The ordinance establishes green building requirements for projects involving 50 or more dwelling units. The proposed project would be required to abide by the green building program regulations. The green building program ordinance would also reduce project-related GHG emissions.

The project includes a transit plaza intended to integrate transit opportunities in to the project. The mix of uses on site would also reduce trips.

The project intends to pursue a Leadership in Energy and Environmental Design (LEED) certification by the US Green Building Council. The mix of uses, design concept and size of the site will afford many opportunities to incorporate sustainable features and strategies. Some of these opportunities being explored include: alternative fuel sources, water conservation and reuse, and recycling programs. A mandate of green policies for the tenants as conditions of their leases is also being explored. Given the number of buildings and mix of uses that comprise the project, certification for Neighborhood Development will be pursued.

The State has mandated a goal of reducing State-wide emissions to 1990 levels by 2020, even though State-wide population and commerce is predicted to grow substantially. To help meet this goal the California Climate Action Team recommended strategies that could be implemented by lead agencies to reduce GHG emissions. The proposed project would comply with these strategies which include increasing building energy efficiency and reducing HFC use in air conditioning systems. The implementation of the proposed project would not result in an unplanned level of development, does not represent a substantial new source of GHG emissions, and furthers the General Plan Framework's vision of Community Center uses for the project site and Add Area. The LEED ND rating system (and all LEED rating systems) also includes rigorous energy efficiency requirements that can far exceed ASHRAE and Title 24 standards. For these reasons, the impact of the project to the cumulative effect of global climate change is not cumulatively considerable and is, therefore, considered to be less than significant.

Cumulative Mitigation Measures

Refer to Mitigation Measure **AQ18**.

Impacts After Mitigation

The majority of operational emissions would result from project-related mobile sources. Project-related mobile source emissions cannot be substantially reduced though mitigation as the Applicant cannot reasonably impose mitigation measures on private vehicles. As such, regional operational emissions would result in a significant and unavoidable air quality impact.

4.0 NOISE AND VIBRATION

This section evaluates noise and vibration impacts associated with the implementation of the proposed project. The noise and vibration analysis in this section assesses the existing noise and vibration conditions at the project site and its vicinity, as well as short-term construction and long-term operational noise and vibration impacts associated with the proposed project. Mitigation measures for potentially significant impacts are recommended, where appropriate.

4.1 NOISE AND VIBRATION CHARACTERISTICS AND EFFECTS

4.1.1 Noise

Characteristics of Sound

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The “A-weighted scale,” abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. **Figure 4-1** provides examples of A-weighted noise levels from common sounds.

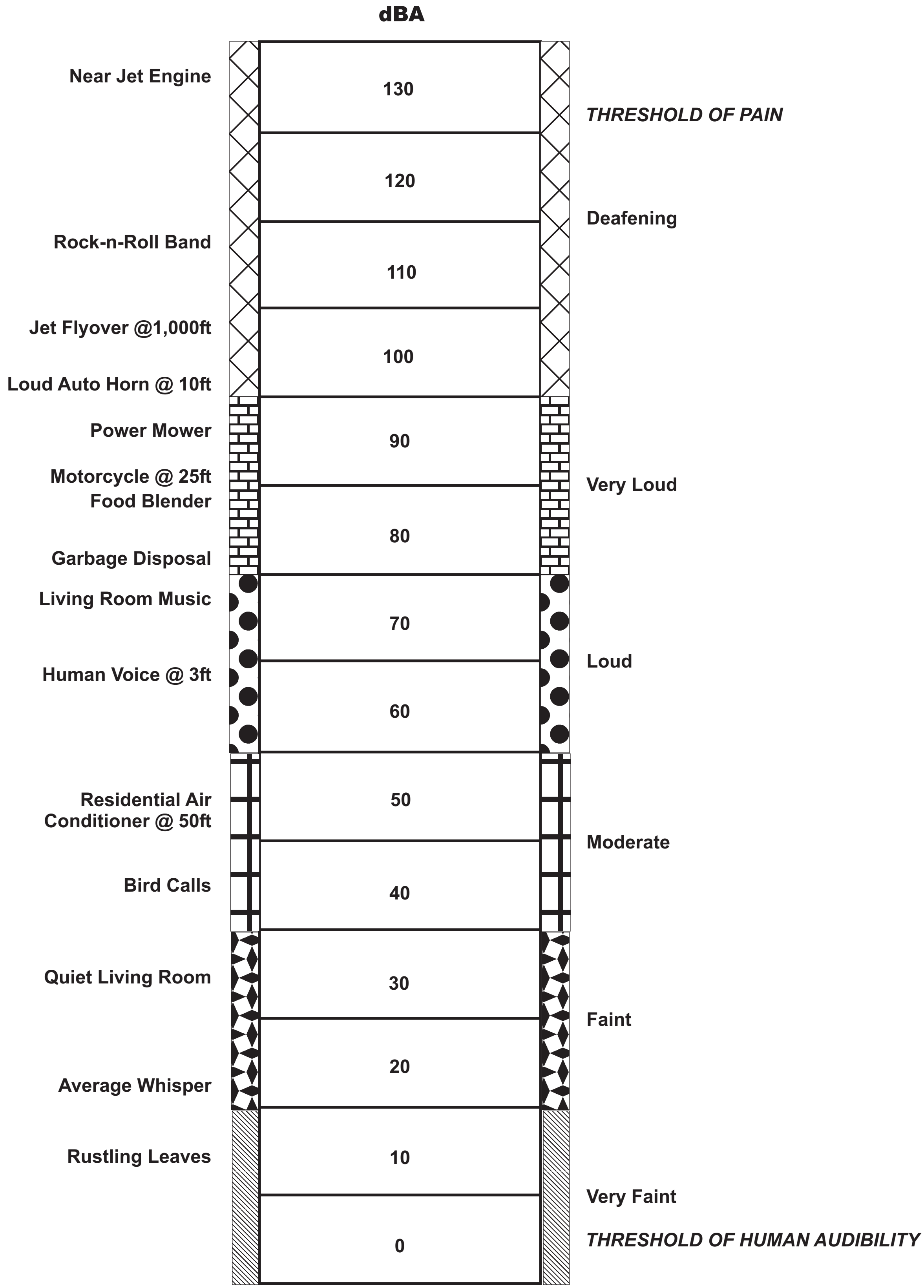
Noise Definitions

This noise analysis discusses sound levels in terms of Community Noise Equivalent Level (CNEL), Day-Night Sound Level (L_{dn}), and Equivalent Noise Level (L_{eq}).

Community Noise Equivalent Level. CNEL is an average sound level during a 24-hour period. CNEL is a noise measurement scale, which accounts for noise source, distance, single event duration, single event occurrence, frequency, and time of day. Human reaction to sound between 7:00 p.m. and 10:00 p.m. is as if the sound were actually 5 dBA higher than if it occurred from 7:00 a.m. to 7:00 p.m. From 10:00 p.m. to 7:00 a.m., humans perceive sound as if it were 10 dBA higher due to the lower background level. Hence, the CNEL is obtained by adding an additional 5 dBA to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and 10 dBA to sound levels in the night before 7:00 a.m. and after 10:00 p.m. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average.

Day-Night Sound Level. L_{dn} is basically a 24-hour L_{eq} with an adjustment to reflect the greater sensitivity of most people to nighttime noise. The adjustment is a 10 dBA penalty for all sound that occurs in the nighttime hours of 10:00 p.m. to 7:00 a.m. The effect of the penalty is that in the calculation of L_{dn}, any event that occurs during the nighttime hours is equivalent to 10 of the same event during the daytime hours. L_{dn} is the most common measure of total community noise over a 24-hour period and is used by the Federal Transit Administration (FTA) to evaluate residential noise impacts from proposed transit projects.

Equivalent Noise Level. L_{eq} is the average noise level on an energy basis for any specific time period. The L_{eq} for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. L_{eq} can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.



SOURCE: Cowan, James P., *Handbook of Environmental Acoustics*

FIGURE 4-1

A-WEIGHTED DECIBEL SCALE

Maximum Noise Level. L_{max} is the maximum noise level is the highest A-weighted sound level measured during a single event that occurs for a fraction of a second in which the sound level changes value. Maximum Sound Level measures the potential intrusiveness of a sound but does specify a period of time that the sound is heard.[28] Maximum noise level is also expressed in units of dBA.

Effects of Noise

Noise is generally defined as unwanted sound. The degree to which noise can impact the human environment ranges from levels that interfere with speech and sleep (annoyance and nuisance) to levels that cause adverse health effects (hearing loss and psychological effects). Human response to noise is subjective and can vary greatly from person to person. Factors that influence individual response include the intensity, frequency, and pattern of noise, the amount of background noise present before the intruding noise, and the nature of work or human activity that is exposed to the noise source.

Audible Noise Changes

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. A change of at least 5 dBA would be noticeable and would likely evoke a community reaction. A 10-dBA increase is subjectively heard as a doubling in loudness and would cause a community response.

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or "point source," will decrease by approximately 6 dBA over hard surfaces and 7.5 dBA over soft surfaces for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level would be 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet, and so on.

Generally, noise is most audible when traveling by direct line-of-sight.[29] Barriers, such as walls, berms, or buildings that break the line-of-sight between the source and the receiver greatly reduce noise levels from the source since sound can only reach the receiver by bending over the top of the barrier (diffraction). Sound barriers can reduce sound levels by up to 20 dBA. However, if a barrier is not high or long enough to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced. In situations where the source or the receiver is located 3 meters (approximately 9.84 feet) above the ground, or whenever the line-of-sight averages more than three meters above the ground, sound levels would be reduced by approximately 3 dBA for each doubling of distance.

Applicable Regulations

The City of Los Angeles has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Regarding construction, the Los Angeles Municipal Code (LAMC) indicates that no construction or repair work shall be performed between the hours of 9:00 p.m. and 7:00 a.m. the following day, since such activities would generate loud noises and disturb persons occupying sleeping quarters in

[28]USEPA, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Safety Margin, 1974.
[29]Line-of-sight is an unobstructed visual path between the noise source and the noise receptor.

any adjacent dwelling, hotel, apartment or other place of residence.[30] No person, other than an individual home owner, engaged in the repair or construction of his/her single-family dwelling, shall perform any construction or repair work of any kind, or perform such work within 500 feet of land so occupied before 8:00 a.m., or after 6:00 p.m. on any Saturday or on a federal holiday, or at any time on any Sunday. Under certain conditions, the City may grant a waiver to allow limited construction activities to occur outside of the limits described above.

The LAMC also specifies the maximum noise level of powered equipment or powered hand tools.[31] Any powered equipment or hand tool that produces a maximum noise level exceeding 75 dBA at a distance of 50 feet is prohibited. However, this noise limitation does not apply where compliance is technically infeasible. Technically infeasible means the above noise limitation cannot be met despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of equipment.

The City of Los Angeles has published significance thresholds to be used in noise analyses.[32] The significance thresholds, which are further discussed below, include thresholds for construction and operational noise levels.

Because this project includes residential land uses, it is important to note that the United States Department of Housing and Urban Development (HUD) has set a goal of 45 dBA L_{dn} as a desirable maximum interior noise standard for HUD-assisted residential units.

4.1.2 Vibration

Characteristics of Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as, buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment.

Vibration Definitions

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV, measured in inches per second, is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the affect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.[33]

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[30] LAMC, Chapter IV, Article 1, Section 41.40, January 29, 1984 and Chapter XI, Article 2, Section 112.04, August 8, 1996.
[31] LAMC, Chapter XI, Article 2, Section 112.05, August 8, 1996.
[32] City of Los Angeles, *L.A. CEQA Thresholds Guide*, 2006.
[33] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, April 1995.

Effects of Vibration

High levels of vibration may cause physical personal injury or damage to buildings. However, ground-borne vibration levels rarely affect human health. Instead, most people consider ground-borne vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of ground-borne vibration may damage fragile buildings or interfere with equipment that is highly sensitive to ground-borne vibration (e.g., electron microscopes).

To counter the effects of ground-borne vibration, the Federal Railway Administration (FRA) and the FTA have published guidance relative to vibration impacts. According to the FRA, fragile buildings can be exposed to ground-borne vibration levels of 0.5 inches per second PPV, without experiencing structural damage.[34] **Table 4-1** shows FTA thresholds for vibration annoyance.

TABLE 4-1: FTA VIBRATION IMPACT CRITERIA

Land Use Category	Vibration Impact Level for Frequent Events (VdB)/a/	Vibration Impact Level for Occasional Events (VdB)/b/	Vibration Impact Level for Infrequent Events (VdB)/c/
Category 1: Buildings where low ambient vibration is essential for interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83

/a/ Frequent events are defined as more than 70 vibration events of the same source per day.
/b/ Occasional events are defined as between 30 and 70 vibration events of the same source per day.
/c/ Infrequent events are defined as fewer than 30 vibration events of the same source per day.
SOURCE: TAHA, 2008.

Perceptible Vibration Changes

In contrast to noise, ground-borne vibration is not a phenomenon that most people experience every day. The background vibration velocity level in residential areas is usually 50 RMS or lower, well below the threshold of perception for humans, which is around 65 RMS.[35] Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Applicable Regulations

There are no adopted City standards for ground-borne vibration.

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[34] Federal Railway Administration, High-Speed Ground Transportation Noise and Vibration Impact Assessment, December 1998.
[35] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, April 1995.

4.2 EXISTING ENVIRONMENTAL SETTING

4.2.1 Existing Noise Environment

The existing noise environment of the project area is characterized by vehicular traffic and noises typical to a dense urban area (e.g., people conversing). Vehicular traffic is the primary source of noise in the project vicinity.

Sound measurements were taken using a Quest Q-400 Noise Dosimeter between 8:30 a.m. and 11:00 a.m. on March 26, 2008, to ascertain existing ambient daytime noise levels in the project vicinity. These readings were used to establish existing ambient noise conditions and to provide a baseline for evaluating noise impacts. Noise monitoring locations are shown in **Figure 4-2**. As shown in **Table 4-2**, the existing ambient sound levels range between 55.5 and 72.9 dBA L_{eq}.

TABLE 4-2: EXISTING NOISE LEVELS

Key to Figure 4-2	Noise Monitoring Location	Distance to Project Site (feet)	Sound Level (dBA, L_{eq})
1	Single-Family Residence - Kittridge Street	55.5	55.5
2	Single-Family Residence - Morse Avenue	58.3	58.3
3	St. Frances School and Church - Victory Boulevard	72.9	72.9
4	Single-Family Residence - Mary Ellen Avenue	67.7	67.7
5	Summit View School - Hamlin Street	59.0	59.0

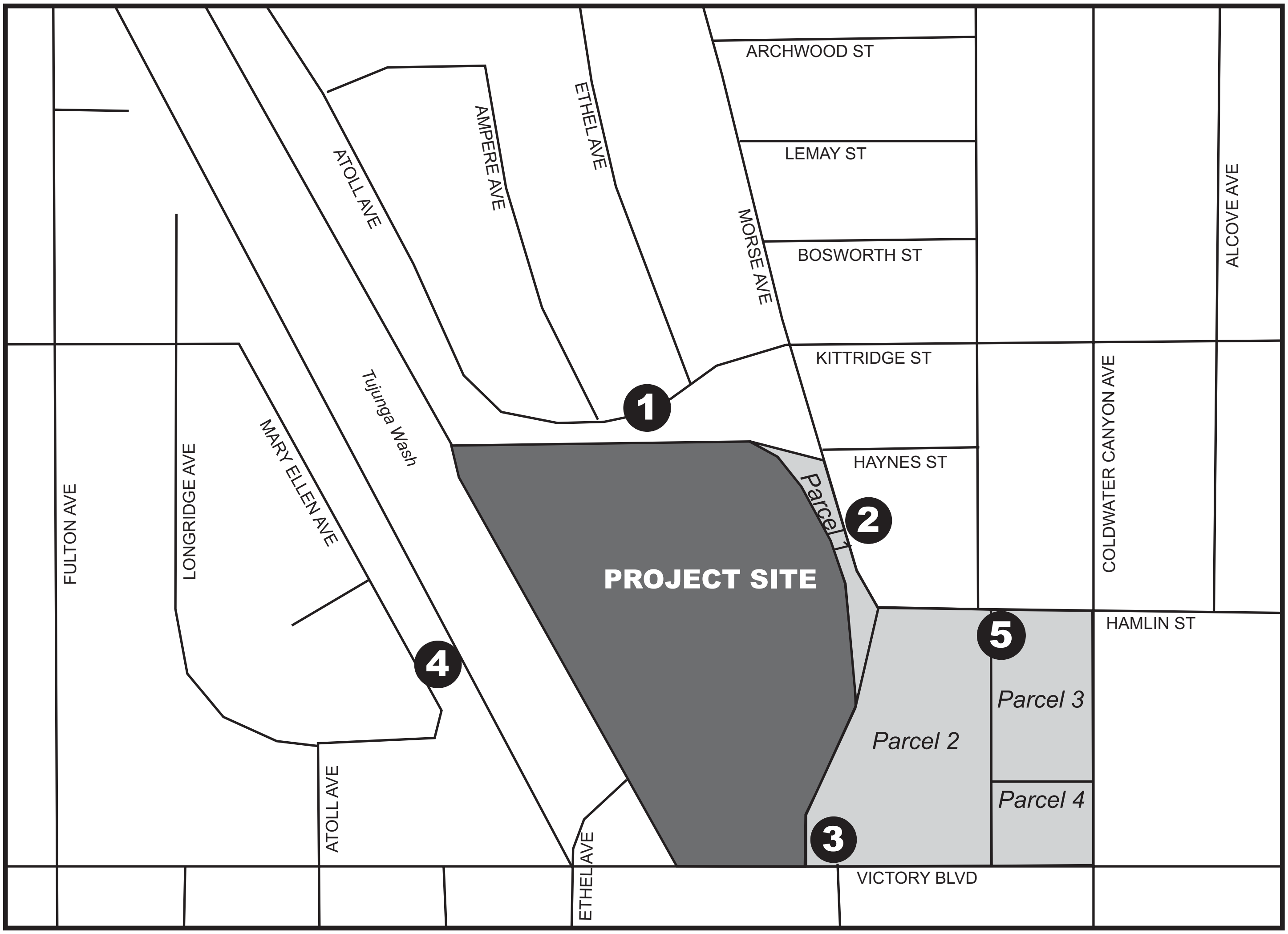
SOURCE: TAHA, 2008.

4.2.2 Existing Vibration Environment

Similar to the environmental setting for noise, the vibration environment is dominated by traffic from nearby roadways. Heavy trucks can generate ground-borne vibrations that vary depending on vehicle type, weight, and pavement conditions. As heavy trucks typically operate on Victory Boulevard and Coldwater Canyon Avenue, existing ground-borne vibration in the project vicinity is largely related to heavy truck traffic on the surrounding roadway network. Vibration levels from Victory Boulevard and Coldwater Canyon Avenue are not typically perceptible at the project site.

4.2.3 Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise. Noise- and vibration sensitive land uses are shown in **Figure 4-3**.



LEGEND:

Noise Monitoring Locations

1. Single-Family Residence on Kittridge Street
2. Single-Family Residence on Morse Avenue
3. Saint Frances School and Church on Victory Boulevard
4. Single-Family Residence on Mary Ellen Avenue
5. Summit View School on Hamlin Street

SOURCE: TAHA, 2008

NOT TO SCALE

N

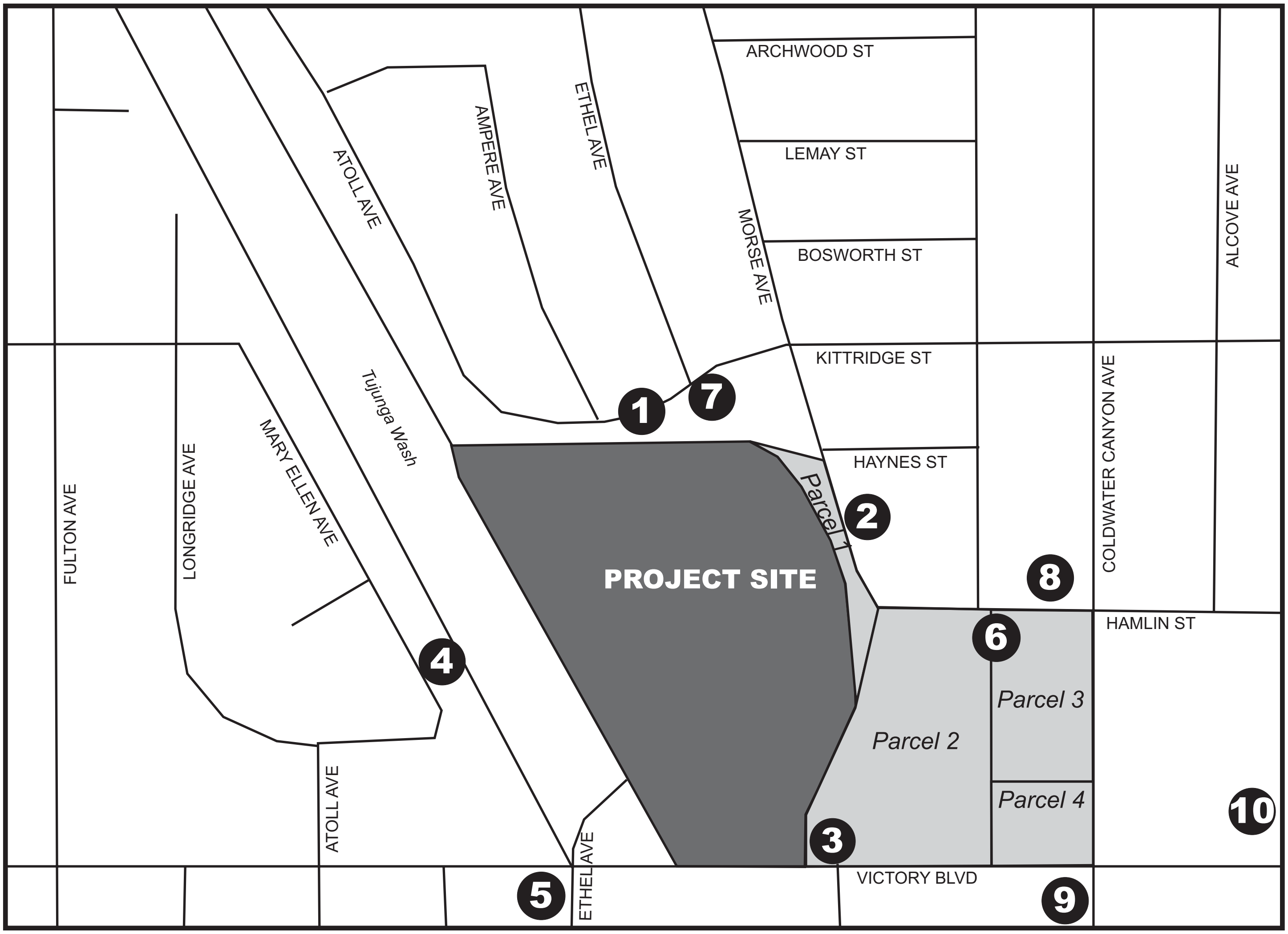
taha

The Plaza at the Glen
Air Quality and Noise Impact Report

taha 2007-075 ENIVIRONMENTAL PLANNING ASSOCIATES

FIGURE 4-2

NOISE MONITORING LOCATIONS



LEGEND:

\# Sensitive Receptor Locations

1. Single-Family Residence on Kittridge Street
2. Single-Family Residence on Morse Avenue
3. Saint Frances School and Church on Victory Boulevard
4. Single-Family Residence on Mary Ellen Avenue
5. Multi-Family Residence on Victory Boulevard
6. Summit View School on Hamlin Street
7. Single-Family Residence on Ethel Avenue
8. Single-Family Residence on Hamlin Street
9. Single- and Multi-Family Residences on Coldwater Canyon Avenue
10. Single-Family Residence on Goodland Avenue

NOT TO SCALE

N

SOURCE: TAHA, 2008

FIGURE 4-3

NOISE SENSITIVE
RECEPTOR LOCATIONS

Proposed Project

As shown in **Figure 4-3**, sensitive receptors near the project site include the following:

- Single-family residential buildings located on Kittridge Street, adjacent and to the north of the project site
- Single-family residential buildings located on Morse Avenue, adjacent and to the northeast of the project site
- St. Frances Church and School located on Victory Boulevard, adjacent and to the east of the project site
- Single-family residential buildings located on Mary Ellen Avenue, approximately 200 feet west of the project site
- Multi-family residential buildings located on Victory Boulevard, approximately 225 feet southwest of the project site
- Summit View School located on Hamlin Street, approximately 350 feet east of the project site

Add Area

As shown in **Figure 4-3**, sensitive receptors near the add area include the following:

- Single-family residential buildings located on Morse Avenue, adjacent and to the east of Parcel 1 and approximately 250 feet northwest of Parcel 3
- Single-family residential buildings located on Ethel Avenue, approximately 175 feet north of Parcel 1
- Summit View School located Hamlin Street, approximately 250 feet east of Parcel 1 and adjacent and to the north of Parcel 4
- Multi-family residential buildings located on Victory Boulevard, approximately 775 feet southwest of Parcel 1 and approximately 475 feet south of Parcel 3
- Single-family residential buildings located on Mary Ellen Avenue, approximately 900 feet west of Parcel 1, approximately 1,200 feet west of Parcel 3, and approximately 1,250 feet west of Parcel 4
- St. Frances Church and School located on Victory Boulevard, adjacent and to the west of Parcels 3 and 4
- Single-family residential buildings located on Hamlin Street, approximately 50 feet north of Parcel 3 and approximately 450 feet north of Parcel 4

- Single- and multi-family residential buildings located on Coldwater Canyon Avenue, approximately 150 feet northeast of Parcel 3 and approximately 285 feet south of Parcel 4

- Single-family residential buildings located on Goodland Avenue, approximately 710 feet east of Parcel 4

The above sensitive receptors represent the nearest residential and school land uses with the potential to be impacted by the proposed project. Additional single- and multi-family residences are located in the surrounding community, within one-quarter-mile of the project site.

4.2.4 Vehicular Traffic

As stated earlier, vehicular traffic is the predominant noise source in the project vicinity. Using existing traffic volumes provided by the project traffic consultant and the Federal Highway Administration (FHWA) RD-77-108 noise calculation formulas, CNEL was calculated for various roadway segments near the project site. Existing mobile noise levels are shown in **Table 4-3**. As shown in **Table 4-3**, mobile noise levels in the project area range from 55.7 to 72.1 dBA CNEL. Modeled vehicle noise levels are typically lower than the noise measurements along similar roadway segments as modeled noise levels do not take into account additional noise sources (e.g., pedestrians).

TABLE 4-3: EXISTING ESTIMATED COMMUNITY NOISE EQUIVALENT LEVEL/a/

Roadway Segment	Estimated CNEL dBA /b/
Coldwater Canyon Avenue between Hamlin Street and Vanowen Street	68.1
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard	68.2
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street	67.3
Erwin Street between Fulton Avenue and Ethel Avenue	55.7
Ethel Avenue between Victory Boulevard and Oxnard Street	59.9
Fulton Avenue between Vanowen Street and Victory Boulevard	66.8
Victory Boulevard between Coldwater Canyon Avenue and Whitsett Avenue	72.1
Victory Boulevard between Woodman Avenue and Fulton Avenues	72.0

/a/ The predicted CNEL were calculated as peak-hour L_{eq} and converted into CNEL using the California Department of Transportation *Technical Noise Supplement* (October 1998). The conversion involved making a correction for peak-hour traffic volumes as a percentage of average daily traffic and a nighttime penalty correction. The peak-hour traffic was assumed to be ten percent of the average daily traffic.
/b/ CNEL is at 50 feet from the roadway right-of-way.
SOURCE: TAHA, 2008

4.3 THRESHOLDS OF SIGNIFICANCE

Construction Phase Significance Criteria

A significant construction impact would result if:

- Construction activities would exceed existing ambient noise levels by 5 dBA or more at a noise-sensitive use.

Operational Phase Significant Criteria

A significant operational impact would result if:

- The proposed project causes the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4-4**) or any 5 dBA or more increase in noise level; and/or
- The proposed project would expose new sensitive receptors to interior noise levels greater than 45 dBA.

Ground-borne Vibration Significance Criteria

There are no adopted State or City of Los Angeles ground-borne vibration standards. Based on federal guidelines, the proposed project would result in a significant construction or operational vibration impact if:

- The proposed project would expose buildings to the FTA building damage threshold level of 0.5 PPV.

4.4 ENVIRONMENTAL IMPACTS

4.4.1 Noise Impacts

Construction Phase Noise Impacts

Construction of the proposed project would result in temporary increases in ambient noise levels in the project area on an intermittent basis. The increase in noise would likely result in a temporary annoyance to nearby residents during the approximate 30-month construction schedule. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers.

Construction activities require the use of numerous noise generating-equipment, such as jack hammers, pneumatic impact equipment, saws, and tractors. Typical noise levels from various types of equipment that may be used during construction are listed in **Table 4-5**. The table shows noise levels at distances of 50 and 100 feet from the construction noise source.

TABLE 4-4: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Category	Community Noise Exposure (dBA, CNEL)					
	55	60	65	70	75	80
Residential – Low-Density Single-Family, Duplex, Mobile Homes						
Residential - Multi-Family						
Transient Lodging - Motels Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

Normally Acceptable - Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

Conditionally Acceptable - New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditionally will normally suffice.

Normally Unacceptable - New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable - New construction or development should generally not be undertaken.

SOURCE: California Department of Health Services.

TABLE 4-5: MAXIMUM NOISE LEVELS OF COMMON CONSTRUCTION MACHINES		
	Noise Level (dBA) /a/	
Noise Source	**50 Feet**	**100 Feet**
Jackhammer	90	84
Crane	88	82
Street Paver	87	81
Backhoe	84	78
Street Compressor	81	75
Front-end Loader	80	74
Grader	87	81
Idling Haul Truck	89	83
Cement Mixer	82	76

/a/ Assumes a 6-dBA drop-off rate for noise generated by a "point source" and traveling over hard surfaces. Actual measured noise levels of the equipment listed in this table were taken at distances of ten and 30 feet from the noise source and attenuated to 50 and 100 feet.
SOURCE: City of Los Angeles, *Los Angeles CEQA Thresholds Guide*, *2006.*

Whereas **Table 4-5** shows the noise level of each equipment, the noise levels shown in **Table 4-6** take into account the likelihood that more than one piece of construction equipment would be in operation at the same time and lists the typical overall noise levels that would be expected for each phase of construction. These noise levels are based on surveys conducted by the USEPA in the early 1970s. Since 1970, regulations have been enforced to improve noise generated by certain types of construction equipment to meet worker noise exposure standards. However, many older pieces of equipment are still in use. Thus, the construction phase noise levels indicated in **Table 4-6** represent worst-case conditions. The highest noise levels are expected to occur during the grading/excavation and finishing phases of construction. The noise source is assumed to be active for 40 percent of the eight-hour work day (consistent with the EPA studies of construction noise), generating a noise level of 89 dBA at a reference distance of 50 feet.

TABLE 4-6: OUTDOOR CONSTRUCTION NOISE LEVELS	
Construction Phase	**Noise Level At 50 Feet (dBA, L_{eq})**
Ground Clearing	84
Grading/Excavation	89
Foundations	78
Structural	85
Finishing	89

SOURCE: City of Los Angeles, *Los Angeles CEQA Thresholds Guide*, *2006.*

The noise level during the construction period at each receptor location was calculated by (1) making a distance adjustment to the construction source sound level of 89 dBA at 50 feet and

(2) logarithmically adding the adjusted construction noise source level to the ambient noise level. The estimated construction noise levels at sensitive receptors are shown in **Table 4-7**.

TABLE 4-7: CONSTRUCTION NOISE IMPACT - UNMITIGATED

Sensitive Receptor	Distance (feet) /a/	Maximum Construction Noise Level (dBA)/b/	Existing Ambient (dBA, L_{eq}) /c/	New Ambient (dBA, L_{eq}) /d/	Increase /h/
Proposed Project					
Single-Family Residence - Kittridge St	15	82.0/e/	55.5	82.0	**26.5**
Single-Family Residence - Morse Ave	25	82.0/e/	58.3	82.0	**22.7**
St. Frances Church and School - Victory Blvd	25	84.0/f/	72.9	84.3	**11.4**
Single-Family Residence - Mary Ellen Ave	200	72.0/f/	67.7	73.4	**5.7**
Multi-Family Residences - Victory Blvd	225	75.9	72.9	77.7	4.8
Summit View School - Hamlin St	350	55.1/e,f/	59.0	60.5	1.5
Parcel 1					
St. Frances Church and School - Victory Blvd	15	82.0/e/	58.3	82.0	**23.7**
Single-Family Residence - Morse Ave	15	82.0/e/	58.3	82.0	**23.7**
Single-Family Residence - Ethel Ave	175	71.1/e/	58.3	71.3	**13.0**
Summit View School - Hamlin St	250	68.0/e/	59.0	68.5	**9.5**
Multi-Family Residence - Victory Blvd	775	58.2/e/	72.9	73.0	0.1
Single-Family Residence - Mary Ellen Ave	900	56.9/e/	67.7	68.0	0.3
Parcel 3					
St. Frances Church and School – Victory Blvd	15	84.0/f/	59.0	84.0	**25.0**
Single-Family Residence - Hamlin St	50	84.0/f/	59.0	84.0	**25.0**
Multi-Family Residence - Coldwater Canyon Ave	150	74.5/f/	67.7	75.3	**7.6**
Single-Family Residence - Morse Ave	250	70.0/f/	58.3	70.3	**12.0**
Multi-Family Residence - Victory Blvd	475	54.5/e,f/	72.9	73.0	0.1
Single-Family Residence - Mary Ellen Ave	1,200	46.4/e,f/	67.7	67.7	0.0
Parcel 4					
St. Frances Church and School -Victory Blvd	15	84.0/f/	72.9	84.3	**11.4**
Summit View School - Hamlin St	25	84.0/f/	59.0	84.0	**25.0**
Multi-Family Residence - Coldwater Canyon Ave	285	59.9/g/	67.7	68.4	0.7

TABLE 4-7: CONSTRUCTION NOISE IMPACT - UNMITIGATED					
Sensitive Receptor	**Distance (feet) /a/**	**Maximum Construction Noise Level (dBA)/b/**	**Existing Ambient (dBA, L_{eq}) /c/**	**New Ambient (dBA, L_{eq}) /d/**	**Increase /h/**
Single-Family Residence - Hamlin St	450	64.9/f/	59.0	65.9	**6.9**
Single-Family Residential - Goodland Ave	710	56.0/g/	59.0	60.8	1.8
Single-Family Residential - Mary Ellen Ave	1,250	51.0/g/	67.7	67.8	0.1
Proposed Project with Add Area					
Single-Family Residence - Kittridge St	15	82.0/e/	55.5	82.0	**26.5**
Single-Family Residence - Morse Ave	15	82.0/e/	58.3	82.0	**23.7**
St. Frances Church and School - Victory Blvd	15	84.0/f/	58.3	84.0	**25.7**
Single-Family Residence - Hamlin St	50	84.0/f/	59.0	84.0	**25.0**
Single-Family Residence - Mary Ellen Ave	200	72.0/e/	67.7	73.4	**5.7**
Multi-Family Residence - Victory Blvd	225	75.9	72.9	77.7	4.8

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance, wall, and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location as shown in **Table 4-2**..
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e Includes a 7-dBA noise-reduction for existing 8-foot wall.
/f/ Includes a 5-dBA noise reduction for existing 6-foot wall.
/g/ Includes a 10-dBA noise reduction for intervening structures located between the project site and the school.
/h/ Significant noise levels listed in bold.
SOURCE: TAHA, 2008.

The noise limitation of the LAMC does not apply where compliance is technically infeasible.[36] "Technically infeasible" means that the noise standard cannot be met despite the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques during the operation of equipment. For example, it would not be feasible to utilize a five-story sound blanket to reduce construction noise levels as hanging a sound blanket off the side of the proposed building would interfere with construction activity.

Proposed Project. As shown in **Table 4-7**, noise levels related to construction activity would exceed the 5-dBA significance threshold at nearby sensitive receptors. As such, the proposed project would result in a significant impact without incorporation of mitigation measures.

Add Area. As shown in **Table 4-7**, noise levels related to construction activity would exceed the 5-dBA significance threshold at nearby sensitive receptors. As such, construction on Parcel 1, 3 and 4 would result in a significant impact without incorporation of mitigation measures. Construction activity would not occur within Parcel 2. Thus, no noise impact is anticipated.

Proposed Project with Add Area. As shown in **Table 4-7**, noise levels related to construction activity would exceed the 5-dBA significance threshold at nearby sensitive receptors. As such, the proposed project with add area would result in a significant impact without incorporation of mitigation measures.

[36]LAMC, Chapter IX, Article 2, Section 122.05.

Construction Phase Noise Mitigation Measures

N1 All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices.

N2 A temporary six-foot solid wall (e.g., wood) shall be constructed on the project site and/or add area where there is no existing wall such that the line-of-sight is blocked from construction activity to the residential and student receptors on Kittridge Street, Morse Avenue, Hamlin Street, Mary Ellen Avenue, Victory Boulevard, and Coldwater Canyon Avenue.

N3 All residential units and on-site occupants located within 500 feet of the construction site shall be sent a notice regarding the construction schedule of the proposed project. A sign, legible at a distance of 50 feet shall also be posted at the construction site. All notices and the signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints.

N4 A "noise disturbance coordinator" shall be established. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.

Impacts After Mitigation

Proposed Project. Mitigation Measure **N1** would reduce construction noise levels by 18 to 25 dBA, and Mitigation Measure **N3** would reduce construction noise levels by approximately 5 dBA during ground-level construction.[37] The other mitigation measures would assist in attenuating construction noise levels. With implementation of Mitigation Measures **N1** through **N4**, construction noise levels at single-family buildings on Kittridge Street, Morse and Mary Ellen Avenues, and St. Frances School and Church would be reduced by at least 38 dBA during ground-level construction. The mitigated construction-related noise levels are shown in **Table 4-8**. The highest project-related construction noise levels with mitigation incorporated would increase at the single-family residences along Kittridge Street and Morse Avenue by 9.1 and 6.7 dBA L_{eq}, respectively. Construction-related noise levels would exceed the 5-dBA significance threshold at nearby sensitive receptors for storied construction. As such, the proposed project would result in a significant impact.

Add Area. The mitigation measures for Parcel 1 would be similar to the proposed project. As shown in **Table 4-8**, mitigated construction activity for Parcel 1 would potentially increase ambient noise levels at the single-family residences along Morse Avenue and St. Frances Church and School by approximately 6.7 dBA L_{eq}. As such, the mitigated construction-related noise levels would exceed the 5-dBA significance threshold at nearby sensitive receptors. Therefore, Parcel 1 would result in significant impact.

The existing uses within Parcel 2 would not change and, as such, no impact is anticipated.

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[37] ASHRAE, Noise Reduction Techniques, 2005.

TABLE 4-8: CONSTRUCTION NOISE IMPACT - MITIGATED					
Sensitive Receptor	**Distance (feet) /a/**	**Maximum Construction Noise Level (dBA)/b/**	**Existing Ambient (dBA, L_{eq}) /c/**	**New Ambient (dBA, L_{eq}) /d/**	**Increase /h/**
Proposed Project					
Single-Family Residence - Kittridge St	15	64.0/e/	55.5	64.6	**9.1**
Single-Family Residence - Morse Ave	25	64.0/e/	58.3	65.0	**6.7**
St. Frances Church and School - Victory Blvd	25	66.0/f/	72.9	73.7	0.8
Single-Family Residence - Mary Ellen Ave	200	54.0/f/	67.7	67.9	0.2
Multi-Family Residences - Victory Blvd	225	75.9	72.9	73.0	0.1
Summit View School - Hamlin St	350	37.1/e,f/	59.0	59.0	0.0
Parcel 1					
St. Frances Church and School - Victory Blvd	15	64.0/e/	58.3	65.0	**6.7**
Single-Family Residence - Morse Ave	15	64.0/e/	58.3	65.0	**6.7**
Single-Family Residence - Ethel Ave	175	53.1/e/	58.3	59.4	1.1
Summit View School - Hamlin St	250	50.0/e/	59.0	59.5	0.5
Multi-Family Residence - Victory Blvd	775	40.2/e/	72.9	72.9	0.0
Single-Family Residence - Mary Ellen Ave	900	38.9/e/	67.7	67.7	0.0
Parcel 3					
St. Frances Church and School – Victory Blvd	15	66.0/f/	59.0	66.8	**7.8**
Single-Family Residence - Hamlin St	50	66.0/f/	59.0	66.8	**7.8**
Multi-Family Residence - Coldwater Canyon Ave	150	56.5/f/	67.7	68.0	0.3
Single-Family Residence - Morse Ave	250	52.0/f/	58.3	59.2	0.9
Multi-Family Residence - Victory Blvd	475	36.5/e,f/	72.9	72.9	0.0
Single-Family Residence - Mary Ellen Ave	1,200	28.4/e,f/	67.7	67.7	0.0
Parcel 4					
St. Frances Church and School -Victory Blvd	15	66.0/f/	72.9	73.7	0.8
Summit View School - Hamlin St	25	66.0/f/	59.0	66.8	**7.8**
Multi-Family Residence - Coldwater Canyon Ave	285	41.9/g/	67.7	67.7	0.0
Single-Family Residence - Hamlin St	450	46.9/f/	59.0	59.3	0.3
Single-Family Residential - Goodland Ave	710	38.0/g/	59.0	59.0	0.0
Single-Family Residential - Mary Ellen Ave	1,250	33.0/g/	67.7	67.7	0.0
Proposed Project with Add Area					
Single-Family Residence - Kittridge St	15	64.0/e/	55.5	64.6	**9.1**

TABLE 4-8: CONSTRUCTION NOISE IMPACT - MITIGATED					
Single-Family Residence - Morse Ave	15	64.0/e/	58.3	65.0	**6.7**
St. Frances Church and School - Victory Blvd	15	66.0/f/	58.3	66.7	**8.4**
Single-Family Residence - Hamlin St	50	66.0/f/	59.0	66.8	**7.8**
Single-Family Residence - Mary Ellen Ave	200	54.0/e/	67.7	67.9	0.2
Multi-Family Residence - Victory Blvd	225	57.9	72.9	73.0	0.1

/a/ Distance of noise source from receptor.
/b/ Construction noise source's sound level at receptor location, with distance, wall, and building adjustment.
/c/ Pre-construction activity ambient sound level at receptor location.
/d/ New sound level at receptor location during the construction period, including noise from construction activity.
/e Includes a 7-dBA noise-reduction for existing 8-foot wall.
/f/ Includes a 5-dBA noise reduction for existing 6-foot wall.
/g/ Includes a 10-dBA noise reduction for intervening structures located between the project site and the school.
/h/ Significant noise levels are listed in bold
SOURCE: TAHA, 2008.

The mitigation measures for Parcel 3 would be similar to the proposed project. As shown in **Table 4-8**, mitigated construction activity for Parcel 3 would potentially increase ambient noise levels at the single-family residences along Hamlin Street and St. Frances Church and School by approximately 7.8 dBA L_{eq}. As such, the mitigated construction-related noise levels would exceed the 5-dBA significance threshold at nearby sensitive receptors. Therefore, Parcel 3 could result in significant impact.

The mitigation measures for Parcel 4 would be similar to the proposed project. As shown in **Table 4-8**, mitigated construction activity for Parcel 4 would potentially increase ambient noise levels at Summit View School along Hamlin Street by approximately 7.8 dBA L_{eq}. As such, the mitigated construction-related noise levels would exceed the 5-dBA significance threshold. Therefore, Parcel 4 could result in significant impact.

Proposed Project with Add Area. When noise levels from construction activity associated with the proposed project overlaps with Parcels 1, 3, and 4, mitigated construction-related noise levels would exceed the 5-dBA significance threshold at nearby sensitive receptors. As shown in **Table 4-8**, mitigated construction activity for the proposed project with add area would potentially increase ambient noise levels at the single-family residences along Kittridge and Hamlin Streets, Morse Avenue, and St. Frances Church and School by approximately 9.1, 7.8, 6.7 and 8.4 dBA L_{eq}, respectively. As such, the proposed project with the add area would result in a significant impact.

Operational Phase Noise Impacts

Vehicular Noise

The predominant noise source for the proposed project is vehicular traffic. According to the traffic report prepared by Overland Traffic Associates, the proposed project would generate a net 18,763 daily vehicle trips.[38]

[38]Overland Traffic Associates, Traffic Impact Analysis for The Plaza at the Glen Project, July 30, 2008.

Proposed Project. To ascertain off-site noise impacts, traffic was modeled under future year (2013) no project and with project conditions utilizing FHWA RD-77-108 noise calculation formulas. Results of the analysis are summarized in **Table 4-9**.

TABLE 4-9: 2008 AND 2013 ESTIMATED COMMUNITY NOISE EQUIVALENT LEVEL – PROPOSED PROJECT/a/

	Estimated dBA, CNEL				
Roadway Segment	**Existing (2008)**	**No Project (2013)**	**Project (2013)**	**Project Impact**	**Cumulative Impact**
Coldwater Canyon Avenue between Hamlin and Vanowen Street	68.1	68.6	69.4	0.8	1.3
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard	68.2	68.7	69.5	0.8	1.3
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street	67.3	67.8	68.5	0.7	1.2
Erwin Street between Fulton and Ethel Avenue	55.7	57.0	59.1	2.1	3.4
Ethel Avenue between Victory Boulevard and Oxnard Street	59.9	61.7	63.6	1.9	3.7
Fulton Avenue between Vanowen Street and Victory Boulevard	66.8	67.4	68.1	0.7	1.3
Victory Boulevard between Coldwater Canyon and Whitsett Avenue	72.1	73.1	73.7	0.6	1.6
Victory Boulevard between Woodman and Fulton Avenue	72.0	73.0	73.4	0.4	1.4

/a/ The predicted CNEL were calculated as peak hour L_{eq} and converted into CNEL using the California Department of Transportation *Technical Noise Supplement* (October 1998). The conversion involved making a correction for peak hour traffic volumes as a percentage of average daily traffic and a nighttime penalty correction. The peak hour traffic was assumed to be ten percent of the average daily traffic.
SOURCE : TAHA, 2008

The greatest project-related mobile noise increase would be 2.1 dBA CNEL and would occur along Erwin Street between Fulton and Ethel Avenues. Mobile noise generated by the proposed project would not cause the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4-5**) or any 5 dBA or more increase in noise level. Therefore, the proposed project would result in a less-than-significant mobile noise impact.

Add Area. As shown in **Table 4-10,** the greatest Parcel 1-related mobile noise increase would be 0.1 dBA CNEL and would occur along Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street. Mobile noise generated by Parcel 1 would not cause the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4-5**) or any 5 dBA or more increase in noise level. Therefore, Parcel 1 would result in a less-than-significant mobile noise impact.

TABLE 4-10: 2013 ESTIMATED COMMUNITY NOISE EQUIVALENT LEVEL – ADD AREA/a/				
	Estimated dBA, CNEL			
Roadway Segment	Parcel 1	Parcel 3	Parcel 4	Project with Add Area
Coldwater Canyon Avenue between Hamlin and Vanowen Streets	0.0	0.2	0.1	0.9
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard	0.0	0.3	0.1	0.9
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street	0.1	0.2	0.1	0.8
Erwin Street between Fulton and Ethel Avenues	0.0	0.0	0.0	2.5
Ethel Avenue between Victory Boulevard and Oxnard Street	0.0	0.0	0.0	2.2
Fulton Avenue between Vanowen Street and Victory Boulevard	0.0	0.0.	0.1	0.7
Victory Boulevard between Coldwater Canyon and Whitsett Avenues	0.0	0.1	0.0	0.7
Victory Boulevard between Woodman and Fulton Avenues	0.0	0.0	0.0	0.5

/a/ The predicted CNEL were calculated as peak hour L_{eq} and converted into CNEL using the California Department of Transportation *Technical Noise Supplement* (October 1998). The conversion involved making a correction for peak hour traffic volumes as a percentage of average daily traffic and a nighttime penalty correction. The peak hour traffic was assumed to be ten percent of the average daily traffic.
SOURCE: TAHA, 2008

The existing uses within Parcel 2 would not change. Thus, no mobile noise is anticipated related to Parcel 2 and no impact is anticipated.

As shown in **Table 4-10**, the greatest Parcel 3-related mobile noise increase would be 0.3 dBA CNEL and would occur along Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard. Mobile noise generated by Parcel 3 would not cause the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4-5**) or any 5 dBA or more increase in noise level. Therefore, Parcel 3 would result in a less-than-significant mobile noise impact.

As shown in **Table 4-10**, the greatest Parcel 4-related mobile noise increase would be 0.1 dBA CNEL and would occur along Fulton Avenue between Vanowen Street and Victory Boulevard. Mobile noise generated by Parcel 4 would not cause the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4-5**) or any 5 dBA or more increase in noise level. Therefore, Parcel 4 would result in a less-than-significant mobile noise impact.

Proposed Project with Add Area. As shown in **Table 4-10**, the greatest proposed project with add area-related mobile noise increase would be 2.5 dBA CNEL and would occur along Erwin Street between Fulton Avenue and Ethel Avenue. Mobile noise generated by the proposed project with add area would not cause the ambient noise level measured at the property line of the affected uses to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category (**Table 4.5**) or any 5 dBA or more increase in noise level. Therefore, the proposed project with add area would result in a less-than-significant mobile noise impact.

Mechanical Equipment Noise

Proposed Project. Mechanical equipment (e.g., parking structure air vents and HVAC equipment) would be designed so as to be located within an enclosure or confined to the rooftop of the proposed structure. In addition, mechanical equipment would be screened from view as necessary to comply with the City of Los Angeles noise ordinance requirements for both daytime (65 dBA) and nighttime (60 dBA) operation at the property line. Operation of mechanical equipment would not be anticipated to increase ambient noise levels by 5 dBA, and would result in a less-than-significant impact.

Add Area. Mechanical equipment would be designed, located, and screened similar to the proposed project and would comply with the City's noise ordinance requirements. Operation of mechanical equipment for the add area would not be anticipated to increase ambient noise levels by 5 dBA, and would result in a less-than-significant impact.

Proposed Project with Add Area. Mechanical equipment would be designed, located, and screened similar to the proposed project and would comply with the City's noise ordinance requirements. Operation of mechanical equipment for the proposed project with the add area would not be anticipated to increase ambient noise levels by 5 dBA, and would result in a less-than-significant impact.

Transit Plaza

Proposed Project. Included in the design of the proposed project is the creation of a transit center along the northeast corner of Ethel Avenue and Victory Boulevard. The Transit Center is proposed partially on a newly constructed bridge over the Tujunga Wash in a park-like setting. Connections from the Transit Center to the project site would be made through a gasoline-powered trolley. The trolley would generate a noise level of approximately 60 dBA as a result of engine noise and bells. Operation of a trolley system would be restricted to commercial areas of the project site and would not approach 50 feet of off-site sensitive receptors. The ambient noise level at the nearest sensitive receptors on Mary Ellen Avenue and Victory Boulevard are 58.3 and 72.9 dBA, respectively. The resulting trolley-associated noise increase would be 3.9 and 0.2 dBA, respectively. Trolley-associated noise would not be anticipated to ambient increase noise levels at sensitive receptors by more than 5 dBA. As such, operational trolley-related noise would result in a less-than-significant impact.

Add Area. Operation of the trolley system would be restricted to the project site and would not be anticipated to increase add area only ambient noise levels by 5 dBA. Therefore a less-than-significant impact is anticipated.

Parking Noise

Proposed Project. The proposed project would include subterranean parking. Subterranean parking would be enclosed on all sides and noise generated by this facility would be inaudible at sensitive receivers. Access ramps to subterranean parking would potentially expose off-site sensitive receptors to unacceptable levels of noise. An automobile traveling at 25 miles per hour generates a noise level of approximately 60 dBA L_{eq}. As shown in **Tables 4-9** and **4-10**, mobile noise levels along Victory Boulevard at Coldwater Canyon Avenue would be approximately 73.1 dBA. When the parking noise level is added to the ambient noise level, the ambient noise level increase at sensitive receptors along Victory Boulevard would be less than 1 dBA and would not be audible.

Passenger automobiles would also travel along the eastern and northern portions of the project site to access subterranean parking. Automobiles passing the St. Frances Church and School would generate a noise level of 60 dBA L_{eq}. The School is separated from the project site by an existing approximately six-foot wall, which would reduce automobile noise levels at the school by 5 dBA. The resulting automobile noise level at the School would be 55 dBA L_{eq}. Typical building construction results in an exterior-to-interior noise reduction of 24 dBA. Based on this noise reduction, the interior noise level at the School would be 31 dBA L_{eq}. This noise level would not exceed the 45 dBA L_{eq} significance criteria and would result in a less-than-significant impact.

The automobile access located on the northern portion of the project site would be separated from sensitive receptors by intervening buildings, including the proposed hotel, retail/restaurant buildings, and residential structures. These proposed buildings would act as a noise barrier. The effect of this barrier would decrease automobile access noise level at sensitive receptors located to the north of the project site by at least 25 dBA. Automobile travel would be located approximately 100 feet from the nearest sensitive receptor, which has an ambient noise level of 55.1 dBA L_{eq}. Based on distance attenuation and the barrier created by new buildings, automobile -related noise at the nearest sensitive receptor would be approximately 35 dBA L_{eq}. When automobile noise is added to the existing ambient noise level, the 15-minute L_{eq} ambient noise level increase would be be less than 0.1 dBA. This incremental increase would be less than the 5 dBA significance threshold and would result in a less-than-significant impact.

Add Area. Parcels 1, 3, and 4 could likely include subterranean and surface parking. Similar to the proposed project, subterranean parking could be enclosed on all sides and inaudible at sensitive receivers. Access ramps to subterranean parking would potentially expose off-site sensitive receptors to unacceptable levels of noise. An automobile traveling at 25 miles per hour generates a noise level of approximately 60 dBA L_{eq}. As shown in Tables IV.I-8 and IV.I-9 mobile noise levels along Coldwater Canyon Avenue at Hamlin Street would be approximately 68.7 dBA. When the parking noise level is added to the ambient noise level, the ambient noise level increase at sensitive receptors along Morse Avenue would be less than 1 dBA. As such, parking structure activity would not be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. In addition, the majority of project parking would be located internal to the project site and away from sensitive receptors. Access ramp and surface parking activity would not be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. Thus, add area parking noise would result in a less-than-significant impact.

The existing uses within Parcel 2 would not change. Thus, no new parking noise source would be placed in Parcel 2, and no impact is anticipated.

Proposed Project with Add Area. Access ramps to parking structures and surface lot parking activity along Coldwater Canyon Avenue, Hamlin Street, and Victory Boulevard would potentially expose off-site sensitive receptors to unacceptable levels of noise. An automobile traveling at 25 miles per hour generates a noise level of approximately 60 dBA L_{eq}. As shown in Tables IV.I-8 and IV.I-9 mobile noise levels along Coldwater Canyon Avenue, Hamlin Street, and Victory Boulevard would be approximately 68.7, 68.6, and 73.1 dBA, respectively. When the parking noise level is added to the ambient noise level, the ambient noise level increase at sensitive receptors along Coldwater Canyon Avenue and Victory Boulevard would be less than 1 dBA and would not be audible. In addition, the majority of project parking would be located internal to the project site and away from sensitive receptors. Access ramp and parking structure activity would not be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more. Thus, parking noise for the proposed project with add area would result in a less-than-significant impact.

Loading Activity and Delivery Truck Noise

Proposed Project. The proposed project would include three loading docks for delivery trucks. All loading docks would have gates that would be closed once delivery trucks have entered the loading areas. These gates would act as a noise barrier and would substantially reduce loading dock noise. The greatest loading dock-related noise levels would be related to truck access and back-up alarms.

Trucks accessing the project site would be a combination of heavy- and medium-duty trucks with noise levels ranging from 71 to 79 dBA L_{eq} at 50 feet.[39] Back-up safety alarms would generate a single event noise level of approximately 79 dBA at 50 feet.[40]

The truck access located on the northern portion of the project site would be separated from sensitive receptors by intervening buildings, including the proposed hotel, retail/restaurant buildings, and residential structures. These proposed buildings would act as a noise barrier. The effect of this barrier would decrease truck access noise level at sensitive receptors located to the north of the project site by at least 25 dBA. Truck travel would be located approximately 100 feet from the nearest sensitive receptor, which has an ambient noise level of 55.1 dBA L_{eq}. Based on distance attenuation and the barrier created by new buildings, truck-related noise at the nearest sensitive receptor would be approximately 51 dBA L_{eq}. When truck noise is added to the existing ambient noise level, the 15-minute L_{eq} ambient noise level increase would be 1.4 dBA. This incremental increase would be less than the 5 dBA significance threshold. Truck access noise associated with the northern loading dock would result in a less-than-significant impact.

The proposed project would increase the number of heavy- and medium-duty trucks traveling along the eastern portion of the project site. These trucks would be located within 15 feet of the St. Frances Church and School and an associated outdoor lunch area. The lunch area is not utilized as a learning environment and lunch activity is compatible with occasional truck noise.

Low levels of noise are essential for a successful learning environment and truck noise may increase interior noise levels at the St. Frances Church and School. The School is not under Los Angeles Unified School District (LAUSD) jurisdiction but LAUSD noise impact criteria are appropriate for analyzing general school noise impacts. LAUSD has indicated that an interior noise level of 45 dBA L_{eq} is appropriate for schools.

Heavy-duty trucks passing the St. Frances Church and School would generate a noise level of 79 dBA L_{eq}. The School is separated from the project site by an existing approximately six-foot wall, which would reduce truck noise levels at the school by 5 dBA. The resulting truck noise

[39] California Department of Transportation, *Technical Noise Supplement*, October 1998.
[40] The back-up safety alarm noise level was based on regulations set forth b the Occupational Safety and Health Administration.

level at the School would be 74 dBA L_{eq}. Typical building construction results in an exterior-to-interior noise reduction of 24 dBA. Based on this noise reduction, the interior noise level at the School would be 50 dBA L_{eq}. This noise level would exceed the 45 dBA L_{eq} significance criteria and would result in a significant impact without implementation of mitigation. As discussed below, mitigation would reduce this impact to less than significant.

Heavy- and medium-duty trucks would generate an L_{max} of 85 dBA at 50 feet.[41] The L_{max} is an instantaneous noise level that is dependent on truck vicinity to sensitive receptors and not on the number of trucks. Trucks would travel on the project site more frequently than under existing conditions but the trucks would not be located closer to the St. Frances Church and School. The existing L_{max} noise levels would not increase as a result of the proposed project and the impact would be less than significant.

New sensitive receptors located on the eastern portion of project site would potentially be exposed to high noise levels from project-related commercial activity. Specifically, proposed residential units on the eastern portion of the project site may be exposed to delivery truck noise. However, if the residential units are constructed such that delivery truck activity access is in direct line-of-sight, retail noise would potentially result in unacceptable noise levels at residential units. Therefore, mitigation is proposed to reduce potentially significant delivery truck-related noise.

