APPENDIX C:
AIR QUALITY ANALYSIS

LSA ASSOCIATES, INC.

MARCH 2010

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CITY OF YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

YUCAIPA, CALIFORNIA

LSA

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CITY OF YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

YUCAIPA, CALIFORNIA

Prepared for:

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LSA

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1.0 EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained by the City of Yucaipa (City) to prepare an air quality study for the proposed City of Yucaipa Housing Element Implementation Plan located in the City of Yucaipa, California.

The air quality study provides a discussion of the proposed project, the physical setting of the project area, and the regulatory framework for air quality. The report provides data on existing air quality, evaluates potential air quality impacts associated with the proposed project, and identifies mitigation measures recommended for potentially significant impacts. Modeled air quality levels are based upon vehicle data and project trip generation prepared for this project.

Emissions during project construction would not exceed any of the criteria pollutant thresholds for criteria pollutant established by the South Coast Air Quality Management District (SCAQMD), except for Reactive Organic Gases (ROG) emissions from architectural coating application. Compliance with SCAQMD Rules and Regulations during construction will reduce construction-related air quality impacts from fugitive dust emissions and construction equipment emissions. Standard dust suppression measures have been identified for short-term construction to meet the SCAQMD emissions thresholds. The proposed project would not exceed the localized significance thresholds (LSTs) during construction periods for either carbon monoxide (CO) or ROG, but even with all feasible mitigation the emissions are expected to exceed the LST for particulate matter less than 10 microns in diameter (PM_{10}) and particulate matte less than 2.5 microns in diameter ($PM_{2.5}$). The project construction emissions would be significant.

Historical air quality data show that existing CO levels for the project area and the general vicinity do not exceed either State or federal ambient air quality standards. Due to the low concentrations of the CO levels in the project vicinity, project-related traffic would not significantly affect local CO levels under the existing or future conditions, and the CO concentrations would be anticipated to continue to be below the federal and State standards. No significant impact on local CO levels would occur.

The proposed project is located in San Bernardino County, which is not among the counties that are found to have serpentine and ultramafic rock in their soils. Therefore, the potential risk for naturally occurring asbestos (NOA) during project construction is small and less than significant.

The City is updating its General Plan and Development Code to incorporate regulations for inclusionary housing that would apply to projects in the redevelopment project area. This project is consistent with the proposed General Plan and Development Code. When completed, the General Plan and Development Code will be consistent with the Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP) Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Therefore, the proposed project is consistent with the regional AQMP.

The potential of the project to affect GCC is also included. Short-term construction emissions of the principal greenhouse gases (GHGs) are quantified, and significance relative to Assembly Bill (AB) 32 is discussed.

The evaluation was prepared in conformance with appropriate standards, utilizing procedures and methodologies in the SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD 1993). Air quality data posted on the California Air Resources Board (ARB) and United States Environmental Protection Agency (EPA) websites are included to document the local air quality environment.

2.0 PROJECT DESCRIPTION

2.1 GEO GRAPHICAL SETTING

As illustrated in Figure 1, the proposed project is located within the City of Yucaipa. The City is situated in the eastern portion of the San Bernardino Valley area, at the foot of the San Bernardino Mountains, between the Cities of Redlands and Calimesa. The City is bounded on the northwest by the Crafton Hills, on the south by the City of Calimesa, and on the north and east by mountainous terrain.

2.2 PROJECT LOCATION AND LAND USE

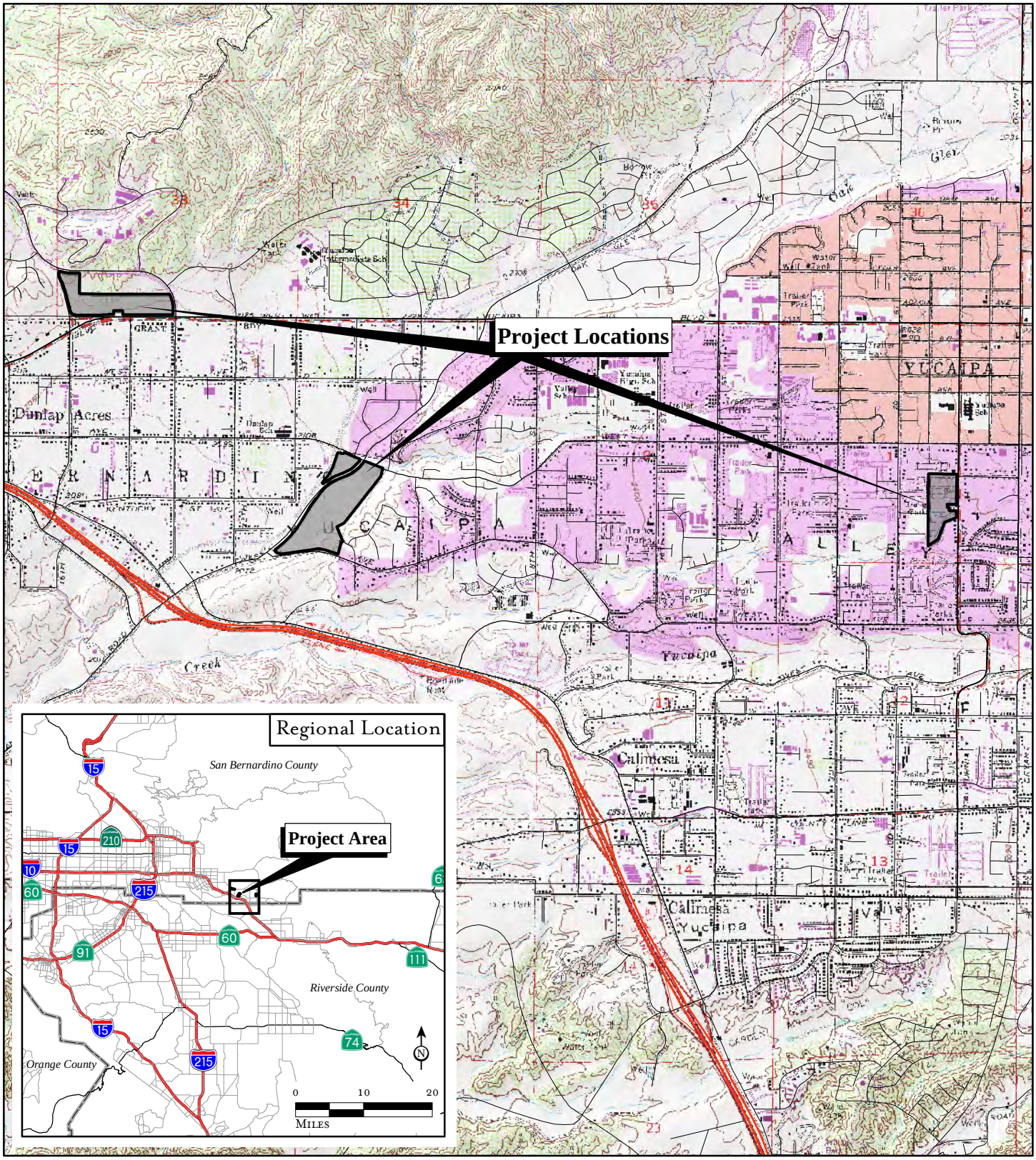
2.2.1 Program 3.A (Site-Specific and Creation of New Land Use District)

For the implementation action that includes site-specific changes to land use designations, there is a total of three sites (as illustrated in Figure 1) that will be analyzed for the potential construction of residential units with a density of 20–24 units/acre (ac).

- **Site 1: Oak Glen Road/Colorado Street.** Site 1 is a 57 ac site located at the northeast corner of the Oak Glen Road/Colorado Street intersection. This site is currently undeveloped, with dominant nonnative vegetation interspersed with native vegetation.
- **Site 2: Yucaipa Boulevard/Sand Canyon Road.** Site 2 is a 27 ac site located at the northwest corner of the Yucaipa Boulevard/Sand Canyon Road intersection. This site is currently undeveloped, with steep slopes covered by annual grasses with several eroded gullies or swales.
- **Site 3: California Street/Avenue E.** Site 3 is a 10 ac site located on the west side of California Street approximately 660 feet (ft) south of Avenue E. This site is currently developed as a manufactured home park with scattered nonnative ornamental trees. No open space, native vegetation, or natural drainages are present.
- **Creation of New Land Use District.** The creation of the new land use district RM-24 (Multiple Residential, 24 units/ac maximum) in the General Plan Land Use Element and Development Code) would establish development standards for multifamily development. There is no one specified project location associated with this component of the proposed project.

2.2.2 Program 4.A, 4.D, 4.E, and 4.F (Citywide)

The changes to land use regulations in the Development Code (Housing Program 4.a, 4.d, 4.e, and 4.f) would apply to all new applicable developments in the City. There is no one specified project location or land use associated with this component of the proposed project.



LSA

FIGURE 1

0 1,500 3,000
Feet

SOURCE: USGS 7.5' Quads: Yucaipa (1988), El Casco (1979), CA; Thomas Bros., 2007

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Yucaipa Housing Element Implementation Program

Regional and Project Location

2.2.3 Inclusionary Housing Program (Redevelopment Project Area)

The amendments to the General Plan and Development Code that incorporate regulations for inclusionary housing would apply to projects in the redevelopment project area only. There is no one specified location or land use associated with this component of the proposed project.

2.3 PROJECT CHARACTERISTICS

California Government Code Section 65302(c) mandates that each city shall include a Housing Element in its General Plan. The Housing Element is required to identify and analyze existing and projected housing needs and include statements of the City's goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing. The City, in preparing its Housing Element, must consider economic, environmental, and fiscal factors, as well as community goals as set forth in the General Plan. In addition, the Housing Element must comply with Section 65580 et seq. of the California Government Code.

In December 2008, the City of Yucaipa submitted its Draft 2008 Housing Element to the California Department of Housing and Community Development (HCD) for review. The HCD subsequently issued a letter stating that the Draft Housing Element complied with all provisions of State Housing Element law. The City adopted the new Housing Element on February 23, 2009.[1]

Chapter V of the City's adopted Draft Housing Element includes a number of implementation actions involving changes to the General Plan Official Land Use Districts and/or the Development Code that are necessary to ensure continued compliance with State law. These implementation actions include site-specific changes to land use designations, as well as changes to land use regulations in the Development Code that apply citywide. These implementation proposals, along with one additional item not called out in the Housing Element Action Plan (the Redevelopment Inclusionary Housing Program), constitute a program of related actions that will be evaluated in the Environmental Impact Report (EIR) (Table A).

2.3.1 Program 3.A (Site Specific and Creation of New Land Use District)

As described in Chapter III of the Housing Element, the City's "fair share" of regional housing need for the planning period July 2006 through June 2014 is 2,048 units. This total includes 476 very-low income units, 332 low-income units, 389 moderate-income units, and 851 above-moderate income units. In addition, the City must accommodate a "carryover" of 608 lower-income units from the previous Housing Element cycle. State law requires the City to demonstrate that it has adequate sites with appropriate zoning to accommodate the various types of units that have been assigned in the Regional Housing Needs Assessment (RHNA).

[1] http://www.yucaipa.org/cityDepartments/communityDevelopment/2008_Housing_Element/Housing_Element_Update.php, website accessed February 18, 2010.

Table A: Summary of Proposed Actions

Action[1]	Description
Designation of Additional Sites (Program 3.a)	Identify and rezone a minimum of 19 ac of land for multifamily development "as-of-right" (i.e., no conditional use permit or other discretionary requirement triggering CEQA review) at a density of 20–24 units/acre (ac) (excluding any density bonus). This action includes the creation of a new zoning district (RM-24) in the Development Code with development standards for multifamily residential development "by right" at a density of up to 24 units/ac.
Density Bonus Ordinance (Program 4.a)	Update the Development Code to reflect changes in State density bonus law (Government Code Section 65915).
Single-Room Occupancy (SRO) Housing (Program 4.d)	Update the Development Code to allow SRO units subject to appropriate development standards.
Emergency Shelters and Transitional/Supportive Housing (Program 4.e)	Update the Development Code to designate emergency shelters a permitted use in the Service Commercial (CS) zone subject to appropriate development standards and clarify that transitional and supportive housing is a residential use.
Reasonable Accommodation for Persons with Disabilities (Program 4.f)	Update the Development Code to establish procedures for reviewing and approving requests for reasonable housing accommodations pursuant to Senate Bill (SB) 520 of 2001.
Inclusionary Housing Program for the Redevelopment Project Area	Adopt an Inclusionary Housing Ordinance incorporating the requirements of State redevelopment law for projects in the redevelopment project area only (not citywide).