Add Area. Parcel 1 could include a four-story, 36-unit residential project. Residential buildings of this size do not typically include loading docks. Thus, noise from loading dock activity and delivery truck-related noise is not anticipated and no impact is anticipated.

The existing uses within Parcel 2 are not anticipated to change and Parcel 2 would therefore not include new loading dock or delivery truck-related noise. Thus, noise from loading activity and delivery trucks is not anticipated in Parcel 2, and no impact is anticipated.

Parcel 3 could include a 21,000-square-foot shopping center and a 112,000-square-foot office building. Noise from loading dock and delivery truck activity would only be anticipated from the retail shopping center. Given the orientation of the project site, the delivery truck access to the loading dock would likely be located in the southern section of Parcel 3 with truck access along Coldwater Canyon Avenue. Based on this assumption, the nearest residential land use to delivery truck activity would be located approximately 175 feet from the loading dock. The ambient noise level at this sensitive receptor is 59.0 dBA L_{eq}. A heavy-duty truck typically generates a noise level of approximately 85 dBA L_{max} at 50 feet. For purposes of this analysis, it was assumed that up to two heavy-duty trucks would approach the loading dock simultaneously. This would result in a noise level of 88.0 dBA L_{max} at 50 feet. When loading dock noise is added to the existing ambient noise level, the resulting noise level would be 88.0 L_{max}. Delivery truck noise would be anticipated to increase ambient noise levels at sensitive receptors by 5 dBA or more, and would result in a significant impact without the incorporation of mitigation measures.

Parcel 4 could include a 36,000-square-foot shopping center, 56,000-square-foot office building, and 143 units of multi-family housing. Noise from loading dock and delivery truck activity would only be anticipated from the retail shopping center. The loading dock would be designed similar to the proposed project loading dock. As such, loading activity noise would not be anticipated to

[41]The L_{max} noise level was obtained from the *Handbook of Environmental Acoustics* by James P. Cowan (1994).

incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more, and would result in a less-than-significant impact.

The nearest sensitive receptor to delivery truck activity would be located approximately 50 feet from the loading dock. The ambient noise level at this sensitive receptor is 72.9 dBA L_{eq}. A heavy-duty truck typically generates a noise level of approximately 85 dBA L_{max} at 50 feet. For purposes of this analysis, it was assumed that up to two heavy-duty trucks would approach the loading dock simultaneously. This would result in a noise level of 88.0 dBA L_{max} at 50 feet. When loading dock noise is added to the existing ambient noise level, the resulting noise level would be 88.1 dBA L_{max}. Delivery truck noise would be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more, and would result in a significant impact without the incorporation of mitigation measures.

Proposed Project with Add Area. The proposed project with add area would include two unloading areas for delivery trucks on the project site, as well as unloading areas in add area Parcels 3 and 4. Similar to the proposed project, one unloading area could be located along the southeastern portion of the project site and one loading area would be located along the northwestern portion of the project site. All loading docks would be internal to the buildings and would have doors to screen them once the delivery truck has entered. Internal circulation noise, including noise generated at the loading areas would be inaudible at all nearby sensitive receptors. As such, loading activity noise would not be anticipated to incrementally increase ambient noise levels at sensitive receptors by 5 dBA or more, and would result in a less-than-significant impact.

Currently, a five-foot grade difference exists along the northern portion of the project site, adjacent to the single-family residences along Kittridge Avenue where the northwestern loading area would be located. In addition, a ten-foot wall is located along the property line, adjacent to the loading area, and along where the delivery trucks would access the loading areas would be constructed. The nearest residential land use to delivery truck access would be located approximately 15 feet from the proposed main loading dock. The ambient noise level at this sensitive receptor is 55.1 dBA. A heavy-duty truck typically generates a noise level of approximately 85 dBA L_{max} at 50 feet. For purposes of this analysis, it was assumed that up to two heavy-duty trucks would approach the loading dock simultaneously. This would result in a noise level of 88.0 dBA L_{max} at 50 feet. When loading dock noise is attenuated with the five-foot grade and ten-foot wall and added to the existing ambient noise level, the resulting noise level would be 78.0 dBA L_{max}.

The noise level increase over existing conditions would exceed 5 dBA at sensitive receptors, adjacent to the proposed project, Parcel 3, and Parcel 4, and would result in a significant impact without the incorporation of mitigation measures.

New sensitive receptors located on the eastern portion of project site would potentially be exposed to high noise levels from project-related commercial activity. Specifically, proposed residential units on the eastern portion of the project site may be exposed to delivery truck noise. However, if the residential units are constructed such that delivery truck activity access is in direct line-of-sight, retail noise would potentially result in unacceptable noise levels at residential units. Therefore, mitigation is proposed to reduce potentially significant delivery truck-related noise.

Land Use/Noise Compatibility

Proposed Project. The proposed project would include the construction of new residential uses on the project site. It is important that new residential land uses are located in noise compatible environments. Five levels of residential units would be developed over the proposed retail and office uses along the west, north, and east perimeter of the project site. The monitored ambient noise level along these perimeter areas of the project site ranged from 55.5 to 67.7 dBA L_{eq}. Typical building construction (e.g. single-paned windows) provides a minimum noise reduction of approximately 24 dBA with windows closed.[42] As such, residential uses within the project site would potentially be exposed to interior noise levels of 41.7 dBA L_{eq}. This noise level would be less than the 45 dBA interior noise level significance threshold. As such, proposed project land use/noise compatibility would result in a less-than-significant impact.

Add Area. Parcel 1 could include construction of a four-story condominium with 39 units developed over the existing uses. It is important that new residential land uses are located in noise compatible environments. The monitored ambient noise level adjacent to Parcel 1 is 58.3 dBA L_{eq}. Typical building construction provides a minimum noise reduction of approximately 24 dBA with windows closed. Residential uses at Parcel 1 would potentially be exposed to interior noise levels of 32.3 dBA L_{eq}. This noise level would be less than the 45-dBA interior noise level significance threshold. As such, Parcel 1 land use/noise compatibility would result in a less-than-significant impact.

The existing uses within Parcel 2 would not change and no impact is anticipated.

There are no residential units planned for Parcel 3 and no impact is anticipated.

Parcel 4 could include construction of 143 units of multi-family housing. It is important that new residential land uses are located in noise compatible environments. The monitored ambient noise level adjacent to Parcel 4 is 59.0 dBA L_{eq}. Typical building construction provides a minimum noise reduction of approximately 24 dBA with windows closed. As such, residential uses at Parcel 4 would potentially be exposed to interior noise levels of 33.0 dBA L_{eq}. This noise level would be less than the 45-dBA interior noise level significance threshold. As suchParcel 4 land use/noise compatibility would result in a less-than-significant impact.

Proposed Project with Add Area. The proposed project with add area could include construction of approximately 332 units of housing. It is important that new residential land uses are located in noise compatible environments. The monitored ambient noise level ranges from 55.5 to 67.7 dBA. Typical building construction provides a minimum noise reduction of approximately 24 dBA with windows closed. As such, residential uses would potentially be exposed to interior noise levels of 41.7 dBA L_{eq}. This noise level would be less than the 45-dBA interior noise level significance threshold. As such, the proposed project with add area land use/noise compatibility would not result in a significant impact.

Operational Phase Noise Mitigation Measures

N5 Prior to issuance of a building permit, an exterior to interior analysis shall be conducted in conformance with the California Building Code, Section 1207 to ensure that interior noise levels are at or below the 45 dBA CNEL.

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[42]FHWA, Insulation of Buildings Against Highway Noise, August 1, 1977.

N6 Based on the City noise ordinance for garbage collection, truck deliveries to the project site and add area shall be scheduled between the hours of 6:00 a.m. and 9:00 p.m.

N7 Loading dock gates shall be closed during all loading/unloading activity.

N8 The Applicant shall coordinate with the St. Frances Church and School to install double-paned glass on western facing windows with a direct line-of-sight to the project site prior to the issuance of Certificate of Occupancy.

Impacts After Mitigation

Mitigation Measure **N5** would ensure that new sensitive receptors would not be exposed to significant on-site noise levels. As such, project operations would result in a less-than-significant noise impact.

Mitigation Measures **N6** though **N8** would control and reduce project-related loading dock and truck noise. Specifically, Mitigation Measure **N7** would reduce truck noise at the St. Frances Church and School by 6 dBA. The mitigated interior noise level at the School would be 44 dBA L_{eq}. This noise level would not exceed the 45 dBA L_{eq} significance criteria and truck noise would result in a less-than-significant impact at the School.

As stated above, loading dock activity and truck noise would result in a significant impact for Parcels 3 and 4. Detailed site plans have not been developed for Parcels 3 and 4 and, as such, detailed mitigation measures cannot be recommended. Further environmental analysis will be required before approval is obtained to construct Parcels 3 and 4, and noise mitigation may be recommended at that time. However, based on the above analysis, loading dock activity and truck noise would result in a significant and unavoidable impact for Parcels 3 and 4.

4.4.2 Ground-borne Vibration Impacts

Construction Phase Ground-borne Vibration Impacts

Proposed Project. As shown in **Table 4-11**, use of heavy equipment (e.g., a bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The nearest residential structures to the project site located on Kittridge Street, would be approximately 15 feet from occasional heavy equipment activity and could experience vibration levels of 0.19 inches per second PPV. This vibration level would not exceed the 0.5 inches per second PPV significance threshold. As such, construction-related vibration associated with the proposed project would result in a less than significant building damage impact.

TABLE 4-11: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT - UNMITIGATED		
Equipment	**PPV at 25 feet (Inches /Second)/a/**	**RMS at25 feet (VdB)**
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Impact Pile Driver	0.644	104
Sonic Pile Driver	0.170	93

/a/ Fragile buildings can be exposed to ground-borne vibration levels of 0.5 PPV without experiencing structural damage.
SOURCE: Federal Transit Authority, *Transit Noise and Vibration Impact Assessment*, May 2006.

The FTA vibration impact criteria for annoyance are shown in **Table 4-1**. Construction activity would occur during daytime hours and, as such, the Category 3 thresholds for daytime uses were utilized for the analysis. In addition, it was assumed that there would be between 30 and 70 vibration events per day of the same source. Based on these assumptions, a construction vibration annoyance impact would result if sensitive receptors would be exposed to vibration levels of 78 VdB RMS or greater. Typical heavy equipment (e.g., a large bulldozer) generates vibration levels of 87 VdB RMS at a distance of 25 feet. The nearest sensitive receptor would be at least 15 feet from construction activity. At this distance, typical construction equipment would generate vibration levels of approximately 93.7 VdB RMS. This vibration level would exceed the annoyance threshold of 78 VdB RMS and, as such, construction-related vibration would result in a significant annoyance impact without incorporation of mitigation measures.

If pile-driving activity were required, an impact pile driver would generate a vibration level of 0.644 inches per second PPV and 104 VdB RMS at a distance of 25 feet. The nearest sensitive receptor would be approximately 55 feet from occasional heavy equipment activity and could experience pile driving vibration levels of 0.20 inches per second PPV and 94 VdB RMS. This vibration level would not exceed the 0.5 inches per second PPV significance threshold but would exceed the 78 VdB RMS significance threshold. As such, pile-driving vibration activity associated with the proposed project would result in a significant impact without the incorporation of mitigation measures.

Add Area. As shown in **Table 4-11**, use of heavy equipment (e.g., a bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The nearest residential structures to Parcels 1, 3, and 4, would be approximately 15 feet from occasional heavy equipment activity and could experience vibration levels of 0.19 inches per second PPV. This vibration level would not exceed the 0.5 inches per second PPV significance threshold. As such, construction-related vibration associated with the add area would result in a less than significant building damage impact. Typical construction equipment would generate vibration levels of approximately 94 VdB RMS. This vibration level would exceed the annoyance threshold of 78 VdB RMS and, as such, construction-related vibration would result in a significant annoyance impact without incorporation of mitigation measures.

If pile-driving activity were required, an impact pile driver would generate a vibration level of 0.644 inches per second PPV and 104 VdB RMS at a distance of 25 feet. The nearest residential structures to Parcels 1, 3, and 4 would be approximately 15 feet from occasional heavy equipment activity and could experience vibration levels of 1.4 inches per second PPV and 110 VdB RMS. This vibration level would exceed the 0.5 inches per second PPV and 78

VdB RMS significance thresholds. As such, pile-driving vibration activity associated with the add area would result in a significant impact without the incorporation of mitigation measures.

Construction activity would not occur within Parcel 2. Thus, no noise impact is anticipated.

Proposed Project with Add Area. As shown in **Table 4-11**, use of heavy equipment (e.g., a bulldozer) generates vibration levels of 0.089 inches per second PPV at a distance of 25 feet. The nearest residential structures to the proposed project with add area would be approximately 15 feet from occasional heavy equipment activity and could experience vibration levels of 0.19 inches per second PPV. This vibration level would not exceed the 0.5 inches per second PPV significance threshold. As such, construction-related vibration associated with the proposed project with add area would result in a less than significant impact. Typical construction equipment would generate vibration levels of approximately 94 VdB RMS. This vibration level would exceed the annoyance threshold of 78 VdB RMS and, as such, construction-related vibration would result in a significant annoyance impact without incorporation of mitigation measures.

If pile-driving activity were required, an impact pile driver would generate a vibration level of 0.644 inches per second PPV and 104 VdB RMS at a distance of 25 feet. The nearest residential structures to the proposed project with add area would be approximately 15 feet from occasional heavy equipment activity and could experience vibration levels of 1.4 inches per second PPV and 110 VdB RMS. This vibration level would exceed the 0.5 inches per second PPV and 78 VdB RMS significance thresholds. As such, pile-driving vibration activity associated with the proposed project with add area would result in a significant impact without the incorporation of mitigation measures.

Construction Phase Ground-borne Vibration Mitigation Measures

N9 Should pile driving be required within 30 feet of any sensitive receptor, the construction contractor shall utilize sonic pile driving or caisson drilling in place of impact pile driving.

Impacts After Mitigation

As shown in **Table 4-12**, implementation of Mitigation Measure **N9** would reduce pile driving vibration levels within 30 feet of sensitive receptors to a maximum of 0.490 inches per second PPV. This vibration level would not exceed the 0.5 inches per second PPV significance threshold. As such, construction-related vibration associated with the proposed project would result in a less-than-significant building damage impact.

TABLE 4–12: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT - MITIGATED

	Vibration at 30 Feet		Vibration at 15 to 30 feet	
Equipment	**PPV (Inches/Second)**	**RMS (VdB)**	**PPV (Inches/Second)**	**RMS (VdB)**
Impact Pile Driver	0.490	102	Not Allowed with Mitigation Measure **N6**	
Sonic Pile Driver	0.129	91	0.366	100

SOURCE: Federal Transit Authority, *Transit Noise and Vibration Impact Assessment*, May 2006

Implementation of Mitigation Measure **N9** would also reduce vibration annoyance from pile driving. Pile driving vibration levels within 30 feet of sensitive receptors would be approximately 100 VdB RMS. This vibration level would exceed the 78 VdB RMS significance threshold. As such, construction-related vibration associated with the proposed project would result in a significant and unavoidable annoyance impact.

Operational Phase Ground-borne Vibration Impacts

Proposed Project. The proposed project would not include significant stationary sources of ground-borne vibration, such as heavy equipment operations. Operational ground-borne vibration in the project vicinity would be generated by vehicular travel on the local roadways and internal access streets. In addition, there would be vibration from garbage trucks emptying dumpsters. However, similar to existing conditions, traffic-related vibration levels would not be perceptible by sensitive receptors. Thus, operational vibration would result in a less-than-significant impact.

Add Area. Operational ground-borne vibration impacts would be similar to the proposed project and would result in a less-than-significant impact.

The existing uses within Parcel 2 would remain. Thus, operational vibration impacts are not anticipated.

Proposed Project with Add Area. Operational ground-borne vibration impacts would be similar to the proposed project and would result in a less-than-significant impact.

Operational Phase Ground-borne Vibration Mitigation Measures

None Required.

Impacts After Mitigation

Operational ground-borne vibration impacts for the proposed project and add area would be less-than-significant.

4.5 CUMULATIVE IMPACTS

Proposed Project. The nearest related projects to the project site would be a mixed-use development located at 13115 Victory Boulevard and a condominium project located at 13148 Victory Boulevard. These projects would be approximately 300 to 700 feet west of the project site. Construction activities associated with these related projects and the proposed project would potentially overlap and each would generate noise at sensitive receptors. The proposed project would result in a significant construction noise impact and, as such, the proposed project combined with related projects would also result in a significant impact. Therefore, the proposed project would result in a cumulative considerable construction noise impact.

When calculating future traffic impacts, the traffic consultant took 91 additional projects into consideration. Thus, the future traffic results without and with the proposed project already account for the cumulative impacts from these other projects. Since the noise impacts are generated directly from the traffic analysis results, the future without project and future with project noise impacts described in this report already reflect cumulative impacts.

Table 4-9 presents the cumulative increase in future traffic noise levels at various intersections (i.e., 2013 "No Project "conditions plus proposed project traffic) for daily traffic conditions. The maximum cumulative roadway noise increase would be 3.7 dBA CNEL and would occur along Ethel Avenue, between Victory Boulevard and Oxnard Street. Cumulative roadway noise levels would exceed the 3-dBA-threshold increment but the estimated cumulative noise level of 63.3 dBA CNEL would remain within the "conditionally acceptable" noise range (55 dBA to 70 dBA) for a residential area. The increase in cumulative noise would not change from conditionally acceptable to "normally unacceptable" or "clearly unacceptable" noise level. Therefore, the proposed project would not result in a cumulatively considerable impact with respect to roadway noise.

The predominant vibration source near the project site is heavy trucks traveling on Victory Boulevard and Coldwater Canyon Avenue. Neither the project nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on Victory Boulevard and Coldwater Canyon Avenue. As such, the proposed project would not add to a cumulative vibration impact.

Add Area. The maximum cumulative roadway noise increase for Parcel 1 would be 1.8 dBA CNEL and would occur along Ethel Avenue, between Victory Boulevard and Oxnard Street. Cumulative roadway noise levels for Parcel 1 would not exceed the 3-dBA-threshold increment and would not result in a perceptible change in noise level. Therefore, Parcel 1 would not result in a cumulatively considerable impact with respect to roadway noise.

The predominant vibration source near Parcel 1 is heavy trucks traveling on Victory Boulevard and Coldwater Canyon Avenue. Neither Parcel 1 nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on Victory Boulevard and Coldwater Canyon Avenue. As such, Parcel 1 would not add to a cumulative vibration impact.

The existing uses within Parcel 2 would not change and, as such, cumulative impacts are not anticipated.

The maximum cumulative roadway noise increase for Parcel 3 would be 1.8 dBA CNEL and would occur along Ethel Avenue, between Victory Boulevard and Oxnard Street. Cumulative roadway noise levels for Parcel 3 would not exceed the 3-dBA threshold increment and would not result in a perceptible change in noise level. Therefore, Parcel 3 would not result in a cumulatively considerable impact with respect to roadway noise.

The predominant vibration source near Parcel 3 is heavy trucks traveling on Victory Boulevard and Coldwater Canyon Avenue. Neither Parcel 3 nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on Victory Boulevard and Coldwater Canyon Avenue. As such, Parcel 3 would not add to a cumulative vibration impact.

The maximum cumulative roadway noise increase for Parcel 4 would be 1.8 dBA CNEL and would occur along Ethel Avenue, between Victory Boulevard and Oxnard Street. Cumulative roadway noise levels for Parcel 4 would not exceed the 3-dBA threshold increment and would not result in a perceptible change in noise level. Therefore, Parcel 4 would not result in a cumulatively considerable impact with respect to roadway noise.

The predominant vibration source near Parcel 4 is heavy trucks traveling on Victory Boulevard and Coldwater Canyon Avenue. Neither Parcel 4 nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on Victory Boulevard and Coldwater Canyon Avenue. As such, Parcel 4 would not add to a cumulative vibration impact.

Proposed Project with Add Area. The maximum cumulative roadway noise increase for the proposed project with add area would be 4.0 dBA CNEL and would occur along Ethel Avenue, between Victory Boulevard and Oxnard Street. Cumulative roadway noise levels for the proposed project with add area would exceed the 3-dBA threshold increment but would not change from conditionally acceptable to “normally unacceptable” or “clearly unacceptable” noise level. Therefore, the proposed project with add area would not result in a cumulatively considerable impact with respect to roadway noise.

The predominant vibration source near the proposed project with add area is heavy trucks traveling on Victory Boulevard and Coldwater Canyon Avenue. Neither the proposed project with add area nor related projects would substantially increase heavy-duty vehicle traffic near the project site and would not cause a substantial increase in heavy-duty trucks on Victory Boulevard and Coldwater Canyon Avenue. As such, the proposed project with add area would not add to a cumulative vibration impact.

Appendix A

Air Quality Data

BURBANK VALLEY PUMP PLA, CALIFORNIA

Period of Record General Climate Summary - Temperature

Station:(041194) BURBANK VALLEY PUMP PLA																
From Year=1939 To Year=2006																
	Monthly Averages			Daily Extremes				Monthly Extremes				Max. Temp.		Min. Temp.		
	Max.	Min.	Mean	High	Date	Low	Date	Highest Mean	Year	Lowest Mean	Year	>= 90 F	<= 32 F	<= 32 F	<= 0 F
	F	F	F	F	dd/yyyy or yyyymmdd	F	dd/yyyy or yyyymmdd	F	-	F	-	# Days	# Days	# Days	# Days
January	67.3	41.6	54.4	93	31/2003	22	29/1979	63.4	2003	45.1	1949	0.1	0.0	1.7	0.0
February	68.8	43.6	56.2	92	16/1977	27	15/1942	61.9	1954	50.7	1949	0.2	0.0	0.6	0.0
March	70.4	45.7	58.0	98	26/1988	22	07/1980	64.5	2004	52.7	1952	0.4	0.0	0.4	0.0
April	73.9	49.0	61.5	105	06/1989	32	05/1978	68.1	1989	53.4	1967	1.7	0.0	0.0	0.0
May	76.7	53.4	65.1	107	29/1984	39	21/1975	71.8	1984	60.6	1998	2.4	0.0	0.0	0.0
June	81.5	57.2	69.3	111	27/1976	43	14/1943	77.7	1981	64.0	1944	4.8	0.0	0.0	0.0
July	88.5	61.0	74.7	108	26/1943	45	02/1979	79.7	1984	69.0	1944	13.6	0.0	0.0	0.0
August	89.2	61.3	75.2	111	26/1944	46	28/1975	80.4	1994	71.7	1948	14.6	0.0	0.0	0.0
September	87.2	59.1	73.2	113	12/1971	43	26/1941	81.4	1984	67.3	1986	11.8	0.0	0.0	0.0
October	81.0	53.3	67.1	108	01/1980	33	30/1971	72.3	1991	62.7	2002	5.9	0.0	0.0	0.0
November	73.5	45.9	59.7	98	03/1976	29	30/1975	65.0	1949	54.0	1994	1.0	0.0	0.2	0.0
December	68.0	41.7	54.9	92	03/1958	22	08/1978	59.6	1958	49.3	1971	0.0	0.0	1.4	0.0
Annual	77.2	51.1	64.1	113	19710912	22	19781208	66.7	1984	61.9	1944	56.5	0.0	4.2	0.0
Winter	68.1	42.3	55.2	93	20030131	22	19781208	59.1	1981	48.6	1949	0.3	0.0	3.6	0.0

BURBANK VALLEY PUMP PLA, CALIFORNIA (041194)

Period of Record Monthly Climate Summary

Period of Record : 12/1/1939 to 12/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	67.3	68.8	70.4	73.9	76.7	81.5	88.5	89.2	87.2	81.0	73.5	68.0	77.2
Average Min. Temperature (F)	41.6	43.6	45.7	49.0	53.4	57.2	61.0	61.3	59.1	53.3	45.9	41.7	51.1
Average Total Precipitation (in.)	3.37	3.94	2.91	1.18	0.28	0.07	0.01	0.11	0.20	0.59	1.54	2.30	16.51
Average Total SnowFall (in.)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.
Max. Temp.: 98.7% Min. Temp.: 98.7% Precipitation: 98.8% Snowfall: 98.8% Snow Depth: 98.8%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

Spring	73.7	49.4	61.5	107	19840529	22	19800307	66.1	1993	58.2	1999	4.4	0.0	0.4	0.0
Summer	86.4	59.8	73.1	111	19440826	43	19430614	77.3	1981	69.1	1944	33.0	0.0	0.0	0.0
Fall	80.6	52.8	66.7	113	19710912	29	19751130	70.2	1991	63.9	1973	18.7	0.0	0.2	0.0

Table updated on Jul 28, 2006
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May
Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Western Regional Climate Center, wrcc@dri.edu

BURBANK VALLEY PUMP PLA, CALIFORNIA

Period of Record General Climate Summary - Precipitation

Station:(041194) BURBANK VALLEY PUMP PLA														
From Year=1939 To Year=2006														
	Precipitation											Total Snowfall		
	Mean	High	Year	Low	Year	1 Day Max.		>= 0.01 in.	>= 0.10 in.	>= 0.50 in.	>= 1.00 in.	Mean	High	Year
	in.	in.	-	in.	-	in.	dd/yyyy or yyyymmdd	# Days	# Days	# Days	# Days	in.	in.	-
January	3.37	15.92	1995	0.00	1948	7.76	22/1943	6	4	2	1	0.1	4.7	1949
February	3.94	15.52	1998	0.00	1964	4.50	08/1993	6	4	2	1	0.0	0.0	1940
March	2.91	12.87	1978	0.00	1956	5.45	01/1983	6	4	2	1	0.0	0.5	1950
April	1.18	5.66	1965	0.00	1962	2.30	12/1956	4	2	1	0	0.0	0.0	1940
May	0.28	4.37	1998	0.00	1942	2.29	08/1977	2	1	0	0	0.0	0.0	1940
June	0.07	1.04	1993	0.00	1940	1.01	05/1993	1	0	0	0	0.0	0.0	1940
July	0.01	0.21	1986	0.00	1940	0.18	12/1992	0	0	0	0	0.0	0.0	1940
August	0.11	2.97	1977	0.00	1940	2.86	17/1977	1	0	0	0	0.0	0.0	1940
September	0.20	3.39	1976	0.00	1940	1.43	10/1976	1	1	0	0	0.0	0.0	1940
October	0.59	7.26	2004	0.00	1953	3.00	19/2004	2	1	0	0	0.0	0.0	1940
November	1.54	10.63	1965	0.00	1948	5.28	29/1970	3	2	1	0	0.0	0.0	1940
December	2.30	8.07	1940	0.00	1950	5.30	29/1965	5	3	2	1	0.0	0.0	1939
Annual	16.51	39.77	1983	3.52	1947	7.76	19430122	36	23	10	5	0.1	4.7	1949
Winter	9.62	32.33	2005	1.81	1961	7.76	19430122	17	12	6	3	0.1	4.7	1949
Spring	4.37	18.19	1983	0.00	1997	5.45	19830301	12	7	3	1	0.0	0.5	1950
Summer	0.19	2.97	1977	0.00	1940	2.86	19770817	2	0	0	0	0.0	0.0	1940
Fall	2.33	11.38	1965	0.00	1980	5.28	19701129	6	4	2	1	0.0	0.0	1940

Table updated on Jul 28, 2006
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb.   Spring = Mar., Apr., and May

Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

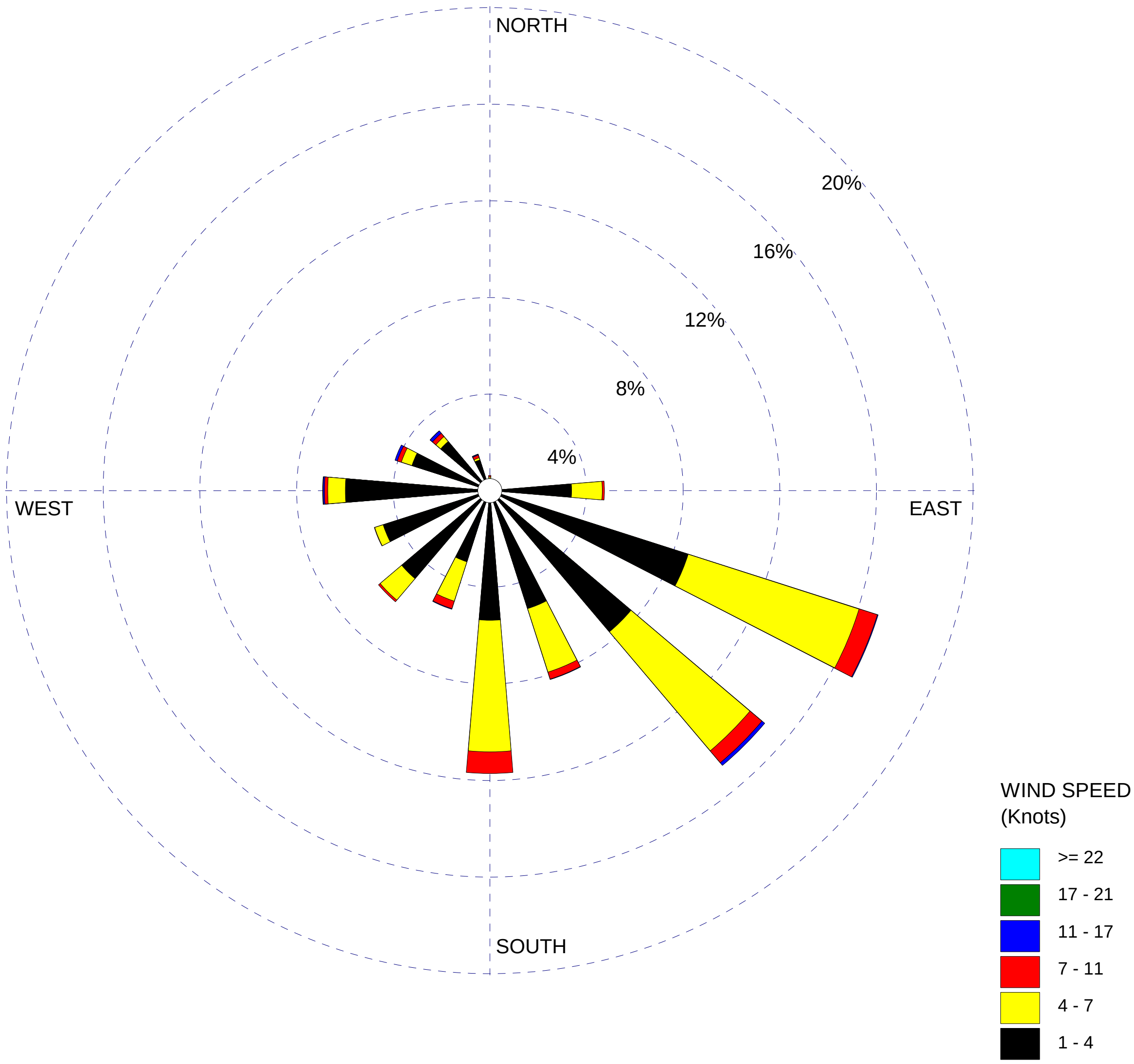
Western Regional Climate Center, wrcc@dri.edu

WIND ROSE PLOT:

The Plaza at the Glen

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:

DATA PERIOD:

1981
Jan 1 - Dec 31
00:00 - 23:00

COMPANY NAME:

MODELER:

CALM WINDS:

10.13%

TOTAL COUNT:

8760 hrs.

AVG. WIND SPEED:

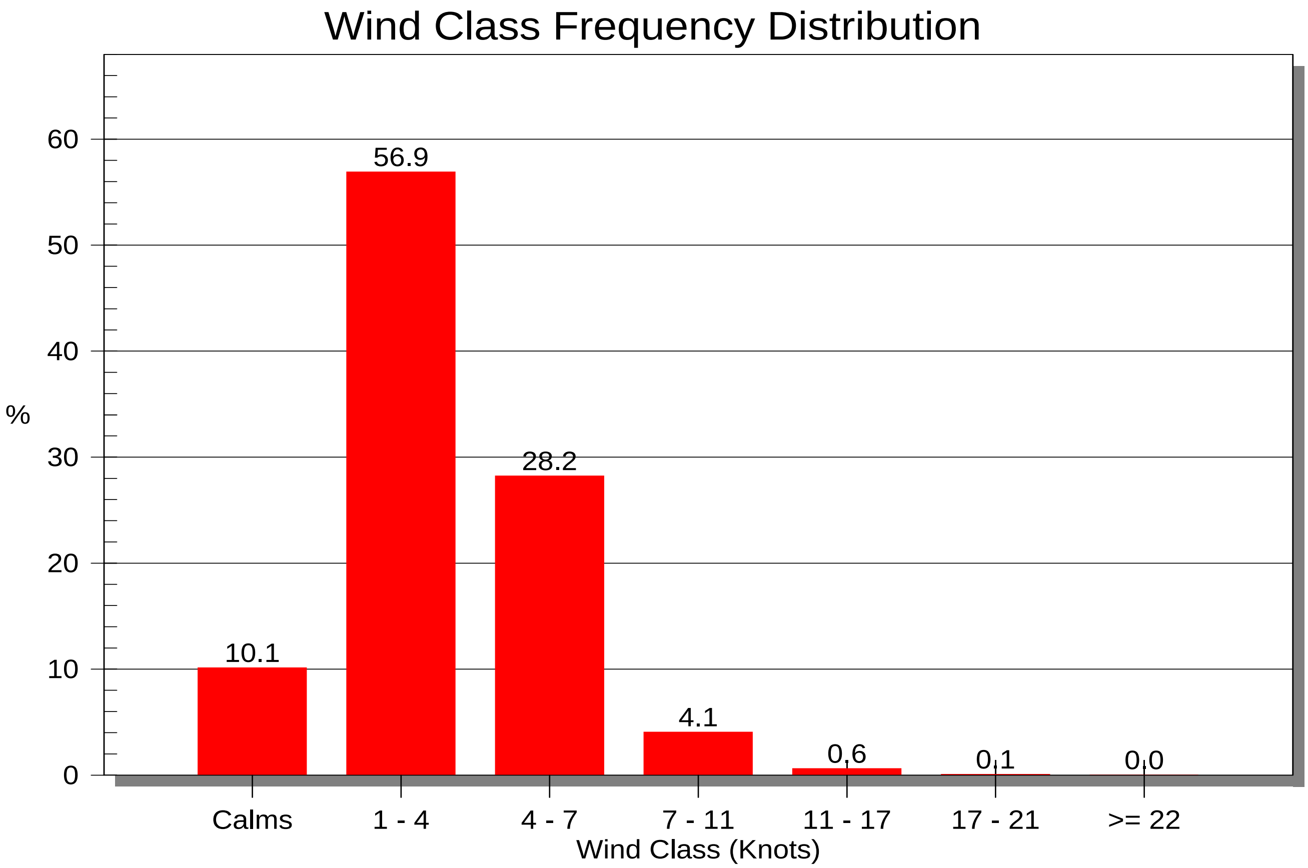
3.67 Knots

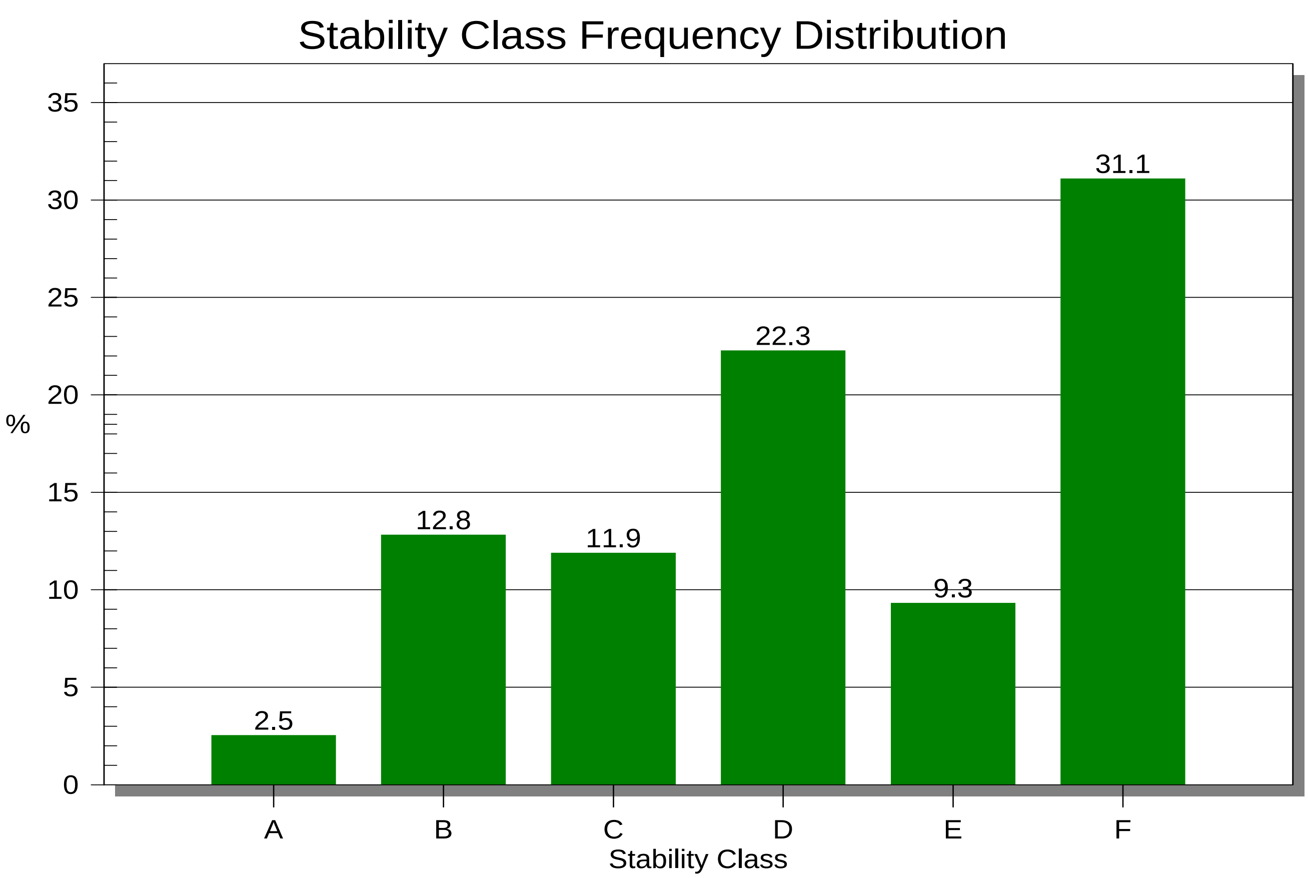
DATE:

3/19/2008

PROJECT NO.:

WRPLOT View - Lakes Environmental Software





WRPLOT View - Lakes Environmental Software

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21865 Copley Drive, Diamond Bar, CA 91765-4182
Information: 1-800-CUT-SMOG (1-800-288-7664)
Internet: http://www.aqmd.gov

Air Quality Reporting

Since 1977, the South Coast Air Quality Management District has served as the local government agency responsible for measuring, reporting and taking steps to improve air quality.

To inform the AQMD's 15 million residents about air quality conditions, the AQMD issues an air quality forecast each day and reports current air quality conditions for each numbered Monitoring Area and General Forecast Area depicted here.

This air quality information is transmitted to the public through newspapers, television, radio and pager services, through faxes to schools, through recorded messages on the AQMD's toll-free Smog Update telephone line, 1-800-CUT-SMOG, and on the AQMD's Internet Website http://www.aqmd.gov.

Newspapers, television and radio stations typically will report air quality information using the General Forecast Areas, shown in color below, which are larger groupings of the more specific Air Monitoring Areas.

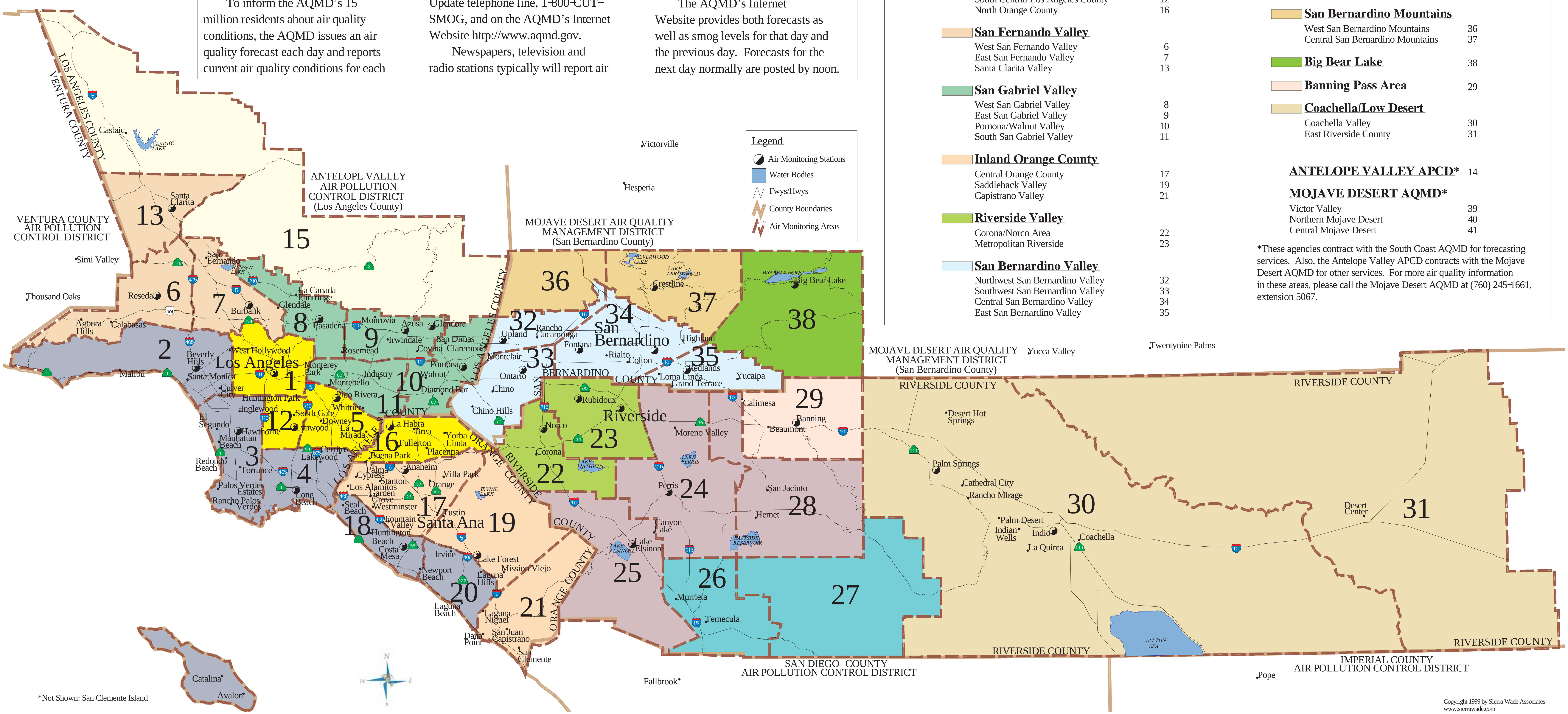
The 1-800-CUT-SMOG (1-800-288-7664) line also provides smog forecast and current smog level information by ZIP code.

The AQMD's Internet Website provides both forecasts as well as smog levels for that day and the previous day. Forecasts for the next day normally are posted by noon.

General Forecast Areas & Air Monitoring Areas

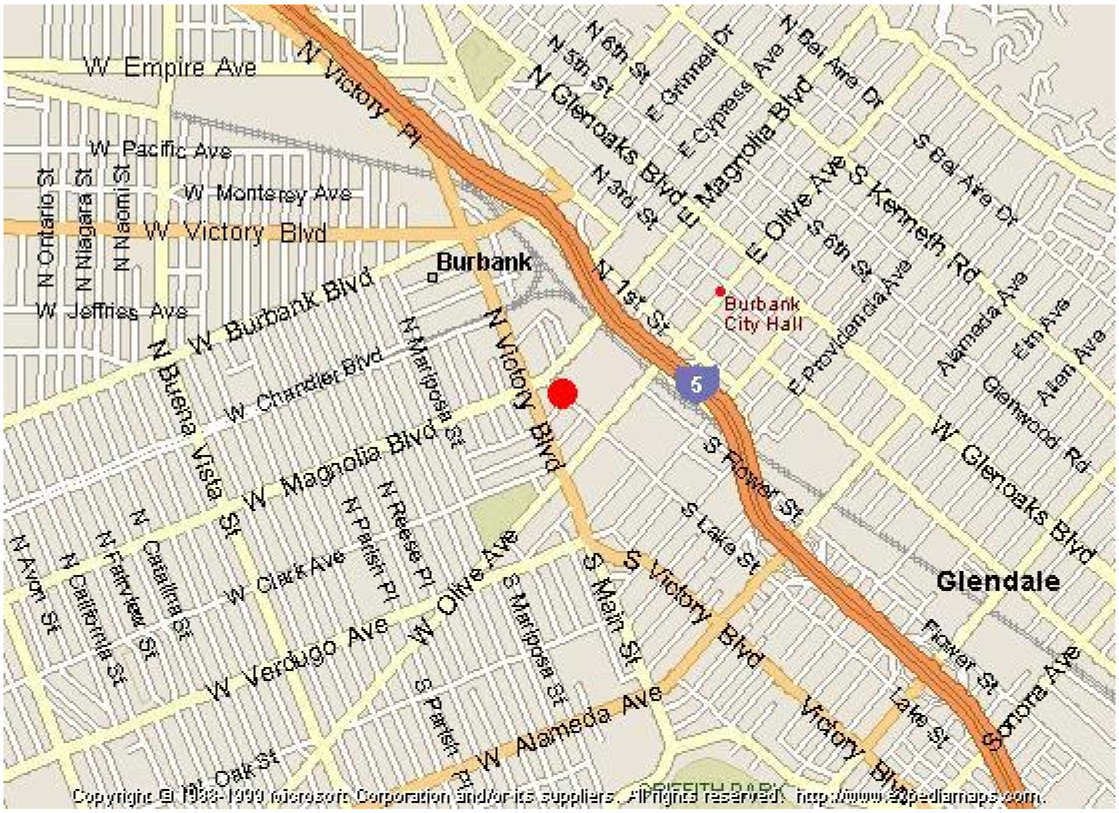
General Forecast Area / Air Monitoring Area	No.
Coastal	
Northwest Los Angeles County Coastal	2
Southwest Los Angeles County Coastal	3
South Los Angeles County Coastal	4
North Orange County Coastal	18
Central Orange County Coastal	20
Metropolitan	
Central Los Angeles County	1
Southeast Los Angeles County	5
South Central Los Angeles County	12
North Orange County	16
San Fernando Valley	
West San Fernando Valley	6
East San Fernando Valley	7
Santa Clarita Valley	13
San Gabriel Valley	
West San Gabriel Valley	8
East San Gabriel Valley	9
Pomona/Walnut Valley	10
South San Gabriel Valley	11
Inland Orange County	
Central Orange County	17
Saddleback Valley	19
Capistrano Valley	21
Riverside Valley	
Corona/Norco Area	22
Metropolitan Riverside	23
San Bernardino Valley	
Northwest San Bernardino Valley	32
Southwest San Bernardino Valley	33
Central San Bernardino Valley	34
East San Bernardino Valley	35
Hemet/Elsinore Area	
Perris Valley	24
Lake Elsinore	25
Hemet/San Jacinto Valley	28
Temecula/Anza Area	
Temecula Valley	26
Anza Area	27
San Gabriel Mountains	15
San Bernardino Mountains	
West San Bernardino Mountains	36
Central San Bernardino Mountains	37
Big Bear Lake	38
Banning Pass Area	29
Coachella/Low Desert	
Coachella Valley	30
East Riverside County	31
ANTELOPE VALLEY APCD*	14
MOJAVE DESERT AQMD*	
Victor Valley	39
Northern Mojave Desert	40
Central Mojave Desert	41

*These agencies contract with the South Coast AQMD for forecasting services. Also, the Antelope Valley APCD contracts with the Mojave Desert AQMD for other services. For more air quality information in these areas, please call the Mojave Desert AQMD at (760) 245-1661, extension 5067.



Quality Assurance
Site Information for Burbank

This page updated February 10, 2005



AIRS Number	ARB Number	Site Start Date	Reporting Agency and Agency Code
060371002	70069	3/1/80	South Coast AQMD (061)

Site Address	County	Air Basin	Latitude	Longitude	Elevation
228 W Palm Av, Burbank CA 91502	Los Angeles	South Coast	34° 10' 33"	118° 19' 1"	10

Pollutants Monitored (click on parameter link for real-time data)
CO, SO_2, NO_2, O_3, PM_{10}, $TEOM_{PM10}$, $BAM_{PM2.5}$, $PM_{2.5}$, Toxics, Cr^{6+}, Outdoor Temperature, Relative Humidity, Wind Direction, Horizontal Wind Speed, Barometric Pressure, Solar Radiation

Site Photos	Photo Sequences	Site Surveys
--Select Photos--	--Select Position And Direction--	--Select Survey--

Other ARB Database Information	Real-Time Met Data	Aerial Photos and Topo Maps Of Site
--Select Database--	--Select Data Server--	--Select External Map--

Site Information Menu Top Page   **Quality Assurance Programs**   **Search QA Site Information Database**

For real-time air quality data visit: Air Quality and Meteorological Information System (AQMIS)

For further information contact:

Merrin Wright, *Manager*
Quality Assurance Section

2005 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2005

Source/Receptor Area No.	Location	Station No.	Carbon Monoxide: No. Days of Data	CO: Max. Conc. in ppm 1-hour	CO: Max Conc. in ppm 8-hour	CO: No. Days Standard Exceeded a) Federal ≥ 9.5 ppm 8-hour	CO: No. Days Standard Exceeded a) State > 9.0 ppm 8-hour	Ozone: No. Days of Data	Ozone: Max. Conc. in ppm 1-hour	Ozone: Max. Conc. in ppm 8-hour	Ozone: Fourth High Conc. ppm 8-hour	Ozone: No. Days Standard Exceeded: Health Advisory ≥ 0.15 ppm 1-hour	Ozone: Federal b) > 0.12 ppm 1-hour	Ozone: Federal b) > 0.08 ppm 8-hour	Ozone: State c) > 0.09 ppm 1-hour	Ozone: State c) > 0.07 ppm 8-hour	Nitrogen Dioxide: No. Days of Data	NO2: Max Conc. in ppm 1-hour d)	NO2: Annual Average d) AAM Conc. ppm	Sulfur Dioxide: No. Days of Data	SO2: Max. Conc. in ppm 1-hour e)	SO2: Max. Conc. in ppm 24-hour e)
	LOS ANGELES COUNTY																					
1	Central LA	087	365	4	3.1	0	0	365	0.121	0.098	0.072	0	0	1	2	2	364	0.13	0.0278	357	0.07	0.010
2	Northwest Coastal LA County	091	365	3	2.1	0	0	361	0.114	0.090	0.077	0	0	1	7	5	365	0.08	0.0178	--	--	--
3	Southwest Coastal LA County	820	365	3	2.1	0	0	365	0.086	0.076	0.068	0	0	0	0	1	365	0.09	0.0134	365	0.04	0.012
4	South Coastal LA County 1	072	365	4	3.5	0	0	365	0.091	0.068	0.059	0	0	0	0	0	365	0.14	0.0241	365	0.04	0.010
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	350	5	3.5	0	0	365	0.138	0.113	0.098	0	2	12	30	29	365	0.09	0.0202	--	--	--
7	East San Fernando Valley	069	363	4	3.4	0	0	365	0.142	0.108	0.081	0	2	2	13	12	365	0.09	0.0294	361	0.01	0.006
8	West San Gabriel Valley	088	363	4	2.8	0	0	363	0.145	0.114	0.086	1	2	5	13	12	363	0.10	0.0241	--	--	--
9	East San Gabriel Valley 1	060	365	3	1.7	0	0	365	0.145	0.122	0.087	1	4	6	20	14	365	0.09	0.0251	--	--	--
9	East San Gabriel Valley 2	591	358	2	1.9	0	0	363	0.160	0.130	0.099	2	8	13	31	29	360	0.09	0.0224	--	--	--
10	Pomona/Walnut Valley	075	365	4	2.5	0	0	361	0.140	0.112	0.096	0	4	11	26	18	365	0.08	0.0312	--	--	--
11	South San Gabriel Valley	085	113*	3*	2.4*	0*	0*	116*	0.077*	0.065*	0.051*	0*	0*	0*	0*	0*	116*	0.09*	0.0308*	--	--	--
12	South Central LA County	084	365	7	5.9	0	0	365	0.111	0.081	0.063	0	0	0	1	1	360	0.11	0.0312	--	--	--
13	Santa Clarita Valley	090	365	2	1.3	0	0	364	0.173	0.141	0.118	5	11	47	65	69	347	0.087	0.0190	--	--	--
	ORANGE COUNTY																					
16	North Orange County	3177	365	7	3.1	0	0	365	0.094	0.075	0.067	0	0	0	0	1	361	0.09	0.0249	--	--	--
17	Central Orange County	3176	365	4	3.3	0	0	365	0.095	0.077	0.075	0	0	0	1	4	365	0.09	0.0211	--	--	--
18	North Coastal Orange County	3195	364	5	3.2	0	0	338	0.085	0.073	0.068	0	0	0	0	0	355	0.09	0.0131	359	0.01	0.008
19	Saddleback Valley	3812	365	2	1.6	0	0	365	0.125	0.085	0.078	0	1	1	3	6	--	--	--	--	--	--
	RIVERSIDE COUNTY																					
22	Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	363	3	2.5	0	0	358	0.144	0.129	0.105	0	3	33	46	62	365	0.08	0.0222	365	0.02	0.011
23	Metropolitan Riverside County 2	4146	365	4	2.4	0	0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Mira Loma	5212	362	3	2.1	0	0	358	0.135	0.116	0.105	0	3	25	34	51	346	0.08	0.0160	--	--	--
24	Perris Valley	4149	--	--	--	--	--	365	0.126	0.103	0.082	0	1	3	11	18	--	--	--	--	--	--
25	Lake Elsinore	4158	365	2	1.0	0	0	365	0.149	0.119	0.097	1	4	15	37	46	365	0.07	0.0142	--	--	--
29	Banning Airport	4164	--	--	--	--	--	359	0.144	0.132	0.119	0	10	39	47	66	329	0.07	0.0148	--	--	--
30	Coachella Valley 1**	4137	364	2	0.8	0	0	363	0.139	0.116	0.108	0	4	35	41	63	352	0.10	0.0120	--	--	--
30	Coachella Valley 2**	4157	--	--	--	--	--	365	0.114	0.095	0.092	0	0	18	18	36	--	--	--	--	--	--
	SAN BERNARDINO COUNTY																					
32	Northwest San Bernardino Valley	5175	364	3	1.8	0	0	365	0.149	0.121	0.101	1	8	15	34	34	364	0.10	0.0313	--	--	--
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	365	3	2.1	0	0	355	0.150	0.128	0.113	2	9	23	49	47	361	0.10	0.0310	365	0.01	0.004
34	Central San Bernardino Valley 2	5203	356	4	2.4	0	0	361	0.163	0.129	0.114	4	9	31	54	58	361	0.0.08	0.0259	--	--	--
35	East San Bernardino Valley	5204	--	--	--	--	--	364	0.146	0.123	0.113	1	6	24	36	45	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	--	--	354	0.182	0.145	0.130	7	18	69	80	102	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	DISTRICT MAXIMUM			7	5.9	0	0		0.182	0.145	0.130	7	18	69	80	102		0.14	0.0313		0.07	0.012
	SOUTH COAST AIR BASIN			7	5.9	0	0		0.182	0.145	0.130	11	30	84	102	120		0.14	0.0313		0.07	0.012

ppm - Parts Per Million parts of air, by volume. AAM = Annual Arithmetic Mean -- - Pollutant not monitored.
* Less than 12 full months of data. May not be representative. ** Salton Sea Air Basin.

a) - The federal 1-hour standard (1-hour average CO > 35 ppm) and state 1-hour standard (1-hour average CO > 20 ppm) were not exceeded. For comparison of data with the federal 8-hour CO standard (9 ppm), 8-hour averages with one decimal place should be rounded to integers.
b) – The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard effective June 15, 2004.
c) - Air Resources Board has established a new 8-hour average California ozone standard of 0.07 ppm effective May 17, 2005.
d) - The state standard is 1-hour average NO_2 > 0.25 ppm. The federal standard is annual arithmetic mean NO_2 > 0.0534 ppm.
e) - The state standards are 1-hour average SO_2 > 0.25 ppm and 24-hour average SO_2 > 0.04 ppm. The federal standards are annual arithmetic mean SO_2 > 0.03 ppm, 24-hour average > 0.14 ppm, and 3-hour average > 0.50 ppm.

AQMD
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

The map showing the locations of source/receptor areas can be accessed via the Internet at http://www.aqmd.gov/telemweb/areamap.aspx. Locations of source/receptor areas are shown on the "South Coast Air Quality Management District Air Monitoring Areas" map available free of charge from SCAQMD Public Information.

2005 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2005

Source/Receptor Area No.	Location	Station No.	PM10 f): No. Days of Data	PM10: Max. Conc. in µg/m³ 24-hour	PM10: No. (%) Samples Exceeding Standard: Federal > 150 µg/m³ 24-hour	PM10: State > 50 µg/m³ 24-hour	PM10: Annual Average i) AAM Conc. µg/m³	PM2.5 g): No. Days of Data	PM2.5: Max. Conc. in µg/m³ 24-hour	PM2.5: 98th Percentile Conc. in µg/m³ 24-hour	PM2.5: No. (%) Samples Exceeding Standard: Federal > 65 µg/m³ 24-hour	PM2.5: Annual Averages j) AAM Conc. µg/m³	TSP h): No. Days of Data	TSP: Max. Conc. in µg/m³ 24-hour	TSP: Annual Average AAM Conc. µg/m³	Lead h): Max. Monthly Average Conc. k) µg/m³	Lead: Max. Quarterly Average Conc. k) µg/m³	Sulfate h): Max. Conc. in µg/m³ 24-hour	Sulfate: No. (%) Samples Exceeding Standard: State ≥ 25 µg/m³ 24-hour
LOS ANGELES COUNTY																			
1	Central LA	087	61	70	0	4(6.6)	29.6	334	73.7	53.2	2(0.6)	18.1	66	141	66.7	0.02	0.02	14.2	0
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	59	89	41.6	--	--	11.7	0
3	Southwest Coastal LA County 2	820	54	44	0	0	22.9	--	--	--	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 1	072	59	66	0	5(8.5)	29.6	324	53.9	41.4	0	16.0	61	112	55.5	0.01	0.01	16.8	0
4	South Coastal LA County 2	077	59	131	0	18(30.5)	43.4	344	50.8	37.8	0	14.7	--	--	--	--	--	--	--
6	West San Fernando Valley	074	--	--	--	--	--	104	39.6	35.8	0	13.9	--	--	--	--	--	--	--
7	East San Fernando Valley	069	61	92	0	5(8.2)	34.3	106	63.2	50.6	0	17.9	--	--	--	--	--	--	--
8	West San Gabriel Valley	088	--	--	--	--	--	113	62.9	43.1	0	15.1	58	89	44.6	--	--	11.2	0
9	East San Gabriel Valley 1	060	55	76	0	12(21.8)	35.1	292*	132.7*	53.2*	1(0.3)*	17.0*	58	142	70.9	--	--	10.2	0
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	76*	58.2*	54.0*	0*	17.0*	39*	104*	66.4*	0.03	0.03	9.9	0
12	South Central LA County	084	--	--	--	--	--	114	54.6	48.5	0	17.5	57	118	67.4	0.03	0.02	17.3	0
13	Santa Clarita Valley	090	60	55	0	1(1.7)	25.8	--	--	--	--	--	--	--	--	--	--	--	--
ORANGE COUNTY																			
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	61	65	0	3(4.9)	28.2	333	54.7	41.9	0	14.7	--	--	--	--	--	--	--
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	55	41	0	0	19.0	113	35.4	31.4	0	10.7	--	--	--	--	--	--	--
RIVERSIDE COUNTY																			
22	Norco/Corona	4155	58	79	0	5(8.6)	31.6	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	123	123	0	69(56.1)	52.0	334	98.7	58.4	4(1.2)	21.0	59	173	96.7	0.02	0.02	10.3	0
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	110	95.0	41.0	1(0.9)	18.0	60	125	75.8	0.01	0.01	10.3	0
23	Mira Loma	5212	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	Perris Valley	4149	60	80	0	19(31.7)	39.2	--	--	--	--	--	--	--	--	--	--	--	--
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	58	76	0	2(3.4)	26.6	--	--	--	--	--	--	--	--	--	--	--	--
30	Coachella Valley 1**	4137	59	66	0	2(3.4)	25.9	83*	26.2*	25.0*	0*	8.4*	--	--	--	--	--	--	--
30	Coachella Valley 2**	4157	115	106	0	39(34.2)	45.7	104	44.4	25.0	0	10.5	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																			
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	57	94	53.4	0.02	0.02	8.4	0
33	Southwest San Bernardino Valley	5817	60	74	0	19(31.7)	40.8	110	87.8	49.6	1(0.9)	18.8	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	60	108	0	29(48.3)	50.0	109	96.8	48.2	1(0.9)	18.9	61	295	100.2	--	--	10.4	0
34	Central San Bernardino Valley 2	5203	60	72	0	23(38.3)	42.3	109	106.3	43.4	1(0.9)	17.4	60	175	87.1	0.02	0.01	10.9	0
35	East San Bernardino Valley	5204	58	61	0	12(20.7)	33.2	--	--	--	--	--	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	56	49	0	0	25.8	--	--	--	--	--	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	51	38.8	38.8	0	12.1	--	--	--	--	--	--	--
DISTRICT MAXIMUM				131	0	69	52.0		132.7	58.4	4	21.0		295	100.2	0.03	0.03	17.3	0
SOUTH COAST AIR BASIN				131	0	89	52.0		132.7	58.4	6	21.0		295	100.2	0.03	0.03	17.3	0

µg/m³ - Micrograms per cubic meter of air. AAM - Annual Arithmetic Mean AGM – Annual Geometric Mean -- - Pollutant not monitored.
* Less than 12 full months of data. May not be representative. ** Salton Sea Air Basin.

f) - PM10 samples were collected every 6 days at all sites except for Station Numbers 4144 and 4157 where samples were collected every 3 days.

g) - PM2.5 samples were collected every 3 days at all sites except for the following sites: Station Numbers 060, 072, 077, 087, 3176, and 4144 where samples were taken every day, and Station Number 5818 where samples were taken every 6 days.

h) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.

i) - Federal PM10 standard is annual average (AAM) > 50 µg/m³. State standard is annual average (AAM) > 20 µg/m³ (changed from AGM > 30 µg/m³, effective July 5, 2003).

j) - Federal PM2.5 standard is annual average (AAM) > 15 µg/m³. State standard is annual average (AAM) > 12 µg/m³ (state standard was established on July 5, 2003).

k) - Federal lead standard is quarterly average > 1.5 µg/m³; and state standard is monthly average ≥ 1.5 µg/m³. No location exceeded lead standards. Maximum monthly and quarterly lead concentrations at special monitoring sites immediately downwind of stationary lead sources were 0.44 µg/m³ and 0.34 µg/m³, respectively, both recorded at Central Los Angeles.

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2006 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2006

Source/Receptor Area No.	Location	Station No.	Carbon Monoxide a): No. Days of Data	CO: Max. Conc. in ppm 1-hour	CO: Max Conc. in ppm 8-hour	Ozone b): No. Days of Data	Ozone: Max. Conc. in ppm 1-hour	Ozone: Max. Conc. in ppm 8-hour	Ozone: Fourth High Conc. ppm 8-hour	No. Days Standard Exceeded: Health Advisory ≥ 0.15 ppm 1-hour	Federal > 0.12 ppm 1-hour	Federal > 0.08 ppm 8-hour	State > 0.09 ppm 1-hour	State > 0.07 ppm 8-hour	Nitrogen Dioxide c): No. Days of Data	NO2: Max Conc. in ppm 1-hour	NO2: Max Conc. in ppm 24-hour	NO2: Annual Average AAM Conc. ppm	Sulfur Dioxide d): No. Days of Data	SO2: Max. Conc. in ppm 1-hour	SO2: Max. Conc. in ppm 24-hour	SO2: Annual Average AAM Conc. ppm
LOS ANGELES COUNTY																						
1	Central LA	087	362	3	2.6	362	0.11	0.079	0.077	0	0	0	8	4	360	0.11	0.06	0.0288	365	0.03	0.006	0.0019
2	Northwest Coastal LA County	091	365	3	2.0	365	0.10	0.074	0.069	0	0	0	3	0	365	0.08	0.05	0.0173	--	--	--	--
3	Southwest Coastal LA County	820	363	3	2.3	360	0.08	0.066	0.062	0	0	0	0	0	351	0.10	0.05	0.0155	363	0.02	0.006	0.0020
4	South Coastal LA County 1	072	360	4	3.4	364	0.08	0.058	0.058	0	0	0	0	0	357	0.10	0.05	0.0215	364	0.03	0.010	0.0012
4	South Coastal LA County 2	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	074	365	5	3.4	361	0.16	0.108	0.105	1	6	17	32	39	363	0.07	0.04	0.0174	--	--	--	--
7	East San Fernando Valley	069	365	4	3.5	365	0.17	0.128	0.099	2	6	12	25	23	365	0.10	0.05	0.0274	360	0.01	0.004	0.0006
8	West San Gabriel Valley	088	360	4	2.8	365	0.15	0.117	0.095	1	5	7	25	24	365	0.12	0.06	0.0245	--	--	--	--
9	East San Gabriel Valley 1	060	365	2	1.7	364	0.17	0.120	0.091	2	7	10	23	19	365	0.11	0.07	0.0258	--	--	--	--
9	East San Gabriel Valley 2	591	363	2	2.0	363	0.18	0.128	0.107	2	10	15	37	31	362	0.10	0.06	0.0206	--	--	--	--
10	Pomona/Walnut Valley	075	365	3	2.1	365	0.15	0.128	0.109	2	9	16	32	30	365	0.10	0.06	0.0307	--	--	--	--
11	South San Gabriel Valley	085	232*	3*	2.7*	250*	0.13*	0.095*	0.080*	0*	1*	3*	9*	5*	204*	0.10*	0.06*	0.0283*	--	--	--	--
12	South Central LA County	084	365	8	6.4	365	0.09	0.066	0.064	0	0	0	0	0	363	0.14	0.08	0.0306	--	--	--	--
13	Santa Clarita Valley	090	363	2	1.3	359	0.16	0.120	0.112	1	20	40	62	64	359	0.08	0.04	0.0184	--	--	--	--
ORANGE COUNTY																						
16	North Orange County	3177	362	6	3.0	362	0.15	0.114	0.092	1	3	4	8	9	361	0.09	0.05	0.0224	--	--	--	--
17	Central Orange County	3176	365	5	3.0	365	0.11	0.088	0.072	0	0	1	5	3	343	0.11	0.06	0.0197	--	--	--	--
18	North Coastal Orange County	3195	365	4	3.0	365	0.07	0.064	0.062	0	0	0	0	0	361	0.10	0.05	0.0145	353	0.01	0.004	0.0013
19	Saddleback Valley	3812	365	2	1.8	356	0.12	0.105	0.092	0	0	6	13	17	--	--	--	--	--	--	--	--
RIVERSIDE COUNTY																						
22	Norco/Corona	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	365	3	2.1	365	0.15	0.116	0.113	1	8	30	45	59	365	0.08	0.05	0.0199	365	0.01	0.004	0.0013
23	Metropolitan Riverside County 2	4146	365	4	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Mira Loma	5214	364	4	2.7	364	0.16	0.119	0.107	1	4	25	39	48	332	0.08	0.05	0.0194	--	--	--	--
24	Perris Valley	4149	--	--	--	351	0.17	0.122	0.114	3	12	53	76	84	--	--	--	--	--	--	--	--
25	Lake Elsinore	4158	362	1	1.0	362	0.14	0.109	0.102	0	3	24	40	58	352	0.07	0.05	0.0151	--	--	--	--
29	Banning Airport	4164	--	--	--	357	0.14	0.115	0.104	0	8	44	57	78	355	0.11	0.04	0.0161	--	--	--	--
30	Coachella Valley 1**	4137	365	2	1.0	361	0.13	0.109	0.101	0	2	23	37	67	359	0.09	0.05	0.0103	--	--	--	--
30	Coachella Valley 2**	4157	--	--	--	364	0.10	0.089	0.087	0	0	7	4	29	--	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																						
32	Northwest San Bernardino Valley	5175	360	3	1.8	365	0.17	0.130	0.114	2	14	25	50	54	337	0.10	0.07	0.0310	--	--	--	--
33	Southwest San Bernardino Valley	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	365	3	2.0	361	0.16	0.123	0.116	1	12	29	47	49	362	0.09	0.06	0.0270	365	0.01	0.003	0.0019
34	Central San Bernardino Valley 2	5203	364	3	2.3	362	0.15	0.127	0.119	3	10	29	52	57	362	0.09	0.05	0.0252	--	--	--	--
35	East San Bernardino Valley	5204	--	--	--	365	0.16	0.135	0.125	5	11	36	60	64	--	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	--	--	--	365	0.16	0.142	0.112	2	9	59	71	96	--	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	DISTRICT MAXIMUM			8	6.4		0.18	0.142	0.125	5	20	59	76	96		0.14	0.08	0.0310		0.03	0.010	0.0020
	SOUTH COAST AIR BASIN			8	6.4		0.18	0.142	0.125	10	35	86	102	121		0.14	0.08	0.0310		0.03	0.010	0.0020

ppm - Parts Per Million parts of air, by volume. AAM = Annual Arithmetic Mean -- - Pollutant not monitored.

* Less than 12 full months of data. May not be representative. ** Salton Sea Air Basin.

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded. The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded, either.

b) - The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard effective June 15, 2005. The 8-hour average California ozone standard of 0.07 ppm was established effective May 17, 2006.

c) - The state standard is 1-hour average NO_2 > 0.25 ppm. The federal standard is annual arithmetic mean NO_2 > 0.0534 ppm. Air Resources Board has approved to lower the NO_2 1-hour standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. The revisions are expected to become effective later in 2007.

d) - The state standards are 1-hour average SO_2 > 0.25 ppm and 24-hour average SO_2 > 0.04 ppm. The federal standards are annual arithmetic mean SO_2 > 0.03 ppm, 24-hour average > 0.14 ppm, and 3-hour average > 0.50 ppm. The federal and state SO_2 standards were not exceeded.

AQMD

South Coast
Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

The map showing the locations of source/receptor areas can be accessed via the Internet at http://www.aqmd.gov/telemweb/areamap.aspx. Locations of source/receptor areas are shown on the "South Coast Air Quality Management District Air Monitoring Areas" map available free of charge from SCAQMD Public Information.

2006 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2006

No.	Source/Receptor Area Location	Station No.	Suspended Particulates PM10 e) No. Days of Data	PM10 Max. Conc. in µg/m³ 24-hour	PM10 No. (%) Samples Exceeding Standard Federal > 150 µg/m³ 24-hour	PM10 No. (%) Samples Exceeding Standard State > 50 µg/m³ 24-hour	PM10 Annual Average AAM h) Conc. µg/m³	Fine Particulates PM2.5 f) No. Days of Data	PM2.5 Max. Conc. in µg/m³ 24-hour	PM2.5 98th Percentile Conc. in µg/m³ 24-hour	PM2.5 No. (%) Samples Exceeding Standard Federal i) > 35 µg/m³ 24-hour	PM2.5 No. (%) Samples Exceeding Standard Federal i) > 65 µg/m³ 24-hour	PM2.5 Annual Averages AAM j) Conc. µg/m³	Particulates TSP g) No. Days of Data	TSP Max. Conc. in µg/m³ 24-hour	TSP Annual Average AAM Conc. µg/m³	Lead g) Max. Monthly Average Conc. k) µg/m³	Lead Max. Quarterly Average Conc. k) µg/m³	Sulfate g) Max. Conc. in µg/m³ 24-hour	Sulfate No. (%) Samples Exceeding Standard State ≥ 25 µg/m³ 24-hour
	LOS ANGELES COUNTY																			
1	Central LA	087	59	59	0	3(5.1)	30.3	330	56.2	38.9	11(3.3)	0	15.6	59	109	63.3	0.02	0.01	18.2	0
2	Northwest Coastal LA County	091	--	--	--	--	--	--	--	--	--	--	--	56	76	40.2	--	--	12.2	0
3	Southwest Coastal LA County	820	51	45	0	0	26.5	--	--	--	--	--	--	56	84	43.1	0.01	0.01	13.6	0
4	South Coastal LA County 1	072	61	78	0	6(9.8)	31.1	290*	58.5*	34.9*	5(1.7)*	0*	14.2*	62	157	62.9	0.01	0.01	17.8	0
4	South Coastal LA County 2	077	58	117	0	19(32.7)	45.0	320	53.6	35.3	6(1.9)	0	14.5	59	192	71.1	0.01	0.01	18.8	0
6	West San Fernando Valley	074	--	--	--	--	--	92	44.1	32.0	1(1.1)	0	12.9	--	--	--	--	--	--	--
7	East San Fernando Valley	069	54	71	0	10(18.5)	35.6	104	50.7	43.4	6(5.8)	0	16.6	--	--	--	--	--	--	--
8	West San Gabriel Valley	088	--	--	--	--	--	113	45.9	32.1	1(0.9)	0	13.4	60	123	42.8	--	--	28.7	1(1.7)
9	East San Gabriel Valley 1	060	58	81	0	7(12.1)	31.9	278*	52.8*	38.5*	8(2.9)*	0*	15.5*	59	142	68.4	--	--	20.8	0
9	East San Gabriel Valley 2	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10	Pomona/Walnut Valley	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11	South San Gabriel Valley	085	--	--	--	--	--	116	72.2	43.1	7(6)	1(0.9)	16.7	58	768	79.3	0.03	0.02	28.6	1(1.7)
12	South Central LA County	084	--	--	--	--	--	107	55.0	44.5	4(3.7)	0	16.7	58	147	68.4	0.02	0.02	24.1	0
13	Santa Clarita Valley	090	58	53	0	1(1.7)	23.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	ORANGE COUNTY																			
16	North Orange County	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
17	Central Orange County	3176	56	104	0	7(12.5)	33.4	330	56.2	40.5	8(2.4)	0	14.1	--	--	--	--	--	--	--
18	North Coastal Orange County	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
19	Saddleback Valley	3812	50	57	0	1(2.0)	22.8	106	47.0	25.7	1(0.9)	0	11.0	--	--	--	--	--	--	--
	RIVERSIDE COUNTY																			
22	Norco/Corona	4155	57	74	0	10(17.5)	36.5	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 1	4144	118	109	0	71(60.2)	54.4	300	68.5	53.7	32(10.7)	1(0.3)	19.0	59	169	91.2	0.01	0.01	10.8	0
23	Metropolitan Riverside County 2	4146	--	--	--	--	--	105	55.3	47.7	9(8.6)	0	17.0	59	131	72.9	0.01	0.01	9.9	0
23	Mira Loma	5214	59	124	0	41(69.5)	64.0	113	63.0	52.5	14(12.4)	0	20.6	--	--	--	--	--	--	--
24	Perris Valley	4149	54	125	0	19(35.2)	45.0	--	--	--	--	--	--	--	--	--	--	--	--	--
25	Lake Elsinore	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	Banning Airport	4164	55	75	0	8(14.6)	31.1	--	--	--	--	--	--	--	--	--	--	--	--	--
30	Coachella Valley 1**	4137	57	73+	0+	2(3.5)+	24.5+	111	24.8	15.9	0	0	7.7	--	--	--	--	--	--	--
30	Coachella Valley 2**	4157	115	122+	0+	57(49.6)+	52.7+	107	24.3	19.1	0	0	9.5	--	--	--	--	--	--	--
	SAN BERNARDINO COUNTY																			
32	Northwest San Bernardino Valley	5175	--	--	--	--	--	--	--	--	--	--	--	58	105	54.6	0.01	0.01	9.1	0
33	Southwest San Bernardino Valley	5817	62	78	0	17(27.4)	42.3	107	53.7	41.5	7(6.5)	0	18.5	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	5197	60	142	0	31(51.7)	53.5	112	52.6	43.8	7(6.3)	0	17.6	59	190	101.0	--	--	10.3	0
34	Central San Bernardino Valley 2	5203	57	92	0	24(42.1)	46.0	102	55.0	48.4	8(7.8)	0	17.8	54	174	87.0	0.02	0.01	11.0	0
35	East San Bernardino Valley	5204	60	103	0	12(20.0)	36.2	--	--	--	--	--	--	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	5181	58	63	0	1(1.7)	26.2	--	--	--	--	--	--	--	--	--	--	--	--	--
38	East San Bernardino Mountains	5818	--	--	--	--	--	42*	40.1*	40.1*	1(2.4)*	0*	11.2*	--	--	--	--	--	--	--
	DISTRICT MAXIMUM			142+	0+	71	64.0		72.2	53.7	32	1	20.6		768	101.0	0.03	0.02	28.7	1
	SOUTH COAST AIR BASIN			142+	0+	75	64.0		72.2	53.7	32	1	20.6		768	101.0	0.03	0.02	28.7	1

µg/m³ - Micrograms per cubic meter of air AAM - Annual Arithmetic Mean -- - Pollutant not monitored

* Less than 12 full months of data. May not be representative. ** Salton Sea Air Basin.

e) - PM10 samples were collected every 6 days at all sites except for Station Numbers 4144 and 4157 where samples were collected every 3 days.

f) - PM2.5 samples were collected every 3 days at all sites except for the following sites: Station Numbers 060, 072, 077, 087, 3176, and 4144 where samples were taken every day, and Station Number 5818 where samples were taken every 6 days.

g) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.

h) - Federal annual PM10 standard (AAM > 50 µg/m³) was revoked effective December 17, 2006. State standard is annual average (AAM) > 20 µg/m³.

i) - U.S. EPA has revised the federal 24-hour PM2.5 standard from 65 µg/m³ to 35 µg/m³; effective December 17, 2006.

j) - Federal PM2.5 standard is annual average (AAM) > 15 µg/m³. State standard is annual average (AAM) > 12 µg/m³.

k) - Federal lead standard is quarterly average > 1.5 µg/m³; and state standard is monthly average ≥ 1.5 µg/m³. No location exceeded lead standards. Maximum monthly and quarterly lead concentrations at special monitoring sites immediately downwind of stationary lead sources were 0.24 µg/m³ and 0.22 µg/m³, respectively, both recorded at Central Los Angeles.

\+ - The data for the samples collected on a high-wind day (July 16, 2006) at Palm Springs and Indio (226 µg/m³ and 313 µg/m³, respectively) were excluded in accordance with EPA's Natural Events Policy.

2007 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2007

Source/Receptor Area No.	Location	Station No. State Code	Station No. District Code	Carbon Monoxide a) No. Days of Data	Carbon Monoxide a) Max. Conc. in ppm 1-hour	Carbon Monoxide a) Max Conc. in ppm 8-hour	Ozone No. Days of Data	Ozone Max. Conc. in ppm 1-hour	Ozone Max. Conc. in ppm 8-hour	Ozone Fourth High Conc. ppm 8-hour	No. Days Standard Exceeded: Health Advisory ≥ 0.15 ppm 1-hour	Federal b) > 0.12 ppm 1-hour	Federal b) > 0.08 ppm 8-hour	Federal b) > 0.075 ppm 8-hour	State c) > 0.09 ppm 1-hour	State c) > 0.070 ppm 8-hour	Nitrogen Dioxide d) No. Days of Data	Nitrogen Dioxide d) Max Conc. in ppm 1-hour	Nitrogen Dioxide d) Annual Average AAM Conc. ppm	Sulfur Dioxide e) No. Days of Data	Sulfur Dioxide e) Max. Conc. in ppm 1-hour	Sulfur Dioxide e) Max. Conc. in ppm 24-hour	Sulfur Dioxide e) Annual Average AAM Conc. ppm
LOS ANGELES COUNTY																							
1	Central LA	70087	087	359	3	2.2	355	0.115	0.102	0.072	0	0	2	3	3	6	360	0.10	0.0299	351	0.01	0.003	0.0009
2	Northwest Coastal LA County	70091	091	365	3	1.9	360	0.117	0.087	0.067	0	0	1	2	2	2	353	0.08	0.0200	--	--	--	--
3	Southwest Coastal LA County	70111	820	361	3	2.4	361	0.087	0.074	0.066	0	0	0	0	0	1	331*	0.08	0.0140	361	0.02	0.009	0.0028
4	South Coastal LA County 1	70072	072	347*	3	2.6	365	0.099	0.073	0.056	0	0	0	0	1	1	365	0.11	0.0207	365	0.11	0.011	0.0027
4	South Coastal LA County 2	70110	077	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
6	West San Fernando Valley	70074	074	358	4	2.8	358	0.129	0.104	0.092	0	1	8	28	21	43	358	0.08	0.0186	--	--	--	--
7	East San Fernando Valley	70069	069	365	4	2.8	365	0.116	0.096	0.088	0	0	6	13	13	19	363	0.09	0.0289	365	0.01	0.003	0.0010
8	West San Gabriel Valley	70088	088	365	3	2.4	365	0.149	0.100	0.089	0	3	6	11	13	21	365	0.09	0.0246	--	--	--	--
9	East San Gabriel Valley 1	70060	060	365	3	2.0	365	0.158	0.112	0.096	1	3	13	20	22	28	365	0.12	0.0253	--	--	--	--
9	East San Gabriel Valley 2	70591	591	365	2	2.0	364	0.147	0.116	0.104	0	3	14	26	25	40	365	0.11	0.0227	--	--	--	--
10	Pomona/Walnut Valley	70075	075	365	3	2.1	365	0.153	0.108	0.102	1	2	10	18	19	25	365	0.10	0.0318	--	--	--	--
11	South San Gabriel Valley	70185	085	365	5	2.9	364	0.135	0.100	0.079	0	2	2	5	6	9	361	0.11	0.0249	--	--	--	--
12	South Central LA County	70084	084	365	8	5.1	365	0.102	0.077	0.056	0	0	0	1	1	2	365	0.10	0.0291	--	--	--	--
13	Santa Clarita Valley	70090	090	361	2	1.2	357	0.135	0.110	0.101	0	2	16	44	31	64	339*	0.08	0.0196	--	--	--	--
ORANGE COUNTY																							
16	North Orange County	30177	3177	360	6	3.3	365	0.152	0.107	0.082	1	1	2	8	7	9	365	0.08	0.0219	--	--	--	--
17	Central Orange County	30178	3176	346*	4	2.9	365	0.127	0.099	0.073	0	1	1	1	2	7	359	0.10	0.0208	--	--	--	--
18	North Coastal Orange County	30195	3195	362	5	3.1	362	0.082	0.072	0.065	0	0	0	0	0	2	362	0.07	0.0132	358	0.01	0.004	0.0010
19	Saddleback Valley	30002	3812	364	3	2.1	365	0.108	0.089	0.080	0	0	2	5	5	10	--	--	--	--	--	--	
RIVERSIDE COUNTY																							
22	Norco/Corona	33155	4155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
23	Metropolitan Riverside County 1	33144	4144	364	4	2.9	365	0.131	0.111	0.099	0	2	15	46	31	69	364	0.07	0.0206	323*	0.02	0.002	0.0017
23	Metropolitan Riverside County 2	33146	4146	365	4	2.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
23	Mira Loma	33165	5214	359	3	2.1	360	0.118	0.104	0.092	0	0	10	23	16	48	349*	0.07	0.0181	--	--	--	--
24	Perris Valley	33149	4149	--	--	--	365	0.139	0.116	0.103	0	4	37	73	66	88	--	--	--	--	--	--	--
25	Lake Elsinore	33158	4158	365	2	2.3	359	0.130	0.108	0.097	0	3	19	35	26	55	358	0.06	0.0174	--	--	--	--
29	Banning Airport	33164	4164	--	--	--	365	0.129	0.113	0.095	0	1	12	43	28	63	363	0.08	0.0147	--	--	--	--
30	Coachella Valley 1**	33137	4137	365	2	1.0	365	0.126	0.101	0.097	0	1	20	58	29	83	365	0.06	0.0103	--	--	--	--
30	Coachella Valley 2**	33155	4157	--	--	--	365	0.106	0.094	0.087	0	0	6	29	8	48	--	--	--	--	--	--	--
SAN BERNARDINO COUNTY																							
32	Northwest San Bernardino Valley	36175	5175	365	2	1.6	365	0.145	0.115	0.112	0	7	18	35	32	55	327*	0.10	0.0276	--	--	--	--
33	Southwest San Bernardino Valley	36025	5817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	36197	5197	359	3	1.8	359	0.144	0.122	0.112	0	9	19	43	40	60	358	0.09	0.0239	359	0.01	0.004	0.0019
34	Central San Bernardino Valley 2	36203	5203	365	4	2.3	365	0.153	0.121	0.117	1	8	24	51	48	74	351	0.08	0.0245	--	--	--	--
35	East San Bernardino Valley	36204	5204	--	--	--	365	0.149	0.124	0.112	0	7	25	58	54	79	--	--	--	--	--	--	--
37	Central San Bernardino Mountains	36181	5181	--	--	--	365	0.171	0.137	0.126	4	13	59	93	67	115	--	--	--	--	--	--	--
38	East San Bernardino Mountains	36001	5818	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM					8	5.1		0.171	0.137	0.126	4	13	59	93	67	115		0.12	0.0318		0.11	0.011	0.0028
SOUTH COAST AIR BASIN					8	5.1		0.171	0.137	0.126	5	18	79	108	96	128		0.12	0.0318		0.11	0.011	0.0028

ppm - Parts Per Million parts of air, by volume. AAM = Annual Arithmetic Mean -- - Pollutant not monitored.

* Less than 12 full months of data; may not be representative. ** Salton Sea Air Basin.

a) - The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded. The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded, either.

b) - The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard effective June 15, 2005. U.S. EPA has revised the federal 8-hour ozone standard from 0.084 ppm to 0.075 ppm, effective May 27, 2008.

c) - The 8-hour average California ozone standard of 0.070 ppm was established effective May 17, 2006.

d) - The federal standard is annual arithmetic mean NO_2 > 0.0534 ppm. California Air Resources Board has revised the NO_2 1-hour state standard from 0.25 ppm to 0.18 ppm and has established a new annual standard of 0.030 ppm, effective March 20, 2008.

e) - The state standards are 1-hour average SO_2 > 0.25 ppm and 24-hour average SO_2 > 0.04 ppm. The federal standards are annual arithmetic mean SO_2 > 0.03 ppm, 24-hour average > 0.14 ppm, and 3-hour average > 0.50 ppm. The federal and state SO_2 standards were not exceeded.

AQMD
South Coast
Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182
www.aqmd.gov

The map showing the locations of source/receptor areas can be accessed via the Internet at http://www.aqmd.gov/telemweb/areamap.aspx. Locations of source/receptor areas are shown on the "South Coast Air Quality Management District Air Monitoring Areas" map available free of charge from SCAQMD Public Information.

Due to technical difficulties, lead and sulfate data are not available and will be provided at a later time.

2007 AIR QUALITY
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2007

Source/Receptor Area No.	Location	Station No. State Code	Station No. District Code	Suspended Particulates PM10 f) No. Days of Data	Max. Conc. in µg/m3 24-hour	No. (%) Samples Exceeding Standards: Federal > 150 µg/m3 24-hour	No. (%) Samples Exceeding Standards: State > 50 µg/m3 24-hour	Annual Average Conc. i) (AAM) µg/m3	Fine Particulates PM2.5 g) No. Days of Data	Max. Conc. in µg/m3 24-hour	98th Percentile Conc. in µg/m3 24-hour	No. (%) Samples Exceeding Federal Standard: Current > 35 j) µg/m3 24-hour	No. (%) Samples Exceeding Federal Standard: Old > 65 j) µg/m3 24-hour	Annual Average Conc. k) (AAM) µg/m3	Particulates h) No. Days of Data	Max. Conc. in µg/m3 24-hour	Annual Average Conc. (AAM) µg/m3	Lead h) Max. Monthly Average Conc. l) µg/m3	Lead h) Max. Quarterly Average Conc. l) µg/m3	Sulfate h) Max. Conc. l) in µg/m3 24-hour	Sulfate h) %Samples Exceeding State Standard ≥ 25 µg/m3 24-hour
LOS ANGELES COUNTY																					
1	Central LA	70087	087	57	78	0	5(9)	33.3	324	64.2	51.2	20(0.6)	0	16.8	58	194	73.5				
2	Northwest Coastal LA County	70091	091	--	--	--	--	--	--	--	--	--	--	--	57	180	57.6				
3	Southwest Coastal LA County	70111	820	56	96	0	2(4)	27.7	--	--	--	--	--	--	55	286	51.8				
4	South Coastal LA County 1	70072	072	58	75+	0+	5(9)+	30.2+	332	82.9	40.8	12(3.6)	1(0.3)	14.6	59	732	76.5				
4	South Coastal LA County 2	70110	077	57	123+	0+	17(30)+	41.7+	326	68.0	33.7	6(1.8)	1(0.3)	13.7	58	694	79.4				
6	West San Fernando Valley	70074	074	--	--	--	--	--	95	43.3	33.4	1(1.1)	0	13.1	--	--	--				
7	East San Fernando Valley	70069	069	55	109	0	11(20)	40.0	98	56.5	47.7	9(9.2)	0	16.8	--	--	--				
8	West San Gabriel Valley	70088	088	--	--	--	--	--	108	68.9	45.4	3(2.8)	1(0.9)	14.3	56	123	46.3				
9	East San Gabriel Valley 1	70060	060	57	83+	0+	11(19)+	35.6+	292*	63.8	49.3	19(6.5)	0	15.9	58	243	77.8				
9	East San Gabriel Valley 2	70591	591	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
10	Pomona/Walnut Valley	70075	075	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
11	South San Gabriel Valley	70185	085	--	--	--	--	--	101	63.6	49.5	5(5.0)	0	16.7	55	196	76.0				
12	South Central LA County	70084	084	--	--	--	--	--	106	49.0	46.1	4(3.8)	0	15.9	59	327	78.8				
13	Santa Clarita Valley	70090	090	58	131+	0+	5(9)+	29.9+	--	--	--	--	--	--	--	--	--				
ORANGE COUNTY																					
16	North Orange County	30177	3177	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
17	Central Orange County	30178	3176	59	75+	0+	5(9)+	31.0+	336	79.4	46.5	14(4.2)	1(0.3)	14.5	--	--	--				
18	North Coastal Orange County	30195	3195	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
19	Saddleback Valley	30002	3812	58	74	0	3(5)	23.0	98	46.9	35.0	2(2.0)	0	11.3	--	--	--				
RIVERSIDE COUNTY																					
22	Norco/Corona	33155	4155	59	93+	0+	10(17)+	39.6+	--	--	--	--	--	--	--	--	--				
23	Metropolitan Riverside County 1	33144	4144	116	118+	0+	66(51)+	54.7+	295*	75.7	54.3	33(11.2)	3(1.0)	19.1	57	237	111.0				
23	Metropolitan Riverside County 2	33146	4146	--	--	--	--	--	101	68.6	57.3	8(7.9)	1(1.0)	18.1	60	674	88.9				
23	Mira Loma	33165	5214	56	142	0	41(73)	68.5	110	69.7	60.1	13(11.8)	1(0.9)	21.0	--	--	--				
24	Perris Valley	33149	4149	59	120+	0+	32(54)+	54.8+	--	--	--	--	--	--	--	--	--				
25	Lake Elsinore	33158	4158	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
29	Banning Airport	33164	4164	49*	78	0	7(14)	33.3	--	--	--	--	--	--	--	--	--				
30	Coachella Valley 1**	33137	4137	55	83	0	6(11)	30.5	104	32.5	20.5	0	0	8.7	--	--	--				
30	Coachella Valley 2**	33155	4157	87*	146+	0+	51(59)+	53.5+	97	26.8	26.5	0	0	9.8	--	--	--				
SAN BERNARDINO COUNTY																					
32	Northwest San Bernardino Valley	36175	5175	--	--	--	--	--	--	--	--	--	--	--	60	206	63.5				
33	Southwest San Bernardino Valley	36025	5817	58	115+	0+	14(24)+	43.4+	102	72.8	53.0	6(5.9)	1(1.0)	17.9	--	--	--				
34	Central San Bernardino Valley 1	36197	5197	58	111+	0+	33(57)+	54.9+	107	77.5	64.9	10(9.3)	2(1.9)	19.0	58	242	96.2				
34	Central San Bernardino Valley 2	36203	5203	58	136+	0+	28(48)+	51.4+	99	72.1	68.4	11(11.1)	3(3.0)	18.3	59	536	106.9				
35	East San Bernardino Valley	36204	5204	60	97	0	19(32)	39.7	--	--	--	--	--	--	--	--	--				
37	Central San Bernardino Mountains	36181	5181	54	89	0	2(4)	27.2	--	--	--	--	--	--	--	--	--				
38	East San Bernardino Mountains	36001	5818	--	--	--	--	--	54	45.4	34.0	1(1.9)	0	10.4	--	--	--				
DISTRICT MAXIMUM					146+	0+	66+	68.5+		82.9	68.4	33	3	21.0		732	111.0				
SOUTH COAST AIR BASIN					142+	0+	79+	68.5+		82.9	68.4	48	8	21.0		732	111.0				

µg/m3 - Micrograms per cubic meter of air. AAM = Annual Arithmetic Mean -- - Pollutant not monitored.

* Less than 12 full months of data; may not be representative. ** Salton Sea Air Basin.

f) - PM10 samples were collected every 6 days at all sites except for Station Numbers 4144 and 4157 where samples were collected every 3 days.

g) - PM2.5 samples were collected every 3 days at all sites except for the following sites: Station Numbers 060, 072, 077, 087, 3176, and 4144 where samples were taken every day, and Station Number 5818 where samples were taken every 6 days.

h) - Total suspended particulates, lead, and sulfate were determined from samples collected every 6 days by the high volume sampler method, on glass fiber filter media.

i) - Federal annual PM10 standard (AAM > 50 µg/m3) was revoked effective December 17, 2006. State standard is annual average (AAM) > 20 µg/m3.

j) - U.S. EPA has revised the federal 24-hour PM2.5 standard from 65 µg/m3 to 35 µg/m3; effective December 17, 2006.

k) - Federal PM2.5 standard is annual average (AAM) > 15 µg/m3. State standard is annual average (AAM) > 12 µg/m3.

l) - Federal lead standard is quarterly average > 1.5 µg/m3; and state standard is monthly average ≥ 1.5 µg/m3. Lead and sulfate data analysis is incomplete and data is not available at this time.

\+ - The following PM10 data samples were excluded from compliance consideration in accordance with the EPA Exceptional Event Regulation: 210 and 157 ug/m3 on March 22 and April 6, respectively, at Coachella Valley 2 (high wind events); 167 ug/m3 on April 12 at Perris Valley (high wind event); 165 and 155 ug/m3 on July 5 at East San Gabriel 1 and Central San Bernardino Valley 1, respectively (fireworks displays); and high concentration throughout the District on October 21, with a maximum concentration of 559 ug/m3 at Metropolitan Riverside County 1 (high wind and wildfire event).

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Appendix B

Construction Emissions

6/11/2008 5:46:00 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Revised Construction.urb924

Project Name: The Plaza at the Glen - Construction

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	39.89	406.40	260.26	0.47	34.19	18.09	51.93	7.28	16.62	23.61	61,258.98
2010 TOTALS (lbs/day mitigated)	39.89	406.40	260.26	0.47	21.99	18.09	39.73	4.73	16.62	21.06	61,258.98
2011 TOTALS (lbs/day unmitigated)	30.10	206.87	339.04	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
2011 TOTALS (lbs/day mitigated)	30.10	206.87	339.04	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
2012 TOTALS (lbs/day unmitigated)	170.39	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
2012 TOTALS (lbs/day mitigated)	170.39	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

6/11/2008 5:46:01 PM

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-2/19/2010 Active Days: 35	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 2/22/2010-3/12/2010 Active Days: 15	9.31	77.76	40.27	0.02	12.99	4.28	17.26	2.71	3.94	6.65	8,356.69
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:46:01 PM

Time Slice 3/15/2010-5/12/2010 Active Days: 43	35.52	381.88	167.53	0.36	**34.19**	17.75	**51.93**	**7.28**	16.33	**23.61**	47,896.78
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:46:01 PM

Time Slice 5/13/2010-5/14/2010 Active Days: 2	28.30	321.88	136.57	0.34	21.21	14.35	35.55	4.57	13.20	17.77	41,379.07
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 5/17/2010-7/9/2010 Active Days: 40	39.89	**406.40**	260.26	**0.47**	21.77	**18.09**	39.86	4.78	**16.62**	21.39	**61,258.98**
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:46:01 PM

Time Slice 7/12/2010-9/3/2010 Active Days: 40	37.79	388.65	250.96	0.47	21.77	17.21	38.97	4.77	15.81	20.58	59,419.99
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Time Slice 9/6/2010-9/17/2010 Active Days: 10	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15

6/11/2008 5:46:01 PM

Time Slice 9/20/2010-12/31/2010 Active Days: 75	22.72	163.62	245.44	0.26	1.13	7.16	8.29	0.40	6.55	6.95	39,119.42
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Building 09/20/2010-09/30/2011	11.14	79.09	121.75	0.13	0.57	3.42	3.98	0.20	3.12	3.33	19,239.50
Building Off Road Diesel	6.96	58.40	23.08	0.00	0.00	2.48	2.48	0.00	2.28	2.28	6,534.41
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Time Slice 1/3/2011-5/27/2011 Active Days: 105	30.10	206.87	**339.04**	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 05/17/2010-05/27/2011	10.64	77.75	115.73	0.13	0.57	3.49	4.05	0.20	3.19	3.39	19,877.86
Building Off Road Diesel	6.82	58.98	23.76	0.00	0.00	2.62	2.62	0.00	2.41	2.41	7,174.82
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04

6/11/2008 5:46:01 PM

Time Slice 5/30/2011-9/30/2011 Active Days: 90	19.46	129.12	223.31	0.26	1.13	5.89	7.02	0.40	5.37	5.78	36,635.40
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 10/3/2011-12/30/2011 Active Days: 65	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 1/2/2012-2/3/2012 Active Days: 25	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30

6/11/2008 5:46:01 PM

Time Slice 2/6/2012-4/5/2012 Active Days: 44	166.93	51.83	104.55	0.13	0.58	2.53	3.10	0.21	2.30	2.51	17,652.49
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 4/6/2012-7/6/2012 Active Days: 66	**170.39**	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.00	0.01	256.28

6/11/2008 5:46:01 PM

Time Slice 7/9/2012-7/16/2012 Active Days: 6	161.86	19.00	16.30	0.01	0.02	1.61	1.63	0.01	1.48	1.49	2,160.60
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 7/17/2012-8/31/2012 Active Days: 34	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

Phase Assumptions

Phase: Demolition 1/4/2010 - 5/12/2010 - Default Demolition Description

Building Volume Total (cubic feet): 1999649

Building Volume Daily (cubic feet): 30732.8

On Road Truck Travel (VMT): 426.84

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 10 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Fine Grading 3/15/2010 - 9/3/2010 - Default Mass Site Grading/Excavation Description

6/11/2008 5:46:01 PM

Total Acres Disturbed: 13

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 8450.7

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Trenching 2/22/2010 - 7/9/2010 - Type Your Description Here

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 4/6/2012 - 7/16/2012 - Default Paving Description

Acres to be Paved: 1

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 10 hours per day

3 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

3 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Building Construction 5/17/2010 - 5/27/2011 - Parking Garage

Off-Road Equipment:

2 Cranes (399 hp) operating at a 0.43 load factor for 10 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 10 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 10 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Building Construction 9/20/2010 - 9/30/2011 - Building Structure

Off-Road Equipment:

3 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

4 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 1/3/2011 - 7/6/2012 - Interior Exterior Construction/Finishing

Off-Road Equipment:

3 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 2/6/2012 - 8/31/2012 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

6/11/2008 5:46:01 PM

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-2/19/2010 Active Days: 35	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 2/22/2010-3/12/2010 Active Days: 15	9.31	77.76	40.27	0.02	12.99	4.28	17.26	2.71	3.94	6.65	8,356.69
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:46:01 PM

Time Slice 3/15/2010-5/12/2010 Active Days: 43	35.52	381.88	167.53	0.36	21.99	17.75	39.73	4.73	16.33	21.06	47,896.78
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

Time Slice 5/13/2010-5/14/2010 Active Days: 2	28.30	321.88	136.57	0.34	9.01	14.35	23.35	2.03	13.20	15.22	41,379.07
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 5/17/2010-7/9/2010 Active Days: 40	39.89	**406.40**	260.26	**0.47**	9.57	**18.09**	27.66	2.23	**16.62**	18.85	**61,258.98**
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:46:01 PM

Time Slice 7/12/2010-9/3/2010 Active Days: 40	37.79	388.65	250.96	0.47	9.57	17.21	26.77	2.23	15.81	18.04	59,419.99
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Time Slice 9/6/2010-9/17/2010 Active Days: 10	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15

6/11/2008 5:46:01 PM

Time Slice 9/20/2010-12/31/2010 Active Days: 75	22.72	163.62	245.44	0.26	1.13	7.16	8.29	0.40	6.55	6.95	39,119.42
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Building 09/20/2010-09/30/2011	11.14	79.09	121.75	0.13	0.57	3.42	3.98	0.20	3.12	3.33	19,239.50
Building Off Road Diesel	6.96	58.40	23.08	0.00	0.00	2.48	2.48	0.00	2.28	2.28	6,534.41
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Time Slice 1/3/2011-5/27/2011 Active Days: 105	30.10	206.87	**339.04**	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 05/17/2010-05/27/2011	10.64	77.75	115.73	0.13	0.57	3.49	4.05	0.20	3.19	3.39	19,877.86
Building Off Road Diesel	6.82	58.98	23.76	0.00	0.00	2.62	2.62	0.00	2.41	2.41	7,174.82
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04

6/11/2008 5:46:01 PM

Time Slice 5/30/2011-9/30/2011 Active Days: 90	19.46	129.12	223.31	0.26	1.13	5.89	7.02	0.40	5.37	5.78	36,635.40
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 10/3/2011-12/30/2011 Active Days: 65	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 1/2/2012-2/3/2012 Active Days: 25	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30

6/11/2008 5:46:01 PM

Time Slice 2/6/2012-4/5/2012 Active Days: 44	166.93	51.83	104.55	0.13	0.58	2.53	3.10	0.21	2.30	2.51	17,652.49
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 4/6/2012-7/6/2012 Active Days: 66	**170.39**	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

6/11/2008 5:46:01 PM

Time Slice 7/9/2012-7/16/2012 Active Days: 6	161.86	19.00	16.30	0.01	0.02	1.61	1.63	0.01	1.48	1.49	2,160.60
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 7/17/2012-8/31/2012 Active Days: 34	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 3/15/2010 - 9/3/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

6/11/2008 5:48:44 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Revised Construction.urb924

Project Name: The Plaza at the Glen - Construction

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	39.89	406.40	260.26	0.47	34.19	18.09	51.93	7.28	16.62	23.61	61,258.98
2010 TOTALS (lbs/day mitigated)	39.89	365.41	260.26	0.47	21.99	18.09	39.73	4.73	16.62	21.06	61,258.98
2011 TOTALS (lbs/day unmitigated)	30.10	206.87	339.04	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
2011 TOTALS (lbs/day mitigated)	30.10	154.25	339.04	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
2012 TOTALS (lbs/day unmitigated)	170.39	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
2012 TOTALS (lbs/day mitigated)	155.18	51.97	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

6/11/2008 5:48:44 PM

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-2/19/2010 Active Days: 35	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 2/22/2010-3/12/2010 Active Days: 15	9.31	77.76	40.27	0.02	12.99	4.28	17.26	2.71	3.94	6.65	8,356.69
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:48:44 PM

Time Slice 3/15/2010-5/12/2010 Active Days: 43	35.52	381.88	167.53	0.36	**34.19**	17.75	**51.93**	**7.28**	16.33	**23.61**	47,896.78
Demolition 01/04/2010-05/12/2010	7.22	60.00	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	46.32	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

Time Slice 5/13/2010-5/14/2010 Active Days: 2	28.30	321.88	136.57	0.34	21.21	14.35	35.55	4.57	13.20	17.77	41,379.07
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 5/17/2010-7/9/2010 Active Days: 40	39.89	**406.40**	260.26	**0.47**	21.77	**18.09**	39.86	4.78	**16.62**	21.39	**61,258.98**
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	17.75	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	17.69	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:48:44 PM

Time Slice 7/12/2010-9/3/2010 Active Days: 40	37.79	388.65	250.96	0.47	21.77	17.21	38.97	4.77	15.81	20.58	59,419.99
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010- 09/03/2010	26.21	304.12	127.26	0.34	21.20	13.47	34.67	4.57	12.39	16.96	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Fine Grading Off Road Diesel	4.54	35.63	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Time Slice 9/6/2010-9/17/2010 Active Days: 10	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15

6/11/2008 5:48:44 PM

Time Slice 9/20/2010-12/31/2010 Active Days: 75	22.72	163.62	245.44	0.26	1.13	7.16	8.29	0.40	6.55	6.95	39,119.42
Building 05/17/2010-05/27/2011	11.59	84.53	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	63.84	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Building 09/20/2010-09/30/2011	11.14	79.09	121.75	0.13	0.57	3.42	3.98	0.20	3.12	3.33	19,239.50
Building Off Road Diesel	6.96	58.40	23.08	0.00	0.00	2.48	2.48	0.00	2.28	2.28	6,534.41
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Time Slice 1/3/2011-5/27/2011 Active Days: 105	30.10	206.87	**339.04**	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 05/17/2010-05/27/2011	10.64	77.75	115.73	0.13	0.57	3.49	4.05	0.20	3.19	3.39	19,877.86
Building Off Road Diesel	6.82	58.98	23.76	0.00	0.00	2.62	2.62	0.00	2.41	2.41	7,174.82
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04

6/11/2008 5:48:44 PM

Time Slice 5/30/2011-9/30/2011 Active Days: 90	19.46	129.12	223.31	0.26	1.13	5.89	7.02	0.40	5.37	5.78	36,635.40
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	72.89	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	54.12	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 10/3/2011-12/30/2011 Active Days: 65	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building 01/03/2011-07/06/2012	9.21	56.23	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	37.46	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 1/2/2012-2/3/2012 Active Days: 25	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30

6/11/2008 5:48:44 PM

Time Slice 2/6/2012-4/5/2012 Active Days: 44	166.93	51.83	104.55	0.13	0.58	2.53	3.10	0.21	2.30	2.51	17,652.49
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 4/6/2012-7/6/2012 Active Days: 66	**170.39**	70.72	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Building 01/03/2011-07/06/2012	8.54	51.72	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	34.80	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.00	0.01	256.28

6/11/2008 5:48:44 PM

Time Slice 7/9/2012-7/16/2012 Active Days: 6	161.86	19.00	16.30	0.01	0.02	1.61	1.63	0.01	1.48	1.49	2,160.60
Asphalt 04/06/2012-07/16/2012	3.46	18.89	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	18.66	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 7/17/2012-8/31/2012 Active Days: 34	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Coating 02/06/2012-08/31/2012	158.40	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	158.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

Phase Assumptions

Phase: Demolition 1/4/2010 - 5/12/2010 - Default Demolition Description

Building Volume Total (cubic feet): 1999649

Building Volume Daily (cubic feet): 30732.8

On Road Truck Travel (VMT): 426.84

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 10 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Fine Grading 3/15/2010 - 9/3/2010 - Default Mass Site Grading/Excavation Description

6/11/2008 5:48:44 PM

Total Acres Disturbed: 13

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 8450.7

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Trenching 2/22/2010 - 7/9/2010 - Type Your Description Here

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 4/6/2012 - 7/16/2012 - Default Paving Description

Acres to be Paved: 1

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 10 hours per day

3 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

3 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Building Construction 5/17/2010 - 5/27/2011 - Parking Garage

Off-Road Equipment:

2 Cranes (399 hp) operating at a 0.43 load factor for 10 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 10 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 10 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Building Construction 9/20/2010 - 9/30/2011 - Building Structure

Off-Road Equipment:

3 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

4 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 1/3/2011 - 7/6/2012 - Interior Exterior Construction/Finishing

Off-Road Equipment:

3 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 2/6/2012 - 8/31/2012 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

6/11/2008 5:48:44 PM

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-2/19/2010 Active Days: 35	7.22	41.48	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Demolition 01/04/2010-05/12/2010	7.22	41.48	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	27.79	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 2/22/2010-3/12/2010 Active Days: 15	9.31	54.88	40.27	0.02	12.99	4.28	17.26	2.71	3.94	6.65	8,356.69
Demolition 01/04/2010-05/12/2010	7.22	41.48	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	27.79	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Trenching 02/22/2010-07/09/2010	2.09	13.41	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	13.34	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:48:44 PM

Time Slice 3/15/2010-5/12/2010 Active Days: 43	35.52	344.75	167.53	0.36	21.99	17.75	39.73	4.73	16.33	21.06	47,896.78
Demolition 01/04/2010-05/12/2010	7.22	41.48	30.97	0.02	12.98	3.40	16.38	2.71	3.13	5.84	6,517.71
Fugitive Dust	0.00	0.00	0.00	0.00	12.91	0.00	12.91	2.68	0.00	2.68	0.00
Demo Off Road Diesel	6.05	27.79	23.32	0.00	0.00	2.82	2.82	0.00	2.59	2.59	4,459.89
Demo On Road Diesel	1.09	13.56	5.47	0.02	0.06	0.58	0.64	0.02	0.53	0.55	1,809.14
Demo Worker Trips	0.07	0.13	2.17	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Fine Grading 03/15/2010-09/03/2010	26.21	289.87	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	21.38	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	13.41	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	13.34	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:48:44 PM

Time Slice 5/13/2010-5/14/2010 Active Days: 2	28.30	303.28	136.57	0.34	9.01	14.35	23.35	2.03	13.20	15.22	41,379.07
Fine Grading 03/15/2010-09/03/2010	26.21	289.87	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	21.38	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	13.41	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	13.34	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 5/17/2010-7/9/2010 Active Days: 40	39.89	365.41	260.26	**0.47**	9.57	**18.09**	27.66	2.23	**16.62**	18.85	**61,258.98**
Building 05/17/2010-05/27/2011	11.59	62.13	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	41.44	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	289.87	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	21.38	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Trenching 02/22/2010-07/09/2010	2.09	13.41	9.30	0.00	0.01	0.88	0.89	0.00	0.81	0.81	1,838.98
Trenching Off Road Diesel	2.06	13.34	8.22	0.00	0.00	0.88	0.88	0.00	0.81	0.81	1,714.64
Trenching Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 5:48:44 PM

Time Slice 7/12/2010-9/3/2010 Active Days: 40	37.79	352.00	250.96	0.47	9.57	17.21	26.77	2.23	15.81	18.04	59,419.99
Building 05/17/2010-05/27/2011	11.59	62.13	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	41.44	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Fine Grading 03/15/2010-09/03/2010	26.21	289.87	127.26	0.34	9.00	13.47	22.47	2.02	12.39	14.41	39,540.08
Fine Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Fine Grading Off Road Diesel	4.54	21.38	17.41	0.00	0.00	2.07	2.07	0.00	1.90	1.90	3,536.10
Fine Grading On Road Diesel	21.61	268.39	108.22	0.34	1.19	11.39	12.58	0.39	10.48	10.87	35,817.47
Fine Grading Worker Trips	0.05	0.10	1.63	0.00	0.01	0.01	0.01	0.00	0.00	0.01	186.51
Time Slice 9/6/2010-9/17/2010 Active Days: 10	11.59	62.13	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building 05/17/2010-05/27/2011	11.59	62.13	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	41.44	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15

6/11/2008 5:48:44 PM

Time Slice 9/20/2010-12/31/2010 Active Days: 75	22.72	119.82	245.44	0.26	1.13	7.16	8.29	0.40	6.55	6.95	39,119.42
Building 05/17/2010-05/27/2011	11.59	62.13	123.69	0.13	0.57	3.74	4.31	0.20	3.42	3.62	19,879.91
Building Off Road Diesel	7.41	41.44	25.02	0.00	0.00	2.80	2.80	0.00	2.58	2.58	7,174.82
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Building 09/20/2010-09/30/2011	11.14	57.69	121.75	0.13	0.57	3.42	3.98	0.20	3.12	3.33	19,239.50
Building Off Road Diesel	6.96	37.00	23.08	0.00	0.00	2.48	2.48	0.00	2.28	2.28	6,534.41
Building Vendor Trips	1.42	15.58	12.81	0.03	0.10	0.67	0.77	0.03	0.62	0.65	2,886.95
Building Worker Trips	2.75	5.11	85.86	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,818.15
Time Slice 1/3/2011-5/27/2011 Active Days: 105	30.10	154.25	**339.04**	0.39	1.70	9.38	11.08	0.61	8.56	9.17	56,513.26
Building 01/03/2011-07/06/2012	9.21	43.92	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	25.16	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 05/17/2010-05/27/2011	10.64	57.15	115.73	0.13	0.57	3.49	4.05	0.20	3.19	3.39	19,877.86
Building Off Road Diesel	6.82	38.39	23.76	0.00	0.00	2.62	2.62	0.00	2.41	2.41	7,174.82
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	53.17	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	34.40	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04

6/11/2008 5:48:44 PM

Time Slice 5/30/2011-9/30/2011 Active Days: 90	19.46	97.09	223.31	0.26	1.13	5.89	7.02	0.40	5.37	5.78	36,635.40
Building 01/03/2011-07/06/2012	9.21	43.92	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	25.16	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Building 09/20/2010-09/30/2011	10.25	53.17	113.82	0.13	0.57	3.21	3.77	0.20	2.93	3.13	19,237.45
Building Off Road Diesel	6.43	34.40	21.84	0.00	0.00	2.34	2.34	0.00	2.15	2.15	6,534.41
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 10/3/2011-12/30/2011 Active Days: 65	9.21	43.92	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building 01/03/2011-07/06/2012	9.21	43.92	109.49	0.13	0.57	2.69	3.25	0.20	2.45	2.65	17,397.94
Building Off Road Diesel	5.38	25.16	17.52	0.00	0.00	1.82	1.82	0.00	1.67	1.67	4,694.90
Building Vendor Trips	1.31	14.08	11.89	0.03	0.10	0.60	0.70	0.03	0.55	0.59	2,887.01
Building Worker Trips	2.51	4.69	80.09	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,816.04
Time Slice 1/2/2012-2/3/2012 Active Days: 25	8.54	40.44	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building 01/03/2011-07/06/2012	8.54	40.44	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	23.52	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30

6/11/2008 5:48:44 PM

Time Slice 2/6/2012-4/5/2012 Active Days: 44	151.72	40.55	104.55	0.13	0.58	2.53	3.10	0.21	2.30	2.51	17,652.49
Building 01/03/2011-07/06/2012	8.54	40.44	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	23.52	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	143.19	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	143.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 4/6/2012-7/6/2012 Active Days: 66	155.18	51.97	118.90	0.14	0.59	4.13	4.72	0.21	3.78	3.99	19,556.81
Asphalt 04/06/2012-07/16/2012	3.46	11.42	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	11.20	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Building 01/03/2011-07/06/2012	8.54	40.44	102.60	0.13	0.57	2.52	3.09	0.20	2.30	2.50	17,396.21
Building Off Road Diesel	5.06	23.52	16.94	0.00	0.00	1.72	1.72	0.00	1.58	1.58	4,694.90
Building Vendor Trips	1.20	12.62	11.03	0.03	0.10	0.53	0.64	0.03	0.49	0.52	2,887.01
Building Worker Trips	2.28	4.30	74.63	0.10	0.46	0.27	0.73	0.17	0.23	0.39	9,814.30
Coating 02/06/2012-08/31/2012	143.19	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	143.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

6/11/2008 5:48:44 PM

Time Slice 7/9/2012-7/16/2012 Active Days: 6	146.65	11.53	16.30	0.01	0.02	1.61	1.63	0.01	1.48	1.49	2,160.60
Asphalt 04/06/2012-07/16/2012	3.46	11.42	14.35	0.00	0.01	1.60	1.61	0.00	1.47	1.48	1,904.32
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.36	11.20	12.65	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,665.67
Paving On Road Diesel	0.01	0.13	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.01	21.13
Paving Worker Trips	0.05	0.10	1.65	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.52
Coating 02/06/2012-08/31/2012	143.19	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	143.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Time Slice 7/17/2012-8/31/2012 Active Days: 34	143.19	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Coating 02/06/2012-08/31/2012	143.19	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28
Architectural Coating	143.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.06	0.11	1.95	0.00	0.01	0.01	0.02	0.00	0.01	0.01	256.28

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 1/4/2010 - 5/12/2010 - Default Demolition Description

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Fine Grading 3/15/2010 - 9/3/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Trenching 2/22/2010 - 7/9/2010 - Type Your Description Here

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Paving 4/6/2012 - 7/16/2012 - Default Paving Description

For Pavers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rollers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Skid Steer Loaders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Building Construction 5/17/2010 - 5/27/2011 - Parking Garage

For Cranes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 15% mitigation reduces emissions by:

NOX: 15%

The following mitigation measures apply to Phase: Building Construction 9/20/2010 - 9/30/2011 - Building Structure

For Cranes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Building Construction 1/3/2011 - 7/6/2012 - Interior Exterior Construction/Finishing

For Forklifts, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Architectural Coating 2/6/2012 - 8/31/2012 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

6/11/2008 6:24:00 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 1 Construction unmitigated.urb924

Project Name: The Plaza at the Glen Add Area 1 Construction

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
2010 TOTALS (lbs/day mitigated)	5.37	57.84	24.96	0.05	8.45	2.53	10.50	1.76	2.33	4.02	7,246.43
2011 TOTALS (lbs/day unmitigated)	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
2011 TOTALS (lbs/day mitigated)	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