[1] Program numbers refer to Chapter V of the City of Yucaipa Housing Element.
CEQA = California Environmental Quality Act

In accordance with Government Code (Section 65583 et seq.), the minimum base residential density (i.e., excluding any density bonus) presumed to be adequate to facilitate development of lower-income housing is 20 units/ac. There are currently no vacant sites in Yucaipa with zoning that meet these criteria. Therefore, the City must rezone a sufficient amount of land to accommodate the 808 lower-income units assigned in the current RHNA cycle plus the 608 carryover units from the previous cycle—a total of 1,416 units—at a density of at least 20 units/ac. The Housing Element (Program 3a) contains a commitment to rezone a minimum of 59 ac of land with an allowable density of 20–24 units/ac to meet the City's obligations under the RHNA. State law requires that the rezoned sites allow multifamily development "by right" (i.e., no conditional use permit or other discretionary approval triggering CEQA review) and have a capacity of at least 16 units per site.

On November 24, 2008, the City Council approved the rezoning of three sites encompassing 40 ac for multifamily development. These sites are located in the Freeway Corridor Specific Plan project area, south of Interstate 10 (I-10). In order to facilitate sustainable development and the reduction of GHGs, all of these sites are located adjacent to commercial districts that will accommodate

pedestrian-oriented commercial developments. There are 25 ac of high-density multifamily zoning and 10.6 ac of adjacent commercial zoning located in the northwest quadrant of the project area, and there are 15 ac of high-density multifamily zoning and 16.8 ac of adjacent commercial zoning located in the southeast quadrant of the project area. A separate EIR was prepared and certified for that project. With the rezoning of 40 ac for multifamily development in the Freeway Corridor Specific Plan, an additional 19 ac remain to be rezoned.

It is anticipated that the selected site(s) will also incorporate commercial and/or institutional land uses in order to facilitate mixed-use sustainable development and the reduction of GHG emissions. The objective is to rezone one or more sites totaling at least 19 ac of multifamily zoning along with the adoption of multifamily design standards for the rezoned sites. Table B provides a summary of on-site and adjacent land use designations for each of the three sites.

- **Site 1: Oak Glen Road/Colorado Street.** This 57 ac site is currently designated RL-2.5-AP (Rural Living, 2.5 ac minimum lot size, Agricultural Preserve Overlay District) on the General Plan Official Land Use District Map. A General Plan Land Use District Change is proposed to remove the AP overlay and establish a 40 ac mixed-use district that could include up to 660 multifamily dwelling units, 4 ac of commercial land uses, 4.5 ac of institutional land uses, and 11.2 ac of open space land uses (as illustrated in Figure 3.2).
- **Site 2: Yucaipa Boulevard/Sand Canyon Road.** This 27 ac site is currently designated CG (General Commercial) on the General Plan Official Land Use Districts Map. A General Plan Land Use District Change is proposed to establish a 27 ac mixed-use district that could include up to 608 multifamily dwelling units and 8 ac of general commercial uses.
- **Site 3: California Street/Avenue E.** This 10 ac site is currently designated RM-72C (Multiple Residential, 7,200-square foot minimum lot size) on the General Plan Official Land Use Districts Map. A General Plan Land Use District Change is proposed to establish a 10 ac multifamily land use district that could include up to 320 multifamily dwelling units.

Creation of New Land Use District. Included in this component of the program is the creation of a new land use district RM-24 (Multiple Residential, 24 units/ac maximum) in the General Plan Land Use Element and Development Code. This district would establish development standards and procedures for multifamily development by right (i.e., without a conditional use permit or other discretionary approval) at a density of 20–24 units/ac, excluding density bonus.

2.3.2 Program 4.A, 4.D, 4.E, and 4.F (Citywide)

In addition to the proposed changes to site-specific land use designations discussed above, the Housing Element implementation plan includes the following amendments to citywide land use regulations and procedures.

Table B: On-Site and Adjacent Land Use Designations

Site	Location	Current Land Use	General Plan Land Use Designation	Zoning Designation
Site 1	On-site	Undeveloped	Rural Living	RL-2.5-AP
	North	Single-family residential (subdivision and large lots)	Single Residential	RS-10
	South	Undeveloped	Open Space	OS
	West	Rural residential	Rural Living	RL-2.5
	East	Residential subdivision	Single Residential	RS-10M
Site 2	On-site	Undeveloped	General Commercial	CG
	North	Undeveloped, Crafton Hills College	General Commercial, Institutional	CG, IN
	South	Undeveloped, commercial, rural residential	General Commercial, Multiple Residential	CG, RM-10M
	West	Residential subdivision	Rural Living, Single Residential	RL-1, RS-20M
	East	Undeveloped, fire station	General Commercial, Institutional	CG, IN
Site 3	On-site	Manufactured Home Park	Multiple Residential	RM-72C
	North	Manufactured home park, commercial	Multiple Residential	RM-72C
	South	Manufactured home park, commercial	Multiple Residential	RM-72C
	West	Manufactured home park, single-family residential	Multiple Residential, Institutional	RM-72C, IN
	East	Church, rural residential	Multiple Residential, Neighborhood Commercial, Institutional	RM-72C, CN, IN

Source: General Plan Land Use Maps, City of Yucaipa.

AP = Agricultural Preserve Overlay District
CN = Neighborhood Commercial
CG = General Commercial
IN = Institutional
OS = Open Space

RL-1 = Rural Living, 1-acre minimum lot size
RL-2.5 = Rural Living, 2.5-acre minimum lot size
RS-10M = Single Residential, 10,000-square foot minimum lot size
RS-20M = Single Residential, 20,000-square foot minimum lot size
RM-10M = Multiple Residential, 10,000-square foot minimum lot size
RM-72C = Multiple Residential, 7,200-square foot minimum lot size

- **Density Bonus Regulations:** Under current State Density Bonus Law (SB 1818 of 2004), cities and counties must provide a density increase up to 35 percent over the otherwise maximum allowable residential density under the Municipal Code and the Land Use Element of the General Plan (or bonuses of equivalent financial value) when builders agree to construct housing developments with units affordable to low-income or moderate-income households. The Housing Action Plan (Chapter V) contains Program 4a to add density bonus provisions to the Municipal Code to comply with the current provisions of State law. Pending completion of that update, State law supersedes the existing density bonus ordinance.
- **Single-Room Occupancy (SRO) Regulations:** SRO facilities are small studio-type units that may provide affordable housing to lower-income individuals such as students. SROs are not currently defined in the Development Code. Program 4d is included in Chapter V of the Housing Element to revise the Code to establish appropriate locations and development standards for SROs. Development standards and approval procedures will be designed to encourage and facilitate this type of housing.
- **Emergency Shelter and Transitional/Supportive Housing Regulations:** SB 2 of 2007 strengthened the planning requirements for emergency shelters and transitional/supportive housing. Unless adequate capacity is available to serve existing need, SB 2 requires that shelters be allowed "by right" (i.e., without a conditional use permit or other discretionary approval) in at least one zoning district. Emergency shelters are currently permitted as a conditional use in a number of land use districts in the City. The Housing Action Plan (Chapter V) includes Program 4e to amend the Municipal Code in conformance with SB 2. The CS (Service Commercial) zone is proposed to allow emergency shelters by right.

  SB 2 also requires that transitional and supportive housing be treated as a residential use that is subject to the same regulations and procedures as other residential uses of the same type in the same zone. Program 4e in the Housing Action Plan provides that the City will amend the Municipal Code in conformance with SB 2.
- **Reasonable Accommodation Procedures:** SB 520 of 2001 requires cities to remove constraints and make reasonable accommodation for housing occupied by persons with disabilities. In order to facilitate the processing of requests to reduce land use or architectural obstacles for persons with disabilities, Program 4f to adopt a Reasonable Accommodation Ordinance is included in the Housing Action Plan.

2.3.3 Inclusionary Housing Program (Redevelopment Project Area)

- **Redevelopment Project Inclusionary Housing Program.** Inclusionary housing refers to the State mandate that at least 15 percent of new housing constructed in a redevelopment project area be affordable to low-income and moderate-income households. The proposed action includes General Plan and Development Code Amendments to incorporate regulations for inclusionary housing in the City's Redevelopment Project Area consistent with State redevelopment law.

2.4 PROJECT OBJECTIVES

This EIR analysis focuses on the proposed City of Yucaipa Housing Element Implementation Project, and, in particular, two primary components of the Housing Element Implementation Project:

(1) identification of sites sufficient to accommodate housing needs for the balance of goals not achieved through existing housing; and, (2) changes to land use regulations in the Development Code that apply citywide. These programs are the focus of the EIR analysis because they have the potential to result in physical impacts to the environment. Specifically, the project objectives include:

- Facilitate RHNA requirements through new construction projects in which the City retains a financial and/or real property interest to best control design, development, and occupancy
- Gear housing production toward small unit sizes and transit-oriented occupants
- Provide housing opportunities for households with a wide range of incomes
- Provide housing opportunities for residents with special needs
- Seek to balance housing and job growth in Yucaipa
- Institute job-based occupancy preferences to minimize commute traffic
- Ensure a choice of housing types and locations to all persons regardless of race, sex, cultural origin, age, marital status, physical handicaps, or family composition
- Provide affordable housing throughout the City

Because several of the goals, policies, and actions that are part of these strategies are specifically intended to mitigate the environmental effects associated with future housing needs in the City, they are discussed in the EIR as part of an overall mitigation strategy, where applicable, for a given issue.

2.5 DISCRETIONARY ACTIONS

The discretionary actions to be considered by the City as part of the proposed project include but are not limited to the following:

- A General Plan Land Use District Change to establish a mixed-use or multifamily land use district on one of the three alternative sites.
- General Plan and Development Code Amendments to incorporate zoning and development standards for an Inclusionary Housing Program in the Redevelopment Project Area.
- A Development Code Amendment to incorporate zoning and development standards for SRO dwelling units, current statutes for Density Bonus provisions of State law, current statutes for Reasonable Accommodation provisions of State law, and zoning and development standards for high-density “by right” multifamily developments.

Future development of housing on sites within the City under the conditions of the City’s Housing Program would likely require approval of the following:

- Architectural and site plan reviews by the Yucaipa Planning Commission and reviewed by the City Council
- Approval of subdivision maps by the City Council
- Issuance of grading and building permits from the City of Yucaipa

Other related approvals may be required by the following agencies, including but not limited to: Yucaipa Valley Water District, Regional Water Quality Control Board (RWQCB), California Department of Fish and Game (CDFG), and the United States Army Corps of Engineers (Corps).

3.0 SETTING

3.1 REGIONAL AIR QUALITY

The project site is located in the nondesert portion of San Bernardino County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the SCAQMD. The air quality assessment for the proposed project includes estimating emissions associated with short-term construction of the proposed project.

A number of air quality modeling tools are available to assess the air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analyses. The SCAQMD's current guidelines, included in its *CEQA Air Quality Handbook* (April 1993), were adhered to in the assessment of air quality impacts for the proposed project.

3.1.1 Regional Air Quality

Both the State of California (State) and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants. As shown in Table C, these pollutants include ozone (O_3), CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), PM_{10}, $PM_{2.5}$, and lead. In addition, the State has set standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to setting out primary and secondary AAQS, the State of California has established a set of episode criteria for O_3, CO, NO_2, SO_2, and PM_{10}. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase from Stage One to Stage Three. An alert level is that concentration of pollutants at which initial stage control actions are to begin. For this project area, SCAQMD Rule 701 applies. An alert will be declared when any one of the pollutant alert levels is reached at any monitoring site and meteorological conditions are such that the pollutant concentrations can be expected to remain at these levels for 12 or more hours or to increase; or, in the case of oxidants, the situation is likely to recur within the next 24 hours unless control actions are taken.