6/11/2008 6:24:00 PM

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	**5.37**	**57.84**	**24.96**	**0.05**	**20.17**	**2.53**	**22.70**	**4.23**	**2.33**	**6.56**	**7,246.43**
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building 03/27/2010-04/01/2011	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building Off Road Diesel	4.82	51.85	17.63	0.00	0.00	1.98	1.98	0.00	1.82	1.82	5,655.14
Building Vendor Trips	0.09	1.01	0.80	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.35
Building Worker Trips	0.10	0.18	3.05	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.16
Time Slice 1/3/2011-4/1/2011 Active Days: 65	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building 03/27/2010-04/01/2011	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building Off Road Diesel	4.48	48.06	16.57	0.00	0.00	1.76	1.76	0.00	1.62	1.62	5,655.14
Building Vendor Trips	0.08	0.92	0.74	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.36
Building Worker Trips	0.09	0.17	2.85	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.08

6/11/2008 6:24:00 PM

Time Slice 4/4/2011-4/15/2011 Active Days: 10	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Asphalt 04/02/2011-04/16/2011	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Paving Off-Gas	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.50	17.14	8.86	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,604.60
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	84.37
Paving Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 4/18/2011-7/15/2011 Active Days: 65	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Coating 04/17/2011-07/17/2011	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Architectural Coating	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 150000

Building Volume Daily (cubic feet): 20000

On Road Truck Travel (VMT): 277.78

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 0.61

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

6/11/2008 6:24:00 PM

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	**5.37**	**57.84**	**24.96**	**0.05**	7.97	**2.53**	10.50	1.68	**2.33**	4.02	**7,246.43**
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

Time Slice 3/29/2010-12/31/2010 Active Days: 200	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building 03/27/2010-04/01/2011	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building Off Road Diesel	4.82	51.85	17.63	0.00	0.00	1.98	1.98	0.00	1.82	1.82	5,655.14
Building Vendor Trips	0.09	1.01	0.80	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.35
Building Worker Trips	0.10	0.18	3.05	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.16
Time Slice 1/3/2011-4/1/2011 Active Days: 65	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building 03/27/2010-04/01/2011	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building Off Road Diesel	4.48	48.06	16.57	0.00	0.00	1.76	1.76	0.00	1.62	1.62	5,655.14
Building Vendor Trips	0.08	0.92	0.74	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.36
Building Worker Trips	0.09	0.17	2.85	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.08
Time Slice 4/4/2011-4/15/2011 Active Days: 10	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Asphalt 04/02/2011-04/16/2011	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Paving Off-Gas	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.50	17.14	8.86	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,604.60
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	84.37
Paving Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 4/18/2011-7/15/2011 Active Days: 65	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Coating 04/17/2011-07/17/2011	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Architectural Coating	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

6/11/2008 6:24:00 PM

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

6/11/2008 6:25:12 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 1 Construction mitigated.urb924

Project Name: The Plaza at the Glen Add Area 1 Construction

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
2010 TOTALS (lbs/day mitigated)	5.37	49.17	24.96	0.05	8.45	2.53	10.50	1.76	2.33	4.02	7,246.43
2011 TOTALS (lbs/day unmitigated)	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
2011 TOTALS (lbs/day mitigated)	4.65	41.09	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

6/11/2008 6:25:12 PM

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	**5.37**	**57.84**	**24.96**	**0.05**	**20.17**	**2.53**	**22.70**	**4.23**	**2.33**	**6.56**	**7,246.43**
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building 03/27/2010-04/01/2011	5.01	53.04	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building Off Road Diesel	4.82	51.85	17.63	0.00	0.00	1.98	1.98	0.00	1.82	1.82	5,655.14
Building Vendor Trips	0.09	1.01	0.80	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.35
Building Worker Trips	0.10	0.18	3.05	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.16
Time Slice 1/3/2011-4/1/2011 Active Days: 65	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building 03/27/2010-04/01/2011	4.65	49.14	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building Off Road Diesel	4.48	48.06	16.57	0.00	0.00	1.76	1.76	0.00	1.62	1.62	5,655.14
Building Vendor Trips	0.08	0.92	0.74	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.36
Building Worker Trips	0.09	0.17	2.85	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.08

Time Slice 4/4/2011-4/15/2011 Active Days: 10	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Asphalt 04/02/2011-04/16/2011	2.76	17.83	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Paving Off-Gas	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.50	17.14	8.86	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,604.60
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	84.37
Paving Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 4/18/2011-7/15/2011 Active Days: 65	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Coating 04/17/2011-07/17/2011	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Architectural Coating	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 150000

Building Volume Daily (cubic feet): 20000

On Road Truck Travel (VMT): 277.78

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 0.61

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

6/11/2008 6:25:12 PM

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	27.08	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	27.08	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	18.17	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	**5.37**	49.17	**24.96**	**0.05**	7.97	**2.53**	10.50	1.68	**2.33**	4.02	**7,246.43**
Mass Grading 01/26/2010-03/26/2010	5.37	49.17	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	13.01	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 6:25:12 PM

Time Slice 3/29/2010-12/31/2010 Active Days: 200	5.01	44.32	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building 03/27/2010-04/01/2011	5.01	44.32	21.48	0.01	0.02	2.03	2.06	0.01	1.87	1.88	6,187.65
Building Off Road Diesel	4.82	43.12	17.63	0.00	0.00	1.98	1.98	0.00	1.82	1.82	5,655.14
Building Vendor Trips	0.09	1.01	0.80	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.35
Building Worker Trips	0.10	0.18	3.05	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.16
Time Slice 1/3/2011-4/1/2011 Active Days: 65	<u>4.65</u>	<u>41.09</u>	<u>20.16</u>	<u>0.01</u>	<u>0.02</u>	<u>1.81</u>	<u>1.83</u>	<u>0.01</u>	<u>1.67</u>	<u>1.67</u>	<u>6,187.58</u>
Building 03/27/2010-04/01/2011	4.65	41.09	20.16	0.01	0.02	1.81	1.83	0.01	1.67	1.67	6,187.58
Building Off Road Diesel	4.48	40.01	16.57	0.00	0.00	1.76	1.76	0.00	1.62	1.62	5,655.14
Building Vendor Trips	0.08	0.92	0.74	0.00	0.01	0.04	0.05	0.00	0.04	0.04	183.36
Building Worker Trips	0.09	0.17	2.85	0.00	0.02	0.01	0.03	0.01	0.01	0.01	349.08
Time Slice 4/4/2011-4/15/2011 Active Days: 10	2.76	12.43	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Asphalt 04/02/2011-04/16/2011	2.76	12.43	11.12	0.00	0.01	1.27	1.28	0.01	1.17	1.17	1,937.61
Paving Off-Gas	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.50	11.74	8.86	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,604.60
Paving On Road Diesel	0.05	0.57	0.23	0.00	0.00	0.02	0.03	0.00	0.02	0.02	84.37
Paving Worker Trips	0.06	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.63
Time Slice 4/18/2011-7/15/2011 Active Days: 65	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Coating 04/17/2011-07/17/2011	3.70	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07
Architectural Coating	3.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.07

<u>Construction Related Mitigation Measures</u>

The following mitigation measures apply to Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

6/11/2008 6:25:12 PM

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Graders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

For Pavers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rollers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

For Cranes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

6/11/2008 6:19:24 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 3 Construction unmitigated.urb924

Project Name: The Plaza at the Glen Add Area 3 Construction unmitigated

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	7.10	60.49	42.16	0.05	20.17	2.54	22.70	4.23	2.33	6.56	8,802.28
2010 TOTALS (lbs/day mitigated)	7.10	60.49	42.16	0.05	16.89	2.54	18.98	3.52	2.33	5.45	8,802.28
2011 TOTALS (lbs/day unmitigated)	43.42	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
2011 TOTALS (lbs/day mitigated)	43.42	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

6/11/2008 6:19:24 PM

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Demolition 01/04/2010-01/25/2010	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Fugitive Dust	0.00	0.00	0.00	0.00	16.80	0.00	16.80	3.49	0.00	3.49	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	1.42	17.64	7.11	0.02	0.08	0.75	0.83	0.03	0.69	0.71	2,354.67
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	57.84	24.96	**0.05**	**20.17**	2.53	**22.70**	**4.23**	2.33	**6.56**	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	7.10	**60.49**	**42.16**	0.03	0.13	**2.54**	2.66	0.04	**2.33**	2.38	**8,802.28**
Building 03/27/2010-04/01/2011	7.10	60.49	42.16	0.03	0.13	2.54	2.66	0.04	2.33	2.38	8,802.28
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.43	4.72	3.76	0.01	0.03	0.20	0.23	0.01	0.19	0.20	860.76
Building Worker Trips	0.56	1.05	17.60	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,012.37
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building 03/27/2010-04/01/2011	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.39	4.27	3.49	0.01	0.03	0.18	0.21	0.01	0.17	0.18	860.78
Building Worker Trips	0.51	0.96	16.42	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,011.94

6/11/2008 6:19:24 PM

Time Slice 4/4/2011-4/15/2011 Active Days: 10	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Asphalt 04/02/2011-04/16/2011	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Paving Off-Gas	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.48	22.98	12.11	0.00	0.00	1.76	1.76	0.00	1.62	1.62	2,043.82
Paving On Road Diesel	0.25	3.08	1.24	0.00	0.02	0.13	0.14	0.00	0.12	0.12	455.05
Paving Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.42**	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Coating 04/17/2011-07/17/2011	43.42	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Architectural Coating	43.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 360000

Building Volume Daily (cubic feet): 40000

On Road Truck Travel (VMT): 555.56

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

6/11/2008 6:19:24 PM

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 3.29

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

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Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Demolition 01/04/2010-01/25/2010	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Fugitive Dust	0.00	0.00	0.00	0.00	16.80	0.00	16.80	3.49	0.00	3.49	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	1.42	17.64	7.11	0.02	0.08	0.75	0.83	0.03	0.69	0.71	2,354.67
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	57.84	24.96	**0.05**	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

Time Slice 3/29/2010-12/31/2010 Active Days: 200	7.10	**60.49**	**42.16**	0.03	0.13	**2.54**	2.66	0.04	**2.33**	2.38	**8,802.28**
Building 03/27/2010-04/01/2011	7.10	60.49	42.16	0.03	0.13	2.54	2.66	0.04	2.33	2.38	8,802.28
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.43	4.72	3.76	0.01	0.03	0.20	0.23	0.01	0.19	0.20	860.76
Building Worker Trips	0.56	1.05	17.60	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,012.37
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building 03/27/2010-04/01/2011	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.39	4.27	3.49	0.01	0.03	0.18	0.21	0.01	0.17	0.18	860.78
Building Worker Trips	0.51	0.96	16.42	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,011.94
Time Slice 4/4/2011-4/15/2011 Active Days: 10	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Asphalt 04/02/2011-04/16/2011	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Paving Off-Gas	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.48	22.98	12.11	0.00	0.00	1.76	1.76	0.00	1.62	1.62	2,043.82
Paving On Road Diesel	0.25	3.08	1.24	0.00	0.02	0.13	0.14	0.00	0.12	0.12	455.05
Paving Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.42**	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Coating 04/17/2011-07/17/2011	43.42	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Architectural Coating	43.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

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For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 3 Construction mitigated.urb924

Project Name: The Plaza at the Glen Add Area 3 Construction mitigated

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	7.10	60.49	42.16	0.05	20.17	2.54	22.70	4.23	2.33	6.56	8,802.28
2010 TOTALS (lbs/day mitigated)	7.10	51.76	42.16	0.05	16.89	2.54	18.98	3.52	2.33	5.45	8,802.28
2011 TOTALS (lbs/day unmitigated)	43.42	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
2011 TOTALS (lbs/day mitigated)	40.44	48.06	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Demolition 01/04/2010-01/25/2010	4.84	47.74	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Fugitive Dust	0.00	0.00	0.00	0.00	16.80	0.00	16.80	3.49	0.00	3.49	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	1.42	17.64	7.11	0.02	0.08	0.75	0.83	0.03	0.69	0.71	2,354.67
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	57.84	24.96	**0.05**	**20.17**	2.53	**22.70**	**4.23**	2.33	**6.56**	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	7.10	**60.49**	**42.16**	0.03	0.13	**2.54**	2.66	0.04	**2.33**	2.38	**8,802.28**
Building 03/27/2010-04/01/2011	7.10	60.49	42.16	0.03	0.13	2.54	2.66	0.04	2.33	2.38	8,802.28
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.43	4.72	3.76	0.01	0.03	0.20	0.23	0.01	0.19	0.20	860.76
Building Worker Trips	0.56	1.05	17.60	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,012.37
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building 03/27/2010-04/01/2011	6.59	56.12	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.39	4.27	3.49	0.01	0.03	0.18	0.21	0.01	0.17	0.18	860.78
Building Worker Trips	0.51	0.96	16.42	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,011.94

Time Slice 4/4/2011-4/15/2011 Active Days: 10	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Asphalt 04/02/2011-04/16/2011	4.60	26.21	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Paving Off-Gas	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.48	22.98	12.11	0.00	0.00	1.76	1.76	0.00	1.62	1.62	2,043.82
Paving On Road Diesel	0.25	3.08	1.24	0.00	0.02	0.13	0.14	0.00	0.12	0.12	455.05
Paving Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.42**	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Coating 04/17/2011-07/17/2011	43.42	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Architectural Coating	43.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 360000

Building Volume Daily (cubic feet): 40000

On Road Truck Travel (VMT): 555.56

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

6/11/2008 6:21:01 PM

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 3.29

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

2 Paving Equipment (104 hp) operating at a 0.53 load factor for 6 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

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Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.84	35.90	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Demolition 01/04/2010-01/25/2010	4.84	35.90	22.33	0.02	16.89	2.10	18.98	3.52	1.93	5.45	5,408.49
Fugitive Dust	0.00	0.00	0.00	0.00	16.80	0.00	16.80	3.49	0.00	3.49	0.00
Demo Off Road Diesel	3.38	18.17	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	1.42	17.64	7.11	0.02	0.08	0.75	0.83	0.03	0.69	0.71	2,354.67
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	49.17	24.96	**0.05**	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	49.17	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	13.01	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

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Time Slice 3/29/2010-12/31/2010 Active Days: 200	7.10	51.76	**42.16**	0.03	0.13	**2.54**	2.66	0.04	**2.33**	2.38	**8,802.28**
Building 03/27/2010-04/01/2011	7.10	51.76	42.16	0.03	0.13	2.54	2.66	0.04	2.33	2.38	8,802.28
Building Off Road Diesel	6.11	45.99	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.43	4.72	3.76	0.01	0.03	0.20	0.23	0.01	0.19	0.20	860.76
Building Worker Trips	0.56	1.05	17.60	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,012.37
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.59	48.06	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building 03/27/2010-04/01/2011	6.59	48.06	39.56	0.03	0.13	2.29	2.41	0.04	2.10	2.15	8,801.86
Building Off Road Diesel	5.68	42.84	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.39	4.27	3.49	0.01	0.03	0.18	0.21	0.01	0.17	0.18	860.78
Building Worker Trips	0.51	0.96	16.42	0.02	0.10	0.05	0.15	0.03	0.05	0.08	2,011.94
Time Slice 4/4/2011-4/15/2011 Active Days: 10	4.60	20.81	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Asphalt 04/02/2011-04/16/2011	4.60	20.81	15.89	0.01	0.03	1.90	1.93	0.01	1.75	1.76	2,809.66
Paving Off-Gas	0.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.48	17.59	12.11	0.00	0.00	1.76	1.76	0.00	1.62	1.62	2,043.82
Paving On Road Diesel	0.25	3.08	1.24	0.00	0.02	0.13	0.14	0.00	0.12	0.12	455.05
Paving Worker Trips	0.08	0.15	2.54	0.00	0.01	0.01	0.02	0.01	0.01	0.01	310.79
Time Slice 4/18/2011-7/15/2011 Active Days: 65	40.44	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Coating 04/17/2011-07/17/2011	40.44	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59
Architectural Coating	40.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.03	0.06	0.98	0.00	0.01	0.00	0.01	0.00	0.00	0.00	120.59

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

6/11/2008 6:21:01 PM

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Graders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

For Pavers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rollers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

For Cranes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

6/11/2008 6:32:11 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 4 Construction mitigated.urb924

Project Name: The Plaza at the Glen Add Area 4 Construction unmitigated

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	6.54	57.84	31.27	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,260.02
2010 TOTALS (lbs/day mitigated)	6.54	57.84	31.27	0.05	8.45	2.53	10.50	1.76	2.33	4.02	7,260.02
2011 TOTALS (lbs/day unmitigated)	43.18	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
2011 TOTALS (lbs/day mitigated)	43.18	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

6/11/2008 6:32:12 PM

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	**57.84**	24.96	**0.05**	**20.17**	**2.53**	**22.70**	**4.23**	**2.33**	**6.56**	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	6.54	56.73	**31.27**	0.01	0.06	2.37	2.43	0.02	2.18	2.20	**7,260.02**
Building 03/27/2010-04/01/2011	6.54	56.73	31.27	0.01	0.06	2.37	2.43	0.02	2.18	2.20	7,260.02
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.13	1.46	1.22	0.00	0.01	0.06	0.07	0.00	0.06	0.06	272.46
Building Worker Trips	0.30	0.55	9.26	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.41
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building 03/27/2010-04/01/2011	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.12	1.32	1.13	0.00	0.01	0.06	0.07	0.00	0.05	0.05	272.47
Building Worker Trips	0.27	0.51	8.63	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.18

6/11/2008 6:32:12 PM

Time Slice 4/4/2011-4/15/2011 Active Days: 10	3.71	22.59	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Asphalt 04/02/2011-04/16/2011	3.71	22.59	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.16	21.03	11.03	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,897.41
Paving On Road Diesel	0.12	1.42	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06	210.24
Paving Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.71
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.18**	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Coating 04/17/2011-07/17/2011	43.18	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 150000

Building Volume Daily (cubic feet): 20000

On Road Truck Travel (VMT): 277.78

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 1.52

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

6/11/2008 6:32:12 PM

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	**57.84**	24.96	**0.05**	7.97	**2.53**	10.50	1.68	**2.33**	4.02	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

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Time Slice 3/29/2010-12/31/2010 Active Days: 200	6.54	56.73	**31.27**	0.01	0.06	2.37	2.43	0.02	2.18	2.20	**7,260.02**
Building 03/27/2010-04/01/2011	6.54	56.73	31.27	0.01	0.06	2.37	2.43	0.02	2.18	2.20	7,260.02
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.13	1.46	1.22	0.00	0.01	0.06	0.07	0.00	0.06	0.06	272.46
Building Worker Trips	0.30	0.55	9.26	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.41
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building 03/27/2010-04/01/2011	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.12	1.32	1.13	0.00	0.01	0.06	0.07	0.00	0.05	0.05	272.47
Building Worker Trips	0.27	0.51	8.63	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.18
Time Slice 4/4/2011-4/15/2011 Active Days: 10	3.71	14.18	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Asphalt 04/02/2011-04/16/2011	3.71	14.18	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.16	12.62	11.03	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,897.41
Paving On Road Diesel	0.12	1.42	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06	210.24
Paving Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.71
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.18**	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Coating 04/17/2011-07/17/2011	43.18	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

6/11/2008 6:32:12 PM

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

The following mitigation measures apply to Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

For Pavers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rollers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Cement and Mortar Mixers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Paving Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Add Area 4 Construction mitigated.urb924

Project Name: The Plaza at the Glen Add Area 4 Construction mitigated

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (lbs/day unmitigated)	6.54	57.84	31.27	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,260.02
2010 TOTALS (lbs/day mitigated)	6.54	49.17	31.27	0.05	8.45	2.53	10.50	1.76	2.33	4.02	7,260.02
2011 TOTALS (lbs/day unmitigated)	43.18	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
2011 TOTALS (lbs/day mitigated)	38.87	44.66	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2

Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	38.91	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	30.01	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	**57.84**	24.96	**0.05**	**20.17**	**2.53**	**22.70**	**4.23**	**2.33**	**6.56**	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	57.84	24.96	0.05	20.17	2.53	22.70	4.23	2.33	6.56	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	20.00	0.00	20.00	4.18	0.00	4.18	0.00
Mass Grading Off Road Diesel	2.43	21.69	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34
Time Slice 3/29/2010-12/31/2010 Active Days: 200	6.54	56.73	**31.27**	0.01	0.06	2.37	2.43	0.02	2.18	2.20	**7,260.02**
Building 03/27/2010-04/01/2011	6.54	56.73	31.27	0.01	0.06	2.37	2.43	0.02	2.18	2.20	7,260.02
Building Off Road Diesel	6.11	54.72	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.13	1.46	1.22	0.00	0.01	0.06	0.07	0.00	0.06	0.06	272.46
Building Worker Trips	0.30	0.55	9.26	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.41
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building 03/27/2010-04/01/2011	6.07	52.71	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building Off Road Diesel	5.68	50.89	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.12	1.32	1.13	0.00	0.01	0.06	0.07	0.00	0.05	0.05	272.47
Building Worker Trips	0.27	0.51	8.63	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.18

6/11/2008 6:29:56 PM

Time Slice 4/4/2011-4/15/2011 Active Days: 10	3.71	22.59	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Asphalt 04/02/2011-04/16/2011	3.71	22.59	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.16	21.03	11.03	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,897.41
Paving On Road Diesel	0.12	1.42	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06	210.24
Paving Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.71
Time Slice 4/18/2011-7/15/2011 Active Days: 65	**43.18**	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Coating 04/17/2011-07/17/2011	43.18	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Architectural Coating	43.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63

Phase Assumptions

Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

Building Volume Total (cubic feet): 150000

Building Volume Daily (cubic feet): 20000

On Road Truck Travel (VMT): 277.78

Off-Road Equipment:

1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 1

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 1136.36

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

Acres to be Paved: 1.52

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 8 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

Off-Road Equipment:

2 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day

1 Cranes (399 hp) operating at a 0.43 load factor for 8 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (549 hp) operating at a 0.74 load factor for 8 hours per day

1 Other Equipment (190 hp) operating at a 0.62 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

6/11/2008 6:29:56 PM

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
Time Slice 1/4/2010-1/25/2010 Active Days: 16	4.13	27.08	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Demolition 01/04/2010-01/25/2010	4.13	27.08	18.77	0.01	8.45	1.72	10.17	1.76	1.59	3.35	4,231.16
Fugitive Dust	0.00	0.00	0.00	0.00	8.40	0.00	8.40	1.75	0.00	1.75	0.00
Demo Off Road Diesel	3.38	18.17	13.86	0.00	0.00	1.35	1.35	0.00	1.24	1.24	2,898.40
Demo On Road Diesel	0.71	8.82	3.56	0.01	0.04	0.37	0.41	0.01	0.34	0.36	1,177.33
Demo Worker Trips	0.04	0.08	1.36	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 1/26/2010-3/26/2010 Active Days: 44	5.37	49.17	24.96	**0.05**	7.97	**2.53**	10.50	1.68	**2.33**	4.02	7,246.43
Mass Grading 01/26/2010-03/26/2010	5.37	49.17	24.96	0.05	7.97	2.53	10.50	1.68	2.33	4.02	7,246.43
Mass Grading Dust	0.00	0.00	0.00	0.00	7.80	0.00	7.80	1.63	0.00	1.63	0.00
Mass Grading Off Road Diesel	2.43	13.01	9.32	0.00	0.00	1.00	1.00	0.00	0.92	0.92	2,305.73
Mass Grading On Road Diesel	2.91	36.09	14.55	0.05	0.16	1.53	1.69	0.05	1.41	1.46	4,816.36
Mass Grading Worker Trips	0.03	0.06	1.09	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.34

6/11/2008 6:29:56 PM

Time Slice 3/29/2010-12/31/2010 Active Days: 200	6.54	48.00	**31.27**	0.01	0.06	2.37	2.43	0.02	2.18	2.20	**7,260.02**
Building 03/27/2010-04/01/2011	6.54	48.00	31.27	0.01	0.06	2.37	2.43	0.02	2.18	2.20	7,260.02
Building Off Road Diesel	6.11	45.99	20.80	0.00	0.00	2.28	2.28	0.00	2.10	2.10	5,929.14
Building Vendor Trips	0.13	1.46	1.22	0.00	0.01	0.06	0.07	0.00	0.06	0.06	272.46
Building Worker Trips	0.30	0.55	9.26	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.41
Time Slice 1/3/2011-4/1/2011 Active Days: 65	6.07	44.66	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building 03/27/2010-04/01/2011	6.07	44.66	29.42	0.01	0.06	2.14	2.20	0.02	1.96	1.99	7,259.79
Building Off Road Diesel	5.68	42.84	19.66	0.00	0.00	2.05	2.05	0.00	1.89	1.89	5,929.14
Building Vendor Trips	0.12	1.32	1.13	0.00	0.01	0.06	0.07	0.00	0.05	0.05	272.47
Building Worker Trips	0.27	0.51	8.63	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,058.18
Time Slice 4/4/2011-4/15/2011 Active Days: 10	3.71	17.19	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Asphalt 04/02/2011-04/16/2011	3.71	17.19	13.88	0.00	0.02	1.66	1.68	0.01	1.52	1.53	2,387.36
Paving Off-Gas	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	3.16	15.64	11.03	0.00	0.00	1.59	1.59	0.00	1.46	1.46	1,897.41
Paving On Road Diesel	0.12	1.42	0.57	0.00	0.01	0.06	0.07	0.00	0.05	0.06	210.24
Paving Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.71
Time Slice 4/18/2011-7/15/2011 Active Days: 65	38.87	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Coating 04/17/2011-07/17/2011	38.87	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63
Architectural Coating	38.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	62.63

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Demolition 1/4/2010 - 1/25/2010 - Default Demolition Description

6/11/2008 6:29:56 PM

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rubber Tired Dozers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Mass Grading 1/26/2010 - 3/26/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Unpaved Roads Measures, the Manage haul road dust 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

For Graders, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Excavators, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Paving 4/2/2011 - 4/16/2011 - Default Paving Description

For Pavers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Rollers, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Building Construction 3/27/2010 - 4/1/2011 - Default Building Construction Description

For Cranes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

6/11/2008 6:29:56 PM

NOX: 40%

For Other Equipment, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Tractors/Loaders/Backhoes, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

For Water Trucks, the Diesel Oxidation Catalyst 40% mitigation reduces emissions by:

NOX: 40%

The following mitigation measures apply to Phase: Architectural Coating 4/17/2011 - 7/17/2011 - Default Architectural Coating Description

For Nonresidential Architectural Coating Measures, the Nonresidential Exterior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

For Nonresidential Architectural Coating Measures, the Nonresidential Interior: Use Low VOC Coatings mitigation reduces emissions by:

ROG: 10%

5/19/2008 9:44:52 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Construction\Urbemis Construction.urb924

Project Name: The Plaza at the Glen - Construction

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010 TOTALS (tons/year unmitigated)	1.84	20.69	8.82	0.02	1.60	0.94	2.53	0.34	0.86	1.20	2,655.16
2010 TOTALS (tons/year mitigated)	1.84	20.69	8.82	0.02	1.07	0.94	2.00	0.23	0.86	1.09	2,655.16
Percent Reduction	0.00	0.00	0.00	0.00	33.20	0.00	20.92	32.33	0.00	9.19	0.00
2011 TOTALS (tons/year unmitigated)	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
2011 TOTALS (tons/year mitigated)	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2012 TOTALS (tons/year unmitigated)	13.11	9.27	12.44	0.01	0.06	0.39	0.45	0.02	0.35	0.38	2,378.53
2012 TOTALS (tons/year mitigated)	13.11	9.27	12.44	0.01	0.06	0.39	0.45	0.02	0.35	0.38	2,378.53
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5/19/2008 9:44:52 AM

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010	1.84	20.69	8.82	0.02	1.60	0.94	2.53	0.34	0.86	1.20	2,655.16
Demolition 05/03/2010-07/30/2010	0.23	1.95	1.01	0.00	0.42	0.11	0.53	0.09	0.10	0.19	211.83
Fugitive Dust	0.00	0.00	0.00	0.00	0.42	0.00	0.42	0.09	0.00	0.09	0.00
Demo Off Road Diesel	0.20	1.51	0.76	0.00	0.00	0.09	0.09	0.00	0.08	0.08	144.95
Demo On Road Diesel	0.04	0.44	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	58.80
Demo Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.08
Fine Grading 08/02/2010-12/31/2010	1.60	18.74	7.81	0.02	1.17	0.83	2.00	0.25	0.76	1.01	2,443.34
Fine Grading Dust	0.00	0.00	0.00	0.00	1.10	0.00	1.10	0.23	0.00	0.23	0.00
Fine Grading Off Road Diesel	0.25	1.96	0.96	0.00	0.00	0.11	0.11	0.00	0.10	0.10	194.49
Fine Grading On Road Diesel	1.35	16.77	6.76	0.02	0.07	0.71	0.79	0.02	0.66	0.68	2,238.59
Fine Grading Worker Trips	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.26
2011	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
Building 01/03/2011-11/02/2012	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
Building Off Road Diesel	1.01	9.20	3.42	0.00	0.00	0.36	0.36	0.00	0.33	0.33	1,113.95
Building Vendor Trips	0.17	1.83	1.55	0.00	0.01	0.08	0.09	0.00	0.07	0.08	375.31
Building Worker Trips	0.33	0.61	10.41	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,276.08

2012	13.11	9.27	12.44	0.01	0.06	0.39	0.45	0.02	0.35	0.38	2,378.53
Building 01/03/2011-11/02/2012	1.19	9.07	12.15	0.01	0.06	0.37	0.43	0.02	0.34	0.36	2,339.72
Building Off Road Diesel	0.81	7.21	2.73	0.00	0.00	0.28	0.28	0.00	0.26	0.26	942.57
Building Vendor Trips	0.13	1.39	1.21	0.00	0.01	0.06	0.07	0.00	0.05	0.06	317.57
Building Worker Trips	0.25	0.47	8.21	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,079.57
Coating 09/03/2012-12/28/2012	11.88	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.22
Architectural Coating	11.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.22
Asphalt 12/03/2012-12/28/2012	0.04	0.19	0.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	19.59
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.19	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	16.66
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
Paving Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18

<u>Phase Assumptions</u>

Phase: Demolition 5/3/2010 - 7/30/2010 - Default Demolition Description

Building Volume Total (cubic feet): 1999649

Building Volume Daily (cubic feet): 30732.8

On Road Truck Travel (VMT): 426.84

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Rubber Tired Loaders (164 hp) operating at a 0.54 load factor for 10 hours per day

3 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Fine Grading 8/2/2010 - 12/31/2010 - Default Mass Site Grading/Excavation Description

5/19/2008 9:44:53 AM

Total Acres Disturbed: 13

Maximum Daily Acreage Disturbed: 1

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 9603.07

Off-Road Equipment:

2 Excavators (168 hp) operating at a 0.57 load factor for 10 hours per day

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 10 hours per day

2 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Paving 12/3/2012 - 12/28/2012 - Default Paving Description

Acres to be Paved: 1

Off-Road Equipment:

1 Pavers (100 hp) operating at a 0.62 load factor for 10 hours per day

3 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

3 Skid Steer Loaders (44 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Building Construction 1/3/2011 - 11/2/2012 - Default Building Construction Description

Off-Road Equipment:

3 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 10 hours per day

4 Cranes (399 hp) operating at a 0.43 load factor for 10 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 10 hours per day

4 Other Equipment (190 hp) operating at a 0.62 load factor for 10 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 10 hours per day

Phase: Architectural Coating 9/3/2012 - 12/28/2012 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100

Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50

Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250

Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100

5/19/2008 9:44:53 AM

Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Mitigated

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2010	1.84	20.69	8.82	0.02	1.07	0.94	2.00	0.23	0.86	1.09	2,655.16
Demolition 05/03/2010-07/30/2010	0.23	1.95	1.01	0.00	0.42	0.11	0.53	0.09	0.10	0.19	211.83
Fugitive Dust	0.00	0.00	0.00	0.00	0.42	0.00	0.42	0.09	0.00	0.09	0.00
Demo Off Road Diesel	0.20	1.51	0.76	0.00	0.00	0.09	0.09	0.00	0.08	0.08	144.95
Demo On Road Diesel	0.04	0.44	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	58.80
Demo Worker Trips	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.08
Fine Grading 08/02/2010-12/31/2010	1.60	18.74	7.81	0.02	0.64	0.83	1.47	0.14	0.76	0.90	2,443.34
Fine Grading Dust	0.00	0.00	0.00	0.00	0.57	0.00	0.57	0.12	0.00	0.12	0.00
Fine Grading Off Road Diesel	0.25	1.96	0.96	0.00	0.00	0.11	0.11	0.00	0.10	0.10	194.49
Fine Grading On Road Diesel	1.35	16.77	6.76	0.02	0.07	0.71	0.79	0.02	0.66	0.68	2,238.59
Fine Grading Worker Trips	0.00	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.26
2011	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
Building 01/03/2011-11/02/2012	1.50	11.64	15.38	0.02	0.07	0.47	0.55	0.03	0.43	0.46	2,765.35
Building Off Road Diesel	1.01	9.20	3.42	0.00	0.00	0.36	0.36	0.00	0.33	0.33	1,113.95
Building Vendor Trips	0.17	1.83	1.55	0.00	0.01	0.08	0.09	0.00	0.07	0.08	375.31
Building Worker Trips	0.33	0.61	10.41	0.01	0.06	0.03	0.10	0.02	0.03	0.05	1,276.08

5/19/2008 9:44:53 AM

2012	13.11	9.27	12.44	0.01	0.06	0.39	0.45	0.02	0.35	0.38	2,378.53
Building 01/03/2011-11/02/2012	1.19	9.07	12.15	0.01	0.06	0.37	0.43	0.02	0.34	0.36	2,339.72
Building Off Road Diesel	0.81	7.21	2.73	0.00	0.00	0.28	0.28	0.00	0.26	0.26	942.57
Building Vendor Trips	0.13	1.39	1.21	0.00	0.01	0.06	0.07	0.00	0.05	0.06	317.57
Building Worker Trips	0.25	0.47	8.21	0.01	0.05	0.03	0.08	0.02	0.02	0.04	1,079.57
Coating 09/03/2012-12/28/2012	11.88	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.22
Architectural Coating	11.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.01	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.22
Asphalt 12/03/2012-12/28/2012	0.04	0.19	0.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	19.59
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.03	0.19	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	16.66
Paving On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76
Paving Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 8/2/2010 - 12/31/2010 - Default Mass Site Grading/Excavation Description

For Soil Stablizing Measures, the Water exposed surfaces 3x daily watering mitigation reduces emissions by:

PM10: 61% PM25: 61%

Appendix C

Operational, CO, and GHG Emissions

5/6/2008 4:35:36 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\No Project Operational.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.99	1.36	1.14	0.00	0.00	0.00	1,633.73

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	49.35	79.48	554.41	0.64	125.08	24.31	67,514.49

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	50.34	80.84	555.55	0.64	125.08	24.31	69,148.22

5/6/2008 4:35:36 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.36	1.14	0.00	0.00	0.00	1,633.73
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.89						
TOTALS (lbs/day, unmitigated)	0.99	1.36	1.14	0.00	0.00	0.00	1,633.73

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Racquetball/health	5.44	8.64	60.32	0.07	13.60	2.64	7,342.14
Quality resturant	2.05	3.31	23.17	0.03	5.22	1.01	2,818.97
Strip mall	29.80	48.10	335.40	0.38	75.68	14.71	40,848.40
Pharmacy/drugstore without drive through	8.48	13.63	95.05	0.11	21.45	4.17	11,575.99
Bank	3.58	5.80	40.47	0.05	9.13	1.78	4,928.99
TOTALS (lbs/day, unmitigated)	49.35	79.48	554.41	0.64	125.08	24.31	67,514.49

Operational Settings:

5/6/2008 4:35:36 PM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					8,052.56	72,422.53

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
Bank				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\No Project Operational.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.60	1.46	8.87	0.00	0.03	0.03	1,647.77

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	42.85	68.86	543.74	0.71	125.08	24.31	71,410.02

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	44.45	70.32	552.61	0.71	125.11	24.34	73,057.79

5/6/2008 4:33:26 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.10	1.36	1.14	0.00	0.00	0.00	1,633.73
Hearth							
Landscape	0.61	0.10	7.73	0.00	0.03	0.03	14.04
Consumer Products	0.00						
Architectural Coatings	0.89						
TOTALS (lbs/day, unmitigated)	1.60	1.46	8.87	0.00	0.03	0.03	1,647.77

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Racquetball/health	4.78	7.48	59.20	0.08	13.60	2.64	7,765.61
Quality resturant	1.78	2.87	22.76	0.03	5.22	1.01	2,981.48
Strip mall	25.82	41.67	328.89	0.43	75.68	14.71	43,205.54
Pharmacy/drugstore without drive through	7.38	11.81	93.20	0.12	21.45	4.17	12,243.97
Bank	3.09	5.03	39.69	0.05	9.13	1.78	5,213.42
TOTALS (lbs/day, unmitigated)	42.85	68.86	543.74	0.71	125.08	24.31	71,410.02

Operational Settings:

5/6/2008 4:33:26 PM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					8,052.56	72,422.53

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0

5/6/2008 4:33:26 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
Bank				2.0	1.0	97.0

5/6/2008 4:35:51 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\No Project Operational.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.29	0.27	1.62	0.00	0.01	0.01	300.72

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	8.20	13.22	99.88	0.13	22.82	4.44	12,795.35

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	8.49	13.49	101.50	0.13	22.83	4.45	13,096.07

5/6/2008 4:35:51 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.02	0.25	0.21	0.00	0.00	0.00	298.16
Hearth							
Landscape	0.11	0.02	1.41	0.00	0.01	0.01	2.56
Consumer Products	0.00						
Architectural Coatings	0.16						
TOTALS (tons/year, unmitigated)	0.29	0.27	1.62	0.00	0.01	0.01	300.72

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Racquetball/health	0.91	1.44	10.87	0.01	2.48	0.48	1,391.46
Quality resturant	0.34	0.55	4.18	0.01	0.95	0.19	534.23
Strip mall	4.95	8.00	60.42	0.08	13.81	2.69	7,741.62
Pharmacy/drugstore without drive through	1.41	2.27	17.12	0.02	3.91	0.76	2,193.89
Bank	0.59	0.96	7.29	0.01	1.67	0.32	934.15
TOTALS (tons/year, unmitigated)	8.20	13.22	99.88	0.13	22.82	4.44	12,795.35

Operational Settings:

5/6/2008 4:35:51 PM

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					8,052.56	72,422.53

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
Bank				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.07	0.81	0.68	0.00	0.00	0.00	966.44

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.13	0.20	1.45	0.00	0.32	0.06	175.31

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.20	1.01	2.13	0.00	0.32	0.06	1,141.75

5/6/2008 4:39:36 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (lbs/day, unmitigated)	0.07	0.81	0.68	0.00	0.00	0.00	966.44

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General light industry	0.13	0.20	1.45	0.00	0.32	0.06	175.31
TOTALS (lbs/day, unmitigated)	0.13	0.20	1.45	0.00	0.32	0.06	175.31

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:39:36 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General light industry		6.97	1000 sq ft	2.50	17.42	186.88
					17.42	186.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:39:36 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General light industry				50.0	25.0	25.0

5/6/2008 4:38:48 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.19	0.83	2.23	0.00	0.01	0.01	969.25

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.12	0.18	1.44	0.00	0.32	0.06	185.36

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.31	1.01	3.67	0.00	0.33	0.07	1,154.61

5/6/2008 4:38:48 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.06	0.81	0.68	0.00	0.00	0.00	966.44
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (lbs/day, unmitigated)	0.19	0.83	2.23	0.00	0.01	0.01	969.25

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General light industry	0.12	0.18	1.44	0.00	0.32	0.06	185.36
TOTALS (lbs/day, unmitigated)	0.12	0.18	1.44	0.00	0.32	0.06	185.36

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:38:48 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General light industry		6.97	1000 sq ft	2.50	17.42	186.88
					17.42	186.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:38:48 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General light industry				50.0	25.0	25.0

5/6/2008 4:40:31 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.03	0.15	0.40	0.00	0.00	0.00	176.89

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.02	0.03	0.26	0.00	0.06	0.01	33.22

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.05	0.18	0.66	0.00	0.06	0.01	210.11

5/6/2008 4:40:31 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.15	0.12	0.00	0.00	0.00	176.38
Hearth							
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	0.00						
Architectural Coatings	0.00						
TOTALS (tons/year, unmitigated)	0.03	0.15	0.40	0.00	0.00	0.00	176.89

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General light industry	0.02	0.03	0.26	0.00	0.06	0.01	33.22
TOTALS (tons/year, unmitigated)	0.02	0.03	0.26	0.00	0.06	0.01	33.22

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:40:31 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General light industry		6.97	1000 sq ft	2.50	17.42	186.88
					17.42	186.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:40:31 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
General light industry				50.0	25.0	25.0

5/6/2008 4:49:46 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 Base.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.28	0.42	0.35	0.00	0.00	0.00	499.15

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	12.41	19.87	139.87	0.16	31.39	6.10	16,982.64

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	12.69	20.29	140.22	0.16	31.39	6.10	17,481.79

5/6/2008 4:49:46 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.42	0.35	0.00	0.00	0.00	499.15
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.25						
TOTALS (lbs/day, unmitigated)	0.28	0.42	0.35	0.00	0.00	0.00	499.15

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	12.41	19.87	139.87	0.16	31.39	6.10	16,982.64
TOTALS (lbs/day, unmitigated)	12.41	19.87	139.87	0.16	31.39	6.10	16,982.64

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:49:46 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
					1,886.87	18,170.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:49:46 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

5/6/2008 4:48:20 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 Base.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.40	0.44	1.90	0.00	0.01	0.01	501.96

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	10.79	17.20	137.85	0.18	31.39	6.10	17,960.02

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	11.19	17.64	139.75	0.18	31.40	6.11	18,461.98

5/6/2008 4:48:20 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.42	0.35	0.00	0.00	0.00	499.15
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	0.00						
Architectural Coatings	0.25						
TOTALS (lbs/day, unmitigated)	0.40	0.44	1.90	0.00	0.01	0.01	501.96

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	10.79	17.20	137.85	0.18	31.39	6.10	17,960.02
TOTALS (lbs/day, unmitigated)	10.79	17.20	137.85	0.18	31.39	6.10	17,960.02

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:48:20 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
					1,886.87	18,170.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:48:20 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

5/6/2008 4:50:00 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 Base.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.08	0.08	0.34	0.00	0.00	0.00	91.60

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.07	3.30	25.28	0.03	5.73	1.11	3,218.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.15	3.38	25.62	0.03	5.73	1.11	3,309.85

5/6/2008 4:50:00 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.08	0.06	0.00	0.00	0.00	91.09
Hearth							
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	0.00						
Architectural Coatings	0.05						
TOTALS (tons/year, unmitigated)	0.08	0.08	0.34	0.00	0.00	0.00	91.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	2.07	3.30	25.28	0.03	5.73	1.11	3,218.25
TOTALS (tons/year, unmitigated)	2.07	3.30	25.28	0.03	5.73	1.11	3,218.25

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:50:00 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
					1,886.87	18,170.51

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:50:00 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0

5/6/2008 4:58:28 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.07	0.10	0.09	0.00	0.00	0.00	122.50

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.07	13.05	91.18	0.10	20.55	3.99	11,099.05

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.14	13.15	91.27	0.10	20.55	3.99	11,221.55

5/6/2008 4:58:28 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.10	0.09	0.00	0.00	0.00	122.50
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.06						
TOTALS (lbs/day, unmitigated)	0.07	0.10	0.09	0.00	0.00	0.00	122.50

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Fast food rest. w/ drive thru	7.30	11.83	82.66	0.09	18.63	3.62	10,061.92
Strip mall	0.77	1.22	8.52	0.01	1.92	0.37	1,037.13
TOTALS (lbs/day, unmitigated)	8.07	13.05	91.18	0.10	20.55	3.99	11,099.05

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

5/6/2008 4:58:28 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Fast food rest. w/ drive thru		248.00	1000 sq ft	4.79	1,187.92	10,789.28
Strip mall		21.49	1000 sq ft	5.77	124.00	1,112.63
					1,311.92	11,901.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:58:28 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

5/6/2008 4:58:10 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.32	0.14	3.18	0.00	0.01	0.01	128.12

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	6.97	11.31	89.48	0.12	20.55	3.99	11,739.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	7.29	11.45	92.66	0.12	20.56	4.00	11,867.37

5/6/2008 4:58:10 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.10	0.09	0.00	0.00	0.00	122.50
Hearth							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	0.06						
TOTALS (lbs/day, unmitigated)	0.32	0.14	3.18	0.00	0.01	0.01	128.12

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Fast food rest. w/ drive thru	6.29	10.25	81.13	0.11	18.63	3.62	10,642.27
Strip mall	0.68	1.06	8.35	0.01	1.92	0.37	1,096.98
TOTALS (lbs/day, unmitigated)	6.97	11.31	89.48	0.12	20.55	3.99	11,739.25

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

5/6/2008 4:58:10 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Fast food rest. w/ drive thru		248.00	1000 sq ft	4.79	1,187.92	10,789.28
Strip mall		21.49	1000 sq ft	5.77	124.00	1,112.63
					1,311.92	11,901.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:58:10 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

5/6/2008 4:58:41 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 Base .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.05	0.03	0.58	0.00	0.00	0.00	23.39

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.34	2.17	16.43	0.02	3.75	0.73	2,103.47

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.39	2.20	17.01	0.02	3.75	0.73	2,126.86

5/6/2008 4:58:41 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.00	0.02	0.02	0.00	0.00	0.00	22.36
Hearth							
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	0.00						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.05	0.03	0.58	0.00	0.00	0.00	23.39

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Fast food rest. w/ drive thru	1.21	1.97	14.90	0.02	3.40	0.66	1,906.91
Strip mall	0.13	0.20	1.53	0.00	0.35	0.07	196.56
TOTALS (tons/year, unmitigated)	1.34	2.17	16.43	0.02	3.75	0.73	2,103.47

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

5/6/2008 4:58:41 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Fast food rest. w/ drive thru		248.00	1000 sq ft	4.79	1,187.92	10,789.28
Strip mall		21.49	1000 sq ft	5.77	124.00	1,112.63
					1,311.92	11,901.91

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:58:41 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0

5/6/2008 5:23:33 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Base with add areas.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.50	2.67	2.24	0.00	0.00	0.00	3,201.04

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	83.97	135.28	945.28	1.08	213.04	41.41	115,047.06

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	85.47	137.95	947.52	1.08	213.04	41.41	118,248.10

5/6/2008 5:23:33 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.19	2.67	2.24	0.00	0.00	0.00	3,201.04
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	1.31						
TOTALS (lbs/day, unmitigated)	1.50	2.67	2.24	0.00	0.00	0.00	3,201.04

Area Source Changes to Defaults

5/6/2008 5:23:33 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	12.41	19.87	139.87	0.16	31.39	6.10	16,982.64
Racquetball/health	5.44	8.64	60.32	0.07	13.60	2.64	7,342.14
Quality resturant	2.05	3.31	23.17	0.03	5.22	1.01	2,818.97
Fast food rest. w/ drive thru	21.05	34.17	238.65	0.27	53.80	10.46	29,049.74
Strip mall	29.80	48.10	335.40	0.38	75.68	14.71	40,848.40
Pharmacy/drugstore without drive through	8.48	13.63	95.05	0.11	21.45	4.17	11,575.99
General light industry	0.39	0.54	3.83	0.00	0.85	0.17	463.06
AA4 retail	0.77	1.22	8.52	0.01	1.92	0.37	1,037.13
Bank	3.58	5.80	40.47	0.05	9.13	1.78	4,928.99
TOTALS (lbs/day, unmitigated)	83.97	135.28	945.28	1.08	213.04	41.41	115,047.06

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89

5/6/2008 5:23:33 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Fast food rest. w/ drive thru		716.00	1000 sq ft	4.79	3,429.64	31,149.70
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
General light industry		2.50	1000 sq ft	18.41	46.02	493.62
AA4 retail		21.49	1000 sq ft	5.77	124.00	1,112.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					13,539.09	123,348.99

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0

5/6/2008 5:23:33 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
General light industry				50.0	25.0	25.0
AA4 retail				2.0	1.0	97.0
Bank				2.0	1.0	97.0

5/6/2008 5:23:49 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Base with add areas.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.61	2.86	16.15	0.00	0.05	0.05	3,226.32

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	72.83	117.17	927.97	1.21	213.04	41.41	121,681.88

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	75.44	120.03	944.12	1.21	213.09	41.46	124,908.20

5/6/2008 5:23:49 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.19	2.67	2.24	0.00	0.00	0.00	3,201.04
Hearth							
Landscape	1.11	0.19	13.91	0.00	0.05	0.05	25.28
Consumer Products	0.00						
Architectural Coatings	1.31						
TOTALS (lbs/day, unmitigated)	2.61	2.86	16.15	0.00	0.05	0.05	3,226.32

Area Source Changes to Defaults

5/6/2008 5:23:49 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	10.79	17.20	137.85	0.18	31.39	6.10	17,960.02
Racquetball/health	4.78	7.48	59.20	0.08	13.60	2.64	7,765.61
Quality resturant	1.78	2.87	22.76	0.03	5.22	1.01	2,981.48
Fast food rest. w/ drive thru	18.13	29.59	234.23	0.31	53.80	10.46	30,725.25
Strip mall	25.82	41.67	328.89	0.43	75.68	14.71	43,205.54
Pharmacy/drugstore without drive through	7.38	11.81	93.20	0.12	21.45	4.17	12,243.97
General light industry	0.38	0.46	3.80	0.00	0.85	0.17	489.61
AA4 retail	0.68	1.06	8.35	0.01	1.92	0.37	1,096.98
Bank	3.09	5.03	39.69	0.05	9.13	1.78	5,213.42
TOTALS (lbs/day, unmitigated)	72.83	117.17	927.97	1.21	213.04	41.41	121,681.88

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89

5/6/2008 5:23:49 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Fast food rest. w/ drive thru		716.00	1000 sq ft	4.79	3,429.64	31,149.70
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
General light industry		2.50	1000 sq ft	18.41	46.02	493.62
AA4 retail		21.49	1000 sq ft	5.77	124.00	1,112.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					13,539.09	123,348.99

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0

5/6/2008 5:23:49 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
General light industry				50.0	25.0	25.0
AA4 retail				2.0	1.0	97.0
Bank				2.0	1.0	97.0

5/6/2008 5:24:00 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Base with add areas.urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.48	0.52	2.95	0.00	0.01	0.01	588.80

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	13.96	22.49	170.41	0.21	38.88	7.56	21,803.33

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	14.44	23.01	173.36	0.21	38.89	7.57	22,392.13

5/6/2008 5:24:00 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.04	0.49	0.41	0.00	0.00	0.00	584.19
Hearth							
Landscape	0.20	0.03	2.54	0.00	0.01	0.01	4.61
Consumer Products	0.00						
Architectural Coatings	0.24						
TOTALS (tons/year, unmitigated)	0.48	0.52	2.95	0.00	0.01	0.01	588.80

Area Source Changes to Defaults

5/6/2008 5:24:00 PM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Elementary school	2.07	3.30	25.28	0.03	5.73	1.11	3,218.25
Racquetball/health	0.91	1.44	10.87	0.01	2.48	0.48	1,391.46
Quality resturant	0.34	0.55	4.18	0.01	0.95	0.19	534.23
Fast food rest. w/ drive thru	3.49	5.68	43.02	0.05	9.82	1.91	5,505.43
Strip mall	4.95	8.00	60.42	0.08	13.81	2.69	7,741.62
Pharmacy/drugstore without drive through	1.41	2.27	17.12	0.02	3.91	0.76	2,193.89
General light industry	0.07	0.09	0.70	0.00	0.16	0.03	87.74
AA4 retail	0.13	0.20	1.53	0.00	0.35	0.07	196.56
Bank	0.59	0.96	7.29	0.01	1.67	0.32	934.15
TOTALS (tons/year, unmitigated)	13.96	22.49	170.41	0.21	38.88	7.56	21,803.33

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Elementary school		43.85	1000 sq ft	43.03	1,886.87	18,170.51
Racquetball/health		21.07	1000 sq ft	41.14	866.82	7,872.89

5/6/2008 5:24:00 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Quality resturant		72.72	1000 sq ft	4.52	328.69	3,021.36
Fast food rest. w/ drive thru		716.00	1000 sq ft	4.79	3,429.64	31,149.70
Strip mall		68.96	1000 sq ft	70.82	4,883.75	43,821.86
Pharmacy/drugstore without drive through		43.25	1000 sq ft	32.00	1,384.00	12,418.63
General light industry		2.50	1000 sq ft	18.41	46.02	493.62
AA4 retail		21.49	1000 sq ft	5.77	124.00	1,112.63
Bank		177.50	1000 sq ft	3.32	589.30	5,287.79
					13,539.09	123,348.99

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0

5/6/2008 5:24:00 PM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Elementary school				20.0	10.0	70.0
Racquetball/health				5.0	2.5	92.5
Quality resturant				8.0	4.0	88.0
Fast food rest. w/ drive thru				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
Pharmacy/drugstore without drive through				2.0	1.0	97.0
General light industry				50.0	25.0	25.0
AA4 retail				2.0	1.0	97.0
Bank				2.0	1.0	97.0

8/7/2008 9:58:18 AM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project Operational.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	14.97	10.63	8.32	0.00	0.02	0.02	12,873.38

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	169.92	266.60	1,894.92	2.16	427.84	83.07	229,864.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	184.89	277.23	1,903.24	2.16	427.86	83.09	242,737.38

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.78	10.63	8.32	0.00	0.02	0.02	12,873.38
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	7.70						
Architectural Coatings	6.49						
TOTALS (lbs/day, unmitigated)	14.97	10.63	8.32	0.00	0.02	0.02	12,873.38

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	7.41	10.95	80.39	0.09	17.59	3.42	9,526.63
Racquetball/health	5.90	9.28	65.75	0.07	14.88	2.89	7,988.27
Hotel	9.83	14.71	104.21	0.12	23.59	4.58	12,661.04
Strip mall	73.33	116.71	825.47	0.94	187.01	36.30	100,343.99
General office building	30.27	46.27	332.63	0.38	74.65	14.50	40,233.91
Medical office building	22.43	35.60	252.47	0.29	57.11	11.09	30,664.98
Theater	20.75	33.08	234.00	0.27	53.01	10.29	28,445.18
TOTALS (lbs/day, unmitigated)	169.92	266.60	1,894.92	2.16	427.84	83.07	229,864.00

8/7/2008 9:58:18 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	1.50	6.72	dwelling units	150.00	1,008.00	10,183.62
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
					26,817.15	247,813.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

8/7/2008 9:58:18 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Medical office building				7.0	3.5	89.5

8/7/2008 9:58:18 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Theater				2.0	1.0	97.0

8/7/2008 9:57:52 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project Operational.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	15.83	10.77	19.14	0.00	0.06	0.06	12,893.04

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	149.49	230.28	1,868.64	2.43	427.84	83.07	243,193.71

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	165.32	241.05	1,887.78	2.43	427.90	83.13	256,086.75

8/7/2008 9:57:52 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.78	10.63	8.32	0.00	0.02	0.02	12,873.38
Hearth							
Landscape	0.86	0.14	10.82	0.00	0.04	0.04	19.66
Consumer Products	7.70						
Architectural Coatings	6.49						
TOTALS (lbs/day, unmitigated)	15.83	10.77	19.14	0.00	0.06	0.06	12,893.04

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	6.80	9.45	79.77	0.10	17.59	3.42	10,074.40
Racquetball/health	5.19	8.02	64.75	0.08	14.88	2.89	8,451.92
Hotel	9.05	12.71	102.63	0.13	23.59	4.58	13,395.90
Strip mall	63.67	100.83	812.23	1.06	187.01	36.30	106,170.84
General office building	27.27	39.94	330.21	0.43	74.65	14.50	42,559.43
Medical office building	19.52	30.75	248.80	0.33	57.11	11.09	32,444.27
Theater	17.99	28.58	230.25	0.30	53.01	10.29	30,096.95
TOTALS (lbs/day, unmitigated)	149.49	230.28	1,868.64	2.43	427.84	83.07	243,193.71

8/7/2008 9:57:52 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	1.50	6.72	dwelling units	150.00	1,008.00	10,183.62
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
					26,817.15	247,813.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

8/7/2008 9:57:52 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Medical office building				7.0	3.5	89.5

8/7/2008 9:57:52 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Theater				2.0	1.0	97.0

8/7/2008 9:58:37 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project Operational.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.88	1.97	3.49	0.00	0.01	0.01	2,352.98

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	28.53	44.24	342.64	0.42	78.07	15.16	43,571.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	31.41	46.21	346.13	0.42	78.08	15.17	45,924.95

8/7/2008 9:58:37 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.14	1.94	1.52	0.00	0.00	0.00	2,349.39
Hearth							
Landscape	0.16	0.03	1.97	0.00	0.01	0.01	3.59
Consumer Products	1.40						
Architectural Coatings	1.18						
TOTALS (tons/year, unmitigated)	2.88	1.97	3.49	0.00	0.01	0.01	2,352.98

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	1.28	1.82	14.60	0.02	3.21	0.62	1,805.26
Racquetball/health	0.99	1.54	11.88	0.01	2.72	0.53	1,514.27
Hotel	1.70	2.44	18.83	0.02	4.30	0.84	2,400.05
Strip mall	12.21	19.37	149.04	0.19	34.13	6.62	19,021.71
General office building	5.16	7.67	60.41	0.07	13.62	2.65	7,625.63
Medical office building	3.74	5.91	45.63	0.06	10.42	2.02	5,812.84
Theater	3.45	5.49	42.25	0.05	9.67	1.88	5,392.21
TOTALS (tons/year, unmitigated)	28.53	44.24	342.64	0.42	78.07	15.16	43,571.97

8/7/2008 9:58:37 AM

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	1.50	6.72	dwelling units	150.00	1,008.00	10,183.62
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
					26,817.15	247,813.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0

8/7/2008 9:58:37 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5
Medical office building				7.0	3.5	89.5

8/7/2008 9:58:37 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Theater				2.0	1.0	97.0

5/6/2008 4:43:49 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.10	0.38	0.16	0.00	0.00	0.00	488.12

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.71	2.53	18.34	0.02	4.00	0.78	2,177.13

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.81	2.91	18.50	0.02	4.00	0.78	2,665.25

5/6/2008 4:43:49 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.38	0.16	0.00	0.00	0.00	488.12
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	2.00						
Architectural Coatings	0.07						
TOTALS (lbs/day, unmitigated)	2.10	0.38	0.16	0.00	0.00	0.00	488.12

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	1.71	2.53	18.34	0.02	4.00	0.78	2,177.13
TOTALS (lbs/day, unmitigated)	1.71	2.53	18.34	0.02	4.00	0.78	2,177.13

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:43:49 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	2.44	5.87	dwelling units	39.00	228.93	2,312.83
					228.93	2,312.83

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:43:49 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						

5/6/2008 4:42:59 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	2.22	0.40	1.71	0.00	0.01	0.01	490.93