Table C: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		--		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15.0 µg/m^3		
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm(40 mg/m^3)		
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	—
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (339 µg/m^3)		0.100 ppm (see footnote 8)	None	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	—	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		—	—	
Lead[10]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	
	Rolling 3-Month Average[9]	—		0.15 µg/m^3		
Visibility-Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[9]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board, February 16, 2010.

Table footnotes are provided on the following page.

Footnotes:

[1] California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1- and 24-hour); nitrogen dioxide; suspended particulate matter - PM_{10}, $PM_{2.5}$ and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the EPA for further clarification and current federal policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent procedure which can be shown to the satisfaction of ARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

[8] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

[9] The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[10] National lead standard, rolling 3-month average: final rule signed October 15, 2008.

°C = degrees Celsius
EPA = United States Environmental Protection Agency
$\mu g/m^3$ = micrograms per cubic meter
mg/m^3 = milligrams per cubic meter
ppm = parts per million

Pollutant alert levels:[1]

- O_3: 392 micrograms per cubic meter (µg/m^3) (0.20 parts per million [ppm]), 1-hour average
- CO: 17 milligrams per cubic meter (mg/m^3) (15 ppm), 8-hour average
- NO_2: 1,130 µg/m^3 (0.6 ppm) 1-hour average; 282 µg/m^3 (0.15 ppm) 24-hour average
- SO_2: 525 µg/m^3 (0.2 ppm), 24-hour average
- Particulates, measured as PM_{10}: 350 µg/m^3, 24-hour average

Table D lists the primary health effects and sources of common air pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these health effects will not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are more stringent than federal AAQS. Among the pollutants, O_3 and particulate matter ($PM_{2.5}$ and PM_{10}) are considered regional pollutants, while the others have more localized effects.

Table D: Summary of Health Effects of the Major Criteria Air Pollutants

Pollutant	Health Effects	Examples of Sources
Particulate matter (PM_{10}: less than or equal to 10 microns)	• Increased respiratory disease • Lung damage • Premature death	• Cars and trucks, especially diesels • Fireplaces, wood stoves • Windblown dust from roadways, agriculture, and construction
Ozone (O_3)	• Breathing difficulties • Lung damage	• Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
Carbon monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Nitrogen dioxide (NO_2)	• Lung damage	• See CO sources
Toxic air contaminants	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders	• Cars and trucks, especially diesels • Industrial sources such as chrome platers • Neighborhood businesses such as dry cleaners and service stations • Building materials and products

Source: ARB 2009 (http://www.arb.ca.gov/research/health/fs/fs1/fs1.htm).
ARB = Air Resources Board

The California Clean Air Act (CCAA) provides the SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. Examples of this would be the motor vehicles at an intersection, a mall, and on highways. The SCAQMD also

[1] SCAQMD Rule 701, Attachment 2.

regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by ARB.

Climate/Meteorology. Air quality in the planning area is not only affected by various emission sources (mobile, industry, etc.), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, etc. The combination of topography, low mixing height, abundant sunshine, and emissions from the second largest urban area in the United States gives the Basin the worst air pollution problem in the nation.

Climate in the Basin is determined by its terrain and geographical location. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border, and high mountains surround the rest of the Basin. The Basin lies in the semi-permanent high-pressure zone of the eastern Pacific; the resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, periods of extremely hot weather, winter storms, and Santa Ana wind conditions do occur.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the site with sufficient data is the Redlands Station.[1] The monthly average maximum temperature recorded at this station in the past ranged from 64.7 degrees Fahrenheit (°F) in January to 94.5°F in July, with an annual average maximum of 78.1°F. The monthly average minimum temperature recorded at this station ranged from 39.3°F in January to 60.6°F in August, with an annual average minimum of 49.2°F. January is typically the coldest month, and July and August are typically the warmest months in this area of the Basin.

The majority of annual rainfall in the Basin occurs between October and April. Summer rainfall is minimal and is generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. Redlands Station also monitors precipitation. Average monthly rainfall measured during that period varied from 2.67 inches in January to 0.49 inch or less between May and September, with an annual total of 13.55 inches. Patterns in monthly and yearly rainfall totals are unpredictable due to fluctuations in the weather.

The Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in midafternoon to late afternoon on hot summer days, when the smog appears to clear up suddenly. Winter inversions frequently break by midmorning.

[1] Western Regional Climate Center, www.wrcc.dri.edu.

Winds in the vicinity of the project area blow predominantly from the east-southeast, with relatively low velocities. Wind speeds in the project area average about 4 miles per hour (mph). Summer wind speeds average slightly higher than winter wind speeds. Low average wind speeds, together with a persistent temperature inversion limit the vertical dispersion of air pollutants throughout the Basin. Strong, dry, north or northeasterly winds, known as Santa Ana winds, occur during the fall and winter months, dispersing air contaminants. The Santa Ana conditions tend to last for several days at a time.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly on shore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are CO and oxides of nitrogen (NO_X) because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

Global Climate Change. Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ± 0.2 degrees Celsius (°C) (1.1 ± 0.4°F) in the 20th century. The prevailing scientific opinion on climate change is that "most of the warming observed over the last 50 years is attributable to human activities."[1] The increased amounts of CO_2 and other GHGs are the primary causes of the human-induced component of warming. They are released by the burning of fossil fuels, land clearing, agriculture, etc., and lead to an increase in the GHG effect.

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include CO_2, methane (CH_4), nitrous oxide (N_2O), and O_3. In the last 200 years, substantial quantities of GHGs have been released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, enhancing the natural greenhouse effect, which is believed to be causing global warming. While human-made GHGs include CO_2, CH_4, and N_2O, some (like chlorofluorocarbons [CFCs]) are completely new to the atmosphere.

Natural sources of CO_2 include the respiration (breathing) of humans, animals and plants and evaporation from the oceans. Together, these natural sources release approximately 150 billion tonnes[2] of CO_2 each year, far outweighing the 7 billion tonnes of human-made emissions from fossil fuel burning, waste incineration, deforestation, and cement manufacture. Nevertheless, natural removal processes such as photosynthesis by land- and ocean-dwelling plant species cannot keep pace with this extra input of human-made CO_2, and consequently the gas is building up in the atmosphere.[3]

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1 Intergovernmental Panel on Climate Change (IPCC), *Climate Change 2007: The Physical Science Basis*, http://www.ipcc.ch.

2 A tonne means a ton in the metric unit system; it is also called a metric ton. A tonne is 1,000 kilograms, or approximately 2,204 pounds.

3 Enviropedia, http://www.enviropedia.org.uk/Global_Warming/Emissions.php.

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Human-made sources include the mining and burning of fossil fuels; digestive processes in ruminant animals such as cattle; rice paddies; and the burying of waste in landfills. Total annual emissions of CH_4 are approximately 500 million tonnes, with human-made emissions accounting for the majority. As for CO_2, the major removal process of atmospheric CH_4—chemical breakdown in the atmosphere—cannot keep pace with source emissions, and CH_4 concentrations in the atmosphere are increasing.

California is the fifteenth largest emitter of GHGs on the planet, representing about 2 percent of the worldwide emissions. In December 2007, ARB approved a GHG target for 2020 equivalent to the State's calculated GHG level in 1990. ARB developed the 2020 target after extensive technical work and a series of stakeholder meetings. The 2020 target of 427 million metric tons of carbon dioxide equivalent ($MMTCO_2E$) requires the reduction of 169 $MMTCO_2E$, or approximately 30 percent, from the State's projected 2020 emissions of 596 $MMTCO_2E$ (business as usual) and the reduction of 42 $MMTCO_2E$, or almost 10 percent, from 2002–2004 average emissions. Table E shows the current emissions and projected 2020 emissions of GHGs for the State.[1]

Table E: California GHG Emissions – Current and Projected ($MMTCO_2E$)

Sector	2002–2004 Average Emissions	Projected 2020 Emissions (BAU)
Transportation	179.3	225.4
Electricity	109.0	139.2
Commercial and Residential	41.0	46.7
Industry	95.9	100.5
Recycling and Waste	5.6	7.7
High GWP [1]	14.8	46.9
Agriculture	27.7	29.8
Forest Net Emissions	-4.7	0.0
Emissions Total	**469**	**596**

Source: Climate Change Scoping Plan, ARB, December 2008.
[1] This category includes semiconductor manufacturing and other industrial processes that emit GHGs that have high GWP such as sulfur hexafluoride (SF_6) and are tracked separately from other sectors.
BAU = Business as Usual
GWP = Global Warming Potential
$MMTCO_2E$ = million metric tons of carbon dioxide equivalent

Air Pollution Constituents and Attainment Status. The ARB coordinates and oversees both State and federal air pollution control programs in California. The ARB oversees activities of local air quality management agencies and maintains air quality monitoring stations throughout the State in conjunction with the EPA and local air districts. The ARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by ARB and EPA to classify air basins as attainment, nonattainment, nonattainment-transitional, or unclassified, based on air quality data for the most recent 3 calendar years compared with the AAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA. The air

[1] ARB Climate Change Scoping Plan, December 2008.

quality data are also used to monitor progress in attaining air quality standards. Table F lists the attainment status for the criteria pollutants in the Basin.

Table F: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O_3 1-hour	Nonattainment	N/A
O_3 8-hour	Nonattainment	Severe-17 Nonattainment
PM_{10}	Nonattainment	Serious Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	Attainment/Unclassified

Source: ARB 2010 (http://www.arb.ca.gov/desig/desig.htm).
CO = carbon monoxide
N/A = not applicable
NO_2 = nitrogen dioxide
O_3 = ozone
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matte less than 2.5 microns in diameter
SO_2 = sulfur dioxide

Ozone. O_3 (smog) is formed by photochemical reactions between oxides of nitrogen and ROGs rather than being directly emitted. O_3 is a pungent, colorless gas typical of Southern California smog. Elevated O_3 concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. O_3 levels peak during summer and early fall. The entire Basin is designated as a nonattainment area for the State 1-hour and 8-hour O_3 standards. The EPA has officially designated the status for most of the Basin regarding the 8-hour O_3 standard as “Severe 17,” which means the Basin has until 2021 to attain the federal 8-hour O_3 standard. The SCAQMD has requested that the Basin’s federal designation be changed from severe to extreme nonattainment. This change would extend the attainment deadline to 2023.

Carbon Monoxide. CO is formed by the incomplete combustion of fossil fuels, almost entirely from automobiles. It is a colorless, odorless gas that can cause dizziness, fatigue, and impairments to central nervous system functions. The entire Basin is in attainment for the State standards for CO. The Basin is designated as a “Severe Maintenance” area under the federal CO standards.

Nitrogen Oxides. NO_2, a reddish brown gas, and nitric oxide (NO), a colorless, odorless gas, are formed from fuel combustion under high temperature or pressure. These compounds are referred to as nitrogen oxides, or NO_X. NO_X is a primary component of the photochemical smog reaction. It also contributes to other pollution problems, including a high concentration of fine particulate matter, poor

visibility, and acid deposition (i.e., acid rain). NO_2 decreases lung function and may reduce resistance to infection. The entire Basin has not exceeded both federal and State standards for NO_2 in the past five years with published monitoring data. It is designated as a maintenance area under the federal standards and an attainment area under the State standards.

Sulfur Dioxide. SO_2 is a colorless irritating gas formed primarily from incomplete combustion of fuels containing sulfur. Industrial facilities also contribute to gaseous SO_2 levels. SO_2 irritates the respiratory tract, can injure lung tissue when combined with fine particulate matter, and reduces visibility and the level of sunlight. The entire Basin is in attainment with both federal and State SO_2 standards.

Lead. Lead is found in old paints and coatings, plumbing, and a variety of other materials. Once in the blood stream, lead can cause damage to the brain, nervous system, and other body systems. Children are highly susceptible to the effects of lead. The entire Basin is in attainment for the federal and State standards for lead.

Particulate Matter. Particulate matter is the term used for a mixture of solid particles and liquid droplets found in the air. Coarse particles (PM_{10}) derive from a variety of sources, including windblown dust and grinding operations. Fuel combustion and resultant exhaust from power plants and diesel buses and trucks are primarily responsible for $PM_{2.5}$ levels. Fine particles can also be formed in the atmosphere through chemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma. The EPA's scientific review concluded that $PM_{2.5}$, which penetrate deeply into the lungs, are more likely than coarse particles to contribute to the health effects listed in a number of recently published community epidemiological studies at concentrations that extend well below those allowed by the current PM_{10} standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms. Most of the Basin is designated nonattainment for the federal and State PM_{10} and $PM_{2.5}$ standards.

Reactive Organic Compounds. ROCs (also known as ROGs and volatile organic compounds [VOCs]) are formed from the combustion of fuels and the evaporation of organic solvents. ROCs are not defined as criteria pollutants, but are a prime component of the photochemical smog reaction. Consequently, ROC accumulates in the atmosphere more quickly during the winter when sunlight is limited and photochemical reactions are slower.

3.1.2 Local Air Quality

SCAQMD, together with ARB, maintains ambient air quality monitoring stations in the Basin. The air quality monitoring station closest to the site is the Redlands–Dearborn Station. This station

monitors ozone and PM_{10} only. The next nearest station is the San Bernardino–4th Street station, which monitors most criteria pollutants except SO_2. The SO_2 concentrations were obtained from the Fontana–Arrow Highway station. These stations characterize the air quality representative of the ambient air quality in the project area.[1] The ambient air quality data in Table G show that CO, NO_2, and SO_2 levels are consistently below the relevant State and federal standards in the project vicinity. O_3, PM_{10}, and $PM_{2.5}$ levels all exceed State and/or federal standards regularly.

3.1.3 Regulatory Settings

Federal Regulations/Standards. Pursuant to the federal Clean Air Act (CAA) of 1970, the EPA established national ambient air quality standards (NAAQS). The NAAQS were established for six major pollutants, termed "criteria" pollutants. Criteria pollutants are defined as those pollutants for which the federal and State governments have established AAQS, or criteria, for outdoor concentrations in order to protect public health.

Data collected at permanent monitoring stations are used by the EPA to classify regions as "attainment" or "nonattainment," depending on whether the regions met the requirements stated in the primary NAAQS. Nonattainment areas are imposed with additional restrictions as required by the EPA.

The EPA has designated the SCAG as the Metropolitan Planning Organization (MPO) responsible for ensuring compliance with the requirements of the CAA for the Basin.

The EPA established new national air quality standards for ground-level O_3 and fine particulate matter in 1997. On May 14, 1999, the Court of Appeals for the District of Columbia Circuit issued a decision ruling that the CAA, as applied in setting the new public health standards for O_3 and particulate matter, was unconstitutional as an improper delegation of legislative authority to the EPA. On February 27, 2001, the United States Supreme Court upheld the way the government sets air quality standards under the CAA. The court unanimously rejected industry arguments that the EPA must consider financial cost as well as health benefits in writing standards. The justices also rejected arguments that the EPA took too much lawmaking power from Congress when it set tougher standards for O_3 and soot in 1997. Nevertheless, the court threw out the EPA's policy for implementing new O_3 rules, saying that the agency ignored a section of the law that restricts its authority to enforce such rules.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the 8-hour ground-level O_3 standard. The EPA issued the proposed rule implementing the 8-hour O_3 standard in April 2003. The EPA completed final 8-hour nonattainment status on April 15, 2004. The EPA revoked the 1-hour O_3 standard on June 15, 2005, and lowered the 8-hour O_3 standard from 0.08 ppm to 0.075 ppm on April 1, 2008.

The EPA issued the final $PM_{2.5}$ implementation rule in fall 2004. The EPA lowered the 24-hour $PM_{2.5}$ standard from 65 to 35 $\mu g/m^3$ and revoked the annual PM_{10} standard on December 17, 2006. The EPA issued final designations for the 2006 24-hour $PM_{2.5}$ standard on December 12, 2008.

[1] Air quality data, 2006–2008; EPA and ARB websites.

Table G: Ambient Air Quality Monitored at Redlands–Dearborn, San Bernardino-4th Street, and Fontana-Arrow Highway Stations

Pollutant	Standard	2006	2007	2008
Carbon Monoxide (CO) – from San Bernardino–4th Street Station				
Maximum 1-hr concentration (ppm)		2.8	3.7	2.2
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hr concentration (ppm)		2.2	2.3	1.7
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0
	Federal: ≥ 9 ppm	0	0	0
Ozone (O_3) – from Redlands–Dearborn Station				
Maximum 1-hr concentration (ppm)		0.165	0.149	0.154
Number of days exceeded:	State: > 0.09 ppm	62	54	72
Maximum 8-hr concentration (ppm)		0.135	0.124	0.120
Number of days exceeded:	State: > 0.07 ppm	80	79	100
	Federal: > 0.075 ppm	62[1]	58	75
Coarse Particulates (PM_{10}) – from Redlands–Dearborn Station				
Maximum 24-hr concentration (μg/m^3)		103	97	58
Number of days exceeded:	State: > 50 μg/m^3	37	38	38
	Federal: > 150 μg/m^3	0	0	0
Annual arithmetic average concentration (μg/m^3)		34.4	37.5	27.5
Exceeded for the year:	State: > 20 μg/m^3	Yes	Yes	Yes
Fine Particulates ($PM_{2.5}$) – from San Bernardino–4th Street Station				
Maximum 24-hr concentration (μg/m^3)		55.0	72.1	43.5
Number of days exceeded:	Federal: > 35 μg/m^3	9[3]	11	1
Annual arithmetic average concentration (μg/m^3)		17.8	17.8	13.8
Exceeded for the year:	State: > 12 μg/m^3	Yes	Yes	Yes
	Federal: > 15 μg/m^3	Yes	Yes	No
Nitrogen Dioxide (NO_2) – from San Bernardino–4th Street Station				
Maximum 1-hr concentration (ppm)		0.088	0.083	0.091
Number of days exceeded:	State: > 0.18 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.025	0.024	0.022
Exceeded for the year:	State: > 0.030 ppm	No	No	No
	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2) – from Fontana–Arrow Highway Station				
Maximum 24-hr concentration (ppm)		0.003	0.004	0.003
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.002	0.002	0.002
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Sources: EPA and ARB websites: www.epa.gov/air/data/index.html and www.arb.ca.gov/adam/welcome.html.

[1] The exceedances of the federal 8-hour O_3 standard are based on the old 0.08 ppm standard. In April 2008, the EPA revised the standard to 0.075 ppm.

[2] No data available.

[3] The exceedances of the federal 24-hour $PM_{2.5}$ standard are based on the old 65 μg/m^3 standard. In 2006, the EPA revised the standard to 35 μg/m^3.

μg/m^3 = micrograms per cubic meter
ARB = California Air Resources Board
EPA = United States Environmental Protection Agency
ppm = parts per million

GCC and GHG reduction are also concerns at the federal level; however, at this time, no federal legislation or regulations have been enacted specifically addressing GHG emissions reductions and GCC. California, in conjunction with several environmental organizations and several other states, sued to force the EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—CO_2, CH_4, (N_2O, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)--in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.[1]

State Regulations/Standards. In 1967, the California Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus, the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board, to establish ARB. Since its formation, ARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems.

In a response to the transportation sector's significant contribution to California's CO_2 emissions, AB 1493 (Pavley) was enacted on July 22, 2002. AB 1493 requires ARB to set GHG emission standards for passenger vehicles and light duty trucks (and other vehicles whose primary use is noncommercial personal transportation in the State) manufactured in 2009 and all subsequent model years. In setting these standards, ARB considered cost effectiveness, technological feasibility, and economic impacts. ARB adopted the standards in September 2004. When fully phased-in, the near-term (2009 to 2012) standards would result in a reduction in GHG emissions of approximately 22 percent compared to the emissions from the 2002 fleet, while the midterm (2013 to 2016) standards would result in a reduction of approximately 30 percent. To set its own GHG emissions limits on motor vehicles, California must receive a waiver from the EPA. However, in December 2007, the EPA denied the request from California for the waiver. In January 2008, the

[1] http://www.epa.gov/climatechange/endangerment.html.

California Attorney General filed a petition for review of the EPA's decision in the Ninth Circuit Court of Appeals; however, no decision on that petition has been published as of January 2009. On January 26, 2009, the President issued an Executive Memorandum directing the EPA to reassess its decision to deny the waiver and to initiate any appropriate action.[1] On May 18, 2009, the President announced the enactment of a 35.5 miles-per-gallon (mpg) fuel economy standard for automobiles and light duty trucks which will begin to take effect in 2012. This standard is approximately the same standard that was proposed by California, and so the California waiver request has been shelved as a result.

The ARB identified particulate emissions from diesel-fueled engines (DPM) as toxic air contaminants (TACs) in August 1998. Following the identification process, ARB was required by law to determine if there is a need for further control. In September 2000, ARB adopted the Diesel Risk Reduction Plan (Diesel RRP), which recommends many control measures to reduce the risks associated with DPM and achieve a goal of 75 percent DPM reduction by 2010 and 85 percent by 2020.

In June 2005, Governor Schwarzenegger established California's GHG emissions reduction targets in Executive Order S-3-05. The Executive Order established the following goals for the State of California: GHG emissions should be reduced to 2000 levels by 2010; GHG emissions should be reduced to 1990 levels by 2020; and GHG emissions should be reduced to 80 percent below 1990 levels by 2050.

California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The ARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2eq. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires ARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to GCC. The Scoping Plan was approved by ARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.[2] Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMT of CO_2eq, which would allow California to attain the emissions goal of 427 MMT of CO_2eq by 2020. The Scoping Plan includes a range of GHG reduction actions that may 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 Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The ARB rulemaking process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by an ARB Board hearing and rule adoption.

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1 Obama, President Barack. 2009. Memorandum for the Administrator of the Environmental Protection Agency. State of California Request for Waiver Under 42 U.S.C. 7543(b), the Clean Air Act. January 26.

2 California Air Resources Board. 2008. *Climate Change Proposed Scoping Plan: a framework for change.* October.

In addition to reducing GHG emissions to 1990 levels by 2020, AB 32 directed ARB and the Climate Action Team (CAT)[1] to identify a list of "discrete early action GHG reduction measures" that could be adopted and made enforceable by January 1, 2010. On January 18, 2007, Governor Schwarzenegger signed Executive Order S-1-07, further solidifying California's dedication to reducing GHGs by setting a new Low Carbon Fuel Standard. The Executive Order set a target to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020 and directs ARB to consider the Low Carbon Fuel Standard as a discrete early action measure.

In December 2008, the ARB released the State's Climate Change Scoping Plan, which outlines a range of strategies necessary for the State to reduce its GHG emissions to 1990 levels by 2020. Many climate mitigation strategies such as promoting water and energy efficiency are also climate adaptation strategies. By building an adaptation strategy on existing climate science and frameworks such as the Scoping Plan, California has begun to effectively anticipate future challenges and change actions that will ultimately reduce the vulnerability of residents, resources, and industries to the consequences of a variable and changing climate. California's mitigation (CAT) and adaptation (CAS) processes will be further integrated through extensive information exchange and consolidation of working groups from both efforts.[2]

SB 375, signed into law on October 1, 2008, is intended to enhance ARB's ability to reach AB 32 goals by directing ARB to develop regional GHG emissions reduction targets to be achieved within the automobile and light truck sectors for 2020 and 2035. ARB will work with California's 18 metropolitan planning organizations to align their regional transportation, housing, and land use plans and prepare a "Sustainable Communities Strategy" to reduce the number of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its GHG reduction targets.

Additionally, SB 375 provides incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The bill exempts home builders from certain CEQA requirements if they build projects consistent with the new sustainable community strategies. It will also encourage the development of more alternative transportation options, to promote healthy lifestyles and reduce traffic congestion.

Regional Air Quality Planning Framework. The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. The federal CAA Amendments of 1977 required that each state adopt an implementation plan outlining pollution control measures to attain the federal standards in nonattainment areas of the State.

The ARB is responsible for incorporating AQMPs for local air basins into a State Implementation Plan (SIP) for EPA approval. Significant authority for air quality control within them has been given to local air districts that regulate stationary source emissions and develop local nonattainment plans.

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1 CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of ARB's jurisdiction.

2 *2009 California Climate Adaptation Strategy*, http://www.energy.ca.gov/2009publications/CNRA-1000-2009-027/CNRA-1000-2009-027-F-ES.PDF

Regional Air Quality Management Plan. The SCAQMD and the SCAG are responsible for formulating and implementing the AQMP for the Basin. Every 3 years the SCAQMD prepares a new AQMP, updating the previous plan and having a 20-year horizon. The SCAQMD adopted the 2003 AQMP in August 2003 and forwarded it to ARB for review and approval. The ARB approved a modified version of the 2003 AQMP and forwarded it to the EPA in October 2003 for review and approval.