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.58	2.19	18.14	0.02	4.00	0.78	2,301.53

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	3.80	2.59	19.85	0.02	4.01	0.79	2,792.46

5/6/2008 4:42:59 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.38	0.16	0.00	0.00	0.00	488.12
Hearth							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	2.00						
Architectural Coatings	0.07						
TOTALS (lbs/day, unmitigated)	2.22	0.40	1.71	0.00	0.01	0.01	490.93

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	1.58	2.19	18.14	0.02	4.00	0.78	2,301.53
TOTALS (lbs/day, unmitigated)	1.58	2.19	18.14	0.02	4.00	0.78	2,301.53

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:42:59 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	2.44	5.87	dwelling units	39.00	228.93	2,312.83
					228.93	2,312.83

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:42:59 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

5/6/2008 4:44:32 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 1 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.41	0.07	0.31	0.00	0.00	0.00	89.59

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.30	0.42	3.32	0.00	0.73	0.14	412.46

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.71	0.49	3.63	0.00	0.73	0.14	502.05

5/6/2008 4:44:32 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.07	0.03	0.00	0.00	0.00	89.08
Hearth							
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	0.37						
Architectural Coatings	0.01						
TOTALS (tons/year, unmitigated)	0.41	0.07	0.31	0.00	0.00	0.00	89.59

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	0.30	0.42	3.32	0.00	0.73	0.14	412.46
TOTALS (tons/year, unmitigated)	0.30	0.42	3.32	0.00	0.73	0.14	412.46

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

5/6/2008 4:44:32 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	2.44	5.87	dwelling units	39.00	228.93	2,312.83
					228.93	2,312.83

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9

5/6/2008 4:44:32 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

5/6/2008 4:53:55 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.28	2.12	1.20	0.00	0.00	0.00	2,655.37

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	17.48	26.96	191.92	0.22	42.56	8.28	23,092.38

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	25.76	29.08	193.12	0.22	42.56	8.28	25,747.75

5/6/2008 4:53:55 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.12	1.20	0.00	0.00	0.00	2,655.37
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	7.34						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	8.28	2.12	1.20	0.00	0.00	0.00	2,655.37

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	7.12	10.63	77.00	0.09	16.78	3.27	9,138.74
Strip mall	4.32	6.85	47.74	0.05	10.77	2.09	5,814.42
General office building	6.04	9.48	67.18	0.08	15.01	2.92	8,139.22
TOTALS (lbs/day, unmitigated)	17.48	26.96	191.92	0.22	42.56	8.28	23,092.38

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

5/6/2008 4:53:55 PM

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Strip mall		19.31	1000 sq ft	36.00	695.16	6,237.67
General office building		15.25	1000 sq ft	56.00	854.00	8,691.58
					2,510.12	24,637.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:53:55 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

5/6/2008 4:53:44 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	8.65	2.18	5.84	0.00	0.02	0.02	2,663.80

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	15.69	23.33	189.41	0.25	42.56	8.28	24,417.62

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	24.34	25.51	195.25	0.25	42.58	8.30	27,081.42

5/6/2008 4:53:44 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.16	2.12	1.20	0.00	0.00	0.00	2,655.37
Hearth							
Landscape	0.37	0.06	4.64	0.00	0.02	0.02	8.43
Consumer Products	7.34						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	8.65	2.18	5.84	0.00	0.02	0.02	2,663.80

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	6.53	9.20	76.14	0.10	16.78	3.27	9,660.95
Strip mall	3.81	5.93	46.81	0.06	10.77	2.09	6,149.94
General office building	5.35	8.20	66.46	0.09	15.01	2.92	8,606.73
TOTALS (lbs/day, unmitigated)	15.69	23.33	189.41	0.25	42.56	8.28	24,417.62

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

5/6/2008 4:53:44 PM

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Strip mall		19.31	1000 sq ft	36.00	695.16	6,237.67
General office building		15.25	1000 sq ft	56.00	854.00	8,691.58
					2,510.12	24,637.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:53:44 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

5/6/2008 4:54:05 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 3 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	1.58	0.40	1.07	0.00	0.00	0.00	486.15

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.98	4.48	34.72	0.05	7.77	1.51	4,375.60

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	4.56	4.88	35.79	0.05	7.77	1.51	4,861.75

5/6/2008 4:54:05 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.03	0.39	0.22	0.00	0.00	0.00	484.61
Hearth							
Landscape	0.07	0.01	0.85	0.00	0.00	0.00	1.54
Consumer Products	1.34						
Architectural Coatings	0.14						
TOTALS (tons/year, unmitigated)	1.58	0.40	1.07	0.00	0.00	0.00	486.15

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	1.23	1.77	13.95	0.02	3.06	0.60	1,731.36
Strip mall	0.73	1.14	8.60	0.01	1.97	0.38	1,101.95
General office building	1.02	1.57	12.17	0.02	2.74	0.53	1,542.29
TOTALS (tons/year, unmitigated)	2.98	4.48	34.72	0.05	7.77	1.51	4,375.60

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

5/6/2008 4:54:05 PM

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Strip mall		19.31	1000 sq ft	36.00	695.16	6,237.67
General office building		15.25	1000 sq ft	56.00	854.00	8,691.58
					2,510.12	24,637.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 4:54:05 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

5/6/2008 5:02:37 PM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	0.85	0.95	0.80	0.00	0.00	0.00	1,139.60

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	12.87	20.16	142.42	0.16	31.89	6.20	17,271.97

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	13.72	21.11	143.22	0.16	31.89	6.20	18,411.57

5/6/2008 5:02:37 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.07	0.95	0.80	0.00	0.00	0.00	1,139.60
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	0.00						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	0.85	0.95	0.80	0.00	0.00	0.00	1,139.60

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	2.52	4.00	27.88	0.03	6.29	1.22	3,395.26
General office building	10.35	16.16	114.54	0.13	25.60	4.98	13,876.71
TOTALS (lbs/day, unmitigated)	12.87	20.16	142.42	0.16	31.89	6.20	17,271.97

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

5/6/2008 5:02:37 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Strip mall		19.33	1000 sq ft	21.00	405.93	3,642.41
General office building		13.00	1000 sq ft	112.00	1,456.00	14,818.44
					1,861.93	18,460.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 5:02:37 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

5/6/2008 5:01:55 PM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	1.10	0.99	3.89	0.00	0.01	0.01	1,145.22

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	11.42	17.44	140.65	0.19	31.89	6.20	18,264.96

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	12.52	18.43	144.54	0.19	31.90	6.21	19,410.18

5/6/2008 5:01:55 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.07	0.95	0.80	0.00	0.00	0.00	1,139.60
Hearth							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	0.00						
Architectural Coatings	0.78						
TOTALS (lbs/day, unmitigated)	1.10	0.99	3.89	0.00	0.01	0.01	1,145.22

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	2.22	3.46	27.34	0.04	6.29	1.22	3,591.18
General office building	9.20	13.98	113.31	0.15	25.60	4.98	14,673.78
TOTALS (lbs/day, unmitigated)	11.42	17.44	140.65	0.19	31.89	6.20	18,264.96

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

5/6/2008 5:01:55 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Strip mall		19.33	1000 sq ft	21.00	405.93	3,642.41
General office building		13.00	1000 sq ft	112.00	1,456.00	14,818.44
					1,861.93	18,460.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 5:01:55 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

5/6/2008 5:04:10 PM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Add Area 4 .urb924

Project Name: The Plaza at the Glen - Existing Shopping Center - Run 2

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	0.19	0.18	0.71	0.00	0.00	0.00	209.01

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.17	3.34	25.77	0.04	5.82	1.13	3,272.95

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.36	3.52	26.48	0.04	5.82	1.13	3,481.96

5/6/2008 5:04:10 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.01	0.17	0.15	0.00	0.00	0.00	207.98
Hearth							
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	0.00						
Architectural Coatings	0.14						
TOTALS (tons/year, unmitigated)	0.19	0.18	0.71	0.00	0.00	0.00	209.01

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Strip mall	0.42	0.66	5.02	0.01	1.15	0.22	643.47
General office building	1.75	2.68	20.75	0.03	4.67	0.91	2,629.48
TOTALS (tons/year, unmitigated)	2.17	3.34	25.77	0.04	5.82	1.13	3,272.95

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

5/6/2008 5:04:10 PM

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Strip mall		19.33	1000 sq ft	21.00	405.93	3,642.41
General office building		13.00	1000 sq ft	112.00	1,456.00	14,818.44
					1,861.93	18,460.85

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.3	0.4	99.4	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.1	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.7	0.9	99.1	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.6	0.0	81.2	18.8
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.6	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.8	53.6	46.4	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

5/6/2008 5:04:10 PM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

8/7/2008 10:04:30 AM

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project with add areas.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	26.18	13.92	10.34	0.00	0.03	0.03	16,951.27

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	199.84	312.51	2,223.05	2.53	501.44	97.37	269,461.67

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	226.02	326.43	2,233.39	2.53	501.47	97.40	286,412.94

8/7/2008 10:04:30 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.03	13.92	10.34	0.00	0.03	0.03	16,951.27
Hearth							
Landscaping - No Winter Emissions							
Consumer Products	17.03						
Architectural Coatings	8.12						
TOTALS (lbs/day, unmitigated)	26.18	13.92	10.34	0.00	0.03	0.03	16,951.27

Area Source Changes to Defaults

8/7/2008 10:04:30 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	7.06	10.44	76.64	0.09	16.77	3.26	9,082.06
Condo/townhouse general	7.41	10.95	80.39	0.09	17.59	3.42	9,526.63
Condo/townhouse high rise	1.70	2.49	18.26	0.02	3.99	0.78	2,163.62
Racquetball/health	5.90	9.28	65.75	0.07	14.88	2.89	7,988.27
Hotel	9.83	14.71	104.21	0.12	23.59	4.58	12,661.04
Strip mall	73.33	116.71	825.47	0.94	187.01	36.30	100,343.99
General office building	30.27	46.27	332.63	0.38	74.65	14.50	40,233.91
Medical office building	22.43	35.60	252.47	0.29	57.11	11.09	30,664.98
Theater	20.75	33.08	234.00	0.27	53.01	10.29	28,445.18
AA3 retail	4.28	6.72	47.53	0.05	10.77	2.09	5,777.97
AA3 office	5.30	8.26	58.39	0.07	13.23	2.57	7,098.20
AA4 retail	2.50	3.92	27.76	0.03	6.29	1.22	3,373.97
AA4 office	9.08	14.08	99.55	0.11	22.55	4.38	12,101.85
TOTALS (lbs/day, unmitigated)	199.84	312.51	2,223.05	2.53	501.44	97.37	269,461.67

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

8/7/2008 10:04:30 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Condo/townhouse general	9.38	6.72	dwelling units	150.00	1,008.00	10,183.62
Condo/townhouse high rise	0.61	5.87	dwelling units	39.00	228.93	2,312.83
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
AA3 retail		19.31	1000 sq ft	36.00	695.16	6,237.67
AA3 office		15.25	1000 sq ft	56.00	854.00	7,662.94
AA4 retail		19.33	1000 sq ft	21.00	405.93	3,642.41
AA4 office		13.00	1000 sq ft	112.00	1,456.00	13,064.69
					31,418.13	290,442.78

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3

8/7/2008 10:04:30 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

8/7/2008 10:04:30 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Medical office building				7.0	3.5	89.5
Theater				2.0	1.0	97.0
AA3 retail				2.0	1.0	97.0
AA3 office				2.0	1.0	97.0
AA4 retail				2.0	1.0	97.0
AA4 office				2.0	1.0	97.0

8/7/2008 10:04:13 AM

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project with add areas.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	27.78	14.19	30.43	0.00	0.10	0.10	16,987.78

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	176.30	269.93	2,192.31	2.86	501.44	97.37	285,084.37

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	204.08	284.12	2,222.74	2.86	501.54	97.47	302,072.15

8/7/2008 10:04:13 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	1.03	13.92	10.34	0.00	0.03	0.03	16,951.27
Hearth							
Landscape	1.60	0.27	20.09	0.00	0.07	0.07	36.51
Consumer Products	17.03						
Architectural Coatings	8.12						
TOTALS (lbs/day, unmitigated)	27.78	14.19	30.43	0.00	0.10	0.10	16,987.78

Area Source Changes to Defaults

8/7/2008 10:04:13 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	6.49	9.01	76.05	0.10	16.77	3.26	9,604.26
Condo/townhouse general	6.80	9.45	79.77	0.10	17.59	3.42	10,074.40
Condo/townhouse high rise	1.57	2.15	18.12	0.02	3.99	0.78	2,288.03
Racquetball/health	5.19	8.02	64.75	0.08	14.88	2.89	8,451.92
Hotel	9.05	12.71	102.63	0.13	23.59	4.58	13,395.90
Strip mall	63.67	100.83	812.23	1.06	187.01	36.30	106,170.84
General office building	27.27	39.94	330.21	0.43	74.65	14.50	42,559.43
Medical office building	19.52	30.75	248.80	0.33	57.11	11.09	32,444.27
Theater	17.99	28.58	230.25	0.30	53.01	10.29	30,096.95
AA3 retail	3.77	5.81	46.77	0.06	10.77	2.09	6,113.49
AA3 office	4.69	7.13	57.46	0.08	13.23	2.57	7,510.39
AA4 retail	2.20	3.39	27.31	0.04	6.29	1.22	3,569.90
AA4 office	8.09	12.16	97.96	0.13	22.55	4.38	12,804.59
TOTALS (lbs/day, unmitigated)	176.30	269.93	2,192.31	2.86	501.44	97.37	285,084.37

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Temperature (F): 75 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

8/7/2008 10:04:13 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Condo/townhouse general	9.38	6.72	dwelling units	150.00	1,008.00	10,183.62
Condo/townhouse high rise	0.61	5.87	dwelling units	39.00	228.93	2,312.83
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
AA3 retail		19.31	1000 sq ft	36.00	695.16	6,237.67
AA3 office		15.25	1000 sq ft	56.00	854.00	7,662.94
AA4 retail		19.33	1000 sq ft	21.00	405.93	3,642.41
AA4 office		13.00	1000 sq ft	112.00	1,456.00	13,064.69
					31,418.13	290,442.78

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3

8/7/2008 10:04:13 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

8/7/2008 10:04:13 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Medical office building				7.0	3.5	89.5
Theater				2.0	1.0	97.0
AA3 retail				2.0	1.0	97.0
AA3 office				2.0	1.0	97.0
AA4 retail				2.0	1.0	97.0
AA4 office				2.0	1.0	97.0

8/7/2008 10:05:20 AM

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: J:\Projects\The Plaza at the Glen 2007-075\AQ\URBEMIS Runs\Operational\Project with add areas.urb924

Project Name: The Plaza at the Glen Proposed Project Operational Emissions

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	5.07	2.59	5.56	0.00	0.01	0.01	3,100.27

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	33.61	51.86	401.96	0.49	91.51	17.76	51,077.53

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	38.68	54.45	407.52	0.49	91.52	17.77	54,177.80

8/7/2008 10:05:20 AM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.19	2.54	1.89	0.00	0.00	0.00	3,093.61
Hearth							
Landscape	0.29	0.05	3.67	0.00	0.01	0.01	6.66
Consumer Products	3.11						
Architectural Coatings	1.48						
TOTALS (tons/year, unmitigated)	5.07	2.59	5.56	0.00	0.01	0.01	3,100.27

Area Source Changes to Defaults

8/7/2008 10:05:20 AM

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Apartments low rise	1.22	1.73	13.91	0.02	3.06	0.59	1,721.01
Condo/townhouse general	1.28	1.82	14.60	0.02	3.21	0.62	1,805.26
Condo/townhouse high rise	0.29	0.41	3.31	0.00	0.73	0.14	410.00
Racquetball/health	0.99	1.54	11.88	0.01	2.72	0.53	1,514.27
Hotel	1.70	2.44	18.83	0.02	4.30	0.84	2,400.05
Strip mall	12.21	19.37	149.04	0.19	34.13	6.62	19,021.71
General office building	5.16	7.67	60.41	0.07	13.62	2.65	7,625.63
Medical office building	3.74	5.91	45.63	0.06	10.42	2.02	5,812.84
Theater	3.45	5.49	42.25	0.05	9.67	1.88	5,392.21
AA3 retail	0.72	1.12	8.58	0.01	1.97	0.38	1,095.30
AA3 office	0.89	1.37	10.54	0.01	2.41	0.47	1,345.57
AA4 retail	0.42	0.65	5.01	0.01	1.15	0.22	639.59
AA4 office	1.54	2.34	17.97	0.02	4.12	0.80	2,294.09
TOTALS (tons/year, unmitigated)	33.61	51.86	401.96	0.49	91.51	17.76	51,077.53

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2013 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

8/7/2008 10:05:20 AM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Apartments low rise	8.94	6.72	dwelling units	143.00	960.96	9,708.39
Condo/townhouse general	9.38	6.72	dwelling units	150.00	1,008.00	10,183.62
Condo/townhouse high rise	0.61	5.87	dwelling units	39.00	228.93	2,312.83
Racquetball/health		21.09	1000 sq ft	45.00	949.05	8,619.75
Hotel		6.54	rooms	230.00	1,504.20	13,661.90
Strip mall		42.36	1000 sq ft	285.00	12,072.60	108,327.44
General office building		9.44	1000 sq ft	450.00	4,248.00	43,234.02
Medical office building		36.13	1000 sq ft	100.00	3,613.00	33,078.82
Theater		48.89	1000 sq ft	70.00	3,422.30	30,708.30
AA3 retail		19.31	1000 sq ft	36.00	695.16	6,237.67
AA3 office		15.25	1000 sq ft	56.00	854.00	7,662.94
AA4 retail		19.33	1000 sq ft	21.00	405.93	3,642.41
AA4 office		13.00	1000 sq ft	112.00	1,456.00	13,064.69
					31,418.13	290,442.78

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.3	0.4	99.4	0.2
Light Truck < 3750 lbs	6.8	1.5	97.0	1.5
Light Truck 3751-5750 lbs	23.0	0.4	99.6	0.0
Med Truck 5751-8500 lbs	10.1	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5	0.0	86.7	13.3

8/7/2008 10:05:20 AM

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	56.5	43.5	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Racquetball/health				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Strip mall				2.0	1.0	97.0
General office building				35.0	17.5	47.5

8/7/2008 10:05:20 AM

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Medical office building				7.0	3.5	89.5
Theater				2.0	1.0	97.0
AA3 retail				2.0	1.0	97.0
AA3 office				2.0	1.0	97.0
AA4 retail				2.0	1.0	97.0
AA4 office				2.0	1.0	97.0

TAHA AIR QUALITY ASSUMPTIONS & INPUTS

Project:	The Plaza at the Glen
Project Number:	2007-075
Existing Year:	2008
Analysis Year:	2013
Existing VMT (from EMFAC2007):	218,863,000
Project VMT (from EMFAC2007):	225,754,000
EMFAC Model:	EMFAC2007
Existing CO Emissions:	1,385.110
Project Year CO Emissions:	950.000
Persistence Factor:	0.7
Existing 8-Hr Ambient CO Concentration (ppm):	2.80
Existing 1-Hr Ambient CO Concentration (ppm):	4.00

EMFAC Assumptions	
Season/Month:	January
Temperature:	47^{o}F
Speed:	20 mph
Source: Transportation Project-Level Carbon Monoxide Protocol, 12/1997	

CAL3QHC INPUTS			
Project Scenario:	Existing	Future Pre-Project	Future Project
Project Year:	2008	2013	2013
Average Time (seconds):	60	60	60
Surface Roughness Factor:	100	100	100
Emissions Factor - Free Flow Link (g/veh-mile):	5.084	3.241	3.241
Emissions Factor - Idle (g/veh-hr):	5.562	5.538	5.538
Saturation Flow Rate (veh/hr):	1600	1600	1600
Receptor Height (Z-Coordinate) (feet):	6	6	6
Wind Speed (m/s):	1	1	1
Stability Class:	F	F	F
Ambient 1-Hr CO Concentration (ppm):	4.00	2.83	2.83

	CAL3QHC names				
Analyzed Intersections:	**Existing**	**Existing Project**	**No Project**	**Project**	**Scenario:**
Coldwater Canyon Ave / Hamlin St	cohaex	coha	cohanp	cohapa	PM
Ethel Ave / Victory Blvd	etviex	etvi	etvinp	etvipa	PM
Morse Ave / Victory Blvd	moviex	movi	movinp	movipa	PM
Coldwater Canyon Ave / Victory Blvd	coviex	covi	covinp	covipa	PM
170 Fwy SB (South Side) / Victory Blvd	17ssviex	17ssvi	17ssvinp	17ssvipa	PM
Whitsett Ave / Victory Blvd	whviex	whvi	whvinp	whvipa	PM
Whitsett Ave / Vanowen St	whvaex	whva	whvanp	whvapa	PM
Coldwater Canyon Ave / Vanowen St	covaex	cova	covanp	covapa	PM
170 Fwy SB (North Side) / Victory Blvd	17visnex	17visn	17visnnp	17visnpa	PM
Woodman Ave / Victory Blvd	woviex	wovi	wovinp	wovipa	PM

Title   : The Plaza at Glen
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/08/05 16:16:53
Scen Year: 2008 -- All model years in the range 1965 to 2008 selected
Season   : January
Area   : Los Angeles County Average
I/M Stat : Enhanced Interim (2005) -- Using I/M schedule for area 59 Los Angeles (SC)
Emissions: Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Heavy Duty Trucks: Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	53488.	3319590.	10057.	3383130.	28066.	1711100.	13597.	1752760.	9384.	660504.	23882.	693770.	5831.	53389.	59220.	73865.	133086.	4283.	135702.	6102740.
VMT/1000	878.	114657.	222.	115757.	665.	63801.	439.	64905.	211.	26031.	1266.	27508.	56.	1395.	1451.	7774.	9225.	467.	1001.	218863.
Trips	216127.	21008800.	55414.	21280400.	115372.	10857700.	83427.	11056500.	84436.	6489850.	287862.	6862150.	102177.	714404.	816581.	1324740.	2141330.	17131.	271376.	41628900.
Total Organic Gas Emissions																				
Run Exh	7.33	12.61	0.06	19.99	5.75	9.11	0.06	14.91	1.97	6.63	0.26	8.85	0.51	1.61	2.12	10.09	12.21	0.66	4.59	61.22
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.13	0.00	0.04	0.05	0.77	0.82	0.00	0.00	0.95
Start Ex	1.61	15.11	0.00	16.72	0.86	8.47	0.00	9.33	0.78	7.61	0.00	8.39	1.79	1.65	3.45	0.00	3.45	0.02	0.96	38.86
Total Ex	8.93	27.72	0.06	36.71	6.61	17.57	0.06	24.24	2.75	14.37	0.26	17.38	2.31	3.30	5.61	10.86	16.48	0.69	5.55	101.03
Diurnal	0.14	1.24	0.00	1.38	0.07	0.58	0.00	0.65	0.01	0.21	0.00	0.22	0.00	0.01	0.01	0.00	0.01	0.00	0.11	2.37
Hot Soak	0.95	4.40	0.00	5.36	0.52	2.04	0.00	2.55	0.11	0.88	0.00	0.99	0.07	0.03	0.10	0.00	0.10	0.00	0.20	9.20
Running	4.83	14.57	0.00	19.40	1.69	11.97	0.00	13.66	0.34	6.33	0.00	6.67	0.57	0.40	0.98	0.00	0.98	0.02	1.03	41.76
Resting	0.09	0.78	0.00	0.87	0.05	0.37	0.00	0.42	0.01	0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.06	1.50
Total	14.95	48.71	0.06	63.72	8.94	32.53	0.06	41.53	3.21	21.93	0.26	25.39	2.96	3.74	6.70	10.86	17.56	0.71	6.95	155.86
Carbon Monoxide Emissions																				
Run Exh	82.73	295.04	0.22	377.99	62.91	228.13	0.34	291.37	33.28	116.02	1.20	150.50	14.80	26.59	41.39	38.03	79.42	4.50	55.27	959.06
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.73	0.02	0.77	0.03	0.23	0.26	3.21	3.47	0.00	0.00	4.24
Start Ex	7.50	166.27	0.00	173.77	4.07	103.63	0.00	107.70	4.52	91.52	0.00	96.03	12.89	27.88	40.77	0.00	40.77	0.33	3.21	421.82
Total Ex	90.22	461.32	0.22	551.76	66.98	331.76	0.34	399.07	37.81	208.27	1.22	247.30	27.72	54.71	82.42	41.24	123.66	4.83	58.48	1385.11
Oxides of Nitrogen Emissions																				
Run Exh	4.71	33.76	0.37	38.85	3.54	34.84	0.74	39.12	1.55	23.02	8.91	33.48	0.42	6.91	7.33	136.64	143.97	9.78	1.58	266.78
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.06	0.07	0.00	0.00	0.00	4.96	4.96	0.00	0.00	5.03
Start Ex	0.36	9.49	0.00	9.86	0.19	7.74	0.00	7.93	0.13	10.25	0.00	10.38	0.22	2.85	3.06	0.00	3.06	0.03	0.10	31.37
Total Ex	5.07	43.26	0.37	48.70	3.73	42.58	0.74	47.05	1.69	33.28	8.97	43.94	0.64	9.76	10.40	141.60	152.00	9.81	1.68	303.18
Carbon Dioxide Emissions (000)																				
Run Exh	0.52	49.54	0.09	50.15	0.39	34.16	0.17	34.73	0.16	19.22	0.72	20.10	0.04	1.04	1.08	14.77	15.85	1.21	0.15	122.19
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.03	0.00	0.01	0.01	0.30	0.30	0.00	0.00	0.33
Start Ex	0.05	1.69	0.00	1.74	0.03	1.08	0.00	1.10	0.02	0.62	0.00	0.64	0.02	0.03	0.05	0.00	0.05	0.00	0.02	3.55
Total Ex	0.57	51.23	0.09	51.89	0.42	35.24	0.17	35.83	0.18	19.86	0.73	20.77	0.07	1.08	1.14	15.06	16.21	1.21	0.16	126.07
PM10 Emissions																				
Run Exh	0.03	1.40	0.04	1.47	0.03	1.56	0.03	1.62	0.01	0.65	0.06	0.72	0.00	0.01	0.02	5.72	5.74	0.15	0.05	9.74
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.12
Start Ex	0.00	0.13	0.00	0.13	0.00	0.13	0.00	0.13	0.00	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.33
Total Ex	0.04	1.53	0.04	1.61	0.03	1.69	0.03	1.75	0.01	0.71	0.06	0.78	0.00	0.02	0.02	5.85	5.86	0.15	0.05	10.20
TireWear	0.01	1.01	0.00	1.02	0.01	0.56	0.00	0.57	0.00	0.25	0.02	0.27	0.00	0.02	0.02	0.23	0.25	0.00	0.00	2.11
BrakeWr	0.01	1.59	0.00	1.60	0.01	0.88	0.01	0.90	0.00	0.36	0.02	0.38	0.00	0.02	0.02	0.19	0.21	0.01	0.01	3.10
Total	0.06	4.13	0.04	4.23	0.04	3.13	0.04	3.22	0.01	1.31	0.10	1.42	0.00	0.06	0.06	6.26	6.32	0.16	0.06	15.42
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.01	0.50	0.00	0.51	0.01	0.34	0.00	0.35	0.00	0.19	0.01	0.20	0.00	0.01	0.01	0.14	0.16	0.01	0.00	1.23
Fuel Consumption (000 gallons)																				
Gasoline	75.47	5327.65	0.00	5403.13	55.79	3666.61	0.00	3722.39	25.21	2071.53	0.00	2096.75	11.87	120.29	132.16	0.00	132.16	9.71	27.67	11391.81
Diesel	0.00	0.00	8.03	8.03	0.00	0.00	15.19	15.19	0.00	0.00	65.40	65.40	0.00	0.00	0.00	1355.56	1355.56	101.16	0.00	1545.34

Title   : The Plaza at Glen
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/08/05 16:16:53
Scen Year: 2013 -- All model years in the range 1969 to 2013 selected
Season   : January
Area   : Los Angeles County Average
I/M Stat : Enhanced Interim (2005) -- Using I/M schedule for area 59 Los Angeles (SC)
Emissions: Tons Per Day

	Light Duty Passenger Cars				Light Duty Trucks				Medium Duty Trucks				Heavy Duty Trucks: Gasoline Trucks			Heavy Duty Trucks: Diesel Trucks	Heavy Duty Trucks: Total HD Trucks	Urban Buses	Motor-cycles	All Vehicles
	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Diesel	Total	Non-cat	Cat	Total					
Vehicles	15510.	3593490.	5302.	3614300.	10888.	1854930.	9830.	1875640.	5142.	715542.	27955.	748639.	1995.	58723.	60718.	83069.	143788.	4481.	145466.	6532320.
VMT/1000	245.	118828.	110.	119183.	251.	66138.	294.	66683.	108.	26572.	1383.	28063.	19.	1390.	1409.	8854.	10263.	489.	1074.	225754.
Trips	60362.	22586400.	26999.	22673800.	42553.	11644700.	58131.	11745400.	41468.	6984910.	341597.	7367980.	40225.	722974.	763200.	1483240.	2246440.	17925.	290903.	44342400.
Total Organic Gas Emissions																				
Run Exh	2.08	8.00	0.03	10.11	2.26	6.63	0.03	8.92	1.08	4.80	0.25	6.13	0.16	1.12	1.28	7.80	9.08	0.64	4.14	39.03
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.14	0.00	0.04	0.04	0.69	0.73	0.00	0.00	0.87
Start Ex	0.44	9.60	0.00	10.04	0.32	6.16	0.00	6.48	0.38	6.06	0.00	6.44	0.62	1.41	2.03	0.00	2.03	0.03	0.91	25.93
Total Ex	2.52	17.60	0.03	20.15	2.58	12.79	0.03	15.40	1.46	10.99	0.26	12.71	0.79	2.57	3.36	8.49	11.84	0.67	5.05	65.82
Diurnal	0.04	1.06	0.00	1.10	0.03	0.58	0.00	0.61	0.00	0.21	0.00	0.22	0.00	0.00	0.01	0.00	0.01	0.00	0.11	2.04
Hot Soak	0.26	4.22	0.00	4.48	0.19	2.27	0.00	2.46	0.05	0.96	0.00	1.01	0.03	0.03	0.05	0.00	0.05	0.00	0.14	8.15
Running	1.22	11.24	0.00	12.46	0.48	11.73	0.00	12.22	0.16	6.34	0.00	6.49	0.19	0.40	0.59	0.00	0.59	0.02	0.65	32.43
Resting	0.03	0.84	0.00	0.87	0.02	0.48	0.00	0.50	0.00	0.17	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.06	1.61
Total	4.07	34.97	0.03	39.06	3.30	27.84	0.03	31.18	1.67	18.68	0.26	20.61	1.01	3.00	4.01	8.49	12.50	0.69	6.01	110.05
Carbon Monoxide Emissions																				
Run Exh	22.47	208.60	0.11	231.17	23.59	176.78	0.22	200.59	16.90	88.57	1.30	106.77	4.47	18.44	22.91	31.09	54.00	4.19	41.20	637.92
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.76	0.03	0.80	0.01	0.23	0.24	3.34	3.59	0.00	0.00	4.38
Start Ex	2.04	117.49	0.00	119.53	1.49	80.92	0.00	82.41	2.20	71.81	0.00	74.01	4.03	23.67	27.70	0.00	27.70	0.35	3.70	307.69
Total Ex	24.51	326.09	0.11	350.71	25.08	257.70	0.22	283.01	19.11	161.14	1.32	181.57	8.51	42.34	50.85	34.43	85.28	4.54	44.89	950.00
Oxides of Nitrogen Emissions																				
Run Exh	1.29	21.68	0.18	23.15	1.32	24.31	0.50	26.12	0.81	16.16	7.01	23.98	0.12	4.64	4.76	97.10	101.86	9.09	1.56	185.77
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.08	0.00	0.00	0.00	5.98	5.98	0.00	0.00	6.07
Start Ex	0.10	6.63	0.00	6.73	0.07	5.93	0.00	6.00	0.07	9.81	0.00	9.87	0.06	2.49	2.56	0.00	2.56	0.03	0.11	25.31
Total Ex	1.39	28.32	0.18	29.89	1.39	30.24	0.50	32.13	0.87	25.97	7.09	33.94	0.18	7.14	7.32	103.08	110.40	9.12	1.67	217.14
Carbon Dioxide Emissions (000)																				
Run Exh	0.15	51.12	0.04	51.31	0.15	35.71	0.11	35.98	0.08	19.74	0.79	20.61	0.01	1.04	1.06	16.94	17.99	1.21	0.19	127.29
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.00	0.01	0.01	0.33	0.34	0.00	0.00	0.37
Start Ex	0.01	1.79	0.00	1.80	0.01	1.15	0.00	1.16	0.01	0.67	0.00	0.68	0.01	0.03	0.04	0.00	0.04	0.00	0.02	3.70
Total Ex	0.16	52.91	0.04	53.11	0.16	36.87	0.11	37.14	0.09	20.44	0.79	21.32	0.02	1.08	1.10	17.27	18.37	1.21	0.20	131.36
PM10 Emissions																				
Run Exh	0.01	1.64	0.02	1.67	0.01	1.95	0.02	1.98	0.00	0.80	0.05	0.86	0.00	0.01	0.01	4.19	4.21	0.14	0.03	8.89
Idle Exh	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.09
Start Ex	0.00	0.15	0.00	0.15	0.00	0.16	0.00	0.16	0.00	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39
Total Ex	0.01	1.79	0.02	1.81	0.01	2.11	0.02	2.14	0.00	0.88	0.06	0.93	0.00	0.02	0.02	4.28	4.30	0.14	0.04	9.36
TireWear	0.00	1.05	0.00	1.05	0.00	0.58	0.00	0.59	0.00	0.25	0.02	0.27	0.00	0.02	0.02	0.26	0.28	0.00	0.00	2.20
BrakeWr	0.00	1.64	0.00	1.65	0.00	0.91	0.00	0.92	0.00	0.37	0.02	0.39	0.00	0.02	0.02	0.22	0.24	0.01	0.01	3.21
Total	0.02	4.48	0.02	4.51	0.02	3.61	0.03	3.65	0.01	1.50	0.09	1.60	0.00	0.06	0.06	4.76	4.82	0.15	0.05	14.78
Lead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOx	0.00	0.51	0.00	0.52	0.00	0.36	0.00	0.36	0.00	0.20	0.01	0.21	0.00	0.01	0.01	0.16	0.18	0.01	0.00	1.28
Fuel Consumption (000 gallons)																				
Gasoline	21.08	5474.38	0.00	5495.46	21.16	3819.78	0.00	3840.95	12.96	2121.51	0.00	2134.47	4.04	118.22	122.26	0.00	122.26	11.66	29.50	11634.31
Diesel	0.00	0.00	3.93	3.93	0.00	0.00	10.14	10.14	0.00	0.00	71.41	71.41	0.00	0.00	0.00	1554.18	1554.18	98.80	0.00	1738.46

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Title    : The Plaza at Glen
Version  : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/08/05 16:19:06
Scen Year: 2008 -- All model years in the range 1965 to 2008 selected
Season   : January
Area     : Los Angeles
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Year: 2008 -- Model Years 1965 to 2008 Inclusive -- January
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average Los Angeles County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Total Organic Gases Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	4.001	11.830	0.000	0.000	1.063
20	0.231	0.281	0.418	1.655	1.581	3.717	0.355

Pollutant Name: Carbon Monoxide Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	23.201	55.173	0.000	0.000	5.562
20	4.023	5.051	6.056	11.334	10.455	30.801	5.084

Pollutant Name: Oxides of Nitrogen Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	3.518	76.314	0.000	0.000	3.883
20	0.411	0.676	1.150	14.302	19.799	1.405	1.262

Pollutant Name: Carbon Dioxide Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	915.999	4825.389	0.000	0.000	337.998
20	464.271	571.389	786.235	1748.980	2386.006	151.224	600.665

Pollutant Name: Sulfur Dioxide Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	0.009	0.046	0.000	0.000	0.003
20	0.005	0.006	0.008	0.017	0.023	0.002	0.006

Pollutant Name: PM10 Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	0.040	1.672	0.000	0.000	0.080
20	0.016	0.031	0.033	0.677	0.353	0.034	0.053

Title   : The Plaza at Glen
Version : Emfac2007 V2.3 Nov 1 2006
Run Date : 2008/08/05 16:19:06
Scen Year: 2013 -- All model years in the range 1969 to 2013 selected
Season   : January
Area   : Los Angeles

****

Year: 2013 -- Model Years 1969 to 2013 Inclusive -- January
Emfac2007 Emission Factors: V2.3 Nov 1 2006

County Average   Los Angeles   County Average

Table 1: Running Exhaust Emissions (grams/mile; grams/idle-hour)

Pollutant Name: Total Organic Gases   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	3.968	10.032	0.000	0.000	0.999
20	0.110	0.161	0.279	1.107	1.466	3.139	0.214

Pollutant Name: Carbon Monoxide   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	23.173	52.415	0.000	0.000	5.538
20	2.367	3.398	4.211	6.493	9.274	23.174	3.241

Pollutant Name: Oxides of Nitrogen   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	3.812	82.909	0.000	0.000	4.464
20	0.238	0.443	0.803	9.457	17.576	1.340	0.861

Pollutant Name: Carbon Dioxide   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	956.840	4928.542	0.000	0.000	360.862
20	459.193	572.521	784.771	1784.348	2272.959	161.843	602.465

Pollutant Name: Sulfur Dioxide   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	0.010	0.047	0.000	0.000	0.004
20	0.004	0.006	0.008	0.017	0.022	0.002	0.006

Pollutant Name: PM10   Temperature: 46F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
0	0.000	0.000	0.040	1.144	0.000	0.000	0.060
20	0.017	0.036	0.038	0.409	0.318	0.024	0.045

CO Concentrations
The Plaza at the Glen 2007-075

2008 Existing

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour
Coldwater Canyon Ave / Hamlin St	PM	0.6	5	3.2
Coldwater Canyon Ave / Vanowen St	PM	1	5	3.5
Coldwater Canyon Ave / Victory Blvd	PM	1.1	5	3.6
Ethel Ave / Victory Blvd	PM	0.9	5	3.4
Morse Ave / Victory Blvd	PM	0.6	5	3.2
Whitsett Ave / Vanowen St	PM	1	5	3.5
Whitsett Ave / Victory Blvd	PM	1.2	5	3.6
Woodman Ave / Victory Blvd	PM	1.3	5	3.7
170 Fwy SB (North Side) / Victory Blvd	PM	0.8	5	3.4
170 Fwy SB (South Side) / Victory Blvd	PM	0.9	5	3.4

2013 No Project

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour
Coldwater Canyon Ave / Hamlin St	PM	0.5	4	2.4
Coldwater Canyon Ave / Vanowen St	PM	0.8	4	2.6
Coldwater Canyon Ave / Victory Blvd	PM	1	4	2.7
Ethel Ave / Victory Blvd	PM	0.8	4	2.6
Morse Ave / Victory Blvd	PM	0.5	4	2.4
Whitsett Ave / Vanowen St	PM	0.8	4	2.6
Whitsett Ave / Victory Blvd	PM	1.0	4	2.7
Woodman Ave / Victory Blvd	PM	1.0	4	2.7
170 Fwy SB (North Side) / Victory Blvd	PM	0.7	4	2.5
170 Fwy SB (South Side) / Victory Blvd	PM	0.7	4	2.5

2013 Project

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour
Coldwater Canyon Ave / Hamlin St	PM	0.5	4	2.4
Coldwater Canyon Ave / Vanowen St	PM	0.8	4	2.6
Coldwater Canyon Ave / Victory Blvd	PM	1.1	4	2.8
Ethel Ave / Victory Blvd	PM	0.9	4	2.6
Morse Ave / Victory Blvd	PM	1.1	4	2.8
Whitsett Ave / Vanowen St	PM	0.8	4	2.6
Whitsett Ave / Victory Blvd	PM	1.1	4	2.8
Woodman Ave / Victory Blvd	PM	1.1	4	2.8
170 Fwy SB (North Side) / Victory Blvd	PM	0.7	4	2.5
170 Fwy SB (South Side) / Victory Blvd	PM	0.8	4	2.6

2013 Project + Add Areas

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour
Coldwater Canyon Ave / Hamlin St	PM	0.6	4	2.4
Coldwater Canyon Ave / Vanowen St	PM	0.8	4	2.6
Coldwater Canyon Ave / Victory Blvd	PM	1.2	4	2.8
Ethel Ave / Victory Blvd	PM	1	4	2.7
Morse Ave / Victory Blvd	PM	1.1	4	2.8
Whitsett Ave / Vanowen St	PM	0.8	4	2.6
Whitsett Ave / Victory Blvd	PM	1.1	4	2.8
Woodman Ave / Victory Blvd	PM	1.1	4	2.8
170 Fwy SB (North Side) / Victory Blvd	PM	0.7	4	2.5
170 Fwy SB (South Side) / Victory Blvd	PM	0.8	4	2.6

2013 Base + Add Area 1

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour	
Coldwater Canyon Ave / Hamlin St	PM	0.5	4	2.4	0.5
Coldwater Canyon Ave / Vanowen St	PM	0.9	4	2.6	0.8
Coldwater Canyon Ave / Victory Blvd	PM	1.1	4	2.8	1
Ethel Ave / Victory Blvd	PM	0.9	4	2.6	0.8
Morse Ave / Victory Blvd	PM	1	4	2.7	0.5
Whitsett Ave / Vanowen St	PM	0.9	4	2.6	0.8
Whitsett Ave / Victory Blvd	PM	1.1	4	2.8	1.0
Woodman Ave / Victory Blvd	PM	1.2	4	2.8	1.0
170 Fwy SB (North Side) / Victory Blvd	PM	0.8	4	2.6	0.7
170 Fwy SB (South Side) / Victory Blvd	PM	0.8	4	2.6	0.7

2013 Base + Add Area 3

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour	
Coldwater Canyon Ave / Hamlin St	PM	0.5	4	2.4	0.5
Coldwater Canyon Ave / Vanowen St	PM	0.9	4	2.6	0.8
Coldwater Canyon Ave / Victory Blvd	PM	1.1	4	2.8	1
Ethel Ave / Victory Blvd	PM	0.9	4	2.6	0.8
Morse Ave / Victory Blvd	PM	0.9	4	2.6	0.5
Whitsett Ave / Vanowen St	PM	0.9	4	2.6	0.8
Whitsett Ave / Victory Blvd	PM	1.1	4	2.8	1.0
Woodman Ave / Victory Blvd	PM	1.2	4	2.8	1.0
170 Fwy SB (North Side) / Victory Blvd	PM	0.8	4	2.6	0.7
170 Fwy SB (South Side) / Victory Blvd	PM	0.8	4	2.6	0.7

2013 Base + Add Area 4

Intersection	Peak Time	Value	Parts Per Million 1-hour	Parts Per Million 8-hour	
Coldwater Canyon Ave / Hamlin St	PM	0.5	4	2.4	0.5
Coldwater Canyon Ave / Vanowen St	PM	0.9	4	2.6	0.8
Coldwater Canyon Ave / Victory Blvd	PM	1.1	4	2.8	1
Ethel Ave / Victory Blvd	PM	0.9	4	2.6	0.8
Morse Ave / Victory Blvd	PM	1	4	2.7	0.5
Whitsett Ave / Vanowen St	PM	0.9	4	2.6	0.8
Whitsett Ave / Victory Blvd	PM	1.1	4	2.8	1.0
Woodman Ave / Victory Blvd	PM	1.2	4	2.8	1.0
170 Fwy SB (North Side) / Victory Blvd	PM	0.8	4	2.6	0.7
170 Fwy SB (South Side) / Victory Blvd	PM	0.8	4	2.6	0.7
State Standard			20	9	

JOB: 170 Fwy SB(North Side) Victory Exist PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 10: 9: 0

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	264.	5.1	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	215.	5.1	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	2425.	5.1	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	2474.	5.1	.0	44.0		
5. sbq	494.0	536.0	494.0	2290.4	1754.	360.	AG	13.	100.0	.0	12.0	2.49	89.1
6. wbq	500.0	518.0	526.5	518.0	27.	90.	AG	4.	100.0	.0	36.0	.62	1.3

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	51	3.0	264	1600	5.56	3	3
6. wbq	60	6	3.0	2425	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 170 Fwy SB(North Side) Victory Exist PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.3	.6	.7
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.2	.0	.6	.4
40.	.1	.0	.4	.4
50.	.0	.0	.4	.5
60.	.0	.0	.5	.6
70.	.0	.0	.6	.7
80.	.0	.0	.8	.8
90.	.4	.4	.4	.4
100.	.8	.8	.0	.0
110.	.6	.7	.0	.0
120.	.5	.6	.0	.0
130.	.4	.5	.0	.0
140.	.5	.4	.0	.0
150.	.4	.4	.0	.0
160.	.3	.3	.0	.0
170.	.3	.3	.0	.0
180.	.4	.4	.0	.0
190.	.3	.3	.0	.0
200.	.3	.5	.0	.0
210.	.4	.5	.0	.0
220.	.4	.6	.0	.0
230.	.5	.6	.0	.0
240.	.5	.5	.0	.0
250.	.7	.6	.0	.0
260.	.8	.8	.0	.0
270.	.3	.3	.3	.3
280.	.0	.0	.8	.8
290.	.0	.0	.7	.6
300.	.0	.0	.5	.5
310.	.0	.1	.5	.5
320.	.0	.2	.4	.4
330.	.0	.2	.4	.6
340.	.0	.3	.3	.6
350.	.0	.3	.3	.6
360.	.2	.3	.6	.7
MAX	.8	.8	.8	.8
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC3 .

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: 179 Fwy SB(North Side) Victory NoProj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 13:56:10

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	313.	3.2	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	323.	3.2	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	3082.	3.2	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	3072.	3.2	.0	44.0		
5. sbq	494.0	536.0	494.0	2809.7	2274.	360.	AG	13.	100.0	.0	12.0	2.95	115.5
6. wbq	500.0	518.0	539.3	518.0	39.	90.	AG	4.	100.0	.0	36.0	.79	2.0

DATE : 8/ 6/ 8
TIME : 13:56:10

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	51	3.0	313	1600	5.54	3	3
6. wbq	60	6	3.0	3082	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 179 Fwy SB(North Side) Victory NoProj PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.2	.4	.5
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.0	.0	.3	.3
40.	.0	.0	.4	.3
50.	.0	.0	.3	.4
60.	.0	.0	.4	.4
70.	.0	.0	.5	.6
80.	.0	.0	.7	.7
90.	.3	.3	.3	.3
100.	.7	.7	.0	.0
110.	.5	.6	.0	.0
120.	.4	.4	.0	.0
130.	.3	.4	.0	.0
140.	.4	.3	.0	.0
150.	.3	.3	.0	.0
160.	.3	.3	.0	.0
170.	.3	.3	.0	.0
180.	.3	.3	.0	.0
190.	.3	.3	.0	.0
200.	.3	.3	.0	.0
210.	.3	.3	.0	.0
220.	.3	.4	.0	.0
230.	.4	.4	.0	.0
240.	.4	.4	.0	.0
250.	.5	.5	.0	.0
260.	.6	.6	.0	.0
270.	.2	.3	.2	.3
280.	.0	.0	.6	.6
290.	.0	.0	.5	.5
300.	.0	.0	.4	.4
310.	.0	.0	.4	.4
320.	.0	.0	.3	.4
330.	.0	.1	.3	.3
340.	.0	.3	.3	.5
350.	.0	.3	.3	.6
360.	.1	.2	.4	.5
MAX	.7	.7	.7	.7
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF   .70 PPM OCCURRED AT RECEPTOR REC3 .

JOB: 179 Fwy SB(North Side) Victory Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14: 9:35

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	358.	3.2	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	323.	3.2	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	3161.	3.2	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	3196.	3.2	.0	44.0		
5. sbq	494.0	536.0	494.0	3286.6	2751.	360.	AG	13.	100.0	.0	12.0	3.38	139.7
6. wbq	500.0	518.0	543.7	518.0	44.	90.	AG	4.	100.0	.0	36.0	.81	2.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	51	3.0	358	1600	5.54	3	3
6. wbq	60	6	3.0	3161	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 179 Fwy SB(North Side) Victory Proj PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.2	.5	.6
10.	*	.3	.0	.6	.3
20.	*	.3	.0	.5	.3
30.	*	.1	.0	.4	.3
40.	*	.0	.0	.4	.3
50.	*	.0	.0	.3	.4
60.	*	.0	.0	.5	.5
70.	*	.0	.0	.5	.6
80.	*	.0	.0	.7	.7
90.	*	.3	.3	.3	.3
100.	*	.7	.7	.0	.0
110.	*	.5	.6	.0	.0
120.	*	.5	.5	.0	.0
130.	*	.3	.4	.0	.0
140.	*	.4	.3	.0	.0
150.	*	.4	.3	.0	.0
160.	*	.3	.3	.0	.0
170.	*	.3	.3	.0	.0
180.	*	.3	.3	.0	.0
190.	*	.3	.3	.0	.0
200.	*	.3	.3	.0	.0
210.	*	.3	.3	.0	.0
220.	*	.3	.4	.0	.0
230.	*	.4	.4	.0	.0
240.	*	.4	.4	.0	.0
250.	*	.5	.5	.0	.0
260.	*	.6	.7	.0	.0
270.	*	.3	.3	.3	.3
280.	*	.0	.0	.6	.7
290.	*	.0	.0	.5	.5
300.	*	.0	.0	.4	.4
310.	*	.0	.0	.4	.4
320.	*	.0	.0	.3	.4
330.	*	.0	.2	.3	.3
340.	*	.0	.3	.3	.5
350.	*	.0	.3	.3	.6
360.	*	.1	.2	.5	.6
MAX	*	.7	.7	.7	.7
DEGR.	*	100	100	80	80

THE HIGHEST CONCENTRATION OF .70 PPM OCCURRED AT RECEPTOR REC3 .

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/21/ 8
TIME : 18:22:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	302.	3.8	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	313.	3.8	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	2979.	3.8	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	2968.	3.8	.0	44.0		
5. sbq	494.0	536.0	494.0	2983.4	2447.	360.	AG	13.	100.0	.0	12.0	3.82	124.3
6. wbq	500.0	518.0	528.6	518.0	29.	90.	AG	4.	100.0	.0	36.0	.74	1.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	52	3.0	302	1600	5.55	3	3
6. wbq	60	5	3.0	2979	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.2	.5	.6
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.2	.0	.4	.3
40.	.0	.0	.4	.4
50.	.0	.0	.4	.4
60.	.0	.0	.5	.5
70.	.0	.0	.6	.6
80.	.0	.0	.8	.8
90.	.4	.3	.4	.3
100.	.8	.8	.0	.0
110.	.6	.6	.0	.0
120.	.5	.5	.0	.0
130.	.4	.4	.0	.0
140.	.4	.4	.0	.0
150.	.4	.3	.0	.0
160.	.3	.3	.0	.0
170.	.3	.3	.0	.0
180.	.3	.3	.0	.0
190.	.3	.3	.0	.0
200.	.3	.4	.0	.0
210.	.4	.5	.0	.0
220.	.4	.5	.0	.0
230.	.4	.5	.0	.0
240.	.5	.5	.0	.0
250.	.6	.6	.0	.0
260.	.7	.7	.0	.0
270.	.3	.3	.3	.3
280.	.0	.0	.7	.7
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.1	.4	.4
330.	.0	.2	.4	.4
340.	.0	.3	.3	.6
350.	.0	.3	.3	.6
360.	.1	.2	.5	.6
MAX	.8	.8	.8	.8
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC3 .

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/21/ 8
TIME : 18:29:59

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	309.	3.8	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	313.	3.8	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	2991.	3.8	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	2987.	3.8	.0	44.0		
5. sbq	494.0	536.0	494.0	3058.1	2522.	360.	AG	13.	100.0	.0	12.0	3.91	128.1
6. wbq	500.0	518.0	529.0	518.0	29.	90.	AG	4.	100.0	.0	36.0	.75	1.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	52	3.0	309	1600	5.55	3	3
6. wbq	60	5	3.0	2991	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.2	.5	.6
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.2	.0	.4	.3
40.	.0	.0	.4	.4
50.	.0	.0	.4	.4
60.	.0	.0	.5	.5
70.	.0	.0	.6	.7
80.	.0	.0	.8	.8
90.	.4	.3	.4	.3
100.	.8	.8	.0	.0
110.	.6	.7	.0	.0
120.	.5	.5	.0	.0
130.	.4	.4	.0	.0
140.	.4	.4	.0	.0
150.	.4	.3	.0	.0
160.	.3	.3	.0	.0
170.	.3	.3	.0	.0
180.	.3	.3	.0	.0
190.	.3	.3	.0	.0
200.	.3	.4	.0	.0
210.	.4	.5	.0	.0
220.	.4	.5	.0	.0
230.	.4	.5	.0	.0
240.	.5	.5	.0	.0
250.	.6	.6	.0	.0
260.	.7	.7	.0	.0
270.	.3	.3	.3	.3
280.	.0	.0	.7	.7
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.1	.4	.4
330.	.0	.2	.4	.4
340.	.0	.3	.3	.6
350.	.0	.3	.3	.6
360.	.1	.2	.5	.6
MAX	.8	.8	.8	.8
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC3 .

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/21/ 8
TIME : 18:34:18

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	301.	3.8	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	313.	3.8	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	2978.	3.8	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	2966.	3.8	.0	44.0		
5. sbq	494.0	536.0	494.0	2972.7	2437.	360.	AG	13.	100.0	.0	12.0	3.81	123.8
6. wbq	500.0	518.0	528.5	518.0	28.	90.	AG	4.	100.0	.0	36.0	.74	1.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	52	3.0	301	1600	5.55	3	3
6. wbq	60	5	3.0	2978	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 170 Fwy SB(North Side) Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.2	.5	.6
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.2	.0	.4	.3
40.	.0	.0	.4	.4
50.	.0	.0	.4	.4
60.	.0	.0	.5	.5
70.	.0	.0	.6	.6
80.	.0	.0	.8	.8
90.	.4	.3	.4	.3
100.	.8	.8	.0	.0
110.	.6	.6	.0	.0
120.	.5	.5	.0	.0
130.	.4	.4	.0	.0
140.	.4	.4	.0	.0
150.	.4	.3	.0	.0
160.	.3	.3	.0	.0
170.	.3	.3	.0	.0
180.	.3	.3	.0	.0
190.	.3	.3	.0	.0
200.	.3	.4	.0	.0
210.	.4	.5	.0	.0
220.	.4	.5	.0	.0
230.	.4	.5	.0	.0
240.	.5	.5	.0	.0
250.	.6	.6	.0	.0
260.	.7	.7	.0	.0
270.	.3	.3	.3	.3
280.	.0	.0	.7	.7
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.1	.4	.4
330.	.0	.2	.4	.4
340.	.0	.3	.3	.6
350.	.0	.3	.3	.6
360.	.1	.2	.5	.6
MAX	.8	.8	.8	.8
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC3 .

JOB: 179 Fwy SB(North Side) Victory PA+AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14:13:55

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	367.	3.2	.0	32.0		
2. nbd	500.0	500.0	500.0	1000.0	500.	360.	AG	323.	3.2	.0	32.0		
3. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	3177.	3.2	.0	56.0		
4. wbd	500.0	518.0	.0	518.0	500.	270.	AG	3221.	3.2	.0	44.0		
5. sbq	494.0	536.0	494.0	3382.0	2846.	360.	AG	13.	100.0	.0	12.0	3.46	144.6
6. wbq	500.0	518.0	544.8	518.0	45.	90.	AG	4.	100.0	.0	36.0	.81	2.3

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. sbq	60	51	3.0	367	1600	5.54	3	3
6. wbq	60	6	3.0	3177	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	468.0	556.0	6.0
2. ne 10 ft	520.0	556.0	6.0
3. sw 10 ft	468.0	480.0	6.0
4. se 10 ft	520.0	480.0	6.0

JOB: 179 Fwy SB(North Side) Victory PA+AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.2	.5	.6
10.	*	.3	.0	.6	.3
20.	*	.3	.0	.5	.3
30.	*	.1	.0	.4	.3
40.	*	.0	.0	.4	.3
50.	*	.0	.0	.4	.4
60.	*	.0	.0	.5	.5
70.	*	.0	.0	.5	.6
80.	*	.0	.0	.7	.7
90.	*	.3	.3	.3	.3
100.	*	.7	.7	.0	.0
110.	*	.5	.6	.0	.0
120.	*	.5	.5	.0	.0
130.	*	.4	.4	.0	.0
140.	*	.4	.3	.0	.0
150.	*	.4	.3	.0	.0
160.	*	.3	.3	.0	.0
170.	*	.3	.3	.0	.0
180.	*	.3	.3	.0	.0
190.	*	.3	.3	.0	.0
200.	*	.3	.3	.0	.0
210.	*	.3	.3	.0	.0
220.	*	.3	.4	.0	.0
230.	*	.4	.4	.0	.0
240.	*	.4	.4	.0	.0
250.	*	.5	.5	.0	.0
260.	*	.6	.7	.0	.0
270.	*	.3	.3	.3	.3
280.	*	.0	.0	.6	.7
290.	*	.0	.0	.5	.5
300.	*	.0	.0	.4	.4
310.	*	.0	.0	.4	.4
320.	*	.0	.0	.3	.4
330.	*	.0	.2	.3	.3
340.	*	.0	.3	.3	.5
350.	*	.0	.3	.3	.6
360.	*	.1	.2	.5	.6
MAX	*	.7	.7	.7	.7
DEGR.	*	100	100	80	80

THE HIGHEST CONCENTRATION OF .70 PPM OCCURRED AT RECEPTOR REC3 .

JOB: 170 Fwy SB (South Side) Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 11:50: 7

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	280.	5.1	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	630.	5.1	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2230.	5.1	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1880.	5.1	.0	44.0		
5. nbq	506.0	464.0	506.0	-1460.0	1924.	180.	AG	13.	100.0	.0	12.0	2.64	97.7
6. ebq	500.0	482.0	475.6	482.0	24.	270.	AG	4.	100.0	.0	36.0	.57	1.2

TIME : 11:50: 7

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	51	3.0	280	1600	5.56	3	3
6. ebq	60	6	3.0	2230	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory Exist PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.3
10.	.0	.0	.4	.3
20.	.0	.0	.4	.3
30.	.0	.0	.5	.3
40.	.0	.0	.5	.3
50.	.0	.0	.6	.3
60.	.0	.0	.5	.4
70.	.0	.0	.6	.5
80.	.0	.0	.7	.6
90.	.3	.2	.4	.2
100.	.6	.6	.1	.0
110.	.5	.5	.1	.0
120.	.4	.4	.1	.0
130.	.5	.3	.2	.0
140.	.4	.3	.2	.0
150.	.6	.3	.3	.0
160.	.6	.3	.4	.0
170.	.8	.3	.5	.0
180.	.7	.6	.4	.3
190.	.3	.7	.0	.4
200.	.3	.6	.0	.4
210.	.3	.5	.0	.2
220.	.4	.5	.0	.2
230.	.4	.5	.0	.2
240.	.5	.5	.0	.1
250.	.6	.6	.0	.1
260.	.8	.8	.0	.1
270.	.3	.4	.3	.5
280.	.0	.0	.8	.9
290.	.0	.0	.6	.7
300.	.0	.0	.5	.6
310.	.0	.0	.4	.6
320.	.0	.0	.4	.6
330.	.0	.0	.3	.4
340.	.0	.0	.3	.3
350.	.0	.0	.3	.3
360.	.0	.0	.3	.3
MAX	.8	.8	.8	.9
DEGR.	170	260	280	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC4 .