The 2003 AQMP updates the attainment demonstration for the federal standards for O_3 and PM_{10}, replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future, and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992.

The 2003 AQMP proposes policies and measures to achieve federal and State standards for healthful air quality in the Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under District jurisdiction (namely, Coachella Valley). The Coachella Valley PM_{10} Plan was revised in June 2002 and forwarded to ARB and EPA for approval. The EPA approved the 2002 Coachella Valley SIP on April 18, 2003.

This revision to the AQMP also addresses several State and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. This AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the O_3 SIP for the South Coast Air Basin for the attainment of the federal O_3 air quality standard. However, this revision points to the urgent need for additional emission reductions (beyond those incorporated in the 1997/99 Plan) to offset increased emission estimates from mobile sources and meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA.

The SCAQMD adopted the 2007 AQMP on June 1, 2007, which it describes as a regional and multiagency effort (the SCAQMD Governing Board, ARB, SCAG, and EPA). State and federal planning requirements will include developing control strategies, attainment demonstration, reasonable further progress, and maintenance plans. The 2007 AQMP also incorporates significant new scientific data, primarily in the form of updated emission inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The ARB has adopted the SCAQMD 2007 AQMP as part of the 2007 SIP and forwarded it to the EPA for review and approval. The SCAQMD is awaiting EPA's review and approval on its 2007 AQMP as part of the 2007 SIP.

4.0 THRESHOLDS AND METHODOLOGY

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, *CEQA Air Quality Handbook* (April 1993), were adhered to in the assessment of air quality impacts for the proposed project. The air quality models identified in the document (including an older version of the URBEMIS model) are outdated; therefore, the current version of the URBEMIS model, URBEMIS2007 Version 9.2.4, was used to estimate project-related mobile and stationary sources emissions in this Air Quality Analysis.

The Air Quality Analysis includes estimated emissions associated with short-term construction and long-term operation of the proposed project. Criteria pollutants with regional impacts would be emitted by project-related vehicular trips, as well as by emissions associated with stationary sources used on site. Localized air quality impacts, i.e., high CO concentrations (CO hot spots) near intersections or roadway segments in the project vicinity, would not occur and would be less than significant due to the generally low ambient CO concentrations (3.7 ppm or lower for the 1-hour period and 2.3 ppm or lower for the 8-hour period, compared to the standards of 20 ppm for the 1-hour period and 9 ppm for the 8-hour period) in the project area. A local CO hot-spot analysis was therefore not conducted.

The net increase in pollutant emissions determines the significance and impact on regional air quality as a result of the proposed project. The results also allow the local government to determine whether the proposed project will deter the region from achieving the goal of reducing pollutants in accordance with the AQMP in order to comply with federal and State AAQS.

SCAQMD has developed LST methodology that can be used to determine whether or not a project may 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 federal or State AAQS and are developed based on the ambient concentrations of that pollutant for each source receptor area. SCAQMD's current guidelines, *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008), and *Final –Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds* (October 2006) were adhered to in the assessment of air quality impacts for the proposed project.

The LST analysis is used to determine whether the daily emissions for the proposed construction activities could result in significant localized air quality impacts. The emissions of concern from construction activities are NO_X, CO, PM_{10}, and $PM_{2.5}$ combustion emissions from construction equipment and fugitive PM_{10} dust from construction site preparation activities. The primary emissions from operational activities include but are not limited to NO_X and CO combustion emissions from stationary sources and/or on-site mobile equipment for maintenance purposes. Off-site mobile emissions, if any, from the project are not included in the emissions compared to the LSTs.

4.1 THRESHOLDS OF SIGNIFICANCE

Based on *Guidelines for the Implementation of California Environmental Quality Act*, Appendix G, Public Resource Code Sections 15000–15387, a project would normally be considered to have a significant effect on air quality if the project would violate any ambient air quality standards, contribute substantially to an existing air quality violation, expose sensitive receptors to substantial pollutants concentrations, or conflict with adopted environmental plans and goals of the community in which it is located.

In addition to the federal and State AAQS, there are daily emissions thresholds for construction and operation of a proposed project in the Basin. The Basin is administered by the SCAQMD, and guidelines and emissions thresholds established by the SCAQMD in its *CEQA Air Quality Handbook* (April 1993) are used in this analysis. It should be noted that the emission thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety (EPA), these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

4.1.1 Regional Emissions Thresholds

Table H shows the CEQA significance thresholds that have been established for the Basin.

Table H: SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
ROCs	75 lbs/day	75 lbs/day
CO	550 lbs/day	550 lbs/day
NO_X	100 lbs/day	100 lbs/day
SO_X	150 lbs/day	150 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day

Source: South Coast Air Quality Management District, 2010.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter with a diameter of 2.5 microns or less
PM_{10} = particulate matter with a diameter of 10 microns or less
ROCs = reactive organic compounds
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides

Projects in the Basin with construction- or operation-related emissions that exceed any of the emissions thresholds should be considered significant under CEQA.

Local Microscale Concentration Standards. The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or federal standard, project emissions are considered significant

if they increase 1-hour CO concentrations by 1.0 ppm or more or 8-hour CO concentrations by 0.45 ppm or more. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20.0 ppm
- California State 8-hour CO standard of 9.0 ppm

4.1.2 Thresholds For Localized Significance

For this project, the appropriate Source Receptor Area (SRA) for the LST is the East San Bernardino Valley area (Area 35), according to the SRA/City Table on the SCAQMD LST website.[1] This project includes sites of 57, 27, and 10 ac. These are far enough apart that the localized impacts from on-site emissions of each will not affect the others.

Following the SCAQMD LST methodology, for sites larger than 5 ac, dispersion modeling needs to be conducted. Each of the project areas are larger than the 5 ac limit of the LST lookup methodology; however, at the time of this air quality analysis the sites do not have any construction details, schedules, etc., so using the 5 ac lookup values provides a conservative estimate of the off-site impacts.

For Site 1, the nearest existing sensitive receptors are residences to the east along Lotus Ave and 11th Street, the closest being approximately 66 ft (20 meters [m]) from the property line. For Site 2, the nearest existing sensitive receptor are residences to the south across Yucaipa Blvd. approximately 82 ft (25m) from the property line. For Site 3, the nearest existing sensitive receptors are residences in the surrounding manufactured home park approximately 33 ft (10m) from the property line. Per the LST methodology, SCAQMD suggests that receptors located less than 25m from an active construction area should use the LST thresholds at 25m. Table I shows the applicable construction LST thresholds for all three sites:

Table I: East San Bernardino Valley LST Thresholds at 25m

Air Pollutant	Threshold (lbs/day)	
	Construction	Operation
CO	2,075	2,075
NO_X	270	270
PM_{10}	14	4
$PM_{2.5}$	9	3

Source: South Coast Air Quality Management District, 2010.
CO = carbon monoxide
lbs/day = pounds per day
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

[1] www.aqmd.gov/ceqa/handbook/LST/LST.html.

4.1.4 Global Warming

The recommended approach for GHG analysis included in OPR's June 2008 release is to: (1) identify and quantify GHG emissions, (2) assess the significance of the impact on GCC, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance.[1] Neither the CEQA statute nor Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis; as with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation…. For local government lead agencies, adoption of general plan policies and certification of general plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews."

Pursuant to SB 97, OPR is in the process of developing guidelines for analysis of the effects of GHG emissions. As part of this process, OPR has asked ARB technical staff to recommend Statewide interim thresholds of significance for GHGs. ARB released a preliminary draft staff proposal in October 2008 that included initial suggestions for significance criteria related to industrial, commercial, and residential projects. The ARB anticipates adopting the proposal in 2009 to allow coordination with OPR's efforts on GCC.

In March 2010, *CEQA Guidelines* amendments were adopted and include the following direction regarding determination of significant impacts from GHG emissions (Section 15064.4):

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:
>
> > (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or
> >
> > (2) Rely on a qualitative analysis or performance based standards.

[1] State of California, 2008. Governor's Office of Planning and Research. *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act Review*. June 19.

> (b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:
>
> > (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
> >
> > (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
> >
> > (3) The extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

Some policy makers and regulators suggest that a zero emissions threshold would be appropriate when evaluating GHGs and their potential effect on GCC. Such a rule appears inconsistent with the State's approach to mitigation of GCC impacts. AB 32 does not prohibit all new GHG emissions; rather, it requires a reduction in Statewide emissions to a given level. Thus, AB 32 recognizes that GHG emissions will continue to occur; increases will result from certain activities, but reductions must occur elsewhere.

Individual projects incrementally contribute toward the potential for GCC on a cumulative basis in concert with all other past, present, and probable future projects. While individual projects are unlikely to measurably affect GCC, each of these projects incrementally contribute toward the potential for GCC on a cumulative basis, in concert with all other past, present, and probable future projects. This air quality analysis analyzes whether the project's emissions should be considered cumulatively significant. The proposed project would result in a significant GCC impact if it would:

- Hinder attainment of the State's goals of reducing GHG emissions to 1990 levels by 2020, as stated in the Global Warming Solutions Act of 2006. A project may be considered to help attainment of the State's goals by being consistent with an adopted Statewide 2020 GHG emissions limit or the plans, programs, and regulations adopted to implement the Global Warming Solutions Act of 2006.
- Fail to achieve increased energy efficiency or reduce overall GHG emissions from an existing facility.

- Significantly increase the consumption of fuels or other energy resources, especially fossil fuels that contribute to GHG emissions when consumed.

5.0 IMPACTS AND MITIGATION

Air pollutant emissions associated with the project would occur over the short term from construction activities, such as fugitive dust from site preparation and grading, and emissions from equipment exhaust. There would be long-term regional emissions associated with project-related vehicular trips. Long-term local CO emissions at intersections in the project vicinity would be affected by project-related traffic. Long-term stationary source emissions would occur due to energy consumption such as electricity and natural gas usage at the proposed land uses.

5.1 CONSTRUCTION IMPACTS

5.1.1 Equipment Exhausts and Related Construction Activities

Construction activities produce combustion emissions from various sources such as demolition, site grading, utility engines, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The use of construction equipment on site would result in localized exhaust emissions.

The project is planned to be built as three separate projects, as described in Section 2.2. Each site is expected to require mass grading and fine grading, with only Site 3 requiring any demolition. The ARB URBEMIS 2007 model was used to calculate the construction emissions, as shown in Tables J, K, and L for Site 1, Site 2, and Site 3, respectively. While the actual details of the future construction schedule are not known, it is expected that rough grading will take from 5–10 months, and the construction of the buildings and infrastructure will take from 2–4 years. Tables J, K, and L list a representative set of emissions sources that represent a peak day during the most intense of the planned nonoverlapping construction phases. Details of the emission factors and other assumptions are included in Appendix A.

Tables J, K, and L show expected combinations; with all mitigation measures implemented, construction equipment/vehicle emissions of criteria pollutants would remain below the SCAQMD emission thresholds for all pollutants except for ROC emissions from architectural coating operations These emissions rates assume the use of low VOC coatings and standard application techniques. Emissions associated with architectural coatings could be reduced by using precoated/natural-colored building materials using water-based or low-VOC coating and coating transfer or spray equipment with high transfer efficiency. For example, a high-volume, low-pressure (HVLP) spray method is a coating application system operated at air pressure between 0.1 and 10 pounds per square inch gauge (psig), with 65 percent transfer efficiency. Manual applications such as a paintbrush, hand roller, trowel, spatula, dauber, rag, or sponge have 100 percent transfer efficiency.