JOB: 170 Fwy SB (South Side) Victory No Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14:21:19

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	396.	3.2	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	713.	3.2	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2800.	3.2	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2483.	3.2	.0	44.0		
5. nbq	506.0	464.0	506.0	-2689.3	3153.	180.	AG	13.	100.0	.0	12.0	3.74	160.2
6. ebq	500.0	482.0	469.4	482.0	31.	270.	AG	4.	100.0	.0	36.0	.71	1.6

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	51	3.0	396	1600	5.54	3	3
6. ebq	60	6	3.0	2800	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory NoProj PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.3	.2
40.	.0	.0	.5	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.3
70.	.0	.0	.5	.4
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.4	.1	.0
120.	.3	.3	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.2	.0
150.	.4	.2	.2	.0
160.	.5	.2	.4	.0
170.	.7	.2	.4	.0
180.	.6	.5	.2	.2
190.	.3	.6	.0	.3
200.	.3	.4	.0	.3
210.	.3	.5	.0	.2
220.	.3	.4	.0	.2
230.	.3	.4	.0	.1
240.	.4	.3	.0	.1
250.	.5	.5	.0	.1
260.	.6	.6	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.6	.7
290.	.0	.0	.5	.6
300.	.0	.0	.4	.4
310.	.0	.0	.3	.4
320.	.0	.0	.3	.5
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.6	.6	.7
DEGR.	170	190	80	280

THE HIGHEST CONCENTRATION OF .70 PPM OCCURRED AT RECEPTOR REC1 .

JOB: 170 Fwy SB (South Side) Victory Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14:25:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	396.	3.2	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	805.	3.2	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	3052.	3.2	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2643.	3.2	.0	44.0		
5. nbq	506.0	464.0	506.0	-2401.1	2865.	180.	AG	12.	100.0	.0	12.0	2.98	145.5
6. ebq	500.0	482.0	454.8	482.0	45.	270.	AG	5.	100.0	.0	36.0	.80	2.3

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	50	3.0	396	1600	5.54	3	3
6. ebq	60	7	3.0	3052	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory Proj PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.3	.3
40.	.0	.0	.5	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.4
70.	.0	.0	.5	.4
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.4	.1	.0
120.	.3	.4	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.2	.0
150.	.4	.3	.2	.0
160.	.6	.2	.4	.0
170.	.7	.2	.4	.0
180.	.7	.5	.3	.2
190.	.3	.6	.0	.4
200.	.3	.4	.0	.3
210.	.3	.5	.0	.2
220.	.3	.5	.0	.2
230.	.4	.4	.0	.1
240.	.4	.3	.0	.1
250.	.6	.5	.0	.1
260.	.7	.7	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.7	.8
290.	.0	.0	.6	.6
300.	.0	.0	.4	.4
310.	.0	.0	.4	.4
320.	.0	.0	.3	.6
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.7	.7	.8
DEGR.	170	260	280	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: 170 Fwy SB (South Side) Victory Base + Add Areas 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 12:56:34

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	87.	3.8	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	686.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2706.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2107.	3.8	.0	44.0		
5. nbq	506.0	464.0	506.0	-245.9	710.	180.	AG	13.	100.0	.0	12.0	3.35	36.1
6. ebq	500.0	482.0	485.2	482.0	15.	270.	AG	2.	100.0	.0	36.0	.65	.8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	54	3.0	87	1600	5.55	3	3
6. ebq	60	3	3.0	2706	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.4	.2
40.	.0	.0	.4	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.3
70.	.0	.0	.5	.4
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.4	.1	.0
120.	.3	.3	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.1	.0
150.	.4	.2	.1	.0
160.	.5	.2	.3	.0
170.	.6	.2	.3	.0
180.	.6	.4	.3	.2
190.	.3	.5	.0	.3
200.	.3	.3	.0	.2
210.	.3	.4	.0	.1
220.	.3	.4	.0	.1
230.	.4	.5	.0	.1
240.	.5	.4	.0	.1
250.	.6	.5	.0	.1
260.	.7	.7	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.7	.8
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.0	.3	.4
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.7	.7	.8
DEGR.	260	260	280	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: 170 Fwy SB (South Side) Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 13: 1:11

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	87.	3.8	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	698.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2738.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2127.	3.8	.0	44.0		
5. nbq	506.0	464.0	506.0	-245.9	710.	180.	AG	13.	100.0	.0	12.0	3.35	36.1
6. ebq	500.0	482.0	485.0	482.0	15.	270.	AG	2.	100.0	.0	36.0	.66	.8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	54	3.0	87	1600	5.55	3	3
6. ebq	60	3	3.0	2738	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.4	.3
40.	.0	.0	.4	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.3
70.	.0	.0	.5	.4
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.4	.1	.0
120.	.3	.3	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.1	.0
150.	.4	.3	.1	.0
160.	.5	.2	.3	.0
170.	.6	.2	.4	.0
180.	.6	.4	.3	.2
190.	.3	.5	.0	.3
200.	.3	.3	.0	.2
210.	.3	.4	.0	.1
220.	.3	.4	.0	.1
230.	.4	.5	.0	.1
240.	.5	.4	.0	.1
250.	.6	.5	.0	.1
260.	.7	.7	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.7	.8
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.0	.3	.4
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.7	.7	.8
DEGR.	260	260	280	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: 170 Fwy SB (South Side) Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 13: 4:52

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	87.	3.8	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	697.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2736.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2126.	3.8	.0	44.0		
5. nbq	506.0	464.0	506.0	-245.9	710.	180.	AG	13.	100.0	.0	12.0	3.35	36.1
6. ebq	500.0	482.0	485.0	482.0	15.	270.	AG	2.	100.0	.0	36.0	.66	.8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	54	3.0	87	1600	5.55	3	3
6. ebq	60	3	3.0	2736	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.4	.3
40.	.0	.0	.4	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.3
70.	.0	.0	.5	.4
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.4	.1	.0
120.	.3	.3	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.1	.0
150.	.4	.3	.1	.0
160.	.5	.2	.3	.0
170.	.6	.2	.4	.0
180.	.6	.4	.3	.2
190.	.3	.5	.0	.3
200.	.3	.3	.0	.2
210.	.3	.4	.0	.1
220.	.3	.4	.0	.1
230.	.4	.5	.0	.1
240.	.5	.4	.0	.1
250.	.6	.5	.0	.1
260.	.7	.7	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.7	.8
290.	.0	.0	.6	.6
300.	.0	.0	.5	.5
310.	.0	.0	.4	.5
320.	.0	.0	.3	.4
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.7	.7	.8
DEGR.	260	260	280	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: 170 Fwy SB (South Side) Victory PA+AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14:30: 8

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	396.	3.2	.0	32.0		
2. sbd	500.0	500.0	500.0	.0	500.	180.	AG	828.	3.2	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	3117.	3.2	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2685.	3.2	.0	44.0		
5. nbq	506.0	464.0	506.0	-2689.3	3153.	180.	AG	13.	100.0	.0	12.0	3.74	160.2
6. ebq	500.0	482.0	458.8	482.0	41.	270.	AG	4.	100.0	.0	36.0	.80	2.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
5. nbq	60	51	3.0	396	1600	5.54	3	3
6. ebq	60	6	3.0	3117	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	480.0	520.0	6.0
2. ne 10 ft	532.0	520.0	6.0
3. sw 10 ft	480.0	444.0	6.0
4. se 10 ft	532.0	444.0	6.0

JOB: 170 Fwy SB (South Side) Victory PA+AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.2
10.	.0	.0	.4	.2
20.	.0	.0	.4	.2
30.	.0	.0	.3	.3
40.	.0	.0	.5	.3
50.	.0	.0	.5	.3
60.	.0	.0	.4	.4
70.	.0	.0	.5	.5
80.	.0	.0	.6	.5
90.	.2	.2	.3	.2
100.	.5	.5	.1	.0
110.	.4	.5	.1	.0
120.	.3	.4	.1	.0
130.	.4	.3	.1	.0
140.	.4	.3	.2	.0
150.	.4	.3	.2	.0
160.	.6	.2	.4	.0
170.	.7	.2	.5	.0
180.	.7	.5	.3	.2
190.	.3	.6	.0	.4
200.	.3	.4	.0	.3
210.	.3	.5	.0	.2
220.	.3	.5	.0	.2
230.	.4	.4	.0	.1
240.	.5	.3	.0	.1
250.	.6	.5	.0	.1
260.	.7	.7	.0	.1
270.	.3	.3	.3	.4
280.	.0	.0	.7	.8
290.	.0	.0	.6	.6
300.	.0	.0	.5	.4
310.	.0	.0	.4	.4
320.	.0	.0	.3	.6
330.	.0	.0	.3	.4
340.	.0	.0	.3	.2
350.	.0	.0	.3	.2
360.	.0	.0	.3	.2
MAX	.7	.7	.7	.8
DEGR.	170	260	280	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: Coldwater Canyon and Hamlin Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 10:32:37

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	722.	5.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	739.	5.8	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	943.	5.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	917.	5.8	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	48.	5.8	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	46.	5.8	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	48.	5.8	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	59.	5.8	.0	32.0		
9. nbq	512.0	488.0	512.0	482.1	6.	180.	AG	1.	100.0	.0	24.0	.26	.3
10. sbq	488.0	512.0	488.0	519.7	8.	360.	AG	1.	100.0	.0	24.0	.34	.4
11. ebq	476.0	494.0	451.9	494.0	24.	270.	AG	27.	100.0	.0	24.0	.92	1.2
12. wbq	524.0	506.0	548.1	506.0	24.	90.	AG	27.	100.0	.0	24.0	.92	1.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	722	1600	5.56	3	3
10. sbq	60	3	3.0	943	1600	5.56	3	3
11. ebq	60	54	3.0	48	1600	5.56	3	3
12. wbq	60	54	3.0	48	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.3	.3
10.	.5	.0	.6	.0
20.	.5	.0	.5	.0
30.	.3	.0	.5	.0
40.	.3	.0	.3	.0
50.	.3	.0	.3	.0
60.	.3	.0	.3	.0
70.	.2	.0	.2	.0
80.	.2	.0	.2	.0
90.	.2	.0	.2	.0
100.	.2	.0	.2	.0
110.	.2	.0	.2	.0
120.	.3	.0	.2	.0
130.	.3	.0	.3	.0
140.	.3	.0	.3	.0
150.	.4	.0	.3	.0
160.	.5	.0	.5	.0
170.	.6	.0	.5	.0
180.	.4	.4	.2	.1
190.	.0	.6	.0	.5
200.	.0	.5	.0	.4
210.	.0	.4	.0	.4
220.	.0	.3	.0	.3
230.	.0	.3	.0	.2
240.	.0	.3	.0	.2
250.	.0	.2	.0	.2
260.	.0	.2	.0	.2
270.	.0	.2	.0	.2
280.	.0	.2	.0	.2
290.	.0	.2	.0	.2
300.	.0	.2	.0	.3
310.	.0	.2	.0	.2
320.	.0	.2	.0	.3
330.	.0	.4	.0	.4
340.	.0	.4	.0	.5
350.	.0	.5	.0	.6
360.	.2	.1	.3	.3
MAX	.6	.6	.6	.6
DEGR.	170	190	10	350

THE HIGHEST CONCENTRATION OF .60 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin No Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 14:39:35

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	823.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	842.	3.2	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1115.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1086.	3.2	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	53.	3.2	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	50.	3.2	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	53.	3.2	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	66.	3.2	.0	32.0		
9. nbq	512.0	488.0	512.0	481.3	7.	180.	AG	1.	100.0	.0	24.0	.30	.3
10. sbq	488.0	512.0	488.0	521.1	9.	360.	AG	1.	100.0	.0	24.0	.40	.5
11. ebq	476.0	494.0	443.3	494.0	33.	270.	AG	27.	100.0	.0	24.0	1.00	1.7
12. wbq	524.0	506.0	556.7	506.0	33.	90.	AG	27.	100.0	.0	24.0	1.00	1.7

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	823	1600	5.54	3	3
10. sbq	60	3	3.0	1115	1600	5.54	3	3
11. ebq	60	54	3.0	53	1600	5.54	3	3
12. wbq	60	54	3.0	53	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin No Proj PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.1	.2	.2
10.	*	.4	.0	.5	.1
20.	*	.3	.0	.4	.0
30.	*	.3	.0	.3	.0
40.	*	.2	.0	.3	.0
50.	*	.2	.0	.2	.0
60.	*	.2	.0	.1	.0
70.	*	.2	.0	.2	.0
80.	*	.2	.0	.2	.0
90.	*	.2	.0	.2	.0
100.	*	.2	.0	.2	.0
110.	*	.2	.0	.2	.0
120.	*	.1	.0	.2	.0
130.	*	.2	.0	.2	.0
140.	*	.3	.0	.2	.0
150.	*	.2	.0	.3	.0
160.	*	.4	.1	.3	.0
170.	*	.5	.1	.3	.0
180.	*	.2	.2	.1	.1
190.	*	.1	.5	.0	.3
200.	*	.0	.3	.0	.3
210.	*	.0	.3	.0	.2
220.	*	.0	.2	.0	.2
230.	*	.0	.2	.0	.2
240.	*	.0	.1	.0	.2
250.	*	.0	.2	.0	.2
260.	*	.0	.2	.0	.2
270.	*	.0	.2	.0	.2
280.	*	.0	.2	.0	.2
290.	*	.0	.2	.0	.2
300.	*	.0	.2	.0	.1
310.	*	.0	.2	.0	.2
320.	*	.0	.2	.0	.2
330.	*	.0	.2	.0	.2
340.	*	.0	.4	.1	.4
350.	*	.0	.3	.1	.5
360.	*	.1	.1	.2	.2
MAX	*	.5	.5	.5	.5
DEGR.	*	170	190	10	350

THE HIGHEST CONCENTRATION OF   .50 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 15: 3:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	1006.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	1025.	3.2	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1206.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1177.	3.2	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	53.	3.2	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	50.	3.2	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	53.	3.2	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	66.	3.2	.0	32.0		
9. nbq	512.0	488.0	512.0	479.7	8.	180.	AG	1.	100.0	.0	24.0	.36	.4
10. sbq	488.0	512.0	488.0	521.9	10.	360.	AG	1.	100.0	.0	24.0	.44	.5
11. ebq	476.0	494.0	443.3	494.0	33.	270.	AG	27.	100.0	.0	24.0	1.00	1.7
12. wbq	524.0	506.0	556.7	506.0	33.	90.	AG	27.	100.0	.0	24.0	1.00	1.7

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	1006	1600	5.54	3	3
10. sbq	60	3	3.0	1206	1600	5.54	3	3
11. ebq	60	54	3.0	53	1600	5.54	3	3
12. wbq	60	54	3.0	53	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin Proj PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.1	.2	.2
10.	*	.4	.0	.5	.1
20.	*	.3	.0	.4	.0
30.	*	.3	.0	.3	.0
40.	*	.3	.0	.3	.0
50.	*	.2	.0	.3	.0
60.	*	.2	.0	.1	.0
70.	*	.2	.0	.2	.0
80.	*	.2	.0	.2	.0
90.	*	.2	.0	.2	.0
100.	*	.2	.0	.2	.0
110.	*	.2	.0	.2	.0
120.	*	.1	.0	.2	.0
130.	*	.3	.0	.2	.0
140.	*	.3	.0	.2	.0
150.	*	.2	.0	.3	.0
160.	*	.4	.1	.3	.0
170.	*	.5	.1	.4	.0
180.	*	.2	.2	.1	.1
190.	*	.1	.5	.0	.4
200.	*	.0	.5	.0	.4
210.	*	.0	.3	.0	.3
220.	*	.0	.3	.0	.2
230.	*	.0	.2	.0	.2
240.	*	.0	.3	.0	.2
250.	*	.0	.2	.0	.2
260.	*	.0	.2	.0	.2
270.	*	.0	.2	.0	.2
280.	*	.0	.2	.0	.2
290.	*	.0	.2	.0	.2
300.	*	.0	.2	.0	.3
310.	*	.0	.2	.0	.2
320.	*	.0	.2	.0	.3
330.	*	.0	.3	.0	.2
340.	*	.0	.4	.1	.5
350.	*	.0	.4	.1	.5
360.	*	.1	.1	.2	.2
MAX	*	.5	.5	.5	.5
DEGR.	*	170	190	10	340

THE HIGHEST CONCENTRATION OF .50 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin Project + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 12: 8:36

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	801.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	811.	3.8	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1078.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1050.	3.8	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	56.	3.8	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	49.	3.8	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	50.	3.8	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	75.	3.8	.0	32.0		
9. nbq	512.0	488.0	512.0	481.4	7.	180.	AG	1.	100.0	.0	24.0	.29	.3
10. sbq	488.0	512.0	488.0	520.8	9.	360.	AG	1.	100.0	.0	24.0	.39	.4
11. ebq	476.0	494.0	421.1	494.0	55.	270.	AG	27.	100.0	.0	24.0	1.08	2.8
12. wbq	524.0	506.0	552.1	506.0	28.	90.	AG	27.	100.0	.0	24.0	.96	1.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	801	1600	5.55	3	3
10. sbq	60	3	3.0	1078	1600	5.55	3	3
11. ebq	60	54	3.0	56	1600	5.55	3	3
12. wbq	60	54	3.0	50	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin Project + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.3	.3
10.	.4	.0	.5	.0
20.	.3	.0	.4	.0
30.	.3	.0	.3	.0
40.	.3	.0	.3	.0
50.	.2	.0	.3	.0
60.	.2	.0	.1	.0
70.	.2	.0	.2	.0
80.	.2	.0	.2	.0
90.	.2	.0	.2	.0
100.	.2	.0	.2	.0
110.	.2	.0	.2	.0
120.	.1	.0	.2	.0
130.	.3	.0	.2	.0
140.	.3	.0	.3	.0
150.	.2	.0	.3	.0
160.	.4	.0	.3	.0
170.	.5	.1	.4	.0
180.	.3	.2	.1	.1
190.	.1	.5	.0	.4
200.	.1	.5	.0	.4
210.	.1	.3	.0	.2
220.	.0	.3	.0	.2
230.	.0	.2	.0	.2
240.	.0	.3	.0	.2
250.	.0	.3	.0	.2
260.	.0	.2	.0	.2
270.	.0	.2	.0	.2
280.	.0	.2	.0	.3
290.	.0	.2	.0	.3
300.	.0	.2	.0	.3
310.	.0	.2	.1	.2
320.	.0	.2	.1	.3
330.	.0	.2	.1	.2
340.	.0	.4	.1	.5
350.	.0	.4	.1	.5
360.	.1	.1	.3	.3
MAX	.5	.5	.5	.5
DEGR.	170	190	10	340

THE HIGHEST CONCENTRATION OF .50 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin Project + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 12:12:52

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	843.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	852.	3.8	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1093.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1071.	3.8	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	100.	3.8	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	49.	3.8	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	50.	3.8	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	114.	3.8	.0	32.0		
9. nbq	512.0	488.0	512.0	478.8	9.	180.	AG	2.	100.0	.0	24.0	.31	.5
10. sbq	488.0	512.0	488.0	523.9	12.	360.	AG	2.	100.0	.0	24.0	.40	.6
11. ebq	476.0	494.0	435.4	494.0	41.	270.	AG	26.	100.0	.0	24.0	.94	2.1
12. wbq	524.0	506.0	531.8	506.0	8.	90.	AG	26.	100.0	.0	24.0	.47	.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	4	3.0	843	1600	5.55	3	3
10. sbq	60	4	3.0	1093	1600	5.55	3	3
11. ebq	60	53	3.0	100	1600	5.55	3	3
12. wbq	60	53	3.0	50	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin Project + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	REC1	REC2	REC3	REC4
	CONCENTRATION (PPM)			
0.	.1	.1	.3	.2
10.	.4	.0	.5	.0
20.	.3	.0	.4	.0
30.	.3	.0	.3	.0
40.	.3	.0	.3	.0
50.	.2	.0	.3	.0
60.	.2	.0	.1	.0
70.	.2	.0	.2	.0
80.	.2	.0	.2	.0
90.	.2	.0	.2	.0
100.	.2	.0	.2	.0
110.	.2	.0	.2	.0
120.	.1	.0	.2	.0
130.	.3	.0	.2	.0
140.	.3	.0	.3	.0
150.	.3	.0	.3	.0
160.	.4	.0	.3	.0
170.	.5	.0	.4	.0
180.	.3	.2	.1	.1
190.	.1	.4	.0	.4
200.	.1	.4	.0	.4
210.	.0	.2	.0	.3
220.	.0	.3	.0	.2
230.	.0	.2	.0	.2
240.	.0	.3	.0	.2
250.	.0	.2	.0	.2
260.	.0	.2	.0	.2
270.	.0	.2	.0	.2
280.	.0	.2	.0	.2
290.	.0	.2	.0	.2
300.	.0	.2	.0	.3
310.	.0	.2	.0	.2
320.	.0	.2	.0	.3
330.	.0	.3	.1	.2
340.	.0	.4	.1	.4
350.	.0	.4	.1	.4
360.	.1	.1	.3	.2
MAX	.5	.4	.5	.4
DEGR.	170	190	10	190

THE HIGHEST CONCENTRATION OF .50 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin Project + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 12:17:26

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	799.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	817.	3.8	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1076.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1047.	3.8	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	51.	3.8	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	49.	3.8	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	50.	3.8	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	63.	3.8	.0	32.0		
9. nbq	512.0	488.0	512.0	481.5	7.	180.	AG	1.	100.0	.0	24.0	.29	.3
10. sbq	488.0	512.0	488.0	520.8	9.	360.	AG	1.	100.0	.0	24.0	.39	.4
11. ebq	476.0	494.0	447.9	494.0	28.	270.	AG	27.	100.0	.0	24.0	.96	1.4
12. wbq	524.0	506.0	552.1	506.0	28.	90.	AG	27.	100.0	.0	24.0	.96	1.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	799	1600	5.55	3	3
10. sbq	60	3	3.0	1076	1600	5.55	3	3
11. ebq	60	54	3.0	51	1600	5.55	3	3
12. wbq	60	54	3.0	50	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin Project + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.3	.3
10.	.4	.0	.5	.0
20.	.3	.0	.4	.0
30.	.3	.0	.3	.0
40.	.3	.0	.3	.0
50.	.2	.0	.3	.0
60.	.2	.0	.1	.0
70.	.2	.0	.2	.0
80.	.2	.0	.2	.0
90.	.2	.0	.2	.0
100.	.2	.0	.2	.0
110.	.2	.0	.2	.0
120.	.1	.0	.2	.0
130.	.3	.0	.2	.0
140.	.3	.0	.3	.0
150.	.2	.0	.3	.0
160.	.4	.0	.3	.0
170.	.5	.1	.4	.0
180.	.3	.2	.1	.1
190.	.0	.5	.0	.4
200.	.0	.5	.0	.4
210.	.0	.3	.0	.2
220.	.0	.3	.0	.2
230.	.0	.2	.0	.2
240.	.0	.3	.0	.2
250.	.0	.2	.0	.2
260.	.0	.2	.0	.2
270.	.0	.2	.0	.2
280.	.0	.2	.0	.2
290.	.0	.2	.0	.2
300.	.0	.2	.0	.3
310.	.0	.2	.0	.2
320.	.0	.2	.0	.3
330.	.0	.2	.0	.2
340.	.0	.4	.0	.5
350.	.0	.4	.1	.5
360.	.1	.1	.3	.3
MAX	.5	.5	.5	.5
DEGR.	170	190	10	340

THE HIGHEST CONCENTRATION OF .50 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Hamlin PA +AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 15:12:59

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	1054.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	1073.	3.2	.0	44.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1224.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	1195.	3.2	.0	44.0		
5. eba	.0	494.0	500.0	494.0	500.	90.	AG	53.	3.2	.0	32.0		
6. ebd	500.0	494.0	1000.0	494.0	500.	90.	AG	50.	3.2	.0	32.0		
7. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	53.	3.2	.0	32.0		
8. wbd	500.0	506.0	.0	506.0	500.	270.	AG	66.	3.2	.0	32.0		
9. nbq	512.0	488.0	512.0	479.4	9.	180.	AG	1.	100.0	.0	24.0	.38	.4
10. sbq	488.0	512.0	488.0	522.0	10.	360.	AG	1.	100.0	.0	24.0	.44	.5
11. ebq	476.0	494.0	443.3	494.0	33.	270.	AG	27.	100.0	.0	24.0	1.00	1.7
12. wbq	524.0	506.0	556.7	506.0	33.	90.	AG	27.	100.0	.0	24.0	1.00	1.7

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	3	3.0	1054	1600	5.54	3	3
10. sbq	60	3	3.0	1224	1600	5.54	3	3
11. ebq	60	54	3.0	53	1600	5.54	3	3
12. wbq	60	54	3.0	53	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	532.0	6.0
2. ne 10 ft	544.0	532.0	6.0
3. sw 10 ft	456.0	468.0	6.0
4. se 10 ft	544.0	468.0	6.0

JOB: Coldwater Canyon and Hamlin PA +AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.3	.2
10.	.4	.0	.6	.1
20.	.3	.0	.4	.0
30.	.3	.0	.3	.0
40.	.3	.0	.3	.0
50.	.2	.0	.3	.0
60.	.2	.0	.1	.0
70.	.2	.0	.2	.0
80.	.2	.0	.2	.0
90.	.2	.0	.2	.0
100.	.2	.0	.2	.0
110.	.2	.0	.2	.0
120.	.1	.0	.2	.0
130.	.3	.0	.2	.0
140.	.3	.0	.3	.0
150.	.2	.0	.3	.0
160.	.4	.1	.3	.0
170.	.6	.1	.4	.0
180.	.2	.2	.1	.1
190.	.1	.5	.0	.4
200.	.0	.5	.0	.4
210.	.0	.3	.0	.3
220.	.0	.3	.0	.2
230.	.0	.2	.0	.2
240.	.0	.3	.0	.2
250.	.0	.2	.0	.2
260.	.0	.2	.0	.2
270.	.0	.2	.0	.2
280.	.0	.2	.0	.2
290.	.0	.2	.0	.2
300.	.0	.2	.0	.3
310.	.0	.2	.0	.2
320.	.0	.2	.0	.3
330.	.0	.3	.0	.2
340.	.0	.4	.1	.5
350.	.0	.4	.1	.5
360.	.1	.1	.3	.2
MAX	.6	.5	.6	.5
DEGR.	170	190	10	340

THE HIGHEST CONCENTRATION OF .60 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Vanowen Existing PM RUN: CAL3QHC RUN

DATE : 3/26/ 8
TIME : 16:25: 8

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	790.	5.1	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	776.	5.1	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	785.	5.1	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	688.	5.1	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1325.	5.1	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1348.	5.1	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1406.	5.1	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1494.	5.1	.0	44.0		
9. nbq	524.0	464.0	524.0	425.2	39.	180.	AG	36.	100.0	.0	48.0	.39	2.0
10. sbq	482.0	536.0	482.0	587.4	51.	360.	AG	27.	100.0	.0	36.0	.52	2.6
11. ebq	464.0	482.0	413.4	482.0	51.	270.	AG	16.	100.0	.0	36.0	.49	2.6
12.													

TIME : 16:25: 8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	36	3.0	790	1600	5.56	3	3
10. sbq	60	36	3.0	785	1600	5.56	3	3
11. ebq	60	21	3.0	1325	1600	5.56	3	3
12. wbq	60	21	3.0	1406	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon and Vanowen Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.5
10.	.4	.0	.8	.3
20.	.3	.0	.7	.4
30.	.3	.0	.6	.4
40.	.2	.0	.6	.4
50.	.2	.0	.7	.5
60.	.3	.0	.7	.5
70.	.3	.0	.9	.7
80.	.3	.0	.9	.6
90.	.5	.2	.5	.2
100.	.9	.6	.2	.0
110.	.9	.6	.2	.0
120.	.7	.5	.2	.0
130.	.7	.5	.2	.0
140.	.6	.4	.2	.0
150.	.6	.4	.2	.0
160.	.7	.4	.3	.0
170.	.6	.3	.3	.0
180.	.4	.4	.1	.1
190.	.3	.6	.0	.3
200.	.4	.7	.0	.3
210.	.4	.6	.0	.3
220.	.5	.7	.0	.2
230.	.5	.5	.0	.2
240.	.5	.7	.0	.2
250.	.6	.9	.0	.3
260.	.6	.9	.0	.3
270.	.2	.4	.2	.5
280.	.0	.2	.6	1.0
290.	.0	.2	.7	1.0
300.	.0	.2	.5	.6
310.	.0	.2	.5	.6
320.	.0	.2	.4	.7
330.	.0	.3	.4	.7
340.	.0	.3	.4	.8
350.	.0	.3	.4	.6
360.	.1	.1	.5	.5
MAX	.9	.9	.9	1.0
DEGR.	110	250	70	280

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC4 .

JOB: Coldwater Canyon Vanowen No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 15:42:51

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	898.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	871.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	930.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	833.	3.2	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1559.	3.2	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1595.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1637.	3.2	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1725.	3.2	.0	44.0		
9. nbq	524.0	464.0	524.0	419.9	44.	180.	AG	36.	100.0	.0	48.0	.44	2.2
10. sbq	482.0	536.0	482.0	597.0	61.	360.	AG	27.	100.0	.0	36.0	.61	3.1
11. ebq	464.0	482.0	404.4	482.0	60.	270.	AG	16.	100.0	.0	36.0	.57	3.0
12. wbq	548.0	518.0	728.6	518.0	181.	90.	AG	10.	100.0	.0	24.0	.95	9.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	36	3.0	898	1600	5.54	3	3
10. sbq	60	36	3.0	930	1600	5.54	3	3
11. ebq	60	21	3.0	1559	1600	5.54	3	3
12. wbq	60	21	3.0	1725	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen No Project PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.0	.3	.3
10.	.3	.0	.5	.2
20.	.3	.0	.4	.2
30.	.2	.0	.5	.3
40.	.2	.0	.5	.3
50.	.3	.0	.4	.3
60.	.3	.0	.5	.4
70.	.3	.0	.7	.5
80.	.3	.0	.8	.4
90.	.5	.1	.4	.1
100.	.8	.4	.3	.0
110.	.8	.5	.2	.0
120.	.5	.4	.2	.0
130.	.5	.3	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.5	.2	.2	.0
170.	.6	.2	.3	.0
180.	.4	.3	.1	.1
190.	.3	.5	.0	.3
200.	.3	.5	.0	.3
210.	.3	.5	.0	.2
220.	.3	.5	.0	.2
230.	.3	.4	.0	.2
240.	.4	.4	.0	.2
250.	.5	.7	.0	.3
260.	.4	.7	.0	.3
270.	.1	.4	.1	.5
280.	.0	.3	.4	.8
290.	.0	.2	.5	.8
300.	.0	.2	.4	.5
310.	.0	.2	.4	.4
320.	.0	.2	.3	.6
330.	.0	.2	.3	.6
340.	.0	.2	.2	.4
350.	.0	.2	.2	.5
360.	.1	.0	.3	.3
MAX	.8	.7	.8	.8
DEGR.	100	260	80	280

THE HIGHEST CONCENTRATION OF   .80 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon Vanowen Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 15:50:34

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1081.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1028.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	981.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	924.	3.2	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1559.	3.2	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1675.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1731.	3.2	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1725.	3.2	.0	44.0		
9. nbq	524.0	464.0	524.0	412.3	52.	180.	AG	35.	100.0	.0	48.0	.51	2.6
10. sbq	482.0	536.0	482.0	598.6	63.	360.	AG	26.	100.0	.0	36.0	.61	3.2
11. ebq	464.0	482.0	401.6	482.0	62.	270.	AG	16.	100.0	.0	36.0	.59	3.2
12. wbq	548.0	518.0	772.5	518.0	224.	90.	AG	11.	100.0	.0	24.0	.98	11.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	35	3.0	1081	1600	5.54	3	3
10. sbq	60	35	3.0	981	1600	5.54	3	3
11. ebq	60	22	3.0	1559	1600	5.54	3	3
12. wbq	60	22	3.0	1731	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.3	.4
10.	.3	.0	.5	.2
20.	.3	.0	.4	.3
30.	.2	.0	.5	.3
40.	.2	.0	.5	.3
50.	.3	.0	.5	.4
60.	.3	.0	.6	.4
70.	.3	.0	.7	.5
80.	.3	.0	.8	.4
90.	.5	.1	.5	.1
100.	.8	.4	.3	.0
110.	.8	.5	.2	.0
120.	.6	.4	.2	.0
130.	.6	.3	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.5	.3	.3	.0
170.	.6	.3	.3	.0
180.	.4	.4	.1	.1
190.	.3	.6	.0	.3
200.	.3	.6	.0	.3
210.	.3	.5	.0	.2
220.	.3	.6	.0	.2
230.	.3	.4	.0	.2
240.	.4	.4	.0	.3
250.	.5	.7	.0	.3
260.	.4	.7	.0	.3
270.	.1	.4	.1	.5
280.	.0	.2	.4	.8
290.	.0	.2	.5	.8
300.	.0	.2	.4	.5
310.	.0	.2	.4	.4
320.	.0	.2	.3	.6
330.	.0	.2	.3	.6
340.	.0	.3	.2	.4
350.	.0	.3	.2	.5
360.	.1	.1	.3	.4
MAX	.8	.7	.8	.8
DEGR.	100	260	80	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon Vanowen Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11:35:29

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	864.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	838.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	898.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	806.	3.8	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1504.	3.8	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1539.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1578.	3.8	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1661.	3.8	.0	44.0		
9. nbq	524.0	464.0	524.0	421.5	43.	180.	AG	36.	100.0	.0	48.0	.43	2.2
10. sbq	482.0	536.0	482.0	594.9	59.	360.	AG	27.	100.0	.0	36.0	.59	3.0
11. ebq	464.0	482.0	406.5	482.0	58.	270.	AG	16.	100.0	.0	36.0	.55	2.9
12. wbq	548.0	518.0	666.1	518.0	118.	90.	AG	10.	100.0	.0	24.0	.87	6.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	36	3.0	864	1600	5.55	3	3
10. sbq	60	36	3.0	898	1600	5.55	3	3
11. ebq	60	21	3.0	1504	1600	5.55	3	3
12. wbq	60	21	3.0	1578	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.4	.4
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.3	.0	.6	.3
40.	.2	.0	.6	.3
50.	.3	.0	.5	.4
60.	.3	.0	.6	.5
70.	.3	.0	.8	.5
80.	.3	.0	.9	.5
90.	.5	.1	.5	.1
100.	.9	.5	.3	.0
110.	.9	.5	.2	.0
120.	.7	.5	.2	.0
130.	.5	.4	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.6	.3	.3	.0
170.	.6	.3	.3	.0
180.	.4	.4	.1	.1
190.	.3	.6	.0	.3
200.	.3	.5	.0	.3
210.	.3	.5	.0	.2
220.	.3	.6	.0	.2
230.	.4	.5	.0	.2
240.	.5	.7	.0	.2
250.	.5	.7	.0	.3
260.	.6	.8	.0	.3
270.	.1	.4	.2	.5
280.	.0	.2	.6	.9
290.	.0	.2	.5	.8
300.	.0	.2	.5	.5
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.2	.3	.6
340.	.0	.3	.3	.5
350.	.0	.3	.3	.6
360.	.1	.1	.4	.4
MAX	.9	.8	.9	.9
DEGR.	110	260	80	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon Vanowen Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11:39:51

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	904.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	851.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	906.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	831.	3.8	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1511.	3.8	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1554.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1588.	3.8	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1673.	3.8	.0	44.0		
9. nbq	524.0	464.0	524.0	419.5	44.	180.	AG	36.	100.0	.0	48.0	.45	2.3
10. sbq	482.0	536.0	482.0	595.4	59.	360.	AG	27.	100.0	.0	36.0	.60	3.0
11. ebq	464.0	482.0	406.2	482.0	58.	270.	AG	16.	100.0	.0	36.0	.56	2.9
12. wbq	548.0	518.0	669.0	518.0	121.	90.	AG	10.	100.0	.0	24.0	.88	6.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	36	3.0	904	1600	5.55	3	3
10. sbq	60	36	3.0	906	1600	5.55	3	3
11. ebq	60	21	3.0	1511	1600	5.55	3	3
12. wbq	60	21	3.0	1588	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.4	.4
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.3	.0	.6	.3
40.	.2	.0	.6	.3
50.	.3	.0	.5	.4
60.	.3	.0	.6	.5
70.	.3	.0	.8	.5
80.	.3	.0	.9	.6
90.	.5	.1	.5	.1
100.	.9	.5	.3	.0
110.	.9	.5	.2	.0
120.	.7	.5	.2	.0
130.	.6	.4	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.6	.3	.3	.0
170.	.6	.3	.3	.0
180.	.4	.4	.1	.1
190.	.3	.6	.0	.3
200.	.3	.6	.0	.3
210.	.3	.5	.0	.2
220.	.3	.7	.0	.2
230.	.4	.5	.0	.2
240.	.5	.7	.0	.3
250.	.5	.7	.0	.3
260.	.6	.8	.0	.3
270.	.2	.4	.2	.5
280.	.0	.2	.6	.9
290.	.0	.2	.5	.8
300.	.0	.2	.5	.6
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.2	.3	.6
340.	.0	.3	.3	.5
350.	.0	.3	.3	.6
360.	.1	.1	.4	.4
MAX	.9	.8	.9	.9
DEGR.	110	260	80	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon Vanowen Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11:43:58

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	870.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	851.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	904.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	810.	3.8	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1525.	3.8	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1554.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1577.	3.8	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1661.	3.8	.0	44.0		
9. nbq	524.0	464.0	524.0	421.3	43.	180.	AG	36.	100.0	.0	48.0	.43	2.2
10. sbq	482.0	536.0	482.0	595.3	59.	360.	AG	27.	100.0	.0	36.0	.59	3.0
11. ebq	464.0	482.0	405.7	482.0	58.	270.	AG	16.	100.0	.0	36.0	.56	3.0
12. wbq	548.0	518.0	665.6	518.0	118.	90.	AG	10.	100.0	.0	24.0	.87	6.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	36	3.0	870	1600	5.55	3	3
10. sbq	60	36	3.0	904	1600	5.55	3	3
11. ebq	60	21	3.0	1525	1600	5.55	3	3
12. wbq	60	21	3.0	1577	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen Base + Add Area 4 PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.4	.4
10.	.3	.0	.6	.3
20.	.3	.0	.5	.3
30.	.3	.0	.6	.3
40.	.2	.0	.6	.3
50.	.3	.0	.5	.4
60.	.3	.0	.6	.5
70.	.3	.0	.8	.5
80.	.3	.0	.9	.6
90.	.5	.1	.5	.1
100.	.9	.5	.3	.0
110.	.9	.5	.2	.0
120.	.7	.5	.2	.0
130.	.6	.4	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.6	.3	.3	.0
170.	.6	.3	.3	.0
180.	.4	.4	.1	.1
190.	.3	.6	.0	.3
200.	.3	.5	.0	.3
210.	.3	.5	.0	.2
220.	.3	.6	.0	.2
230.	.4	.5	.0	.2
240.	.5	.7	.0	.2
250.	.5	.7	.0	.3
260.	.6	.8	.0	.3
270.	.1	.4	.2	.5
280.	.0	.2	.6	.9
290.	.0	.2	.5	.8
300.	.0	.2	.5	.6
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.2	.3	.6
340.	.0	.3	.3	.5
350.	.0	.3	.3	.6
360.	.1	.1	.4	.4
MAX	.9	.8	.9	.9
DEGR.	110	260	80	280

THE HIGHEST CONCENTRATION OF   .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon Vanowen PA + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 15:58:45

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1129.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1001.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	991.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	942.	3.2	.0	44.0		
5. eba	.0	482.0	500.0	482.0	500.	90.	AG	1559.	3.2	.0	56.0		
6. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1696.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1685.	3.2	.0	44.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1725.	3.2	.0	44.0		
9. nbq	524.0	464.0	524.0	411.6	52.	180.	AG	34.	100.0	.0	48.0	.50	2.7
10. sbq	482.0	536.0	482.0	597.4	61.	360.	AG	25.	100.0	.0	36.0	.59	3.1
11. ebq	464.0	482.0	398.7	482.0	65.	270.	AG	17.	100.0	.0	36.0	.61	3.3
12. wbq	548.0	518.0	777.1	518.0	229.	90.	AG	11.	100.0	.0	24.0	.99	11.6

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	34	3.0	1129	1600	5.54	3	3
10. sbq	60	34	3.0	991	1600	5.54	3	3
11. ebq	60	23	3.0	1559	1600	5.54	3	3
12. wbq	60	23	3.0	1685	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw 10 ft	444.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	444.0	444.0	6.0
4. se 10 ft	568.0	444.0	6.0

JOB: Coldwater Canyon Vanowen PA + AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.3	.4
10.	.3	.0	.5	.2
20.	.3	.0	.4	.3
30.	.2	.0	.5	.3
40.	.2	.0	.5	.3
50.	.3	.0	.4	.3
60.	.3	.0	.6	.4
70.	.3	.0	.7	.5
80.	.3	.0	.7	.4
90.	.5	.1	.5	.1
100.	.8	.4	.3	.0
110.	.8	.5	.2	.0
120.	.6	.4	.2	.0
130.	.6	.3	.2	.0
140.	.6	.3	.2	.0
150.	.6	.3	.2	.0
160.	.5	.3	.3	.0
170.	.6	.2	.3	.0
180.	.4	.4	.1	.1
190.	.3	.5	.0	.3
200.	.3	.7	.0	.3
210.	.3	.5	.0	.3
220.	.3	.6	.0	.2
230.	.3	.5	.0	.2
240.	.4	.4	.0	.3
250.	.5	.7	.0	.3
260.	.4	.7	.0	.3
270.	.1	.4	.1	.5
280.	.0	.2	.4	.8
290.	.0	.2	.5	.8
300.	.0	.2	.4	.5
310.	.0	.2	.4	.4
320.	.0	.2	.3	.6
330.	.0	.2	.4	.6
340.	.0	.3	.2	.5
350.	.0	.3	.2	.5
360.	.1	.1	.3	.4
MAX	.8	.7	.7	.8
DEGR.	100	200	70	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon and Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 11:19:18

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	641.	5.1	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	833.	5.1	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	754.	5.1	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	644.	5.1	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2086.	5.1	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1952.	5.1	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1714.	5.1	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	1766.	5.1	.0	56.0		
9. nbq	518.0	452.0	518.0	403.1	49.	180.	AG	31.	100.0	.0	36.0	.62	2.5
10. sbq	482.0	548.0	482.0	611.3	63.	360.	AG	31.	100.0	.0	36.0	.73	3.2
11. ebq	464.0	476.0	421.3	476.0	43.	270.	AG	15.	100.0	.0	48.0	.49	2.2
12. wbq	536.0	524.0	538.9	524.0	3.	90.	AG	179.	100.0	.0	48.0	.03	.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	42	3.0	641	1600	5.56	3	3
10. sbq	60	42	3.0	754	1600	5.56	3	3
11. ebq	60	15	3.0	2086	1600	5.56	3	3
12. wbq	60	15	3.0	1714	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.8	.5
20.	.3	.0	.8	.5
30.	.3	.0	.8	.5
40.	.3	.0	.7	.5
50.	.3	.0	.7	.6
60.	.3	.0	1.0	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.7
90.	.6	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.1	.8	.2	.0
120.	.8	.7	.2	.0
130.	.7	.5	.2	.0
140.	.8	.5	.2	.0
150.	.8	.5	.2	.0
160.	.7	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.7	.0	.3
200.	.4	.8	.0	.3
210.	.5	.7	.0	.2
220.	.5	.6	.0	.2
230.	.6	.7	.0	.2
240.	.7	.9	.0	.3
250.	.8	1.1	.0	.3
260.	.7	1.0	.0	.3
270.	.2	.5	.3	.6
280.	.0	.3	.8	1.1
290.	.0	.3	.9	1.1
300.	.0	.2	.7	1.0
310.	.0	.2	.6	.8
320.	.0	.3	.5	.7
330.	.0	.3	.5	.8
340.	.0	.3	.5	.9
350.	.0	.3	.5	.9
360.	.1	.1	.6	.6
MAX	1.1	1.1	1.1	1.1
DEGR.	110	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Victory No Proj PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16: 9: 0

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	721.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	945.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	907.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	776.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2684.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2503.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2242.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2330.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	387.2	65.	180.	AG	32.	100.0	.0	36.0	.75	3.3
10. sbq	482.0	548.0	482.0	674.8	127.	360.	AG	32.	100.0	.0	36.0	.95	6.4
11. ebq	464.0	476.0	412.6	476.0	51.	270.	AG	14.	100.0	.0	48.0	.61	2.6
12. wbq	536.0	524.0	539.5	524.0	4.	90.	AG	166.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	43	3.0	721	1600	5.54	3	3
10. sbq	60	43	3.0	907	1600	5.54	3	3
11. ebq	60	14	3.0	2684	1600	5.54	3	3
12. wbq	60	14	3.0	2242	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory No Proj PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.4	.4
10.	.3	.0	.7	.3
20.	.4	.0	.6	.4
30.	.3	.0	.7	.4
40.	.3	.0	.5	.5
50.	.3	.0	.6	.5
60.	.3	.0	.8	.5
70.	.3	.0	.8	.6
80.	.3	.0	.8	.5
90.	.5	.2	.5	.2
100.	.9	.5	.2	.0
110.	1.0	.7	.3	.0
120.	.7	.5	.2	.0
130.	.6	.5	.2	.0
140.	.5	.4	.2	.0
150.	.6	.4	.2	.0
160.	.7	.4	.2	.0
170.	.7	.4	.2	.0
180.	.5	.5	.1	.1
190.	.4	.6	.0	.2
200.	.4	.7	.0	.2
210.	.4	.7	.0	.2
220.	.4	.5	.0	.3
230.	.5	.6	.0	.3
240.	.5	.8	.0	.3
250.	.7	.9	.0	.3
260.	.6	.8	.0	.3
270.	.1	.5	.2	.6
280.	.0	.3	.6	1.0
290.	.0	.3	.7	1.0
300.	.0	.3	.6	.7
310.	.0	.3	.5	.6
320.	.0	.3	.5	.6
330.	.0	.2	.5	.8
340.	.0	.3	.4	.6
350.	.0	.3	.3	.6
360.	.1	.1	.4	.4
MAX	1.0	.9	.8	1.0
DEGR.	110	250	60	280

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Coldwater Canyon and Victory Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:16:24

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	783.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1128.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	998.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	902.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	3337.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2847.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2412.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2653.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	355.9	96.	180.	AG	33.	100.0	.0	36.0	.89	4.9
10. sbq	482.0	548.0	482.0	1106.7	559.	360.	AG	33.	100.0	.0	36.0	1.13	28.4
11. ebq	464.0	476.0	404.7	476.0	59.	270.	AG	13.	100.0	.0	48.0	.75	3.0
12. wbq	536.0	524.0	539.6	524.0	4.	90.	AG	155.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	44	3.0	783	1600	5.54	3	3
10. sbq	60	44	3.0	998	1600	5.54	3	3
11. ebq	60	13	3.0	3337	1600	5.54	3	3
12. wbq	60	13	3.0	2412	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.7	.6
10.	.5	.0	1.0	.4
20.	.5	.0	.8	.4
30.	.3	.0	.8	.5
40.	.3	.0	.6	.5
50.	.3	.0	.6	.5
60.	.3	.0	.8	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.6
90.	.5	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.0	.7	.3	.0
120.	.8	.6	.3	.0
130.	.7	.5	.3	.0
140.	.8	.4	.2	.0
150.	.8	.4	.2	.0
160.	.8	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.8	.0	.3
200.	.4	.8	.0	.2
210.	.5	.6	.0	.3
220.	.5	.6	.0	.3
230.	.6	.8	.0	.3
240.	.7	.8	.0	.3
250.	.7	1.1	.0	.3
260.	.7	1.1	.0	.3
270.	.2	.5	.3	.6
280.	.0	.3	.7	1.1
290.	.0	.3	.9	1.1
300.	.0	.3	.7	.8
310.	.0	.3	.6	.7
320.	.0	.3	.5	.6
330.	.0	.4	.5	.9
340.	.0	.4	.5	.8
350.	.0	.4	.5	.8
360.	.2	.1	.7	.6
MAX	1.0	1.1	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11: 3: 5

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	698.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	919.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	878.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	751.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2596.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2419.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2172.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2255.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	391.3	61.	180.	AG	32.	100.0	.0	36.0	.73	3.1
10. sbq	482.0	548.0	482.0	659.0	111.	360.	AG	32.	100.0	.0	36.0	.92	5.6
11. ebq	464.0	476.0	414.3	476.0	50.	270.	AG	14.	100.0	.0	48.0	.59	2.5
12. wbq	536.0	524.0	539.4	524.0	3.	90.	AG	167.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	43	3.0	698	1600	5.55	3	3
10. sbq	60	43	3.0	878	1600	5.55	3	3
11. ebq	60	14	3.0	2596	1600	5.55	3	3
12. wbq	60	14	3.0	2172	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

```
     JOB: Coldwater Canyon and Victory Base + Add Area 1 PM            RUN: CAL3QHC RUN

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4
------*------------------------
  0.  *    .1    .1    .6    .6
 10.  *    .3    .0    .9    .4
 20.  *    .4    .0    .8    .4
 30.  *    .4    .0    .8    .5
 40.  *    .3    .0    .6    .5
 50.  *    .3    .0    .6    .5
 60.  *    .3    .0    .8    .6
 70.  *    .3    .0   1.0    .8
 80.  *    .3    .0   1.0    .6
 90.  *    .5    .2    .5    .2
100.  *   1.0    .7    .3    .0
110.  *   1.0    .8    .3    .0
120.  *    .8    .7    .2    .0
130.  *    .7    .5    .2    .0
140.  *    .8    .5    .2    .0
150.  *    .7    .4    .2    .0
160.  *    .7    .4    .2    .0
170.  *    .7    .4    .3    .0
180.  *    .5    .5    .1    .1
190.  *    .4    .7    .0    .3
200.  *    .4    .7    .0    .3
210.  *    .5    .7    .0    .2
220.  *    .5    .6    .0    .3
230.  *    .6    .7    .0    .3
240.  *    .7    .8    .0    .3
250.  *    .7   1.0    .0    .3
260.  *    .7   1.0    .0    .3
270.  *    .2    .5    .2    .6
280.  *    .0    .3    .7   1.1
290.  *    .0    .3    .8   1.1
300.  *    .0    .3    .6    .8
310.  *    .0    .3    .6    .6
320.  *    .0    .2    .5    .6
330.  *    .0    .3    .5    .9
340.  *    .0    .3    .5    .8
350.  *    .0    .3    .5    .7
360.  *    .1    .1    .6    .6
------*------------------------
MAX   *   1.0   1.0   1.0   1.1
DEGR. *  100   250    70   280

THE HIGHEST CONCENTRATION OF    1.10 PPM OCCURRED AT RECEPTOR REC4 .
```

JOB: Coldwater Canyon and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11:11: 3

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	725.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	981.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	982.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	797.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2612.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2451.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2191.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2281.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	393.1	59.	180.	AG	31.	100.0	.0	36.0	.70	3.0
10. sbq	482.0	548.0	482.0	679.7	132.	360.	AG	31.	100.0	.0	36.0	.95	6.7
11. ebq	464.0	476.0	410.4	476.0	54.	270.	AG	15.	100.0	.0	48.0	.61	2.7
12. wbq	536.0	524.0	539.7	524.0	4.	90.	AG	179.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	42	3.0	725	1600	5.55	3	3
10. sbq	60	42	3.0	982	1600	5.55	3	3
11. ebq	60	15	3.0	2612	1600	5.55	3	3
12. wbq	60	15	3.0	2191	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.9	.4
20.	.4	.0	.8	.5
30.	.4	.0	.8	.5
40.	.3	.0	.6	.5
50.	.3	.0	.6	.5
60.	.3	.0	.8	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.7
90.	.5	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.0	.8	.3	.0
120.	.8	.7	.2	.0
130.	.7	.5	.2	.0
140.	.8	.5	.2	.0
150.	.7	.4	.2	.0
160.	.7	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.7	.0	.3
200.	.4	.8	.0	.3
210.	.5	.8	.0	.2
220.	.5	.6	.0	.2
230.	.6	.7	.0	.3
240.	.7	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.7	1.0	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.3	.8	1.1
300.	.0	.3	.6	.8
310.	.0	.3	.6	.6
320.	.0	.3	.5	.7
330.	.0	.3	.5	.9
340.	.0	.3	.5	.9
350.	.0	.3	.5	.7
360.	.1	.1	.6	.6
MAX	1.0	1.0	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 11:15:15

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	694.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	910.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	951.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	779.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2594.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2465.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2170.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2255.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	397.0	55.	180.	AG	31.	100.0	.0	36.0	.67	2.8
10. sbq	482.0	548.0	482.0	664.4	116.	360.	AG	31.	100.0	.0	36.0	.92	5.9
11. ebq	464.0	476.0	410.9	476.0	53.	270.	AG	15.	100.0	.0	48.0	.61	2.7
12. wbq	536.0	524.0	539.7	524.0	4.	90.	AG	179.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	42	3.0	694	1600	5.55	3	3
10. sbq	60	42	3.0	951	1600	5.55	3	3
11. ebq	60	15	3.0	2594	1600	5.55	3	3
12. wbq	60	15	3.0	2170	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.9	.4
20.	.4	.0	.8	.5
30.	.4	.0	.8	.5
40.	.3	.0	.7	.5
50.	.3	.0	.6	.5
60.	.3	.0	.8	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.6
90.	.5	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.0	.8	.3	.0
120.	.8	.7	.2	.0
130.	.7	.5	.2	.0
140.	.8	.5	.2	.0
150.	.7	.4	.2	.0
160.	.7	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.7	.0	.3
200.	.4	.7	.0	.3
210.	.5	.8	.0	.2
220.	.5	.6	.0	.2
230.	.6	.7	.0	.3
240.	.7	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.7	1.0	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.3	.8	1.1
300.	.0	.3	.6	.8
310.	.0	.3	.6	.6
320.	.0	.3	.5	.7
330.	.0	.2	.5	.9
340.	.0	.3	.5	.9
350.	.0	.3	.5	.7
360.	.1	.1	.6	.6
MAX	1.0	1.0	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Coldwater Canyon and Victory PA + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:20:25

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	796.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1176.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1016.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	935.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	3507.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2936.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2446.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2718.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	350.7	101.	180.	AG	33.	100.0	.0	36.0	.90	5.1
10. sbq	482.0	548.0	482.0	1168.9	621.	360.	AG	33.	100.0	.0	36.0	1.15	31.5
11. ebq	464.0	476.0	399.5	476.0	64.	270.	AG	13.	100.0	.0	48.0	.78	3.3
12. wbq	536.0	524.0	539.6	524.0	4.	90.	AG	155.	100.0	.0	48.0	.04	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	44	3.0	796	1600	5.54	3	3
10. sbq	60	44	3.0	1016	1600	5.54	3	3
11. ebq	60	13	3.0	3507	1600	5.54	3	3
12. wbq	60	13	3.0	2446	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Coldwater Canyon and Victory PA + AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.7	.6
10.	.5	.0	1.0	.4
20.	.5	.0	.8	.5
30.	.3	.0	.8	.5
40.	.3	.0	.7	.5
50.	.3	.0	.6	.5
60.	.3	.0	.8	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.2	.6
90.	.5	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.0	.7	.3	.0
120.	.8	.6	.3	.0
130.	.7	.5	.3	.0
140.	.8	.5	.2	.0
150.	.8	.4	.2	.0
160.	.8	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.8	.0	.3
200.	.4	.9	.0	.3
210.	.6	.6	.0	.3
220.	.6	.6	.0	.3
230.	.6	.8	.0	.3
240.	.7	.8	.0	.3
250.	.8	1.1	.0	.3
260.	.7	1.1	.0	.3
270.	.2	.5	.3	.6
280.	.0	.3	.8	1.2
290.	.0	.3	.9	1.2
300.	.0	.3	.7	.8
310.	.0	.3	.6	.7
320.	.0	.3	.6	.7
330.	.0	.4	.5	.9
340.	.0	.4	.5	.9
350.	.0	.4	.5	.8
360.	.2	.1	.7	.6
MAX	1.0	1.1	1.2	1.2
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.20 PPM OCCURRED AT RECEPTOR REC3 .

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: Ethel and Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 10:47:53

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	127.	5.1	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	175.	5.1	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	364.	5.1	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	119.	5.1	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1924.	5.1	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1996.	5.1	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1682.	5.1	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	1807.	5.1	.0	56.0		
9. nbq	512.0	452.0	512.0	434.8	17.	180.	AG	25.	100.0	.0	24.0	.47	.9
10. sbq	488.0	548.0	488.0	1157.4	609.	360.	AG	25.	100.0	.0	24.0	1.37	31.0
11. ebq	476.0	476.0	457.6	476.0	18.	270.	AG	7.	100.0	.0	48.0	.38	.9
12. wbq	524.0	524.0	540.1	524.0	16.	90.	AG	7.	100.0	.0	48.0	.33	.8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	50	3.0	127	1600	5.56	3	3
10. sbq	60	50	3.0	364	1600	5.56	3	3
11. ebq	60	7	3.0	1924	1600	5.56	3	3
12. wbq	60	7	3.0	1682	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.0	.6	.5
10.	.3	.0	.7	.5
20.	.2	.0	.4	.5
30.	.1	.0	.4	.5
40.	.1	.0	.5	.5
50.	.1	.0	.6	.6
60.	.1	.0	.6	.6
70.	.1	.0	.9	.8
80.	.1	.0	.8	.8
90.	.3	.2	.2	.2
100.	.8	.7	.0	.0
110.	.8	.8	.0	.0
120.	.7	.7	.0	.0
130.	.6	.6	.0	.0
140.	.5	.5	.0	.0
150.	.4	.4	.0	.0
160.	.5	.4	.0	.0
170.	.4	.4	.0	.0
180.	.5	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.5	.0	.0
210.	.5	.4	.0	.0
220.	.5	.5	.0	.0
230.	.5	.5	.0	.0
240.	.7	.7	.0	.0
250.	.8	.8	.0	.0
260.	.7	.7	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.8	.8
290.	.0	.1	.8	.8
300.	.0	.1	.7	.7
310.	.0	.1	.5	.6
320.	.0	.1	.5	.5
330.	.0	.1	.5	.5
340.	.0	.1	.5	.6
350.	.0	.2	.5	.7
360.	.1	.0	.6	.5
MAX	.8	.8	.9	.8
DEGR.	110	110	70	290

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Ethel and Victory No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:28: 7

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	160.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	213.	3.2	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	498.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	223.	3.2	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2498.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2583.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2167.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2304.	3.2	.0	56.0		
9. nbq	512.0	452.0	512.0	428.1	24.	180.	AG	25.	100.0	.0	24.0	.60	1.2
10. sbq	488.0	548.0	488.0	1863.6	1316.	360.	AG	25.	100.0	.0	24.0	1.87	66.8
11. ebq	476.0	476.0	452.1	476.0	24.	270.	AG	7.	100.0	.0	48.0	.49	1.2
12. wbq	524.0	524.0	544.7	524.0	21.	90.	AG	7.	100.0	.0	48.0	.42	1.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	50	3.0	160	1600	5.54	3	3
10. sbq	60	50	3.0	498	1600	5.54	3	3
11. ebq	60	7	3.0	2498	1600	5.54	3	3
12. wbq	60	7	3.0	2167	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory No Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.5	.4
10.	.3	.0	.5	.3
20.	.2	.0	.4	.3
30.	.2	.0	.4	.4
40.	.2	.0	.4	.5
50.	.2	.0	.5	.5
60.	.2	.0	.6	.5
70.	.1	.0	.7	.6
80.	.1	.0	.7	.6
90.	.3	.2	.2	.2
100.	.7	.5	.0	.0
110.	.7	.7	.0	.0
120.	.6	.5	.0	.0
130.	.5	.4	.0	.0
140.	.6	.4	.0	.0
150.	.5	.4	.0	.0
160.	.3	.4	.0	.0
170.	.4	.4	.0	.0
180.	.4	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.3	.0	.0
210.	.4	.4	.0	.0
220.	.4	.4	.0	.0
230.	.5	.4	.0	.0
240.	.5	.5	.0	.0
250.	.7	.7	.0	.0
260.	.6	.6	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.6	.8
290.	.0	.1	.6	.7
300.	.0	.1	.5	.5
310.	.0	.1	.5	.5
320.	.0	.1	.5	.4
330.	.0	.2	.4	.4
340.	.0	.2	.4	.5
350.	.0	.2	.3	.5
360.	.2	.1	.5	.4
MAX	.7	.7	.7	.8
DEGR.	100	110	70	280

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC4 .

JOB: Ethel and Victory Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:44:32

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	222.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	519.	3.2	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1116.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	349.	3.2	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2680.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2983.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2503.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2670.	3.2	.0	56.0		
9. nbq	512.0	452.0	512.0	424.7	27.	180.	AG	22.	100.0	.0	24.0	.42	1.4
10. sbq	488.0	548.0	488.0	3726.8	3179.	360.	AG	22.	100.0	.0	24.0	2.10	161.5
11. ebq	476.0	476.0	432.0	476.0	44.	270.	AG	12.	100.0	.0	48.0	.58	2.2
12. wbq	524.0	524.0	565.0	524.0	41.	90.	AG	12.	100.0	.0	48.0	.55	2.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	45	3.0	222	1600	5.54	3	3
10. sbq	60	45	3.0	1116	1600	5.54	3	3
11. ebq	60	12	3.0	2680	1600	5.54	3	3
12. wbq	60	12	3.0	2503	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.6	.7
10.	.5	.0	.8	.5
20.	.4	.0	.5	.5
30.	.4	.0	.5	.5
40.	.2	.0	.5	.5
50.	.2	.0	.5	.5
60.	.2	.0	.6	.6
70.	.2	.0	.8	.8
80.	.2	.0	.8	.7
90.	.4	.2	.2	.2
100.	.9	.7	.0	.0
110.	.9	.7	.0	.0
120.	.7	.6	.0	.0
130.	.6	.5	.0	.0
140.	.6	.5	.0	.0
150.	.5	.4	.0	.0
160.	.5	.4	.1	.0
170.	.5	.4	.1	.0
180.	.4	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.5	.0	.0
210.	.5	.5	.0	.0
220.	.5	.7	.0	.0
230.	.5	.7	.0	.0
240.	.6	.9	.0	.0
250.	.7	.9	.0	.0
260.	.7	.8	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.7	.8
290.	.0	.1	.8	.8
300.	.0	.2	.6	.6
310.	.0	.3	.5	.6
320.	.0	.3	.5	.6
330.	.0	.3	.5	.6
340.	.0	.4	.4	.7
350.	.0	.3	.4	.9
360.	.2	.1	.6	.7
MAX	.9	.9	.8	.9
DEGR.	100	240	10	350

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Ethel and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 10:30:44

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	155.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	206.	3.8	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	484.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	218.	3.8	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2417.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2500.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2096.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2228.	3.8	.0	56.0		
9. nbq	512.0	452.0	512.0	429.5	23.	180.	AG	25.	100.0	.0	24.0	.58	1.1
10. sbq	488.0	548.0	488.0	1789.8	1242.	360.	AG	25.	100.0	.0	24.0	1.82	63.1
11. ebq	476.0	476.0	452.9	476.0	23.	270.	AG	7.	100.0	.0	48.0	.47	1.2
12. wbq	524.0	524.0	544.1	524.0	20.	90.	AG	7.	100.0	.0	48.0	.41	1.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	50	3.0	155	1600	5.55	3	3
10. sbq	60	50	3.0	484	1600	5.55	3	3
11. ebq	60	7	3.0	2417	1600	5.55	3	3
12. wbq	60	7	3.0	2096	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.7	.6
10.	.3	.0	.7	.5
20.	.2	.0	.5	.5
30.	.2	.0	.4	.5
40.	.2	.0	.5	.5
50.	.2	.0	.6	.5
60.	.2	.0	.6	.6
70.	.2	.0	.8	.8
80.	.2	.0	.8	.7
90.	.4	.2	.2	.2
100.	.9	.7	.0	.0
110.	.9	.7	.0	.0
120.	.7	.6	.0	.0
130.	.6	.5	.0	.0
140.	.6	.5	.0	.0
150.	.5	.4	.0	.0
160.	.4	.4	.0	.0
170.	.5	.4	.1	.0
180.	.4	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.5	.0	.0
210.	.5	.4	.0	.0
220.	.5	.5	.0	.0
230.	.5	.5	.0	.0
240.	.7	.7	.0	.0
250.	.7	.8	.0	.0
260.	.7	.7	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.8	.9
290.	.0	.1	.8	.8
300.	.0	.2	.6	.6
310.	.0	.1	.5	.6
320.	.0	.2	.5	.5
330.	.0	.2	.5	.6
340.	.0	.2	.5	.6
350.	.0	.2	.4	.7
360.	.2	.1	.7	.6
MAX	.9	.8	.8	.9
DEGR.	100	250	70	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Ethel and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 10:34:28

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	155.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	206.	3.8	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	484.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	218.	3.8	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2423.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2506.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2122.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2254.	3.8	.0	56.0		
9. nbq	512.0	452.0	512.0	429.5	23.	180.	AG	25.	100.0	.0	24.0	.58	1.1
10. sbq	488.0	548.0	488.0	1789.8	1242.	360.	AG	25.	100.0	.0	24.0	1.82	63.1
11. ebq	476.0	476.0	452.8	476.0	23.	270.	AG	7.	100.0	.0	48.0	.47	1.2
12. wbq	524.0	524.0	544.3	524.0	20.	90.	AG	7.	100.0	.0	48.0	.41	1.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	50	3.0	155	1600	5.55	3	3
10. sbq	60	50	3.0	484	1600	5.55	3	3
11. ebq	60	7	3.0	2423	1600	5.55	3	3
12. wbq	60	7	3.0	2122	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory Base + Add Area 3 PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.7	.6
10.	.3	.0	.7	.5
20.	.2	.0	.5	.5
30.	.2	.0	.4	.5
40.	.2	.0	.5	.5
50.	.2	.0	.6	.5
60.	.2	.0	.6	.6
70.	.2	.0	.8	.8
80.	.2	.0	.8	.7
90.	.4	.2	.2	.2
100.	.9	.7	.0	.0
110.	.9	.7	.0	.0
120.	.7	.6	.0	.0
130.	.6	.5	.0	.0
140.	.6	.5	.0	.0
150.	.5	.4	.0	.0
160.	.4	.4	.0	.0
170.	.5	.4	.1	.0
180.	.4	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.5	.0	.0
210.	.5	.4	.0	.0
220.	.5	.5	.0	.0
230.	.5	.5	.0	.0
240.	.7	.7	.0	.0
250.	.7	.8	.0	.0
260.	.7	.7	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.8	.9
290.	.0	.1	.8	.8
300.	.0	.2	.6	.6
310.	.0	.1	.5	.6
320.	.0	.2	.5	.5
330.	.0	.2	.5	.6
340.	.0	.2	.5	.6
350.	.0	.2	.4	.7
360.	.2	.1	.7	.6
MAX	.9	.8	.8	.9
DEGR.	100	250	70	280

THE HIGHEST CONCENTRATION OF   .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Ethel and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 10:38:50

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	155.	3.8	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	206.	3.8	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	484.	3.8	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	218.	3.8	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2416.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2499.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2154.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2286.	3.8	.0	56.0		
9. nbq	512.0	452.0	512.0	429.5	23.	180.	AG	25.	100.0	.0	24.0	.58	1.1
10. sbq	488.0	548.0	488.0	1789.8	1242.	360.	AG	25.	100.0	.0	24.0	1.82	63.1
11. ebq	476.0	476.0	452.9	476.0	23.	270.	AG	7.	100.0	.0	48.0	.47	1.2
12. wbq	524.0	524.0	544.6	524.0	21.	90.	AG	7.	100.0	.0	48.0	.42	1.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	50	3.0	155	1600	5.55	3	3
10. sbq	60	50	3.0	484	1600	5.55	3	3
11. ebq	60	7	3.0	2416	1600	5.55	3	3
12. wbq	60	7	3.0	2154	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.2	.1	.7	.6
10.	.3	.0	.7	.5
20.	.2	.0	.5	.5
30.	.2	.0	.4	.5
40.	.2	.0	.5	.5
50.	.2	.0	.6	.5
60.	.2	.0	.6	.6
70.	.2	.0	.8	.8
80.	.2	.0	.8	.7
90.	.4	.2	.2	.2
100.	.9	.7	.0	.0
110.	.9	.7	.0	.0
120.	.7	.7	.0	.0
130.	.6	.5	.0	.0
140.	.6	.5	.0	.0
150.	.5	.4	.0	.0
160.	.4	.4	.0	.0
170.	.5	.4	.1	.0
180.	.4	.4	.0	.0
190.	.4	.4	.0	.0
200.	.4	.5	.0	.0
210.	.5	.4	.0	.0
220.	.5	.5	.0	.0
230.	.5	.5	.0	.0
240.	.7	.7	.0	.0
250.	.7	.8	.0	.0
260.	.7	.7	.0	.0
270.	.2	.3	.2	.3
280.	.0	.1	.8	.9
290.	.0	.1	.8	.8
300.	.0	.2	.6	.6
310.	.0	.1	.5	.6
320.	.0	.2	.5	.5
330.	.0	.2	.5	.6
340.	.0	.2	.5	.6
350.	.0	.2	.4	.7
360.	.2	.1	.7	.6
MAX	.9	.8	.8	.9
DEGR.	100	250	70	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Ethel and Victory PA + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:37:52

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	.0	512.0	500.0	500.	360.	AG	235.	3.2	.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	581.	3.2	.0	32.0		
3. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	1277.	3.2	.0	44.0		
4. sbd	488.0	500.0	488.0	.0	500.	180.	AG	382.	3.2	.0	32.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2716.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	3081.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2581.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2766.	3.2	.0	56.0		
9. nbq	512.0	452.0	512.0	423.9	28.	180.	AG	22.	100.0	.0	24.0	.40	1.4
10. sbq	488.0	548.0	488.0	4279.6	3732.	360.	AG	22.	100.0	.0	24.0	2.18	189.6
11. ebq	476.0	476.0	427.7	476.0	48.	270.	AG	13.	100.0	.0	48.0	.61	2.5
12. wbq	524.0	524.0	573.1	524.0	49.	90.	AG	13.	100.0	.0	48.0	.62	2.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	44	3.0	235	1600	5.54	3	3
10. sbq	60	44	3.0	1277	1600	5.54	3	3
11. ebq	60	13	3.0	2716	1600	5.54	3	3
12. wbq	60	13	3.0	2766	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	456.0	568.0	6.0
2. ne 10 ft	544.0	568.0	6.0
3. sw 10 ft	456.0	432.0	6.0
4. se 10 ft	544.0	432.0	6.0

JOB: Ethel and Victory PA + AA PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.3	.2	.8	.8
10.	.6	.0	.9	.5
20.	.4	.0	.5	.5
30.	.4	.0	.6	.5
40.	.4	.0	.5	.5
50.	.2	.0	.5	.6
60.	.2	.0	.6	.6
70.	.2	.0	.9	.8
80.	.2	.0	.8	.8
90.	.4	.2	.2	.2
100.	.9	.7	.0	.0
110.	.9	.8	.0	.0
120.	.7	.7	.0	.0
130.	.6	.5	.0	.0
140.	.7	.5	.0	.0
150.	.5	.4	.1	.0
160.	.5	.4	.1	.0
170.	.5	.4	.1	.0
180.	.4	.4	.0	.0
190.	.4	.5	.0	.1
200.	.4	.5	.0	.0
210.	.5	.5	.0	.0
220.	.5	.7	.0	.0
230.	.5	.7	.0	.0
240.	.7	.9	.0	.0
250.	.8	1.0	.0	.0
260.	.7	.9	.0	.0
270.	.2	.4	.2	.4
280.	.0	.2	.7	.8
290.	.0	.2	.8	.8
300.	.0	.2	.7	.7
310.	.0	.3	.5	.6
320.	.0	.3	.5	.6
330.	.0	.3	.5	.6
340.	.0	.4	.4	.9
350.	.0	.4	.4	.9
360.	.3	.2	.8	.8
MAX	.9	1.0	.9	.9
DEGR.	100	250	10	340

THE HIGHEST CONCENTRATION OF   1.00 PPM OCCURRED AT RECEPTOR REC2 .

JOB: Morse and Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 11: 1:23

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	1660.1	.0	1660.1	1640.4	1640.	360.	AG	51.	5.1	.0	****		
2. sbd	1620.7	1640.4	1620.7	.0	1640.	180.	AG	56.	5.1	.0	****		
3. eba	.0	1581.4	1640.4	1581.4	1640.	90.	AG	1846.	5.1	.0	****		
4. ebd	1640.4	1581.4	3280.8	1581.4	1640.	90.	AG	1846.	5.1	.0	****		
5. wba	3280.8	1719.2	1640.4	1719.2	1640.	270.	AG	2096.	5.1	.0	****		
6. wbd	1640.4	1719.2	.0	1719.2	1640.	270.	AG	2091.	5.1	.0	****		
7. nbq	1660.1	1522.3	1660.1	1460.5	62.	180.	AG	14.	100.0	.0	39.4	****	3.1
8. ebq	1601.0	1581.4	1597.7	1581.4	3.	270.	AG	1.	100.0	.0	****	.43	.2
9. wbq	1679.8	1719.2	1682.7	1719.2	3.	90.	AG	1.	100.0	.0	****	.36	.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	56	3.0	51	1600	5.56	3	3
8. ebq	60	1	3.0	1846	1600	5.56	3	3
9. wbq	60	1	3.0	2096	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	1535.4	1863.5	5.9
2. ne 10 ft	1745.4	1863.5	5.9
3. sw 10 ft	1535.4	1456.7	5.9
4. se 10 ft	1745.4	1456.7	5.9

JOB: Morse and Victory Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.3	.3
10.	.0	.0	.3	.3
20.	.0	.0	.4	.3
30.	.0	.0	.2	.3
40.	.0	.0	.3	.3
50.	.0	.0	.4	.4
60.	.0	.0	.5	.4
70.	.0	.0	.5	.5
80.	.0	.0	.6	.6
90.	.2	.1	.2	.1
100.	.5	.5	.0	.0
110.	.5	.5	.0	.0
120.	.4	.5	.0	.0
130.	.3	.3	.0	.0
140.	.3	.3	.0	.0
150.	.3	.3	.0	.0
160.	.4	.3	.0	.0
170.	.3	.3	.0	.0
180.	.3	.3	.0	.0
190.	.3	.3	.0	.0
200.	.3	.4	.0	.0
210.	.3	.3	.0	.0
220.	.3	.3	.0	.0
230.	.3	.4	.0	.0
240.	.5	.4	.0	.0
250.	.5	.5	.0	.0
260.	.5	.5	.0	.0
270.	.1	.1	.1	.2
280.	.0	.0	.6	.6
290.	.0	.0	.5	.5
300.	.0	.0	.4	.5
310.	.0	.0	.4	.4
320.	.0	.0	.3	.3
330.	.0	.0	.3	.2
340.	.0	.0	.3	.4
350.	.0	.0	.3	.3
360.	.0	.0	.3	.3
MAX	.5	.5	.6	.6
DEGR.	100	100	80	80

THE HIGHEST CONCENTRATION OF .60 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Morse and Victory No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 16:51:32

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	1660.1	.0	1660.1	1640.4	1640.	360.	AG	56.	3.2	.0	****		
2. sbd	1620.7	1640.4	1620.7	.0	1640.	180.	AG	62.	3.2	.0	****		
3. eba	.0	1581.4	1640.4	1581.4	1640.	90.	AG	2406.	3.2	.0	****		
4. ebd	1640.4	1581.4	3280.8	1581.4	1640.	90.	AG	2406.	3.2	.0	****		
5. wba	3280.8	1719.2	1640.4	1719.2	1640.	270.	AG	2689.	3.2	.0	****		
6. wbd	1640.4	1719.2	.0	1719.2	1640.	270.	AG	2683.	3.2	.0	****		
7. nbq	1660.1	1522.3	1660.1	1441.8	81.	180.	AG	14.	100.0	.0	39.4	****	4.1
8. ebq	1601.0	1581.4	1596.6	1581.4	4.	270.	AG	1.	100.0	.0	****	.56	.2
9. wbq	1679.8	1719.2	1683.5	1719.2	4.	90.	AG	1.	100.0	.0	****	.47	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	56	3.0	56	1600	5.54	3	3
8. ebq	60	1	3.0	2406	1600	5.54	3	3
9. wbq	60	1	3.0	2689	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	1535.4	1863.5	5.9
2. ne 10 ft	1745.4	1863.5	5.9
3. sw 10 ft	1535.4	1456.7	5.9
4. se 10 ft	1745.4	1456.7	5.9

JOB: Morse and Victory No Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.2	.2
10.	.0	.0	.2	.2
20.	.0	.0	.2	.2
30.	.0	.0	.2	.2
40.	.0	.0	.3	.3
50.	.0	.0	.3	.3
60.	.0	.0	.3	.3
70.	.0	.0	.4	.5
80.	.0	.0	.4	.4
90.	.1	.1	.1	.1
100.	.4	.4	.0	.0
110.	.4	.4	.0	.0
120.	.3	.3	.0	.0
130.	.2	.3	.0	.0
140.	.3	.3	.0	.0
150.	.2	.2	.0	.0
160.	.2	.2	.0	.0
170.	.2	.2	.0	.0
180.	.2	.2	.0	.0
190.	.2	.2	.0	.0
200.	.2	.2	.0	.0
210.	.3	.2	.0	.0
220.	.3	.3	.0	.0
230.	.3	.3	.0	.0
240.	.3	.3	.0	.0
250.	.4	.4	.0	.0
260.	.4	.4	.0	.0
270.	.1	.1	.1	.1
280.	.0	.0	.4	.4
290.	.0	.0	.5	.4
300.	.0	.0	.3	.3
310.	.0	.0	.3	.3
320.	.0	.0	.3	.3
330.	.0	.0	.2	.2
340.	.0	.0	.2	.2
350.	.0	.0	.2	.2
360.	.0	.0	.2	.2
MAX	.4	.4	.5	.5
DEGR.	100	100	290	70

THE HIGHEST CONCENTRATION OF .50 PPM OCCURRED AT RECEPTOR REC4 .

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: Morse and Victory Project PM   RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:10:27

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S   VD = .0 CM/S   Z0 = 100. CM
U = 1.0 M/S   CLAS = 6 (F)   ATIM = 60. MINUTES   MIXH = 1000. M   AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	56.	3.2	.0	32.0		
2. sbd	494.0	500.0	494.0	.0	500.	180.	AG	62.	3.2	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2806.	3.2	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	3059.	3.2	.0	56.0		
5. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2861.	3.2	.0	68.0		
6. wbd	500.0	524.0	.0	524.0	500.	270.	AG	3019.	3.2	.0	56.0		
7. nbq	506.0	464.0	506.0	442.0	22.	180.	AG	13.	100.0	.0	12.0	.71	1.1
8. ebq	488.0	482.0	462.4	482.0	26.	270.	AG	4.	100.0	.0	36.0	.70	1.3
9. wbq	512.0	524.0	531.5	524.0	20.	90.	AG	5.	100.0	.0	48.0	.54	1.0
10. nbd	506.0	500.0	506.0	1000.0	500.	360.	AG	110.	3.2	.0	44.0		
11. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	527.	3.2	.0	44.0		
12. sbq	494.0	548.0	494.0	2578.9	2031.	360.	AG	26.	100.0	.0	24.0	3.33	103.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	52	3.0	56	1600	5.54	3	3
8. ebq	60	5	3.0	2806	1600	5.54	3	3
9. wbq	60	5	3.0	2861	1600	5.54	3	3
12. sbq	60	52	3.0	527	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	568.0	1.8
2. ne 10 ft	532.0	568.0	1.8
3. sw 10 ft	468.0	444.0	1.8
4. se 10 ft	532.0	444.0	1.8

JOB: Morse and Victory Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.3	.1	.8	.6
10.	.4	.0	.8	.5
20.	.2	.0	.6	.5
30.	.2	.0	.6	.5
40.	.2	.0	.6	.6
50.	.2	.0	.6	.7
60.	.2	.0	.8	.8
70.	.2	.0	.9	.9
80.	.2	.0	1.0	.9
90.	.5	.2	.3	.3
100.	1.1	.8	.0	.0
110.	1.0	.8	.0	.0
120.	.8	.7	.0	.0
130.	.7	.7	.0	.0
140.	.6	.5	.0	.0
150.	.6	.5	.0	.0
160.	.6	.5	.0	.0
170.	.5	.5	.0	.0
180.	.5	.5	.0	.0
190.	.5	.5	.0	.0
200.	.5	.5	.0	.0
210.	.5	.5	.0	.0
220.	.5	.7	.0	.0
230.	.6	.7	.0	.0
240.	.7	.9	.0	.0
250.	.8	1.0	.0	.0
260.	.8	1.0	.0	.0
270.	.2	.4	.3	.3
280.	.0	.2	.8	.9
290.	.0	.2	.8	1.0
300.	.0	.2	.7	.7
310.	.0	.2	.7	.6
320.	.0	.2	.5	.6
330.	.0	.2	.5	.7
340.	.0	.2	.5	.7
350.	.0	.3	.5	.8
360.	.3	.1	.8	.6
MAX	1.1	1.0	1.0	1.0
DEGR.	100	250	80	290

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Morse and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9:43:59

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	54.	3.8	.0	32.0		
2. sbd	494.0	500.0	494.0	.0	500.	180.	AG	59.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2329.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2329.	3.8	.0	56.0		
5. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2600.	3.8	.0	68.0		
6. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2595.	3.8	.0	56.0		
7. nbq	506.0	464.0	506.0	391.4	73.	180.	AG	14.	100.0	.0	12.0	****	3.7
8. ebq	488.0	482.0	483.8	482.0	4.	270.	AG	1.	100.0	.0	36.0	.54	.2
9. wbq	512.0	524.0	515.6	524.0	4.	90.	AG	1.	100.0	.0	48.0	.45	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	56	3.0	54	1600	5.55	3	3
8. ebq	60	1	3.0	2329	1600	5.55	3	3
9. wbq	60	1	3.0	2600	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	568.0	1.8
2. ne 10 ft	532.0	568.0	1.8
3. sw 10 ft	468.0	444.0	1.8
4. se 10 ft	532.0	444.0	1.8

JOB: Morse and Victory Base + Add Area 1 PM N: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.5	.5
10.	.0	.0	.5	.5
20.	.0	.0	.5	.5
30.	.0	.0	.6	.6
40.	.0	.0	.6	.6
50.	.0	.0	.6	.7
60.	.0	.0	.7	.7
70.	.0	.0	1.0	.9
80.	.0	.0	.9	.9
90.	.3	.3	.4	.3
100.	.8	.8	.0	.0
110.	.8	.9	.0	.0
120.	.8	.8	.0	.0
130.	.6	.6	.0	.0
140.	.6	.5	.0	.0
150.	.5	.5	.0	.0
160.	.5	.5	.0	.0
170.	.5	.5	.0	.0
180.	.5	.5	.0	.0
190.	.5	.5	.0	.0
200.	.5	.5	.0	.0
210.	.5	.5	.0	.0
220.	.5	.6	.0	.0
230.	.6	.6	.0	.0
240.	.7	.8	.0	.0
250.	.8	.8	.0	.0
260.	.8	.8	.0	.0
270.	.2	.2	.3	.3
280.	.0	.0	.9	.9
290.	.0	.0	.9	1.0
300.	.0	.0	.7	.7
310.	.0	.0	.7	.6
320.	.0	.0	.5	.6
330.	.0	.0	.5	.6
340.	.0	.0	.5	.5
350.	.0	.0	.5	.5
360.	.0	.0	.5	.5
MAX	.8	.9	1.0	1.0
DEGR.	120	110	70	290

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Morse and Victory Base + Add Area 3PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9:48:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	54.	3.8	.0	32.0		
2. sbd	494.0	500.0	494.0	.0	500.	180.	AG	59.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2345.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2345.	3.8	.0	56.0		
5. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2126.	3.8	.0	68.0		
6. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2121.	3.8	.0	56.0		
7. nbq	506.0	464.0	506.0	391.4	73.	180.	AG	14.	100.0	.0	12.0	****	3.7
8. ebq	488.0	482.0	483.7	482.0	4.	270.	AG	1.	100.0	.0	36.0	.54	.2
9. wbq	512.0	524.0	514.9	524.0	3.	90.	AG	1.	100.0	.0	48.0	.37	.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	56	3.0	54	1600	5.55	3	3
8. ebq	60	1	3.0	2345	1600	5.55	3	3
9. wbq	60	1	3.0	2126	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	568.0	1.8
2. ne 10 ft	532.0	568.0	1.8
3. sw 10 ft	468.0	444.0	1.8
4. se 10 ft	532.0	444.0	1.8

JOB: Morse and Victory Base + Add Area 3PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.5	.5
10.	.0	.0	.5	.5
20.	.0	.0	.5	.5
30.	.0	.0	.5	.5
40.	.0	.0	.6	.5
50.	.0	.0	.5	.6
60.	.0	.0	.7	.7
70.	.0	.0	.9	.8
80.	.0	.0	.9	.8
90.	.2	.2	.3	.3
100.	.7	.7	.0	.0
110.	.7	.8	.0	.0
120.	.6	.7	.0	.0
130.	.5	.5	.0	.0
140.	.5	.5	.0	.0
150.	.5	.5	.0	.0
160.	.4	.4	.0	.0
170.	.4	.4	.0	.0
180.	.4	.5	.0	.0
190.	.4	.4	.0	.0
200.	.4	.4	.0	.0
210.	.5	.5	.0	.0
220.	.5	.5	.0	.0
230.	.5	.5	.0	.0
240.	.7	.7	.0	.0
250.	.7	.7	.0	.0
260.	.7	.7	.0	.0
270.	.2	.2	.3	.3
280.	.0	.0	.8	.8
290.	.0	.0	.8	.9
300.	.0	.0	.7	.7
310.	.0	.0	.6	.5
320.	.0	.0	.5	.6
330.	.0	.0	.5	.5
340.	.0	.0	.5	.5
350.	.0	.0	.5	.5
360.	.0	.0	.5	.5
MAX	.7	.8	.9	.9
DEGR.	110	110	70	290

THE HIGHEST CONCENTRATION OF   .90 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Morse and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9:54: 2

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	54.	3.8	.0	32.0		
2. sbd	494.0	500.0	494.0	.0	500.	180.	AG	59.	3.8	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2404.	3.8	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	2618.	3.8	.0	56.0		
5. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2658.	3.8	.0	68.0		
6. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2808.	3.8	.0	56.0		
7. nbq	506.0	464.0	506.0	391.4	73.	180.	AG	14.	100.0	.0	12.0	****	3.7
8. ebq	488.0	482.0	483.6	482.0	4.	270.	AG	1.	100.0	.0	36.0	.56	.2
9. wbq	512.0	524.0	515.6	524.0	4.	90.	AG	1.	100.0	.0	48.0	.46	.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	56	3.0	54	1600	5.55	3	3
8. ebq	60	1	3.0	2404	1600	5.55	3	3
9. wbq	60	1	3.0	2658	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	468.0	568.0	1.8
2. ne 10 ft	532.0	568.0	1.8
3. sw 10 ft	468.0	444.0	1.8
4. se 10 ft	532.0	444.0	1.8

JOB: Morse and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.0	.0	.5	.5
10.	.0	.0	.5	.5
20.	.0	.0	.5	.5
30.	.0	.0	.6	.6
40.	.0	.0	.6	.7
50.	.0	.0	.7	.7
60.	.0	.0	.8	.8
70.	.0	.0	1.0	1.0
80.	.0	.0	1.0	1.0
90.	.3	.3	.4	.3
100.	.9	.8	.0	.0
110.	.8	.9	.0	.0
120.	.8	.8	.0	.0
130.	.7	.7	.0	.0
140.	.6	.5	.0	.0
150.	.5	.5	.0	.0
160.	.5	.5	.0	.0
170.	.5	.5	.0	.0
180.	.5	.5	.0	.0
190.	.5	.5	.0	.0
200.	.5	.5	.0	.0
210.	.5	.5	.0	.0
220.	.6	.6	.0	.0
230.	.6	.6	.0	.0
240.	.8	.8	.0	.0
250.	.9	.8	.0	.0
260.	.8	.9	.0	.0
270.	.2	.3	.3	.4
280.	.0	.0	.9	.9
290.	.0	.0	1.0	1.0
300.	.0	.0	.7	.7
310.	.0	.0	.7	.7
320.	.0	.0	.6	.6
330.	.0	.0	.6	.7
340.	.0	.0	.6	.5
350.	.0	.0	.5	.5
360.	.0	.0	.5	.5
MAX	.9	.9	1.0	1.0
DEGR.	100	110	70	70

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Morse and Victory PA + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:16:11

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	.0	506.0	500.0	500.	360.	AG	56.	3.2	.0	32.0		
2. sbd	494.0	500.0	494.0	.0	500.	180.	AG	62.	3.2	.0	32.0		
3. eba	.0	482.0	500.0	482.0	500.	90.	AG	2904.	3.2	.0	56.0		
4. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	3228.	3.2	.0	56.0		
5. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2892.	3.2	.0	68.0		
6. wbd	500.0	524.0	.0	524.0	500.	270.	AG	3098.	3.2	.0	56.0		
7. nbq	506.0	464.0	506.0	447.6	16.	180.	AG	13.	100.0	.0	12.0	.53	.8
8. ebq	488.0	482.0	456.2	482.0	32.	270.	AG	4.	100.0	.0	36.0	.74	1.6
9. wbq	512.0	524.0	535.7	524.0	24.	90.	AG	6.	100.0	.0	48.0	.55	1.2
10. nbd	506.0	500.0	506.0	1000.0	500.	360.	AG	128.	3.2	.0	44.0		
11. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	664.	3.2	.0	44.0		
12. sbq	494.0	548.0	494.0	3023.1	2475.	360.	AG	25.	100.0	.0	24.0	3.13	125.7

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
7. nbq	60	51	3.0	56	1600	5.54	3	3
8. ebq	60	6	3.0	2904	1600	5.54	3	3
9. wbq	60	6	3.0	2892	1600	5.54	3	3
12. sbq	60	51	3.0	664	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	468.0	568.0	1.8
2. ne 10 ft	532.0	568.0	1.8
3. sw 10 ft	468.0	444.0	1.8
4. se 10 ft	532.0	444.0	1.8

JOB: Morse and Victory PA + AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.3	.1	.8	.7
10.	.4	.0	.9	.5
20.	.3	.0	.6	.5
30.	.2	.0	.7	.5
40.	.2	.0	.6	.6
50.	.2	.0	.6	.7
60.	.2	.0	.8	.8
70.	.2	.0	1.0	.9
80.	.2	.0	1.0	.9
90.	.5	.2	.3	.3
100.	1.1	.8	.0	.0
110.	1.1	.9	.0	.0
120.	.9	.7	.0	.0
130.	.8	.7	.0	.0
140.	.7	.5	.0	.0
150.	.6	.5	.0	.0
160.	.6	.5	.0	.0
170.	.6	.5	.0	.0
180.	.5	.5	.0	.0
190.	.5	.5	.0	.0
200.	.5	.5	.0	.0
210.	.5	.6	.0	.0
220.	.5	.7	.0	.0
230.	.6	.7	.0	.0
240.	.7	.9	.0	.0
250.	.8	1.0	.0	.0
260.	.8	1.0	.0	.0
270.	.2	.4	.3	.3
280.	.0	.2	.9	.9
290.	.0	.2	1.0	1.0
300.	.0	.2	.7	.7
310.	.0	.2	.7	.7
320.	.0	.2	.5	.6
330.	.0	.2	.5	.8
340.	.0	.2	.5	.7
350.	.0	.3	.5	.8
360.	.3	.1	.8	.7
MAX	1.1	1.0	1.0	1.0
DEGR.	100	250	70	290

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Whitsett and VanowenExisting PM RUN: CAL3QHC RUN

DATE : 3/26/ 8
TIME : 15:13:43

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	990.	5.1	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	914.	5.1	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	574.	5.1	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	654.	5.1	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1496.	5.1	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1483.	5.1	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1417.	5.1	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1426.	5.1	.0	44.0		
9. nbq	524.0	452.0	524.0	402.0	50.	180.	AG	37.	100.0	.0	48.0	.52	2.5
10. sbq	476.0	536.0	476.0	564.9	29.	360.	AG	37.	100.0	.0	48.0	.30	1.5
11. ebq	452.0	476.0	411.1	476.0	41.	270.	AG	20.	100.0	.0	48.0	.40	2.1
12. wbq	548.0	518.0	599.6	518.0	52.	90.	AG	15.	100.0	.0	36.0	.51	2.6

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	990	1600	5.56	3	3
10. sbq	60	37	3.0	574	1600	5.56	3	3
11. ebq	60	20	3.0	1496	1600	5.56	3	3
12. wbq	60	20	3.0	1417	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and VanowenExisting PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.5
10.	.3	.0	.7	.3
20.	.3	.0	.5	.4
30.	.2	.0	.6	.4
40.	.2	.0	.6	.4
50.	.2	.0	.7	.5
60.	.2	.0	.8	.5
70.	.2	.0	.9	.6
80.	.3	.0	.9	.5
90.	.6	.3	.5	.1
100.	.9	.7	.3	.0
110.	1.0	.7	.2	.0
120.	.7	.5	.2	.0
130.	.8	.5	.2	.0
140.	.6	.4	.2	.0
150.	.7	.4	.2	.0
160.	.7	.4	.4	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.8	.0	.4
200.	.4	.8	.0	.4
210.	.4	.7	.0	.3
220.	.4	.7	.0	.3
230.	.5	.6	.0	.3
240.	.5	.6	.0	.3
250.	.7	1.0	.0	.3
260.	.6	.9	.0	.3
270.	.2	.5	.2	.5
280.	.0	.2	.5	.9
290.	.0	.2	.6	.9
300.	.0	.2	.5	.7
310.	.0	.2	.5	.6
320.	.0	.3	.4	.6
330.	.0	.3	.3	.6
340.	.0	.3	.4	.8
350.	.0	.3	.4	.7
360.	.1	.1	.5	.5
MAX	1.0	1.0	.9	.9
DEGR.	110	250	70	280

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Whitsett and Vanowen No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:27:41

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1153.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1070.	3.2	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	694.	3.2	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	782.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1760.	3.4	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1745.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1651.	3.2	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1661.	3.2	.0	44.0		
9. nbq	524.0	452.0	524.0	393.7	58.	180.	AG	37.	100.0	.0	48.0	.60	3.0
10. sbq	476.0	536.0	476.0	571.0	35.	360.	AG	37.	100.0	.0	48.0	.36	1.8
11. ebq	452.0	476.0	403.9	476.0	48.	270.	AG	20.	100.0	.0	48.0	.47	2.4
12. wbq	548.0	518.0	608.1	518.0	60.	90.	AG	15.	100.0	.0	36.0	.59	3.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1153	1600	5.54	3	3
10. sbq	60	37	3.0	694	1600	5.54	3	3
11. ebq	60	20	3.0	1760	1600	5.54	3	3
12. wbq	60	20	3.0	1651	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and Vanowen No Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.3
10.	.2	.0	.6	.2
20.	.2	.0	.5	.3
30.	.2	.0	.4	.3
40.	.2	.0	.6	.3
50.	.2	.0	.4	.3
60.	.2	.0	.6	.4
70.	.2	.0	.7	.5
80.	.3	.0	.8	.4
90.	.5	.2	.4	.1
100.	.8	.5	.3	.0
110.	.8	.5	.2	.0
120.	.5	.4	.2	.0
130.	.5	.3	.2	.0
140.	.5	.3	.2	.0
150.	.5	.3	.2	.0
160.	.4	.3	.2	.0
170.	.4	.2	.2	.0
180.	.4	.4	.0	.1
190.	.2	.5	.0	.2
200.	.2	.7	.0	.3
210.	.3	.5	.0	.3
220.	.3	.7	.0	.2
230.	.4	.4	.0	.3
240.	.4	.5	.0	.2
250.	.5	.6	.0	.3
260.	.4	.7	.0	.2
270.	.1	.4	.1	.4
280.	.0	.1	.5	.6
290.	.0	.1	.5	.7
300.	.0	.2	.5	.4
310.	.0	.1	.3	.5
320.	.0	.2	.3	.5
330.	.0	.2	.3	.6
340.	.0	.3	.3	.5
350.	.0	.2	.4	.5
360.	.1	.1	.5	.3
MAX	.8	.7	.8	.7
DEGR.	100	200	80	290

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Whitsett and VanowenProject PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:33:33

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1199.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1162.	3.2	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	740.	3.2	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	805.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1840.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1779.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1668.	3.2	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1701.	3.2	.0	44.0		
9. nbq	524.0	452.0	524.0	391.5	60.	180.	AG	37.	100.0	.0	48.0	.62	3.1
10. sbq	476.0	536.0	476.0	573.4	37.	360.	AG	37.	100.0	.0	48.0	.39	1.9
11. ebq	452.0	476.0	401.7	476.0	50.	270.	AG	20.	100.0	.0	48.0	.49	2.6
12. wbq	548.0	518.0	608.8	518.0	61.	90.	AG	15.	100.0	.0	36.0	.60	3.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1199	1600	5.54	3	3
10. sbq	60	37	3.0	740	1600	5.54	3	3
11. ebq	60	20	3.0	1840	1600	5.54	3	3
12. wbq	60	20	3.0	1668	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

```
     JOB: Whitsett and VanowenProject PM                       RUN: CAL3QHC RUN

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4
------*------------------------
  0.  *    .1    .1    .5    .4
 10.  *    .2    .0    .6    .2
 20.  *    .2    .0    .5    .3
 30.  *    .2    .0    .4    .3
 40.  *    .2    .0    .6    .3
 50.  *    .2    .0    .6    .3
 60.  *    .2    .0    .6    .4
 70.  *    .3    .0    .7    .5
 80.  *    .3    .0    .8    .4
 90.  *    .5    .2    .4    .1
100.  *    .8    .5    .3    .0
110.  *    .8    .5    .3    .0
120.  *    .5    .4    .2    .0
130.  *    .5    .3    .2    .0
140.  *    .6    .3    .2    .0
150.  *    .5    .3    .2    .0
160.  *    .5    .3    .2    .0
170.  *    .4    .3    .2    .0
180.  *    .4    .4    .0    .1
190.  *    .2    .6    .0    .2
200.  *    .3    .7    .0    .3
210.  *    .3    .5    .0    .3
220.  *    .3    .7    .0    .2
230.  *    .4    .4    .0    .3
240.  *    .4    .5    .0    .3
250.  *    .5    .6    .0    .3
260.  *    .4    .7    .0    .2
270.  *    .1    .4    .1    .4
280.  *    .0    .1    .5    .6
290.  *    .0    .2    .5    .7
300.  *    .0    .2    .5    .5
310.  *    .0    .2    .3    .5
320.  *    .0    .2    .3    .6
330.  *    .0    .2    .3    .6
340.  *    .0    .3    .4    .7
350.  *    .0    .2    .4    .5
360.  *    .1    .1    .5    .4
------*------------------------
MAX   *    .8    .7    .8    .7
DEGR. *  100   200    80   290

THE HIGHEST CONCENTRATION OF     .80 PPM OCCURRED AT RECEPTOR REC1 .
```

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: Whitsett and Vanowen Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9: 5:34

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1111.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1030.	3.8	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	669.	3.8	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	752.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1696.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1682.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1589.	3.8	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1601.	3.8	.0	44.0		
9. nbq	524.0	452.0	524.0	396.0	56.	180.	AG	37.	100.0	.0	48.0	.58	2.8
10. sbq	476.0	536.0	476.0	569.8	34.	360.	AG	37.	100.0	.0	48.0	.35	1.7
11. ebq	452.0	476.0	405.6	476.0	46.	270.	AG	20.	100.0	.0	48.0	.45	2.4
12. wbq	548.0	518.0	605.9	518.0	58.	90.	AG	15.	100.0	.0	36.0	.57	2.9

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1111	1600	5.55	3	3
10. sbq	60	37	3.0	669	1600	5.55	3	3
11. ebq	60	20	3.0	1696	1600	5.55	3	3
12. wbq	60	20	3.0	1589	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and Vanowen Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.4
10.	.3	.0	.6	.3
20.	.2	.0	.5	.3
30.	.2	.0	.6	.3
40.	.2	.0	.6	.3
50.	.2	.0	.6	.4
60.	.2	.0	.6	.5
70.	.2	.0	.8	.5
80.	.3	.0	.9	.4
90.	.5	.2	.4	.1
100.	.9	.5	.3	.0
110.	.8	.6	.2	.0
120.	.6	.5	.2	.0
130.	.5	.4	.2	.0
140.	.6	.3	.2	.0
150.	.5	.3	.2	.0
160.	.5	.3	.2	.0
170.	.6	.3	.2	.0
180.	.4	.4	.0	.1
190.	.3	.7	.0	.3
200.	.3	.7	.0	.3
210.	.4	.5	.0	.3
220.	.4	.7	.0	.3
230.	.4	.5	.0	.3
240.	.5	.6	.0	.3
250.	.5	.6	.0	.3
260.	.6	.9	.0	.3
270.	.1	.5	.2	.5
280.	.0	.2	.5	.9
290.	.0	.2	.6	.7
300.	.0	.2	.5	.5
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.3	.3	.6
340.	.0	.3	.3	.7
350.	.0	.2	.4	.6
360.	.1	.1	.5	.4
MAX	.9	.9	.9	.9
DEGR.	100	260	80	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Vanowen Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9: 9:31

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1111.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1042.	3.8	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	676.	3.8	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	752.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1712.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1686.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1592.	3.8	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1611.	3.8	.0	44.0		
9. nbq	524.0	452.0	524.0	396.0	56.	180.	AG	37.	100.0	.0	48.0	.58	2.8
10. sbq	476.0	536.0	476.0	570.2	34.	360.	AG	37.	100.0	.0	48.0	.35	1.7
11. ebq	452.0	476.0	405.2	476.0	47.	270.	AG	20.	100.0	.0	48.0	.46	2.4
12. wbq	548.0	518.0	606.0	518.0	58.	90.	AG	15.	100.0	.0	36.0	.57	2.9

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1111	1600	5.55	3	3
10. sbq	60	37	3.0	676	1600	5.55	3	3
11. ebq	60	20	3.0	1712	1600	5.55	3	3
12. wbq	60	20	3.0	1592	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and Vanowen Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.4
10.	.3	.0	.6	.3
20.	.2	.0	.5	.3
30.	.2	.0	.6	.3
40.	.2	.0	.6	.3
50.	.2	.0	.6	.4
60.	.2	.0	.6	.5
70.	.2	.0	.8	.5
80.	.3	.0	.9	.4
90.	.5	.2	.4	.1
100.	.9	.5	.3	.0
110.	.8	.6	.2	.0
120.	.6	.5	.2	.0
130.	.5	.4	.2	.0
140.	.6	.3	.2	.0
150.	.5	.3	.2	.0
160.	.5	.3	.2	.0
170.	.6	.3	.2	.0
180.	.4	.4	.0	.1
190.	.3	.7	.0	.3
200.	.3	.7	.0	.3
210.	.4	.5	.0	.3
220.	.4	.7	.0	.3
230.	.4	.5	.0	.3
240.	.5	.6	.0	.3
250.	.5	.7	.0	.3
260.	.6	.9	.0	.3
270.	.1	.5	.2	.5
280.	.0	.2	.5	.9
290.	.0	.2	.6	.7
300.	.0	.2	.5	.5
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.3	.3	.6
340.	.0	.3	.3	.7
350.	.0	.2	.4	.6
360.	.1	.1	.5	.4
MAX	.9	.9	.9	.9
DEGR.	100	260	80	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Vanowen Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/23/ 8
TIME : 9:13:34

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1111.	3.8	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1041.	3.8	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	668.	3.8	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	752.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1711.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1686.	3.8	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1589.	3.8	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1600.	3.8	.0	44.0		
9. nbq	524.0	452.0	524.0	396.0	56.	180.	AG	37.	100.0	.0	48.0	.58	2.8
10. sbq	476.0	536.0	476.0	569.8	34.	360.	AG	37.	100.0	.0	48.0	.35	1.7
11. ebq	452.0	476.0	405.3	476.0	47.	270.	AG	20.	100.0	.0	48.0	.46	2.4
12. wbq	548.0	518.0	605.9	518.0	58.	90.	AG	15.	100.0	.0	36.0	.57	2.9

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1111	1600	5.55	3	3
10. sbq	60	37	3.0	668	1600	5.55	3	3
11. ebq	60	20	3.0	1711	1600	5.55	3	3
12. wbq	60	20	3.0	1589	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and Vanowen Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.4
10.	.3	.0	.6	.3
20.	.2	.0	.5	.3
30.	.2	.0	.6	.3
40.	.2	.0	.6	.3
50.	.2	.0	.6	.4
60.	.2	.0	.6	.5
70.	.2	.0	.8	.5
80.	.3	.0	.9	.4
90.	.5	.2	.4	.1
100.	.9	.5	.3	.0
110.	.8	.6	.2	.0
120.	.6	.5	.2	.0
130.	.5	.4	.2	.0
140.	.6	.3	.2	.0
150.	.5	.3	.2	.0
160.	.5	.3	.2	.0
170.	.6	.3	.2	.0
180.	.4	.4	.0	.1
190.	.3	.7	.0	.3
200.	.3	.7	.0	.3
210.	.4	.5	.0	.3
220.	.4	.7	.0	.3
230.	.4	.5	.0	.3
240.	.5	.6	.0	.3
250.	.5	.6	.0	.3
260.	.6	.9	.0	.3
270.	.1	.5	.2	.5
280.	.0	.2	.5	.9
290.	.0	.2	.6	.7
300.	.0	.2	.5	.5
310.	.0	.2	.4	.5
320.	.0	.2	.3	.6
330.	.0	.3	.3	.6
340.	.0	.3	.3	.7
350.	.0	.2	.4	.6
360.	.1	.1	.5	.4
MAX	.9	.9	.9	.9
DEGR.	100	260	80	280

THE HIGHEST CONCENTRATION OF .90 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Vanowen PA + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:40: 2

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S	VD = .0 CM/S	Z0 = 100. CM		
U = 1.0 M/S	CLAS = 6 (F)	ATIM = 60. MINUTES	MIXH = 1000. M	AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	.0	524.0	500.0	500.	360.	AG	1211.	3.2	.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1186.	3.2	.0	44.0		
3. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	748.	3.2	.0	68.0		
4. sbd	476.0	500.0	476.0	.0	500.	180.	AG	809.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	1861.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1788.	3.2	.0	44.0		
7. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1671.	3.2	.0	68.0		
8. wbd	500.0	518.0	.0	518.0	500.	270.	AG	1708.	3.2	.0	44.0		
9. nbq	524.0	452.0	524.0	390.9	61.	180.	AG	37.	100.0	.0	48.0	.63	3.1
10. sbq	476.0	536.0	476.0	573.8	38.	360.	AG	37.	100.0	.0	48.0	.39	1.9
11. ebq	452.0	476.0	401.1	476.0	51.	270.	AG	20.	100.0	.0	48.0	.50	2.6
12. wbq	548.0	518.0	608.9	518.0	61.	90.	AG	15.	100.0	.0	36.0	.60	3.1

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1211	1600	5.54	3	3
10. sbq	60	37	3.0	748	1600	5.54	3	3
11. ebq	60	20	3.0	1861	1600	5.54	3	3
12. wbq	60	20	3.0	1671	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	432.0	556.0	6.0
2. ne 10 ft	568.0	556.0	6.0
3. sw 10 ft	432.0	432.0	6.0
4. se 10 ft	568.0	432.0	6.0

JOB: Whitsett and Vanowen PA + AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.5	.4
10.	.2	.0	.6	.2
20.	.2	.0	.5	.3
30.	.2	.0	.5	.3
40.	.2	.0	.6	.3
50.	.2	.0	.6	.3
60.	.2	.0	.6	.4
70.	.3	.0	.7	.5
80.	.3	.0	.8	.4
90.	.5	.2	.4	.1
100.	.8	.5	.3	.0
110.	.8	.5	.3	.0
120.	.5	.4	.2	.0
130.	.5	.4	.2	.0
140.	.6	.3	.2	.0
150.	.5	.3	.2	.0
160.	.5	.3	.2	.0
170.	.4	.3	.2	.0
180.	.4	.4	.0	.1
190.	.2	.6	.0	.2
200.	.3	.7	.0	.3
210.	.3	.5	.0	.3
220.	.3	.7	.0	.2
230.	.4	.4	.0	.3
240.	.4	.5	.0	.3
250.	.5	.6	.0	.3
260.	.4	.7	.0	.3
270.	.1	.4	.1	.5
280.	.0	.1	.5	.6
290.	.0	.2	.5	.7
300.	.0	.2	.5	.5
310.	.0	.2	.3	.5
320.	.0	.2	.3	.6
330.	.0	.3	.3	.6
340.	.0	.3	.4	.7
350.	.0	.2	.4	.5
360.	.1	.1	.5	.4
MAX	.8	.7	.8	.7
DEGR.	100	200	80	290

THE HIGHEST CONCENTRATION OF .80 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Whitsett and Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/27/ 8
TIME : 11:35:49

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	998.	5.1	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	914.	5.1	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	599.	5.1	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	586.	5.1	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2067.	5.1	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2230.	5.1	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1733.	5.1	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	1667.	5.1	.0	56.0		
9. nbq	518.0	452.0	518.0	359.9	92.	180.	AG	30.	100.0	.0	36.0	.83	4.7
10. sbq	482.0	548.0	482.0	591.5	44.	360.	AG	30.	100.0	.0	36.0	.50	2.2
11. ebq	464.0	476.0	416.0	476.0	48.	270.	AG	17.	100.0	.0	48.0	.51	2.4
12. wbq	536.0	524.0	576.3	524.0	40.	90.	AG	17.	100.0	.0	48.0	.43	2.0

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	40	3.0	998	1600	5.56	3	3
10. sbq	60	40	3.0	599	1600	5.56	3	3
11. ebq	60	17	3.0	2067	1600	5.56	3	3
12. wbq	60	17	3.0	1733	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory Existing PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.1	.6	.6
10.	*	.3	.0	.9	.5
20.	*	.4	.0	.8	.5
30.	*	.2	.0	.8	.5
40.	*	.2	.0	.7	.6
50.	*	.2	.0	.8	.6
60.	*	.3	.0	1.0	.8
70.	*	.3	.0	1.1	.9
80.	*	.3	.0	1.2	.8
90.	*	.6	.2	.6	.2
100.	*	1.1	.7	.3	.0
110.	*	1.2	.8	.3	.0
120.	*	.8	.7	.3	.0
130.	*	.8	.6	.2	.0
140.	*	.8	.5	.2	.0
150.	*	.7	.5	.3	.0
160.	*	.8	.4	.4	.0
170.	*	.8	.4	.3	.0
180.	*	.5	.6	.1	.1
190.	*	.4	.9	.0	.4
200.	*	.4	.8	.0	.4
210.	*	.4	.8	.0	.4
220.	*	.5	.8	.0	.4
230.	*	.6	.8	.0	.4
240.	*	.7	.9	.0	.4
250.	*	.7	1.1	.0	.3
260.	*	.7	1.0	.0	.3
270.	*	.2	.5	.3	.6
280.	*	.0	.3	.7	1.1
290.	*	.0	.2	.9	1.1
300.	*	.0	.2	.6	1.0
310.	*	.0	.3	.6	.9
320.	*	.0	.3	.5	.8
330.	*	.0	.3	.5	.8
340.	*	.0	.3	.5	.9
350.	*	.0	.4	.5	.9
360.	*	.1	.1	.6	.6
MAX	*	1.2	1.1	1.2	1.1
DEGR.	*	110	250	80	280

THE HIGHEST CONCENTRATION OF 1.20 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Victory No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:51:48

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1160.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1072.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	730.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	705.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2626.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2808.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2265.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2196.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	139.7	312.	180.	AG	30.	100.0	.0	36.0	1.03	15.9
10. sbq	482.0	548.0	482.0	603.2	55.	360.	AG	30.	100.0	.0	36.0	.65	2.8
11. ebq	464.0	476.0	406.6	476.0	57.	270.	AG	16.	100.0	.0	48.0	.63	2.9
12. wbq	536.0	524.0	585.5	524.0	50.	90.	AG	16.	100.0	.0	48.0	.54	2.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	41	3.0	1160	1600	5.54	3	3
10. sbq	60	41	3.0	730	1600	5.54	3	3
11. ebq	60	16	3.0	2626	1600	5.54	3	3
12. wbq	60	16	3.0	2265	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory No Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.4	.4
10.	.3	.0	.5	.3
20.	.2	.0	.5	.4
30.	.2	.0	.6	.5
40.	.2	.0	.5	.5
50.	.3	.0	.7	.5
60.	.3	.0	.7	.6
70.	.3	.0	.9	.7
80.	.3	.0	.9	.6
90.	.5	.2	.5	.2
100.	.9	.6	.3	.0
110.	1.0	.7	.3	.0
120.	.8	.6	.3	.0
130.	.7	.5	.3	.0
140.	.6	.4	.3	.0
150.	.7	.4	.3	.0
160.	.7	.4	.3	.0
170.	.7	.4	.2	.0
180.	.5	.6	.1	.1
190.	.4	.8	.0	.4
200.	.4	.7	.0	.4
210.	.4	.7	.0	.4
220.	.4	.4	.0	.3
230.	.5	.6	.0	.3
240.	.5	.7	.0	.3
250.	.7	.9	.0	.3
260.	.6	.8	.0	.2
270.	.1	.5	.2	.4
280.	.0	.3	.6	.9
290.	.0	.2	.7	1.0
300.	.0	.2	.6	.7
310.	.0	.2	.5	.6
320.	.0	.2	.5	.5
330.	.0	.2	.4	.8
340.	.0	.3	.4	.6
350.	.0	.3	.3	.6
360.	.1	.1	.4	.4
MAX	1.0	.9	.9	1.0
DEGR.	110	250	70	290

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC1 .