Table J: Peak-Day Mitigated Emissions from Site 1 Construction Operations

Construction Phases	Pollutant Emissions (lbs/day)						
	CO	**ROCs**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Mass Grading	34	7.5	60	0.0029	83	20	6,400
Fine Grading	17	3.7	30	0.0016	82	18	3,200
Trenching	8.9	1.8	15	0.0013	0.74	0.68	1,800
Paving	14	6.4	26	0.018	1.8	1.7	3,200
Building	77	6.6	39	0.12	2.6	2.1	13,000
Coating	9.4	280	0.53	0.014	0.1	0.055	1,400
SCAQMD Threshold	**550**	**75**	**100**	**150**	**150**	**55**	**NT**
Exceeds Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**	
LST Thresholds	**2,075**	**No**	**270**	**No**	**14**	**9**	
Significant Emissions?	**No**	**Threshold**	**No**	**Threshold**	**Yes**	**Yes**	

Source: LSA Associates, Inc., March 2010.
CO = carbon monoxide
CO_2 = carbon dioxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROCs = reactive organic compounds
SO_x = sulfur oxides
NT = No Threshold
SCAQMD = South Coast Air Quality Management District

Table K: Peak-Day Mitigated Emissions from Site 2 Construction Operations

Construction Phases	Pollutant Emissions (lbs/day)						
	CO	**ROCs**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Mass Grading	34	7.5	60	0.0029	56	14	6,400
Fine Grading	17	3.7	30	0.0016	54	12	3,200
Trenching	8.9	1.8	15	0.0013	0.74	0.68	1,800
Paving	13	4.8	20	0.013	1.5	1.3	2,500
Building	84	7.1	44	0.13	2.9	2.3	15,000
Coating	9.7	360	0.54	0.015	0.11	0.057	1,400
SCAQMD Threshold	**550**	**75**	**100**	**150**	**150**	**55**	**NT**
Exceeds Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**	
LST Thresholds	**2,075**	**No**	**270**	**No**	**14**	**9**	
Significant Emissions?	**No**	**Threshold**	**No**	**Threshold**	**Yes**	**Yes**	

Source: LSA Associates, Inc., March 2010.
CO = carbon monoxide
CO_2 = carbon dioxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROCs = reactive organic compounds
SO_x = sulfur oxides
NT = No Threshold
SCAQMD = South Coast Air Quality Management District

Table L: Peak-Day Mitigated Emissions from Site 3 Construction Operations

Construction Phases	Pollutant Emissions (lbs/day)						
	CO	**ROCs**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**	**CO_2**
Demolition	9.0	1.8	16	0.016	12	3.2	2,400
Mass Grading	32	7.0	57	0.0026	22	6.6	6,100
Fine Grading	12	2.7	22	0.0013	21	5.1	2,400
Trenching	8.9	1.8	15	0.0013	0.74	0.68	1,800
Paving	12	3.3	17	0.0066	1.4	1.2	1,900
Building	37	4.4	23	0.044	1.6	1.3	6,000
Coating	4.1	95	0.23	0.0063	0.045	0.024	600
SCAQMD Threshold	**550**	**75**	**100**	**150**	**150**	**55**	
Exceeds Threshold?	**No**	**Yes**	**No**	**No**	**No**	**No**	
LST Thresholds	**2,075**	**No**	**270**		**14**	**9**	**NT**
Significant Emissions?	**No**	**Threshold**	**No**	**No Threshold**	**Yes**	**No**	

Source: LSA Associates, Inc., March 2010.

CO = carbon monoxide
CO_2 = carbon dioxide
lbs/day = pounds per day
NO_x = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROCs = reactive organic compounds
SO_x = sulfur oxides
NT = No Threshold
SCAQMD = South Coast Air Quality Management District

The use of an HVLP spray method would increase the transfer efficiency from 25 to 65 percent. This increase in efficiency would reduce the VOC emissions to approximately 131, 168, and 44 lbs/day for Sites 1, 2, and 3, respectively. The use of manual application methods would further reduce the emissions. The ROC emissions from Sites 1 and 2 would remain significant.

5.1.2 Fugitive Dust

Fugitive dust emissions are generally associated with land clearing, exposure of soils to the air and wind, and cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. Construction emissions can vary greatly depending on the level of activity, the specific operations taking place, the equipment being operated, local soils, weather conditions, and other factors. The proposed project will be required to comply with SCAQMD Rules 402 and 403 to control fugitive dust. There are a number of feasible control measures that can be reasonably implemented to significantly reduce PM_{10} emissions from construction. As shown in Tables J, K, and L, fugitive dust emissions from project construction would not exceed the SCAQMD threshold for standard construction emissions.

5.1.3 Localized Significance Analysis

Tables J, K, and L also list the construction-related LSTs for each area. The project areas are each larger than the 5 ac limit of the LST lookup methodology; however, these sites do not have any construction details, schedules, etc., so using the 5 ac lookup values provides a conservative estimate of the off-site impacts. As shown in Tables J, K, and L, it is expected that the CO and NO_X local

concentrations will be less than significant, but that the PM_{10} and $PM_{2.5}$ local concentrations from construction operations at all of the project sites will be significant, even with all feasible mitigation measures implemented. This is due to the location of residential uses in the vicinity of these project sites being so close that mitigation measures would not be sufficient to reduce them to below the significance threshold levels.

5.1.4 Odors

Heavy-duty equipment in the project area during construction would emit odors. However, the construction activity would be short term and would cease to occur after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required.

SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed project is not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential existing off-site uses would not occur as a result of the proposed project.

5.1.5 Naturally Occurring Asbestos

The proposed project is located in San Bernardino County, which is not among the counties that are found to have serpentine and ultramafic rock in their soils. Therefore, the potential risk for NOA during project construction is small and less than significant.

5.2 LONG-TERM REGIONAL AIR QUALITY IMPACTS

5.2.1 Long-Term Project Operational Emissions

Long-term air emission impacts are those associated with stationary sources and mobile sources involving any project-related change. The proposed project would result in both additional stationary and mobile-source emissions. Based on data provided in the Traffic Impact Study prepared for this project (LSA Associates, Inc., March 2010), long-term operational emissions associated with each proposed site, calculated with the URBEMIS 2007 model, are shown in Tables M, N, and O (listing only the higher of the winter or summer emissions). Emissions from the project-related mobile sources would exceed the daily thresholds established by the City, based on emission factors for the year of operation, for CO, ROG, and NO_x for both Sites 1 and 2. Table P shows the emissions from all three sites combined for the overall regional effect, showing that if all three sites are implemented, emissions of CO, ROG, NO_x, PM_{10}, and $PM_{2.5}$ would exceed the daily thresholds established by the City. These emissions are largely from the project-related vehicular traffic. These emissions sources are beyond the control of the City. Therefore, while project-related long-term air quality impacts would be significant, there are no feasible mitigation measures available.

Table M: Site 1 Operational Emissions

Emissions Sources	Pollutant Emissions, lbs/day					
	CO	**ROG**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	570	50	75	0.68	110	22
Stationary Sources						
Natural Gas	2.8	0.5	6.5	0	0.01	0.01
Hearth	1.6	0.21	3.7	0.02	0.3	0.29
Landscape	3.1	0.25	0.04	0	0.01	0.01
Consumer Products	0	34	0	0	0	0
Architectural Coatings	0	1.6	0	0	0	0
Total Project Emissions	578	87	85	0.7	110	22
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**

Source: LSA Associates, Inc., March 2010.
Note: Table values rounded to two significant digits and thus may not appear to sum correctly.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SOx = sulfur oxides

Table N: Site 2 Operational Emissions

Emissions Sources	Pollutant Emissions, lbs/day					
	CO	**ROG**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	760	66	100	0.92	150	29
Stationary Sources						
Natural Gas	2.5	0.46	6.0	0	0.01	0.01
Hearth	1.4	0.2	3.4	0.02	0.27	0.27
Landscape	3.1	0.25	0.04	0	0.01	0.01
Consumer Products	0	31	0	0	0	0
Architectural Coatings	0	2.1	0	0	0	0
Total Project Emissions	767	100	109	0.94	150	29
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**

Source: LSA Associates, Inc., March 2010.
Note: Table values rounded to two significant digits and thus may not appear to sum correctly.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SOx = sulfur oxides

Table O: Site 3 Operational Emissions

Emissions Sources	Pollutant Emissions, lbs/day					
	CO	**ROG**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	170	15	22	0.2	33	6.5
Stationary Sources						
Natural Gas	1.3	0.24	3.1	0	0.01	0.01
Hearth	0.75	0.1	1.8	0.01	0.14	0.14
Landscape	1.6	0.12	0.02	0	0.01	0.01
Consumer Products	0	16	0	0	0	0
Architectural Coatings	0	0.55	0	0	0	0
Total Project Emissions	174	32	27	0.21	33	6.7
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA Associates, Inc., March 2010.
Note: Table values rounded to two significant digits and thus may not appear to sum correctly.

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides

Table P: Operational Emissions for All Three Sites Combined

Emissions Sources	Pollutant Emissions, lbs/day					
	CO	**ROG**	**NO_X**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Mobile Sources	1,500	130	200	1.8	290	58
Stationary Sources						
Natural Gas	6.6	1.2	16	0	0.03	0.03
Hearth	3.8	0.51	8.9	0.05	0.71	0.70
Landscape	7.8	0.62	0.10	0	0.030	0.03
Consumer Products	0	81	0	0	0	0
Architectural Coatings	0	4.3	0	0	0	0
Total Project Emissions	1,500	220	220	1.9	290	58
SCAQMD Thresholds	**550**	**55**	**55**	**150**	**150**	**55**
Significant?	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: LSA Associates, Inc., March 2010.
Note: Table values rounded to two significant digits and thus may not appear to sum correctly.

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
ROG = reactive organic gases
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides

5.2.2 Localized Significance Analysis

Table Q shows the calculated emissions for the proposed operational activities compared with the appropriate LSTs. The LST analysis only includes on-site sources; however, it is unknown exactly what percentage of mobile sources will be on site. For a worst-case scenario assessment, the emissions shown in Table Q include all on-site stationary sources and 8 percent of the mobile sources, which is an estimate of the amount of project-related vehicle traffic that will occur on site. Considering the average trip length included in the URBEMIS2007 model, which ranges from 7.4 to 13.3 mi, and a typical on-site travel distance of less than 0.5 mile (approximately 5.4 percent on average), the 8 percent assumption is considered to be conservative.

Table Q: Project LST Operational Impacts

Emissions Source	Pollutant Emissions (lbs/day)			
	CO	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
Site 1 On-site emissions	53	16	9.1	2.1
Site 2 On-site emissions	68	17	12	2.6
Site 3 On-site emissions	17	6.7	2.8	0.68
LST Thresholds	**2,075**	**270**	**4**	**3**
Significant Emissions?	**No**	**No**	**Yes**	**No**

Source: LSA Associates, Inc., March 2010.
Note: Assuming 8 percent of project vehicle traffic occurs on site, East San Bernardino Valley SRA (35), 5-acre site, 25-meter distance.
CO = carbon monoxide
lbs/day = pounds per day
LST = localized significance threshold
NO_x = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
SRA = Source Receptor Area

Table Q shows that the on-site operational emission rates for CO, NO_X, and $PM_{2.5}$ result in concentrations that are below the LST thresholds at the nearest residential uses. However, the on-site operational emission rates for PM_{10} result in concentrations that do exceed the LST thresholds for Sites 1 and 2. Therefore, the proposed operational activity at Sites 1 and 2 would result in a localized significant air quality impact. These air quality impacts are almost entirely from the exhaust of project-related vehicles. Because vehicular emissions are controlled at the State and federal level, there are no feasible mitigation measures the project can implement to reduce this air quality impact.

5.2.3 Greenhouse Gas Emissions

This section evaluates potential significant impacts to GCC that could result from implementation of the proposed project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. Mitigation measures are identified as appropriate.

Emissions estimates for the proposed project are discussed below. GHG emissions estimates are provided herein for informational purposes only, as there is no established quantified GHG emissions threshold. Bearing in mind that CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure," the analysis below is based on methodologies

and information available to the City at the time this analysis was prepared. Estimation of GHG emissions in the future does not account for all changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that is probably worse than what will be encountered (after energy-efficient technologies have been implemented). While information is presented below to assist the public and the City's decision-makers in understanding the project's potential contribution to GCC impacts, the information available to the City is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of project development would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation (as opposed to its construction). Typically, more than 80 percent of the total energy consumption takes place during the use of buildings, and less than 20 percent is consumed during construction.[1]

Overall, the following activities associated with the proposed project could directly or indirectly contribute to the generation of GHG emissions:

- **Removal of Vegetation:** The removal of vegetation for construction results in a loss of the carbon sequestration in plants. However, planting of additional vegetation would result in additional carbon sequestration and would reduce the GHG emissions of the project.
- **Construction Activities:** During construction of the project, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. The URBEMIS modeling performed for the construction analysis (see Appendix A) shows that GHG emissions would be as high as 897 metric tons per year.
- **Gas, Electricity, and Water Use:** Natural gas use results in the emissions of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuels. California's water conveyance system is energy-intensive. Approximately one-fifth of the electricity and one-third of the nonpower plant natural gas consumed in the State are associated with water delivery, treatment, and use.[2]
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill CH_4 can also be a source of energy. In addition, many materials in landfills do not

[1] United Nations Environment Programme (UNEP), 2007. *Buildings and Climate Change: Status, Challenges and Opportunities*, Paris, France.

[2] CaliforniaAir Resources Board, 2010. *Economic Sectors Portal*. Website: www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm. Accessed January 5, 2010.

decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

- **Motor Vehicle Use:** Transportation associated with the proposed project would result in GHG emissions from fuel combustion in daily automobile and truck trips.

The GHG emissions calculation presented below includes construction emissions, GHG emissions from increased energy consumption, water usage, solid waste disposal, and estimated GHG emissions from vehicular traffic that would result from implementation of the project.

The project would be required to implement the construction exhaust control measures listed in Section 5.6 including minimization of construction equipment idling and implementation of proper engine tuning and exhaust controls. Both of these measures would reduce GHG emissions during the construction period.

Architectural coatings used in construction of the project may contain VOCs that are similar to ROGs and are part of O_3 precursors. However, there are no significant emissions of GHGs from architectural coatings.

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources and indirect emissions from stationary sources associated with energy consumption. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with on-site facilities and customers/employees/deliveries to the project site. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for heating, and other sources. Increases in stationary source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed uses.

The GHG emission estimates presented in Tables R, S, and T show the emissions associated with each site, and Table U shows the combination of the three sites envisioned by the proposed project at build out. Appendix C includes the worksheets for the GHG emissions.

Table R: Site 1 Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Vehicles[1]	11,000	0.38	0.87	11,000
Electricity Production	2,000	0.022	0.012	2,000
Natural Gas Combustion[1]	1,400	0.035	0.034	1,400
Solid Waste	--	--	--	1,100
Other Area Sources[2]	0.93	--	--	0.93
Total Annual Emissions	14,000	0.44	0.92	16,000

Source: LSA Associates, Inc., March 2010.
Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
[1] CO_2 emissions for vehicles and natural gas from URBEMIS 2007 output.
[2] Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 output.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

Table S: Site 2 Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Vehicles[1]	15,000	0.53	1.2	15,000
Electricity Production	2,300	0.025	0.014	2,300
Natural Gas Combustion[1]	1,300	0.035	0.034	1,300
Solid Waste	--	--	--	1,200
Other Area Sources[2]	0.93	--	--	0.93
Total Annual Emissions	19,000	0.59	1.2	20,000

Source: LSA Associates, Inc., March 2010.
Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
[1] CO_2 emissions for vehicles and natural gas from URBEMIS 2007 output.
[2] Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 output.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

Table T: Site 3 Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Vehicles[1]	3,300	0.11	0.24	3,400
Electricity Production	750	0.0082	0.0045	750
Natural Gas Combustion[1]	660	0.016	0.015	660
Solid Waste	--	--	--	440
Other Area Sources[2]	0.47	--	--	0.47
Total Annual Emissions	4,700	0.13	0.26	5,300

Source: LSA Associates, Inc., March 2010.
Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
[1] CO_2 emissions for vehicles and natural gas from URBEMIS 2007 output.
[2] Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 output.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

Table U: Greenhouse Gas Emissions for All Three Sites Combined

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Vehicles[1]	29,000	1.0	2.3	30,000
Electricity Production	5,000	0.055	0.03	5,000
Natural Gas Combustion[1]	3,300	0.087	0.083	3,300
Solid Waste	--	--	--	2,800
Other Area Sources[2]	2.3	--	--	2.3
Total Annual Emissions	37,000	1.1	2.4	41,000

Source: LSA Associates, Inc., March 2010.
Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.
[1] CO_2 emissions for vehicles and natural gas from URBEMIS 2007 output.
[2] Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 output.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
N_2O = nitrous oxide

Due to the global nature of this phenomenon and the scale of the emissions, total emissions are typically expressed in units of teragrams (a trillion [10^{12}] grams or one million metric tons) per year (Tg/year). This is the standard metric unit used worldwide. As shown in Tables R–U, Site 1 operations would result in average annual emissions of 16,000 metric tons of CO_2e per year ($MTCO_2e$ /yr), Site 2 20,000 $MTCO_2e$ /yr, Site 3 5,300 $MTCO_2e$ /yr and the combination of all three 41,000 $MTCO_2e$ /yr. These emissions rates can also be expressed as 0.016, 0.020, 0.0053, and 0.041 Tg/year of CO_2e for each site and the combination, respectively. As a comparison, the existing emissions from the entire San Bernardino County are estimated to be approximately 3.4 Tg/year (in 2006) of CO_2e and approximately 496.95 Tg/year of CO_2e for the entire State.

Energy and Natural Gas Use. Buildings represent 39 percent of the United States' primary energy usage and 70 percent of electricity consumption.[1] The proposed project would increase the demand for electricity and natural gas due to the increased building area and number of employees. The project would indirectly result in increased GHG emissions from off-site electricity generation at power plants (a portion of 5,000 metric tons of CO_2e/year) and directly from consumption of natural gas (3,300 metric tons of CO_2e/year).

Water Use. Water-related energy use consumes 19 percent of the State's electricity every year.[2] Energy use and related GHG emissions are based on electricity used for water supply and conveyance, water treatment, water distribution, and wastewater treatment. The project would indirectly result in increased GHG emissions from the off-site electricity generation at power plants (the remainder of the 5,000 metric tons of CO_2e/year).

[1] United States Department of Energy. 2003. *Buildings Energy Data Book.*
[2] California, State of, 2005. California Energy Commission. California's Water-Energy Relationship. November.

Solid Waste Disposal. The proposed project would also generate solid waste once in operation. Average waste generation rates from a variety of sources are available from the California Integrated Waste Management Board.[1] This analysis uses an average waste generation rate of 1.17 dry tons per residence per year for residential uses and 0.0024 dry tons per square foot per year for retail uses. The project would indirectly result in increased GHG emissions from solid waste treatment at treatment plants (approximately 2,800 metric tons of CO_2e/year).

Mobile Sources. Mobile sources (vehicle trips and associated miles traveled) are one of the largest sources of GHG emissions in California and represent approximately 38 percent of annual CO_2 emissions generated in the State. Like most land use development projects, vehicle miles traveled (VMT) is the most direct indicator of CO_2 emissions from the proposed project, and associated CO_2 emissions function as the best indicator of total GHG emissions.

Summary. All three sites combined would generate up to 41,000 metric tons of CO_2e per year of new emissions, as shown in Table U. The emissions from electricity production would comprise approximately 13 percent of the project's total CO_2e emissions, and emissions from solid waste disposal would total approximately 7 percent. The emissions from vehicle exhaust would comprise approximately 72 percent of the project's total CO_2e emissions. The emissions from vehicle exhaust are controlled by the State and federal governments and are outside the control of the City.

The remaining CO_2e emissions are primarily associated with building heating systems. Specific development projects proposed under the project would comply with existing State and federal regulations regarding the energy efficiency of buildings, appliances, and lighting, which would reduce the project's electricity demand. The new buildings constructed in accordance with current energy efficiency standards would be more energy efficient than older buildings. However, in the absence of supplementary mitigation measures, the project would obstruct the implementation of GHG reduction goals under AB 32.

At present, there is a federal ban on CFCs; therefore, it is assumed the project would not generate emissions of CFCs. The project may emit a small amount of HFC emissions from leakage and service of refrigeration and air conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used in the project site are unknown at this time. PFCs and sulfur hexafluoride are typically used in industrial applications, none of which would be used on the project site. Therefore, it is not anticipated that the project would contribute significant emissions of these additional GHGs.

Implementation of the project could result in GHG emission levels that would substantially conflict with implementation of the GHG reduction goals under AB 32 or other State regulations. The California Environmental Protection Agency (Cal EPA), CAT, and ARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses,

[1] California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Residential Developments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Residential.htm.

local government and community groups, and State incentive and regulatory programs. These include the CAT's 2006 "*Report to Governor Schwarzenegger and the Legislature*," ARB's 2007 "*Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California*," and ARB's "*Climate Change Proposed Scoping Plan: a Framework for Change.*"

The reports identify strategies to reduce California's emissions to the levels proposed in Executive Order S-3-05 and AB 32 that are applicable to proposed project. The Proposed Scoping Plan is the most recent document, and the strategies included in the Scoping Plan that apply to the project are contained in Table V, which also summarizes the extent to which the project would comply with the strategies to help California reach the emission reduction targets.

The strategies listed in Table V are addressed as either part of the project, required mitigation measures, or requirements under local or State ordinances. With implementation of these strategies/measures, the project's contribution to cumulative GHG emissions would be reduced to a less than significant level.

In order to ensure that the proposed project complies with and would not conflict with or impede the implementation of reduction goals identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor, Mitigation Measure GCC-1 shall be implemented. Many of the individual elements of this measure are already included as part of the proposed project or are required as part of project-specific mitigation measures.

Table V: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Energy Efficiency Measures	
Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). **Renewables Portfolio Standard.** Achieve a 33 percent renewable energy mix statewide. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Compliant with Mitigation Incorporated.** The proposed project would be required to comply with the updated Title 24 standards for building construction. In addition, the project would be required to comply with the requirements of Mitigation Measure GCC-1, identified below, including measures to incorporate energy-efficient building design features.

Table V: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Water Conservation and Efficiency Measures	
Water Use Efficiency. Continue efficiency programs and use cleaner energy sources to move and treat water. Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions.	**Compliant with Mitigation Incorporated.** The project would be required to comply with the requirements of Mitigation Measure GCC-1, identified below, including measures to increase water use efficiency. Additionally, the project's sustainability features include high-efficiency sinks, toilets, and urinals, some of which are sensor-operated. The project would also improve the existing irrigation on site, which would result in a reduced water demand for the project area.
Solid Waste Reduction Measures	
Increase Waste Diversion, Composting, and Commercial Recycling, and Move Toward Zero-Waste. Increase waste diversion from landfills beyond the 50 percent mandate to provide for additional recovery of recyclable materials. Composting and commercial recycling could have substantial GHG reduction benefits. In the long term, zero-waste policies that would require manufacturers to design products to be fully recyclable may be necessary.	**Compliant with Mitigation Incorporated.** Data available from the California Integrated Waste Management Board (CIWMB) indicates that the City of Yucaipa has exceeded the 50 percent diversion rate (2006). The proposed project would be required to comply with Mitigation Measure GCC-1, identified below, including measures to increase solid waste diversion, composting, and recycling. Further, as described in Section 5.6 below, construction of the project would utilize recycled building materials.
Transportation and Motor Vehicle Measures	
Vehicle Climate Change Standards. AB 1493 (Pavley) required the State to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of GHG emissions from passenger vehicles and light duty trucks. Regulations were adopted by ARB in September 2004. **Light-Duty Vehicle Efficiency Measures.** Implement additional measures that could reduce light-duty GHG emissions. For example, measures to ensure that tires are properly inflated can both reduce GHG emissions and improve fuel efficiency. **Adopt Heavy- and Medium-Duty Fuel and Engine Efficiency Measures.** Regulations to require retrofits to improve the fuel efficiency of heavy-duty trucks that could include devices that reduce aerodynamic drag and rolling resistance. This measure could also include hybridization of and increased engine efficiency of vehicles. **Low Carbon Fuel Standard.** ARB identified this measure as a Discrete Early Action Measure. This measure would reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020.	**Compliant.** The project does not involve the manufacture, sale, or purchase of vehicles. However, vehicles that operate within and access the project site would comply with any vehicle and fuel standards that ARB adopts.