JOB: Whitsett and Victory Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 17:57: 3

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1183.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1118.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	753.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	751.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2970.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	3060.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2390.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2367.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	-214.6	667.	180.	AG	31.	100.0	.0	36.0	1.14	33.9
10. sbq	482.0	548.0	482.0	611.3	63.	360.	AG	31.	100.0	.0	36.0	.73	3.2
11. ebq	464.0	476.0	403.1	476.0	61.	270.	AG	15.	100.0	.0	48.0	.70	3.1
12. wbq	536.0	524.0	585.0	524.0	49.	90.	AG	15.	100.0	.0	48.0	.56	2.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	42	3.0	1183	1600	5.54	3	3
10. sbq	60	42	3.0	753	1600	5.54	3	3
11. ebq	60	15	3.0	2970	1600	5.54	3	3
12. wbq	60	15	3.0	2390	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.6	.5
20.	.2	.0	.6	.5
30.	.2	.0	.7	.5
40.	.3	.0	.6	.5
50.	.3	.0	.7	.6
60.	.3	.0	.9	.6
70.	.3	.0	1.0	.7
80.	.3	.0	1.1	.6
90.	.5	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.0	.7	.3	.0
120.	.8	.6	.3	.0
130.	.7	.5	.3	.0
140.	.8	.4	.3	.0
150.	.7	.4	.3	.0
160.	.7	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.6	.1	.2
190.	.4	.9	.0	.5
200.	.4	.7	.0	.5
210.	.4	.7	.0	.4
220.	.4	.5	.0	.3
230.	.5	.6	.0	.3
240.	.6	.8	.0	.3
250.	.7	.9	.0	.3
260.	.6	.8	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.3	.7	1.1
300.	.0	.2	.6	.8
310.	.0	.2	.5	.6
320.	.0	.2	.5	.6
330.	.0	.3	.5	.8
340.	.0	.3	.5	.7
350.	.0	.3	.4	.8
360.	.1	.1	.6	.6
MAX	1.0	.9	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 18:10:57

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1116.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1031.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	705.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	681.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2538.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2713.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2193.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2127.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	276.2	176.	180.	AG	31.	100.0	.0	36.0	1.00	8.9
10. sbq	482.0	548.0	482.0	600.7	53.	360.	AG	31.	100.0	.0	36.0	.63	2.7
11. ebq	464.0	476.0	408.5	476.0	55.	270.	AG	16.	100.0	.0	48.0	.61	2.8
12. wbq	536.0	524.0	583.9	524.0	48.	90.	AG	16.	100.0	.0	48.0	.53	2.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	41	3.0	1116	1600	5.55	3	3
10. sbq	60	41	3.0	705	1600	5.55	3	3
11. ebq	60	16	3.0	2538	1600	5.55	3	3
12. wbq	60	16	3.0	2193	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.8	.5
20.	.3	.0	.7	.5
30.	.2	.0	.8	.5
40.	.2	.0	.6	.5
50.	.3	.0	.7	.6
60.	.3	.0	.9	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.8
90.	.5	.2	.6	.2
100.	1.1	.7	.3	.0
110.	1.0	.8	.3	.0
120.	.8	.7	.3	.0
130.	.8	.6	.3	.0
140.	.8	.5	.3	.0
150.	.8	.4	.3	.0
160.	.9	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.9	.0	.5
200.	.4	.9	.0	.4
210.	.4	.7	.0	.4
220.	.5	.6	.0	.4
230.	.5	.6	.0	.3
240.	.6	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.6	.9	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.2	.8	1.1
300.	.0	.2	.6	.8
310.	.0	.2	.5	.6
320.	.0	.2	.5	.7
330.	.0	.3	.5	.8
340.	.0	.3	.5	.9
350.	.0	.3	.5	.8
360.	.1	.1	.6	.6
MAX	1.1	1.0	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 18:15:18

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1116.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1031.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	705.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	681.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2570.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2745.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2212.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2146.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	276.2	176.	180.	AG	31.	100.0	.0	36.0	1.00	8.9
10. sbq	482.0	548.0	482.0	600.7	53.	360.	AG	31.	100.0	.0	36.0	.63	2.7
11. ebq	464.0	476.0	407.8	476.0	56.	270.	AG	16.	100.0	.0	48.0	.62	2.9
12. wbq	536.0	524.0	584.4	524.0	48.	90.	AG	16.	100.0	.0	48.0	.53	2.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	41	3.0	1116	1600	5.55	3	3
10. sbq	60	41	3.0	705	1600	5.55	3	3
11. ebq	60	16	3.0	2570	1600	5.55	3	3
12. wbq	60	16	3.0	2212	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.8	.5
20.	.3	.0	.7	.5
30.	.2	.0	.8	.5
40.	.2	.0	.7	.5
50.	.3	.0	.7	.6
60.	.3	.0	.9	.6
70.	.3	.0	1.1	.8
80.	.3	.0	1.1	.8
90.	.5	.2	.6	.2
100.	1.1	.7	.3	.0
110.	1.1	.8	.3	.0
120.	.8	.7	.3	.0
130.	.8	.6	.3	.0
140.	.8	.5	.3	.0
150.	.8	.4	.3	.0
160.	.9	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.5	.1	.1
190.	.4	.9	.0	.5
200.	.4	.9	.0	.4
210.	.4	.7	.0	.4
220.	.5	.6	.0	.4
230.	.5	.6	.0	.3
240.	.6	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.7	.9	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.2	.8	1.1
300.	.0	.2	.6	.8
310.	.0	.2	.5	.6
320.	.0	.2	.5	.7
330.	.0	.3	.5	.8
340.	.0	.3	.5	.9
350.	.0	.3	.5	.8
360.	.1	.1	.6	.6
MAX	1.1	1.0	1.1	1.1
DEGR.	100	250	70	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Whitsett and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 18:19:25

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1080.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	995.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	705.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	697.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2585.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2744.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2191.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2125.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	301.6	150.	180.	AG	31.	100.0	.0	36.0	.97	7.6
10. sbq	482.0	548.0	482.0	600.7	53.	360.	AG	31.	100.0	.0	36.0	.63	2.7
11. ebq	464.0	476.0	407.5	476.0	57.	270.	AG	16.	100.0	.0	48.0	.62	2.9
12. wbq	536.0	524.0	583.9	524.0	48.	90.	AG	16.	100.0	.0	48.0	.53	2.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	41	3.0	1080	1600	5.55	3	3
10. sbq	60	41	3.0	705	1600	5.55	3	3
11. ebq	60	16	3.0	2585	1600	5.55	3	3
12. wbq	60	16	3.0	2191	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.1	.6	.6
10.	*	.3	.0	.8	.5
20.	*	.3	.0	.7	.5
30.	*	.2	.0	.8	.5
40.	*	.2	.0	.7	.5
50.	*	.3	.0	.7	.6
60.	*	.3	.0	.9	.6
70.	*	.3	.0	1.1	.8
80.	*	.3	.0	1.1	.8
90.	*	.5	.2	.6	.2
100.	*	1.1	.7	.3	.0
110.	*	1.0	.8	.3	.0
120.	*	.8	.7	.3	.0
130.	*	.8	.6	.3	.0
140.	*	.8	.5	.3	.0
150.	*	.8	.4	.2	.0
160.	*	.9	.4	.3	.0
170.	*	.7	.4	.3	.0
180.	*	.5	.5	.1	.1
190.	*	.4	.9	.0	.4
200.	*	.4	.9	.0	.4
210.	*	.4	.7	.0	.4
220.	*	.5	.6	.0	.4
230.	*	.6	.6	.0	.3
240.	*	.6	.8	.0	.3
250.	*	.7	1.0	.0	.3
260.	*	.6	.9	.0	.3
270.	*	.2	.5	.2	.6
280.	*	.0	.3	.7	1.1
290.	*	.0	.2	.8	1.1
300.	*	.0	.2	.6	.9
310.	*	.0	.2	.6	.6
320.	*	.0	.2	.5	.7
330.	*	.0	.3	.5	.8
340.	*	.0	.3	.5	.8
350.	*	.0	.3	.5	.8
360.	*	.1	.1	.6	.6
MAX	*	1.1	1.0	1.1	1.1
DEGR.	*	100	250	70	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 95221

JOB: Whitsett and Victory PA+ AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 18: 2: 2

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1187.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1130.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	757.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	763.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	3059.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	3125.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2415.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2400.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	-224.9	677.	180.	AG	31.	100.0	.0	36.0	1.14	34.4
10. sbq	482.0	548.0	482.0	611.8	64.	360.	AG	31.	100.0	.0	36.0	.73	3.2
11. ebq	464.0	476.0	401.3	476.0	63.	270.	AG	15.	100.0	.0	48.0	.72	3.2
12. wbq	536.0	524.0	585.5	524.0	49.	90.	AG	15.	100.0	.0	48.0	.57	2.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	42	3.0	1187	1600	5.54	3	3
10. sbq	60	42	3.0	757	1600	5.54	3	3
11. ebq	60	15	3.0	3059	1600	5.54	3	3
12. wbq	60	15	3.0	2415	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Whitsett and Victory PA+ AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.6
10.	.3	.0	.7	.5
20.	.2	.0	.6	.5
30.	.2	.0	.7	.5
40.	.3	.0	.7	.5
50.	.3	.0	.7	.6
60.	.3	.0	.9	.6
70.	.3	.0	1.0	.8
80.	.3	.0	1.1	.7
90.	.5	.2	.6	.2
100.	1.0	.7	.3	.0
110.	1.0	.7	.3	.0
120.	.8	.6	.3	.0
130.	.7	.6	.3	.0
140.	.8	.4	.3	.0
150.	.7	.4	.3	.0
160.	.7	.4	.3	.0
170.	.7	.4	.3	.0
180.	.5	.6	.1	.2
190.	.4	.9	.0	.5
200.	.4	.7	.0	.5
210.	.4	.7	.0	.4
220.	.4	.6	.0	.3
230.	.6	.6	.0	.3
240.	.6	.8	.0	.3
250.	.7	.9	.0	.3
260.	.6	.9	.0	.3
270.	.2	.5	.2	.6
280.	.0	.3	.7	1.1
290.	.0	.3	.7	1.1
300.	.0	.2	.6	.9
310.	.0	.2	.6	.6
320.	.0	.2	.5	.6
330.	.0	.3	.5	.8
340.	.0	.3	.5	.8
350.	.0	.3	.5	.8
360.	.1	.1	.6	.6
MAX	1.0	.9	1.1	1.1
DEGR.	100	250	80	280

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Woodman and Victory Existing PM RUN: CAL3QHC RUN

DATE : 3/26/ 8
TIME : 16:49:54

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1187.	5.1	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1322.	5.1	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1170.	5.1	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1096.	5.1	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2025.	5.1	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1935.	5.1	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1831.	5.1	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	1860.	5.1	.0	56.0		
9. nbq	518.0	452.0	518.0	372.0	80.	180.	AG	26.	100.0	.0	36.0	.74	4.1
10. sbq	482.0	548.0	482.0	626.1	78.	360.	AG	26.	100.0	.0	36.0	.73	4.0
11. ebq	464.0	476.0	403.1	476.0	61.	270.	AG	22.	100.0	.0	48.0	.58	3.1
12. wbq	536.0	524.0	591.0	524.0	55.	90.	AG	22.	100.0	.0	48.0	.52	2.8

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	35	3.0	1187	1600	5.56	3	3
10. sbq	60	35	3.0	1170	1600	5.56	3	3
11. ebq	60	22	3.0	2025	1600	5.56	3	3
12. wbq	60	22	3.0	1831	1600	5.56	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Existing PM   RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.2	.2	.8	.7
10.	*	.6	.0	1.2	.5
20.	*	.5	.0	1.0	.5
30.	*	.5	.0	.9	.5
40.	*	.5	.0	.9	.5
50.	*	.5	.0	.9	.6
60.	*	.5	.0	1.1	.7
70.	*	.5	.0	1.1	.8
80.	*	.4	.0	1.1	.7
90.	*	.7	.2	.6	.2
100.	*	1.1	.8	.3	.0
110.	*	1.2	.8	.4	.0
120.	*	.9	.7	.4	.0
130.	*	.9	.5	.3	.0
140.	*	1.0	.5	.4	.0
150.	*	1.0	.5	.4	.0
160.	*	1.0	.6	.5	.0
170.	*	1.0	.5	.5	.0
180.	*	.7	.8	.1	.2
190.	*	.4	1.1	.0	.5
200.	*	.5	1.0	.0	.5
210.	*	.5	1.0	.0	.5
220.	*	.5	.7	.0	.4
230.	*	.6	.9	.0	.4
240.	*	.7	1.0	.0	.4
250.	*	.8	1.1	.0	.4
260.	*	.7	1.3	.0	.4
270.	*	.2	.6	.2	.7
280.	*	.0	.4	.8	1.2
290.	*	.0	.4	.9	1.2
300.	*	.0	.3	.7	1.1
310.	*	.0	.3	.6	.9
320.	*	.0	.4	.5	1.0
330.	*	.0	.5	.6	1.0
340.	*	.0	.5	.6	1.1
350.	*	.0	.6	.6	1.2
360.	*	.2	.2	.8	.7
MAX	*	1.2	1.3	1.2	1.2
DEGR.	*	110	260	10	290

THE HIGHEST CONCENTRATION OF   1.30 PPM OCCURRED AT RECEPTOR REC2 .

JOB: Woodman and Victory No Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 18: 9: 3

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1326.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1497.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1322.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1219.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2560.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2481.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2371.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2382.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	312.1	140.	180.	AG	27.	100.0	.0	36.0	.92	7.1
10. sbq	482.0	548.0	482.0	685.4	137.	360.	AG	27.	100.0	.0	36.0	.92	7.0
11. ebq	464.0	476.0	394.0	476.0	70.	270.	AG	20.	100.0	.0	48.0	.69	3.6
12. wbq	536.0	524.0	600.7	524.0	65.	90.	AG	20.	100.0	.0	48.0	.63	3.3

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1326	1600	5.54	3	3
10. sbq	60	37	3.0	1322	1600	5.54	3	3
11. ebq	60	20	3.0	2560	1600	5.54	3	3
12. wbq	60	20	3.0	2371	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory No Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.5
10.	.4	.0	1.0	.4
20.	.5	.0	.9	.4
30.	.4	.0	.7	.4
40.	.4	.0	.5	.5
50.	.3	.0	.7	.5
60.	.3	.0	.7	.5
70.	.3	.0	.9	.6
80.	.3	.0	.9	.5
90.	.5	.2	.5	.2
100.	1.0	.6	.3	.0
110.	1.0	.6	.3	.0
120.	.7	.5	.3	.0
130.	.7	.5	.3	.0
140.	.6	.4	.3	.0
150.	.7	.5	.3	.0
160.	1.0	.5	.4	.0
170.	.7	.5	.3	.0
180.	.5	.6	.1	.1
190.	.4	1.0	.0	.4
200.	.4	.9	.0	.4
210.	.4	.7	.0	.4
220.	.4	.6	.0	.4
230.	.5	.8	.0	.3
240.	.5	.7	.0	.3
250.	.7	.9	.0	.3
260.	.5	.9	.0	.3
270.	.2	.5	.2	.5
280.	.0	.3	.6	1.0
290.	.0	.3	.6	1.0
300.	.0	.3	.6	.7
310.	.0	.4	.5	.7
320.	.0	.4	.6	.6
330.	.0	.3	.5	.7
340.	.0	.5	.5	.9
350.	.0	.4	.5	.8
360.	.1	.1	.6	.5
MAX	1.0	1.0	1.0	1.0
DEGR.	100	190	10	280

THE HIGHEST CONCENTRATION OF 1.00 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Woodman and Victory Project PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 18:15:10

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1326.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1531.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1339.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1219.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2645.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2583.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2577.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2554.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	277.0	175.	180.	AG	28.	100.0	.0	36.0	.98	8.9
10. sbq	482.0	548.0	482.0	731.0	183.	360.	AG	28.	100.0	.0	36.0	.98	9.3
11. ebq	464.0	476.0	395.3	476.0	69.	270.	AG	19.	100.0	.0	48.0	.69	3.5
12. wbq	536.0	524.0	602.9	524.0	67.	90.	AG	19.	100.0	.0	48.0	.67	3.4

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	38	3.0	1326	1600	5.54	3	3
10. sbq	60	38	3.0	1339	1600	5.54	3	3
11. ebq	60	19	3.0	2645	1600	5.54	3	3
12. wbq	60	19	3.0	2577	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Project PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.5
10.	.5	.0	1.0	.4
20.	.5	.0	1.0	.4
30.	.5	.0	.7	.4
40.	.4	.0	.5	.5
50.	.3	.0	.7	.5
60.	.3	.0	.7	.5
70.	.3	.0	1.0	.7
80.	.3	.0	.9	.6
90.	.5	.2	.5	.2
100.	1.0	.6	.3	.0
110.	1.0	.7	.3	.0
120.	.7	.6	.3	.0
130.	.7	.5	.3	.0
140.	.6	.5	.3	.0
150.	.8	.5	.4	.0
160.	1.0	.5	.4	.0
170.	.7	.4	.3	.0
180.	.5	.6	.1	.1
190.	.4	.9	.0	.5
200.	.4	.9	.0	.4
210.	.4	.7	.0	.4
220.	.5	.6	.0	.4
230.	.5	.8	.0	.3
240.	.5	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.7	.9	.0	.3
270.	.2	.5	.2	.5
280.	.0	.3	.6	1.0
290.	.0	.3	.8	1.1
300.	.0	.4	.6	.7
310.	.0	.4	.5	.7
320.	.0	.4	.5	.6
330.	.0	.4	.5	.8
340.	.0	.5	.5	1.0
350.	.0	.4	.4	.9
360.	.1	.1	.6	.5
MAX	1.0	1.0	1.0	1.1
DEGR.	100	250	10	290

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC4 .

JOB: Woodman and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 17:40:31

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1276.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1441.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1271.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1173.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2476.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2400.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2294.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2303.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	331.0	121.	180.	AG	28.	100.0	.0	36.0	.89	6.1
10. sbq	482.0	548.0	482.0	667.1	119.	360.	AG	28.	100.0	.0	36.0	.88	6.0
11. ebq	464.0	476.0	396.3	476.0	68.	270.	AG	20.	100.0	.0	48.0	.66	3.4
12. wbq	536.0	524.0	598.7	524.0	63.	90.	AG	20.	100.0	.0	48.0	.61	3.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1276	1600	5.55	3	3
10. sbq	60	37	3.0	1271	1600	5.55	3	3
11. ebq	60	20	3.0	2476	1600	5.55	3	3
12. wbq	60	20	3.0	2294	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Base + Add Area 1 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.8	.7
10.	.4	.0	1.2	.4
20.	.6	.0	1.0	.4
30.	.5	.0	.9	.5
40.	.4	.0	.5	.5
50.	.4	.0	.8	.5
60.	.3	.0	.9	.7
70.	.3	.0	1.0	.8
80.	.3	.0	1.0	.7
90.	.6	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.1	.8	.3	.0
120.	.8	.7	.3	.0
130.	.8	.5	.4	.0
140.	.9	.5	.4	.0
150.	.8	.6	.4	.0
160.	1.0	.5	.4	.0
170.	.9	.5	.4	.0
180.	.5	.7	.1	.1
190.	.4	1.1	.0	.4
200.	.4	.9	.0	.6
210.	.5	.8	.0	.4
220.	.5	.7	.0	.4
230.	.5	.8	.0	.4
240.	.7	1.0	.0	.3
250.	.8	1.1	.0	.3
260.	.7	.9	.0	.3
270.	.2	.6	.2	.6
280.	.0	.3	.8	1.1
290.	.0	.4	.8	1.1
300.	.0	.4	.7	.8
310.	.0	.4	.5	.8
320.	.0	.3	.5	.7
330.	.0	.4	.6	.8
340.	.0	.5	.6	1.0
350.	.0	.4	.6	.9
360.	.1	.1	.8	.7
MAX	1.1	1.1	1.2	1.1
DEGR.	110	190	10	280

THE HIGHEST CONCENTRATION OF 1.20 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Woodman and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 17:44:51

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1276.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1445.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1274.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1173.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2489.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2416.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2319.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2324.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	331.0	121.	180.	AG	28.	100.0	.0	36.0	.89	6.1
10. sbq	482.0	548.0	482.0	668.0	120.	360.	AG	28.	100.0	.0	36.0	.89	6.1
11. ebq	464.0	476.0	396.0	476.0	68.	270.	AG	20.	100.0	.0	48.0	.67	3.5
12. wbq	536.0	524.0	599.3	524.0	63.	90.	AG	20.	100.0	.0	48.0	.62	3.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1276	1600	5.55	3	3
10. sbq	60	37	3.0	1274	1600	5.55	3	3
11. ebq	60	20	3.0	2489	1600	5.55	3	3
12. wbq	60	20	3.0	2319	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Base + Add Area 3 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to
the maximum concentration, only the first
angle, of the angles with same maximum
concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.8	.7
10.	.4	.0	1.2	.4
20.	.6	.0	1.0	.4
30.	.5	.0	.9	.5
40.	.4	.0	.5	.5
50.	.4	.0	.8	.5
60.	.3	.0	.9	.7
70.	.3	.0	1.0	.8
80.	.3	.0	1.0	.7
90.	.6	.2	.5	.2
100.	1.0	.7	.3	.0
110.	1.1	.8	.3	.0
120.	.8	.7	.3	.0
130.	.8	.5	.4	.0
140.	.9	.5	.4	.0
150.	.8	.6	.4	.0
160.	1.0	.5	.4	.0
170.	.9	.5	.4	.0
180.	.5	.7	.1	.1
190.	.4	1.1	.0	.4
200.	.4	.9	.0	.6
210.	.5	.8	.0	.4
220.	.5	.7	.0	.4
230.	.5	.8	.0	.4
240.	.7	1.0	.0	.3
250.	.8	1.1	.0	.3
260.	.7	.9	.0	.3
270.	.2	.6	.2	.6
280.	.0	.3	.8	1.1
290.	.0	.4	.8	1.1
300.	.0	.4	.7	.8
310.	.0	.4	.5	.8
320.	.0	.4	.5	.8
330.	.0	.4	.6	.8
340.	.0	.5	.6	1.0
350.	.0	.4	.6	.9
360.	.1	.1	.8	.7
MAX	1.1	1.1	1.2	1.1
DEGR.	110	190	10	280

THE HIGHEST CONCENTRATION OF 1.20 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Woodman and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

DATE : 4/22/ 8
TIME : 17:48:56

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1276.	3.8	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1445.	3.8	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1271.	3.8	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1173.	3.8	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2475.	3.8	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2399.	3.8	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2319.	3.8	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2324.	3.8	.0	56.0		
9. nbq	518.0	452.0	518.0	331.0	121.	180.	AG	28.	100.0	.0	36.0	.89	6.1
10. sbq	482.0	548.0	482.0	667.1	119.	360.	AG	28.	100.0	.0	36.0	.88	6.0
11. ebq	464.0	476.0	396.4	476.0	68.	270.	AG	20.	100.0	.0	48.0	.66	3.4
12. wbq	536.0	524.0	599.3	524.0	63.	90.	AG	20.	100.0	.0	48.0	.62	3.2

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	37	3.0	1276	1600	5.55	3	3
10. sbq	60	37	3.0	1271	1600	5.55	3	3
11. ebq	60	20	3.0	2475	1600	5.55	3	3
12. wbq	60	20	3.0	2319	1600	5.55	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Base + Add Area 4 PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	*	.1	.1	.8	.7
10.	*	.4	.0	1.2	.4
20.	*	.6	.0	1.0	.4
30.	*	.5	.0	.9	.5
40.	*	.4	.0	.5	.5
50.	*	.4	.0	.8	.5
60.	*	.3	.0	.9	.7
70.	*	.3	.0	1.0	.8
80.	*	.3	.0	1.0	.7
90.	*	.6	.2	.5	.2
100.	*	1.0	.7	.3	.0
110.	*	1.1	.8	.3	.0
120.	*	.8	.7	.3	.0
130.	*	.8	.5	.4	.0
140.	*	.9	.5	.4	.0
150.	*	.8	.6	.4	.0
160.	*	1.0	.5	.4	.0
170.	*	.9	.5	.4	.0
180.	*	.5	.7	.1	.1
190.	*	.4	1.1	.0	.4
200.	*	.4	.9	.0	.6
210.	*	.5	.8	.0	.4
220.	*	.5	.7	.0	.4
230.	*	.5	.8	.0	.4
240.	*	.7	1.0	.0	.3
250.	*	.8	1.1	.0	.3
260.	*	.7	.9	.0	.3
270.	*	.2	.6	.2	.6
280.	*	.0	.3	.8	1.1
290.	*	.0	.4	.8	1.1
300.	*	.0	.4	.7	.8
310.	*	.0	.4	.5	.8
320.	*	.0	.3	.5	.8
330.	*	.0	.4	.6	.8
340.	*	.0	.5	.6	1.0
350.	*	.0	.4	.6	.9
360.	*	.1	.1	.8	.7
MAX	*	1.1	1.1	1.2	1.1
DEGR.	*	110	190	10	280

THE HIGHEST CONCENTRATION OF 1.20 PPM OCCURRED AT RECEPTOR REC3 .

JOB: Woodman and Victory Project + AA PM RUN: CAL3QHC RUN

DATE : 8/ 6/ 8
TIME : 18:19:38

The MODE flag has been set to C for calculating CO averages.

SITE & METEOROLOGICAL VARIABLES

VS = .0 CM/S VD = .0 CM/S Z0 = 100. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = .0 PPM

LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	.0	518.0	500.0	500.	360.	AG	1326.	3.2	.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	1540.	3.2	.0	44.0		
3. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1342.	3.2	.0	56.0		
4. sbd	482.0	500.0	482.0	.0	500.	180.	AG	1219.	3.2	.0	44.0		
5. eba	.0	476.0	500.0	476.0	500.	90.	AG	2662.	3.2	.0	68.0		
6. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	2603.	3.2	.0	56.0		
7. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	2630.	3.2	.0	68.0		
8. wbd	500.0	524.0	.0	524.0	500.	270.	AG	2598.	3.2	.0	56.0		
9. nbq	518.0	452.0	518.0	277.0	175.	180.	AG	28.	100.0	.0	36.0	.98	8.9
10. sbq	482.0	548.0	482.0	733.1	185.	360.	AG	28.	100.0	.0	36.0	.99	9.4
11. ebq	464.0	476.0	394.9	476.0	69.	270.	AG	19.	100.0	.0	48.0	.69	3.5
12. wbq	536.0	524.0	604.3	524.0	68.	90.	AG	19.	100.0	.0	48.0	.69	3.5

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
9. nbq	60	38	3.0	1326	1600	5.54	3	3
10. sbq	60	38	3.0	1342	1600	5.54	3	3
11. ebq	60	19	3.0	2662	1600	5.54	3	3
12. wbq	60	19	3.0	2630	1600	5.54	3	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. nw 10 ft	444.0	568.0	6.0
2. ne 10 ft	556.0	568.0	6.0
3. sw 10 ft	444.0	432.0	6.0
4. se 10 ft	556.0	432.0	6.0

JOB: Woodman and Victory Project + AA PM RUN: CAL3QHC RUN

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4
0.	.1	.1	.6	.5
10.	.5	.0	1.0	.4
20.	.5	.0	1.0	.4
30.	.5	.0	.7	.4
40.	.4	.0	.5	.5
50.	.3	.0	.7	.5
60.	.3	.0	.8	.6
70.	.3	.0	1.0	.7
80.	.3	.0	.9	.7
90.	.5	.2	.5	.2
100.	1.0	.6	.3	.0
110.	1.1	.8	.3	.0
120.	.7	.6	.3	.0
130.	.7	.5	.3	.0
140.	.6	.5	.3	.0
150.	.8	.5	.4	.0
160.	1.0	.5	.4	.0
170.	.7	.4	.3	.0
180.	.5	.6	.1	.1
190.	.4	.9	.0	.5
200.	.4	.9	.0	.4
210.	.4	.7	.0	.4
220.	.5	.6	.0	.4
230.	.5	.8	.0	.3
240.	.6	.8	.0	.3
250.	.7	1.0	.0	.3
260.	.7	.9	.0	.3
270.	.2	.5	.2	.5
280.	.0	.3	.6	1.0
290.	.0	.3	.8	1.1
300.	.0	.4	.6	.7
310.	.0	.4	.5	.7
320.	.0	.4	.5	.6
330.	.0	.4	.5	.8
340.	.0	.5	.5	1.0
350.	.0	.4	.4	.9
360.	.1	.1	.6	.5
MAX	1.1	1.0	1.0	1.1
DEGR.	110	250	10	290

THE HIGHEST CONCENTRATION OF 1.10 PPM OCCURRED AT RECEPTOR REC1 .

GREENHOUSE GAS EMISSIONS CALCULATION - Mobile Source

N_2O to NO_X Ratio	0.048

Emissions Factors from EMFAC 2007	
Daily VMT	221,652,000
NO_X (tons/mi)	0.000001153
N_2O (tons/mi)	0.000000055
CH_4 (tons/mi)	0.000000042

Project VMT	247,814
No Project VMT	72,423
Estimated Net VMT for Proposed Project	175,391 [a]
Estimated Net VMT for Add Area 1	2,313
EstimatedNet VMT for Add Area 3	24,638
Estimated Net VMT for Add Area 4	18,461
Estimated Net VMT for Project with Add Are	45,411

Estimated Greenhouse Gas Emissions (mobile sources)		
Land Use	**N_2O**	**CH_4**
	tons	tons
Project	5.0	3.8
No Project	1.5	1.1
Project	3.5	2.7
Add Area 1	0.0	0.0
Add Area 3	0.5	0.4
Add Area 4	0.4	0.3
Proposed Project with Add Areas	0.9	0.7

Estimated Carbon Equivalent (mobile sources)		
Land Use	**N_2O**	**CH_4**
Carbon Equivalent	**310**	**21**
	tons	tons
Project	1,552	79.0
No Project	454	23.1
Project (Net)	1,098	55.9
Add Area 1 (Net)	14	0.7
Add Area 3 (Net)	154	7.9
Add Area 4 (Net)	116	5.9
Proposed Project with Add Areas (Net)	284	14.5

a) URBEMIS2007

GREENHOUSE GAS EMISSIONS CALCULATION - Area Source

Natural Gas Usage Rate

	Natural Gas Use (cubic ft./month)[a]	**Natural Gas Use (mmBTU/year)**
Project	2,862,829	34,354
No Project	440,237	5,283
Project (Net)	2,422,592	29,071
Add Area 1 (Net)	103,048	1,237
Add Area 2 (Net)	-	-
Add Area 3 (Net)	583,520	7,002
Add Area 4 (Net)	254,282	3,051
Project with Add Areas	4,094,222	49,131
No Project with Net Add Areas	1,381,087	16,573
Project with Add Areas (Net)	3,363,441	40,361
Emission Factor (kg/mmBTU)[f]		
	N_2O	**CH_4**
	0.0001	0.01

Estimated Greenhouse Gas Emissions (Natural Gas)		
Land Use	**N_2O**	**CH_4**
	tons	tons
Project	0.00	0.20
No Project	0.00	0.03
Project (Net)	0.00	0.17
Add Area 1	0.00	0.01
Add Area 2	-	-
Add Area 3	0.00	0.04
Add Area 4	0.00	0.02
Project with Add Areas	0.00	0.29
No Project with Net Add Areas	0.00	0.10
Project with Add Areas (Net)	0.00	0.24

Estimated Carbon Equivalent (Natural Gas)		
Land Use	**N_2O**	**CH_4**
Carbon Equivalent	**310**	**21**
	tons	tons
Project	1.1	4.3
No Project	0.2	0.7
Project (Net)	0.9	3.6
Add Area 1	0.0	0.2
Add Area 2	-	-
Add Area 3	0.2	0.9
Add Area 4	0.1	0.4
Project with Add Areas	1.5	6.1
No Project with Net Add Areas	0.5	2.1
Project with Add Areas (Net)	1.3	5.0

a) Natural gas usage rates from Table A9-12-A of the SCAQMD CEQA Air Quality Handbook.

General Reporting Protocol , March, 2007.

GREENHOUSE GAS EMISSIONS CALCULATION - Electricity

Electrical Usage Rate

		Electrical Use
Project		
General Electricity		Kwh/Yr[a]
Project		16,425,725
No Project		2,074,717
Net		14,351,008
Add Area 1 (net)		139,333
Add Area 3 (net)		1,763,736
Add Area 4 (net)		1,429,440
Project w/ Add Area (net)		17,683,517
Water Cycle Electricty	MG/Yr	Kwh/Yr[b]
Project	200.7	2,549,353
No Project	21.5	273,476
Net	179.2	2,275,878
Add Area 1 (net)	6.7	85,593
Add Area 3 (net)	13.5	171,187
Add Area 4 (net)	6.7	85,593
Project w/ Add Area (net)	206.2	2,618,251

Emission Factor (pounds/Kwh)[c]	**N_2O**	**CH_4**	**CO_2**
	0.0000037	0.0000067	0.8050000

Estimated Greenhouse Gas Emissions (Electricity)			
Land Use	**N_2O**	**CH_4**	**CO2**
	tons	tons	tons
Project	0.0304	0.0550	6611.3543
No Project	0.0038	0.0070	835.0735
Net	0.0265	0.0481	5776.2809
Add Area 1 (net)	0.0003	0.0005	56.0814
Add Area 3 (net)	0.0033	0.0059	709.9038
Add Area 4 (net)	0.0026	0.0048	575.3497
Project w/ Add Area (net)	0.0327	0.0592	7117.6157

Estimated Carbon Equivalent (Electricity)			
Land Use	**N_2O**	**CH_4**	**CO2**
Carbon Equivalent	**310**	**21**	**1**
	tons	tons	tons
Project	9.42	1.16	6611.35
No Project	1.19	0.15	835.07
Net	8.23	1.01	5776.28
Add Area 1 (net)	0.08	0.01	56.08
Add Area 3 (net)	1.01	0.12	709.90
Add Area 4 (net)	0.82	0.10	575.35
Project w/ Add Area (net)	10.14	1.24	7117.62

Estimated Greenhouse Gas Emissions (Water Cycle Electricity)			
Land Use	**N_2O**	**CH_4**	**CO2**
	tons	tons	tons
Project	0.0047	0.0085	1026.1148
No Project	0.0005	0.0009	110.0741
Net	0.0042	0.0076	916.0407
Add Area 1 (net)	0.0002	0.0003	34.4513
Add Area 3 (net)	0.0003	0.0006	68.9027
Add Area 4 (net)	0.0002	0.0003	34.4513
Project w/ Add Area (net)	0.0048	0.0088	1053.8461

Estimated Carbon Equivalent (Water Cycle Electricity)			
Land Use	**N_2O**	**CH_4**	**CO2**
Carbon Equivalent	**310**	**21**	**1**
	tons	tons	tons
Project	1.46	0.18	1026.11
No Project	0.16	0.02	110.07
Net	1.31	0.16	916.04
Add Area 1 (net)	0.05	0.01	34.45
Add Area 3 (net)	0.10	0.01	68.90
Add Area 4 (net)	0.05	0.01	34.45
Project w/ Add Area (net)	1.50	0.18	1053.85

a) General electricity usage rates obtained from Table A9-11-A of the SCAQMD CEQA Air Quality Handbook.

b) Water cycle electricity rate obtained from California Energy Comission, *2005 Integrated Energy Policy Report* , November 2005.

c) California Climate Action Registry, *General Reporting Protocol* , March 2007.

Appendix D

Mobile Noise

AM

Existing Conditions

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1393	16	52	29	91	1267	6	83.6	3	41.8	35	56	35	56	35	56	65.3	63.3	65.5	67.6	66.4	65.4
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1405	16	52	29	91	1279	6	84.3	3	42.2	35	56	35	56	35	56	65.4	63.3	65.5	67.6	66.4	65.5
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1548	16	52	29	91	1409	6	92.9	3	46.4	35	56	35	56	35	56	65.8	63.7	65.9	68.0	66.8	65.9
Erwin St	Fulton Ave	Ethel Ave	272	16	34	23	91	247.5	6	16.3	3	8.16	25	40	25	40	25	40	54.0	53.9	57.0	58.3	57.1	56.1
Ethel Ave	Victory Blvd	Oxnard St	250	16	34	23	91	227.5	6	15	3	7.5	30	48	30	48	30	48	56.0	54.7	58.9	60.0	58.7	57.7
Fulton Ave	Vanowen St	Victory Blvd	1021	16	52	29	91	929.1	6	61.3	3	30.6	35	56	35	56	35	56	64.0	61.9	65.6	66.9	65.7	64.7
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	3795.5	16	76	35	91	3454	6	228	3	114	35	56	35	56	35	56	69.7	67.6	71.3	72.3	71.1	70.2
Victory Blvd	Woodman Ave	Fulton Ave	3292.5	16	76	35	91	2996	6	198	3	98.8	35	56	35	56	35	56	69.1	67.0	70.7	71.6	70.5	69.6

Future No Project Conditions

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1539	16	52	29	91	1400	6	92.3	3	46.2	35	56	35	56	35	56	65.8	63.7	65.9	68.0	66.8	65.9
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1553	16	52	29	91	1413	6	93.2	3	46.6	35	56	35	56	35	56	65.8	63.7	65.9	68.0	66.9	65.9
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1709	16	52	29	91	1555	6	103	3	51.3	35	56	35	56	35	56	66.2	64.1	66.3	68.5	67.3	66.3
Erwin St	Fulton Ave	Ethel Ave	326	16	34	23	91	296.7	6	19.6	3	9.78	25	40	25	40	25	40	54.8	54.7	57.8	59.1	57.8	56.9
Ethel Ave	Victory Blvd	Oxnard St	310	16	34	23	91	282.1	6	18.6	3	9.3	30	48	30	48	30	48	56.9	55.7	59.8	60.9	59.6	58.7
Fulton Ave	Vanowen St	Victory Blvd	1129.5	16	52	29	91	1028	6	67.8	3	33.9	35	56	35	56	35	56	64.4	62.3	66.0	67.3	66.1	65.2
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4325.5	16	76	35	91	3936	6	260	3	130	35	56	35	56	35	56	70.3	68.2	71.9	72.8	71.7	70.8
Victory Blvd	Woodman Ave	Fulton Ave	3763	16	76	35	91	3424	6	226	3	113	35	56	35	56	35	56	69.7	67.6	71.3	72.2	71.1	70.2

Future With Project Conditions

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1782	16	52	29	91	1622	6	107	3	53.5	35	56	35	56	35	56	66.4	64.3	66.5	68.6	67.5	66.5
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1796	16	52	29	91	1634	6	108	3	53.9	35	56	35	56	35	56	66.4	64.4	66.6	68.7	67.5	66.5
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1900	16	52	29	91	1729	6	114	3	57	35	56	35	56	35	56	66.7	64.6	66.8	68.9	67.7	66.8
Erwin St	Fulton Ave	Ethel Ave	416	16	34	23	91	378.6	6	25	3	12.5	25	40	25	40	25	40	55.9	55.7	58.9	60.2	58.9	57.9
Ethel Ave	Victory Blvd	Oxnard St	447	16	34	23	91	406.8	6	26.8	3	13.4	30	48	30	48	30	48	58.5	57.3	61.4	62.5	61.2	60.3
Fulton Ave	Vanowen St	Victory Blvd	1264.5	16	52	29	91	1151	6	75.9	3	37.9	35	56	35	56	35	56	64.9	62.8	66.5	67.8	66.6	65.7
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4830.5	16	76	35	91	4396	6	290	3	145	35	56	35	56	35	56	70.7	68.7	72.4	73.3	72.2	71.3
Victory Blvd	Woodman Ave	Fulton Ave	4109	16	76	35	91	3739	6	247	3	123	35	56	35	56	35	56	70.0	68.0	71.7	72.6	71.5	70.6

Future With Project Conditions + Add Areas

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1749	16	52	29	91	1591	6	105	3	52.5	35	56	35	56	35	56	66.3	64.2	66.4	68.6	67.4	66.4
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1762	16	52	29	91	1603	6	106	3	52.9	35	56	35	56	35	56	66.4	64.3	66.5	68.6	67.4	66.5
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1877.5	16	52	29	91	1709	6	113	3	56.3	35	56	35	56	35	56	66.6	64.5	66.8	68.9	67.7	66.7
Erwin St	Fulton Ave	Ethel Ave	402	16	34	23	91	365.8	6	24.1	3	12.1	25	40	25	40	25	40	55.7	55.6	58.7	60.0	58.8	57.8
Ethel Ave	Victory Blvd	Oxnard St	424	16	34	23	91	385.8	6	25.4	3	12.7	30	48	30	48	30	48	58.2	57.0	61.2	62.3	61.0	60.0
Fulton Ave	Vanowen St	Victory Blvd	1247.5	16	52	29	91	1135	6	74.9	3	37.4	35	56	35	56	35	56	64.9	62.8	66.5	67.7	66.5	65.6
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4768.5	16	76	35	91	4339	6	286	3	143	35	56	35	56	35	56	70.7	68.6	72.3	73.2	72.1	71.2
Victory Blvd	Woodman Ave	Fulton Ave	4071	16	76	35	91	3705	6	244	3	122	35	56	35	56	35	56	70.0	67.9	71.6	72.6	71.4	70.5

No Project Conditions + Add Area 1

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1541	16	52	29	91	1402	6	92.5	3	46.2	35	56	35	56	35	56	65.8	63.7	65.9	68.0	66.8	65.9
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1562	16	52	29	91	1421	6	93.7	3	46.9	35	56	35	56	35	56	65.8	63.8	66.0	68.1	66.9	65.9
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1731	16	52	29	91	1575	6	104	3	51.9	35	56	35	56	35	56	66.3	64.2	66.4	68.5	67.3	66.4
Erwin St	Fulton Ave	Ethel Ave	326	16	34	23	91	296.7	6	19.6	3	9.78	25	40	25	40	25	40	54.8	54.7	57.8	59.1	57.8	56.9
Ethel Ave	Victory Blvd	Oxnard St	310	16	34	23	91	282.1	6	18.6	3	9.3	30	48	30	48	30	48	56.9	55.7	59.8	60.9	59.6	58.7
Fulton Ave	Vanowen St	Victory Blvd	1129.5	16	52	29	91	1028	6	67.8	3	33.9	35	56	35	56	35	56	64.4	62.3	66.0	67.3	66.1	65.2
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4327	16	76	35	91	3938	6	260	3	130	35	56	35	56	35	56	70.3	68.2	71.9	72.8	71.7	70.8
Victory Blvd	Woodman Ave	Fulton Ave	3765	16	76	35	91	3426	6	226	3	113	35	56	35	56	35	56	69.7	67.6	71.3	72.2	71.1	70.2

No Project Conditions + Add Area 3

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1461	16	52	29	91	1329	6	87.6	3	43.8	35	56	35	56	35	56	65.5	63.5	65.7	67.8	66.6	65.7
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1385	16	52	29	91	1260	6	83.1	3	41.5	35	56	35	56	35	56	65.3	63.2	65.4	67.6	66.4	65.4
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1639.5	16	52	29	91	1492	6	98.4	3	49.2	35	56	35	56	35	56	66.0	64.0	66.2	68.3	67.1	66.2
Erwin St	Fulton Ave	Ethel Ave	326	16	34	23	91	296.7	6	19.6	3	9.78	25	40	25	40	25	40	54.8	54.7	57.8	59.1	57.8	56.9
Ethel Ave	Victory Blvd	Oxnard St	310	16	34	23	91	282.1	6	18.6	3	9.3	30	48	30	48	30	48	56.9	55.7	59.8	60.9	59.6	58.7
Fulton Ave	Vanowen St	Victory Blvd	1129.5	16	52	29	91	1028	6	67.8	3	33.9	35	56	35	56	35	56	64.4	62.3	66.0	67.3	66.1	65.2
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4258.5	16	76	35	91	3875	6	256	3	128	35	56	35	56	35	56	70.2	68.1	71.8	72.8	71.6	70.7
Victory Blvd	Woodman Ave	Fulton Ave	3707.5	16	76	35	91	3374	6	222	3	111	35	56	35	56	35	56	69.6	67.5	71.2	72.2	71.0	70.1

No Project Conditions + Add Area 4

ROAD SEGMENT	from:	to:	TOT. # VEH.	EQUIVALENT LANE DISTANCE D1	D2	Eq. Dis.	VEHICLE TYPE % Auto %	Auto	MT %	MT	HT %	HT	VEHICLE SPEED Auto	k/h	MT	k/h	HT	k/h	NOISE LEVEL (dBA) Auto	MT	HT	50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
Coldwater Canyon Ave	Hamlin St	Vanowen St	1571	16	52	29	91	1429	6	94.2	3	47.1	35	56	35	56	35	56	65.9	63.8	66.0	68.1	66.9	66.0
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1568	16	52	29	91	1426	6	94.1	3	47	35	56	35	56	35	56	65.9	63.8	66.0	68.1	66.9	66.0
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1745.5	16	52	29	91	1588	6	105	3	52.4	35	56	35	56	35	56	66.3	64.2	66.4	68.6	67.4	66.4
Erwin St	Fulton Ave	Ethel Ave	326	16	34	23	91	296.7	6	19.6	3	9.78	25	40	25	40	25	40	54.8	54.7	57.8	59.1	57.8	56.9
Ethel Ave	Victory Blvd	Oxnard St	310	16	34	23	91	282.1	6	18.6	3	9.3	30	48	30	48	30	48	56.9	55.7	59.8	60.9	59.6	58.7
Fulton Ave	Vanowen St	Victory Blvd	1121.5	16	52	29	91	1021	6	67.3	3	33.6	35	56	35	56	35	56	64.4	62.3	66.0	67.3	66.1	65.1
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4341	16	76	35	91	3950	6	260	3	130	35	56	35	56	35	56	70.3	68.2	71.9	72.8	71.7	70.8
Victory Blvd	Woodman Ave	Fulton Ave	3778.5	16	76	35	91	3438	6	227	3	113	35	56	35	56	35	56	69.7	67.6	71.3	72.2	71.1	70.2

PM

Existing Conditions

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	1580	16	52	29	91	1438	6	94.8	3	47.4	35	56	35	56	35	56	65.9	63.8	66.0	68.1	66.9	66.0
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1613	16	52	29	91	1468	6	96.8	3	48.4	35	56	35	56	35	56	66.0	63.9	66.1	68.2	67.0	66.1
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1293	16	52	29	91	1177	6	77.6	3	38.8	35	56	35	56	35	56	65.0	62.9	65.1	67.3	66.1	65.1
Erwin St	Fulton Ave	Ethel Ave	147	16	34	23	91	133.8	6	8.82	3	4.41	25	40	25	40	25	40	51.4	51.2	54.3	55.7	54.4	53.4
Ethel Ave	Victory Blvd	Oxnard St	246	16	34	23	91	223.9	6	14.8	3	7.38	30	48	30	48	30	48	55.9	54.7	58.8	59.9	58.6	57.7
Fulton Ave	Vanowen St	Victory Blvd	1004	16	52	29	91	913.6	6	60.2	3	30.1	35	56	35	56	35	56	63.9	61.8	65.5	66.8	65.6	64.7
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	3700	16	76	35	91	3367	6	222	3	111	35	56	35	56	35	56	69.6	67.5	71.2	72.1	71.0	70.1
Victory Blvd	Woodman Ave	Fulton Ave	3597	16	76	35	91	3273	6	216	3	108	35	56	35	56	35	56	69.5	67.4	71.1	72.0	70.9	70.0

Future No Project Conditions

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	1776	16	52	29	91	1616	6	107	3	53.3	35	56	35	56	35	56	66.4	64.3	66.5	68.6	67.4	66.5
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1811	16	52	29	91	1648	6	109	3	54.3	35	56	35	56	35	56	66.5	64.4	66.6	68.7	67.5	66.6
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1463	16	52	29	91	1331	6	87.8	3	43.9	35	56	35	56	35	56	65.6	63.5	65.7	67.8	66.6	65.7
Erwin St	Fulton Ave	Ethel Ave	201	16	34	23	91	182.9	6	12.1	3	6.03	25	40	25	40	25	40	52.7	52.6	55.7	57.0	55.7	54.8
Ethel Ave	Victory Blvd	Oxnard St	373	16	34	23	91	339.4	6	22.4	3	11.2	30	48	30	48	30	48	57.7	56.5	60.6	61.7	60.4	59.5
Fulton Ave	Vanowen St	Victory Blvd	1161	16	52	29	91	1057	6	69.7	3	34.8	35	56	35	56	35	56	64.5	62.5	66.2	67.4	66.2	65.3
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4624	16	76	35	91	4208	6	277	3	139	35	56	35	56	35	56	70.5	68.5	72.2	73.1	72.0	71.1
Victory Blvd	Woodman Ave	Fulton Ave	4534	16	76	35	91	4126	6	272	3	136	35	56	35	56	35	56	70.5	68.4	72.1	73.0	71.9	71.0

Future With Project Conditions

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	2118	16	52	29	91	1927	6	127	3	63.5	35	56	35	56	35	56	67.2	65.1	67.3	69.4	68.2	67.3
Coldwater Canyon Ave	Hamlin St	Victory Blvd	2155	16	52	29	91	1961	6	129	3	64.6	35	56	35	56	35	56	67.2	65.1	67.3	69.5	68.3	67.3
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1706	16	52	29	91	1552	6	102	3	51.2	35	56	35	56	35	56	66.2	64.1	66.3	68.5	67.3	66.3
Erwin St	Fulton Ave	Ethel Ave	327	16	34	23	91	297.6	6	19.6	3	9.81	25	40	25	40	25	40	54.8	54.7	57.8	59.1	57.9	56.9
Ethel Ave	Victory Blvd	Oxnard St	571	16	34	23	91	519.6	6	34.3	3	17.1	30	48	30	48	30	48	59.5	58.3	62.5	63.6	62.3	61.3
Fulton Ave	Vanowen St	Victory Blvd	1340.5	16	52	29	91	1220	6	80.4	3	40.2	35	56	35	56	35	56	65.2	63.1	66.8	68.1	66.9	65.9
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	5298	16	76	35	91	4821	6	318	3	159	35	56	35	56	35	56	71.1	69.1	72.8	73.7	72.6	71.7
Victory Blvd	Woodman Ave	Fulton Ave	4996.5	16	76	35	91	4547	6	300	3	150	35	56	35	56	35	56	70.9	68.8	72.5	73.4	72.3	71.4

Future With Project Conditions + Add Areas

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	2184	16	52	29	91	1987	6	131	3	65.5	35	56	35	56	35	56	67.3	65.2	67.4	69.5	68.3	67.4
Coldwater Canyon Ave	Hamlin St	Victory Blvd	2221	16	52	29	91	2021	6	133	3	66.6	35	56	35	56	35	56	67.4	65.3	67.5	69.6	68.4	67.5
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1751.5	16	52	29	91	1594	6	105	3	52.5	35	56	35	56	35	56	66.3	64.2	66.4	68.6	67.4	66.4
Erwin St	Fulton Ave	Ethel Ave	356	16	34	23	91	324	6	21.4	3	10.7	25	40	25	40	25	40	55.2	55.0	58.2	59.5	58.2	57.2
Ethel Ave	Victory Blvd	Oxnard St	617	16	34	23	91	561.5	6	37	3	18.5	30	48	30	48	30	48	59.9	58.7	62.8	63.9	62.6	61.7
Fulton Ave	Vanowen St	Victory Blvd	1373	16	52	29	91	1249	6	82.4	3	41.2	35	56	35	56	35	56	65.3	63.2	66.9	68.2	67.0	66.0
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	5420.5	16	76	35	91	4933	6	325	3	163	35	56	35	56	35	56	71.2	69.2	72.9	73.8	72.7	71.8
Victory Blvd	Woodman Ave	Fulton Ave	5070	16	76	35	91	4614	6	304	3	152	35	56	35	56	35	56	70.9	68.9	72.6	73.5	72.4	71.5

No Project Conditions + Add Area 1

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	1780	16	52	29	91	1619	6	107	3	53.4	35	56	35	56	35	56	66.4	64.3	66.5	68.6	67.4	66.5
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1824	16	52	29	91	1660	6	109	3	54.7	35	56	35	56	35	56	66.5	64.4	66.6	68.7	67.6	66.6
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1468	16	52	29	91	1336	6	88.1	3	44	35	56	35	56	35	56	65.6	63.5	65.7	67.8	66.6	65.7
Erwin St	Fulton Ave	Ethel Ave	201	16	34	23	91	182.9	6	12.1	3	6.03	25	40	25	40	25	40	52.7	52.6	55.7	57.0	55.7	54.8
Ethel Ave	Victory Blvd	Oxnard St	373	16	34	23	91	339.4	6	22.4	3	11.2	30	48	30	48	30	48	57.7	56.5	60.6	61.7	60.4	59.5
Fulton Ave	Vanowen St	Victory Blvd	1161	16	52	29	91	1057	6	69.7	3	34.8	35	56	35	56	35	56	64.5	62.5	66.2	67.4	66.2	65.3
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4629	16	76	35	91	4212	6	278	3	139	35	56	35	56	35	56	70.6	68.5	72.2	73.1	72.0	71.1
Victory Blvd	Woodman Ave	Fulton Ave	4537	16	76	35	91	4129	6	272	3	136	35	56	35	56	35	56	70.5	68.4	72.1	73.0	71.9	71.0

No Project Conditions + Add Area 3

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	1840	16	52	29	91	1674	6	110	3	55.2	35	56	35	56	35	56	66.5	64.5	66.7	68.8	67.6	66.7
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1939	16	52	29	91	1764	6	116	3	58.2	35	56	35	56	35	56	66.8	64.7	66.9	69.0	67.8	66.9
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1538	16	52	29	91	1400	6	92.3	3	46.1	35	56	35	56	35	56	65.8	63.7	65.9	68.0	66.8	65.9
Erwin St	Fulton Ave	Ethel Ave	201	16	34	23	91	182.9	6	12.1	3	6.03	25	40	25	40	25	40	52.7	52.6	55.7	57.0	55.7	54.8
Ethel Ave	Victory Blvd	Oxnard St	373	16	34	23	91	339.4	6	22.4	3	11.2	30	48	30	48	30	48	57.7	56.5	60.6	61.7	60.4	59.5
Fulton Ave	Vanowen St	Victory Blvd	1161	16	52	29	91	1057	6	69.7	3	34.8	35	56	35	56	35	56	64.5	62.5	66.2	67.4	66.2	65.3
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4679	16	76	35	91	4258	6	281	3	140	35	56	35	56	35	56	70.6	68.5	72.2	73.2	72.0	71.2
Victory Blvd	Woodman Ave	Fulton Ave	4578.5	16	76	35	91	4166	6	275	3	137	35	56	35	56	35	56	70.5	68.4	72.1	73.1	71.9	71.1

No Project Conditions + Add Area 4

ROAD SEGMENT			TOT. # VEH.	EQUIVALENT LANE DISTANCE			VEHICLE TYPE %						VEHICLE SPEED						NOISE LEVEL (dBA)			50 ft ROW CNEL (dBA)	75 ft ROW CNEL (dBA)	100 ft ROW CNEL (dBA)
	from:	to:		D1	D2	Eq. Dis.	Auto %	Auto	MT %	MT	HT %	HT	Auto	k/h	MT	k/h	HT	k/h	Auto	MT	HT			
Coldwater Canyon Ave	Hamlin St	Vanowen St	1786	16	52	29	91	1625	6	107	3	53.6	35	56	35	56	35	56	66.4	64.3	66.5	68.7	67.5	66.5
Coldwater Canyon Ave	Hamlin St	Victory Blvd	1854	16	52	29	91	1687	6	111	3	55.6	35	56	35	56	35	56	66.6	64.5	66.7	68.8	67.6	66.7
Coldwater Canyon Ave	Victory Blvd	Oxnard St	1493.5	16	52	29	91	1359	6	89.6	3	44.8	35	56	35	56	35	56	65.6	63.6	65.8	67.9	66.7	65.7
Erwin St	Fulton Ave	Ethel Ave	201	16	34	23	91	182.9	6	12.1	3	6.03	25	40	25	40	25	40	52.7	52.6	55.7	57.0	55.7	54.8
Ethel Ave	Victory Blvd	Oxnard St	373	16	34	23	91	339.4	6	22.4	3	11.2	30	48	30	48	30	48	57.7	56.5	60.6	61.7	60.4	59.5
Fulton Ave	Vanowen St	Victory Blvd	1194	16	52	29	91	1087	6	71.6	3	35.8	35	56	35	56	35	56	64.7	62.6	66.3	67.6	66.4	65.4
Victory Blvd	Coldwater Canyon Ave	Whitsett Ave	4672.5	16	76	35	91	4252	6	280	3	140	35	56	35	56	35	56	70.6	68.5	72.2	73.2	72.0	71.1
Victory Blvd	Woodman Ave	Fulton Ave	4561	16	76	35	91	4151	6	274	3	137	35	56	35	56	35	56	70.5	68.4	72.1	73.1	71.9	71.0

Estimated dBA, CNEL /b/ -- AM PEAK HOUR												
Roadway Segment	**Existing**	**No Project**	**Project**	**Project + Add Areas**	**Project Impact**	**Cumulative Impact**	**Base + Add Area 1**	**Add Area 1 Impact**	**Base + Add Area 3**	**Add Area 3 Impact**	**Base + Add Area 4**	**Add Area 4 Impact**
Coldwater Canyon Avenue between Hamlin Street and Vanowen Street	67.6	68.0	68.6	68.6	0.6	1.1	68.0	0.0	67.8	-0.2	68.1	0.1
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard	67.6	68.0	68.7	68.6	0.6	1.1	68.1	0.0	67.6	-0.5	68.1	0.0
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street	68.0	68.5	68.9	68.9	0.5	0.9	68.5	0.1	68.3	-0.2	68.6	0.1
Erwin Street between Fulton Avenue and Ethel Avenue	58.3	59.1	60.2	60.0	1.1	1.8	59.1	0.0	59.1	0.0	59.1	0.0
Ethel Avenue between Victory Boulevard and Oxnard Street	60.0	60.9	62.5	62.3	1.6	2.5	60.9	0.0	60.9	0.0	60.9	0.0
Fulton Ave between Vanowen Street and Victory Boulevard	66.9	67.3	67.8	67.7	0.5	0.9	67.3	0.0	67.3	0.0	67.3	0.0
Victory Boulevard between Coldwater Avenue and Whitsett Avenue	72.3	72.8	73.3	73.2	0.5	1.0	72.8	0.0	72.8	-0.1	72.8	0.0
Victory Boulevard between Woodman Avenue and Fulton Avenue	71.6	72.2	72.6	72.6	0.4	1.0	72.2	0.0	72.2	-0.1	72.2	0.0
Estimated dBA, CNEL /b/ -- PM PEAK HOUR												
Roadway Segment	**Existing**	**No Project**	**Project**	**Project + Add Areas**	**Project Impact**	**Cumulative Impact**	**Base + Add Area 1**	**Add Area 1 Impact**	**Base + Add Area 3**	**Add Area 3 Impact**	**Base + Add Area 4**	**Add Area 4 Impact**
Coldwater Canyon Avenue between Hamlin Street and Vanowen Street	68.1	68.6	69.40	69.5	0.8	1.3	68.6	0.0	68.8	0.2	68.7	0.0
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard	68.2	68.7	69.5	69.6	0.8	1.3	68.7	0.0	69.0	0.3	68.8	0.1
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street	67.3	67.8	68.5	68.6	0.7	1.2	67.8	0.0	68.0	0.2	67.9	0.1
Erwin Street between Fulton Avenue and Ethel Avenue	55.7	57.0	59.1	59.5	2.1	3.5	57.0	0.0	57.0	0.0	57.0	0.0
Ethel Avenue between Victory Boulevard and Oxnard Street	59.9	61.7	63.6	63.9	1.8	3.7	61.7	0.0	61.7	0.0	61.7	0.0
Fulton Ave between Vanowen Street and Victory Boulevard	66.8	67.4	68.1	68.2	0.6	1.3	67.4	0.0	67.4	0.0	67.6	0.1
Victory Boulevard between Coldwater Avenue and Whitsett Avenue	72.1	73.1	73.7	73.8	0.6	1.6	73.1	0.0	73.2	0.1	73.2	0.0
Victory Boulevard between Woodman Avenue and Fulton Avenue	72.0	73.0	73.4	73.5	0.4	1.4	73.0	0.0	73.1	0.0	73.1	0.0
Estimated dBA, CNEL /b/ -- AM PEAK HOUR				**Project with Add Area**	**Project with Add Area Cumulative**		**Add Area 1 Cumulative**		**Add Area 3 Cumulative**		**Add Area 4 Cumulative**	
Coldwater Canyon Avenue between Hamlin Street and Vanowen Street				0.6	1.4		0.4		0.2		0.5	
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard				0.5	1.4		0.5		-0.1		0.5	
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street				0.4	1.3		0.5		0.2		0.5	
Erwin Street between Fulton Avenue and Ethel Avenue				0.9	3.8		0.8		0.8		0.8	
Ethel Avenue between Victory Boulevard and Oxnard Street				1.4	4.0		0.9		0.9		0.9	
Fulton Ave between Vanowen Street and Victory Boulevard				0.4	1.4		0.4		0.4		0.4	
Victory Boulevard between Coldwater Avenue and Whitsett Avenue				0.4	1.7		0.6		0.5		0.6	
Victory Boulevard between Woodman Avenue and Fulton Avenue				0.3	1.5		0.6		0.5		0.6	
Estimated dBA, CNEL /b/ -- PM PEAK HOUR												
Coldwater Canyon Avenue between Hamlin Street and Vanowen Street				0.9	0.6		0.5		0.7		0.5	
Coldwater Canyon Avenue between Hamlin Street and Victory Boulevard				0.9	0.5		0.5		0.8		0.6	
Coldwater Canyon Avenue between Victory Boulevard and Oxnard Street				0.8	0.4		0.6		0.8		0.6	
Erwin Street between Fulton Avenue and Ethel Avenue				2.5	0.9		1.4		1.4		1.4	
Ethel Avenue between Victory Boulevard and Oxnard Street				2.2	1.4		1.8		1.8		1.8	
Fulton Ave between Vanowen Street and Victory Boulevard				0.7	0.4		0.6		0.6		0.8	
Victory Boulevard between Coldwater Avenue and Whitsett Avenue				0.7	0.4		1.0		1.0		1.0	
Victory Boulevard between Woodman Avenue and Fulton Avenue				0.5	0.3		1.0		1.0		1.0	