Table V: Project Compliance with Greenhouse Gas Emission Reduction Strategies

Strategy	Project Compliance
Regional Transportation-Related Greenhouse Gas Targets. Develop regional GHG emissions reduction targets for passenger vehicles. Local governments will play a significant role in the regional planning process to reach passenger vehicle GHG emissions reduction targets. Local governments have the ability to directly influence both the siting and design of new residential and commercial developments in a way that reduces GHGs associated with vehicle travel.	**Compliant.** Specific regional emission targets for transportation emissions do not directly apply to this project; regional GHG reduction target development is outside the scope of this project. The project is compliant with the applicable General Plan Land Use and Zoning designation for the site and is an upgrade to an existing facility in an urban area.
Measures to Reduce High Global Warming Potential (GWP) Gases. ARB has identified Discrete Early Action measures to reduce GHG emissions from the refrigerants used in car air conditioners, semiconductor manufacturing, and consumer products. ARB has also identified potential reduction opportunities for future commercial and industrial refrigeration, changing the refrigerants used in auto air conditioning systems, and ensuring that existing car air conditioning systems do not leak.	**Compliant.** New products used or serviced on the project site (after implementation of the reduction of GHGs) would comply with future ARB rules and regulations.

Source: LSA Associates, Inc., March 2010.
ARB = California Air Resources Board
GHG = greenhouse gas

As described above, project-related GHG emissions are not confined to a particular air basin, but are dispersed worldwide. Consequently, it is speculative to determine how project-related GHG emissions would contribute to GCC and how GCC may impact the State. Therefore, project-related GHG emissions are not project-specific impacts to global warming but are instead the project's contribution to this cumulative impact. As stated previously, project-related GHG emissions and their contribution to GCC impacts in the State are less than significant and less than cumulatively considerable because: (1) the project's impacts alone would not cause or significantly contribute to GCC, and (2) the project has no substantial effect on consumption of fuels or other energy resources, especially fossil fuels that contribute to GHG emissions when consumed.

5.3 LONG-TERM MICROSCALE (CO HOT-SPOT) ANALYSIS

Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited; it disperses rapidly with distance from the source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, school children, the elderly, hospital patients, etc).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.[1]

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the 24302 4th St., San Bernardino AQ Station, the closest station with monitored CO data, showed a highest recorded 1-hour concentration of 3.7 ppm (State standard is 20 ppm) and a highest 8-hour concentration of 2.3 ppm (State standard is 9 ppm) during the past 3 years (see Table G).

The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Based on the same Traffic Impact Analysis used for the long-term regional analysis above, CO hot-spot analyses were conducted for existing, existing plus project, 2014 baseline and 2014 with project, and 2035 baseline and 2035 with project conditions. The impact on local CO levels was assessed with the ARB-approved CALINE4 air quality model, which allows microscale CO concentrations to be estimated along roadway corridors or near intersections. This model is designed to identify localized concentrations of CO, often termed "hot spots." A brief discussion of input to the CALINE4 model follows. The analysis was performed for the worst-case wind angle and wind speed condition and is based on the following assumptions:

- Selected modeling locations represent the intersections closest to the project site, with the highest project-related vehicle-turning movements and the worst level of service deterioration.
- Twenty receptor locations with the possibility of extended outdoor exposure from approximately 23 to 69 ft of the roadway centerline near intersections were modeled to determine CO concentrations.
- The calculations assume a meteorological condition of almost no wind (0.5 meter/second [m/s]), a suburban topographical condition between the source and receptor, and a mixing height of 1,000 m, representing a worst-case scenario for CO concentrations.
- CO concentrations are calculated for the 1-hour averaging period and then compared to the 1-hour standards. CO 8-hour averages are extrapolated using techniques outlined in the SCAQMD *CEQA Air Quality Handbook* (updated April 1993) and compared to the 8-hour standards; a persistence factor of 0.7 was used to predict the 8-hour concentration.
- Concentrations are given in parts per million at each of the receptor locations.
- The "at-grade" link option with speed adjusted based on average cruise speed and number of vehicles per lane per hour was used rather than the "intersection" link selection in the CALINE4 model (Caltrans has suggested that the "intersection" link should not be used due to an inappropriate algorithm based on outdated vehicle distribution.) Emission factors from the EMFAC2007 model were used for the vehicle fleet.

[1] Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm.

- The highest levels of the second highest 1-hour and 8-hour CO concentrations monitored at the Riverside-Rubidoux Station in the past 3 years were used as background concentrations (3.1 parts per million [ppm] for the 1-hour CO and 2.1 ppm for the 8-hour CO). The "background" concentrations are then added to the model results for future with and without the proposed project conditions.

Table W lists the CO concentrations at the 11 existing intersections analyzed in the Traffic Impact Study for the existing project scenario. As shown in Table W, under the existing conditions, the intersections analyzed for the daily peak hour would experience 1-hour and 8-hour CO concentrations below the federal and State standards. The existing CO concentrations are from current traffic in the vicinity of these intersections. Similarly, Tables X and Y show that project-related increases in CO concentrations would all be 0.2 ppm or less, and all CO concentrations would be below the respective 1-hour and 8-hour federal and State standards. Because no CO hot spots would occur, the proposed project would not have a significant impact on local air quality for CO, and no mitigation measures would be required. See Appendix B for the Caline4 modeling output.

5.4 AIR QUALITY MANAGEMENT PLAN CONSISTENCY

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. It fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The City is updating its General Plan and Development Code to incorporate regulations for inclusionary housing that would apply to projects in the redevelopment project area. This project is consistent with the proposed General Plan and Development Code. When completed, the General Plan and Development Code will be consistent with the Southern California Association of Governments (SCAG) Regional Comprehensive Plan (RCP) Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Therefore, the proposed project is consistent with the regional AQMP.

Table W: Existing CO Concentrations Without and With the Project

Intersection	Distance from Road Centerline to Maximum CO Concentration (meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr (20 ppm)	8-Hr (9 ppm)
16th Street and Sand Canyon Road	7	3.7	2.5	No	No
	10	3.7	2.5	No	No
	7	3.6	2.5	No	No
	14	3.6	2.5	No	No
Campus Drive East and Sand Canyon Road	12	3.8	2.6	No	No
	7	3.7	2.5	No	No
	14	3.7	2.5	No	No
	14	3.7	2.5	No	No
Chapman Heights Road and Sand Canyon Road	7	3.8	2.6	No	No
	14	3.8	2.6	No	No
	7	3.7	2.5	No	No
	10	3.7	2.5	No	No
Tennessee Street and Yucaipa Boulevard	10	4.3	2.9	No	No
	7	4.2	2.9	No	No
	7	4.2	2.9	No	No
	10	4.1	2.8	No	No
14th Street and Yucaipa Boulevard	13	4.3	2.9	No	No
	14	4.3	2.9	No	No
	14	4.2	2.9	No	No
	14	4.2	2.9	No	No
Oak Glen Road and Yucaipa Boulevard	14	4.6	3.2	No	No
	15	4.4	3.0	No	No
	14	4.4	3.0	No	No
	21	4.4	3.0	No	No
California Street and Yucaipa Boulevard	8	3.9	2.7	No	No
	14	3.9	2.7	No	No
	8	3.8	2.6	No	No
	8	3.7	2.5	No	No
Oak Glen Road and Avenue E	14	4.3	2.9	No	No
	14	4.2	2.9	No	No

Table W: Existing CO Concentrations Without and With the Project

Intersection	Distance from Road Centerline to Maximum CO Concentration (meters)	Existing One-Hour CO Concentration (ppm)	Existing Eight-Hour CO Concentration (ppm)	Exceeds State Standards	
				1-Hr (20 ppm)	8-Hr (9 ppm)
	14	4.2	2.9	No	No
	14	4.1	2.8	No	No
5th Street and Avenue E	8	3.9	2.7	No	No
	8	3.8	2.6	No	No
	8	3.8	2.6	No	No
	8	3.8	2.6	No	No
California Street and Avenue E	12	3.6	2.5	No	No
	12	3.6	2.5	No	No
	12	3.6	2.5	No	No
	12	3.6	2.5	No	No
Oak Glen Road and Colorado Street	7	4.3	2.9	No	No
	14	4.2	2.9	No	No
	7	4.1	2.8	No	No
	12	4.0	2.7	No	No

Source: LSA Associates, Inc., March 2010.
Note: Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County. State 1-hour standard is 20 ppm and the 8-hour standard is 9 ppm.
CO = carbon monoxide
hr = hour
ppm = parts per million

Table X: 2014 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
16th Street and Sand Canyon Road	7 / 7	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	7 / 10	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	10 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 7	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
Campus Drive East and Sand Canyon Road	12 / 12	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	7 / 14	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	12 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
Chapman Heights Road and Sand Canyon Road	7 / 7	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No
	14 / 7	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	7 / 10	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	10 / 12	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
Tennessee Street and Yucaipa Boulevard	7 / 7	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	7 / 7	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	10 / 10	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	10 / 10	3.8 / 3.9	0.1	2.6 / 2.7	0.1	No	No
14th Street and Yucaipa Boulevard	14 / 13	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	13 / 14	3.9 / 4.1	0.2	2.7 / 2.8	0.1	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
Oak Glen Road and Yucaipa Boulevard	14 / 14	4.2 / 4.2	0.0	2.9 / 2.9	0.0	No	No
	17 / 15	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	15 / 14	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	14 / 21	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
California Street and Yucaipa Boulevard	8 / 8	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 8	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	8 / 14	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No

Table X: 2014 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
	8 / 8	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
Oak Glen Road and Avenue E	14 / 14	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 3.9	0.0	2.7 / 2.7	0.0	No	No
	14 / 14	3.8 / 3.9	0.1	2.6 / 2.7	0.1	No	No
5th Street and Avenue E	8 / 8	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
California Street and Avenue E	12 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
Oak Glen Road and Colorado Street	7 / 7	3.9 / 4.2	0.3	2.7 / 2.9	0.2	No	No
	14 / 7	3.9 / 4.1	0.2	2.7 / 2.8	0.1	No	No
	7 / 14	3.8 / 4.1	0.3	2.6 / 2.8	0.2	No	No
	14 / 14	3.7 / 3.9	0.2	2.5 / 2.7	0.2	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table Y: 2035 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (Meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
16th Street and Sand Canyon Road	7 / 7	3.3 / 3.4	0.1	2.2 / 2.3	0.1	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Campus Drive East and Sand Canyon Road	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Chapman Heights Road and Sand Canyon Road	7 / 7	3.3 / 3.4	0.1	2.2 / 2.3	0.1	No	No
	10 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 10	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Tennessee Street and Yucaipa Boulevard	10 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 7	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	7 / 10	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	7 / 7	3.4 / 3.4	0.0	2.3 / 2.3	0.0	No	No
14th Street and Yucaipa Boulevard	13 / 13	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 14	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 14	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
Oak Glen Road and Yucaipa Boulevard	14 / 14	3.8 / 3.8	0.0	2.6 / 2.6	0.0	No	No
	15 / 17	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 15	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No

Table Y: 2035 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (Meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
California Street and Yucaipa Boulevard	8 / 8	3.3 / 3.4	0.1	2.2 / 2.3	0.1	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Oak Glen Road and Avenue E	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No
	14 / 14	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
5th Street and Avenue E	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
California Street and Avenue E	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.2 / 3.3	0.1	2.2 / 2.2	0.0	No	No
	12 / 12	3.2 / 3.2	0.0	2.2 / 2.2	0.0	No	No
Oak Glen Road and Colorado Street	7 / 7	3.7 / 3.8	0.1	2.5 / 2.6	0.1	No	No
	7 / 7	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	12 / 14	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

5.5 STANDARD CONDITIONS

5.5.1 Construction Impacts

The project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

The applicable Rule 403 measures are as follows:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least twice daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 m (2 ft) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Pave construction access roads at least 30 m (100 ft) onto the site from the main road.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.

5.6 MITIGATION MEASURES

5.6.1 Construction Impacts

A. The following additional dust suppression measures in the South Coast Air Quality Management District (SCAQMD) *California Environmental Quality Act (CEQA) Air Quality Handbook* are included as part of the project's mitigation:

- Revegetate disturbed areas as quickly as possible.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).
- Sweep all streets once per day if visible soil materials are carried to adjacent streets (recommend water sweepers with reclaimed water).
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash trucks and any equipment leaving the site.
- Pave, water, or chemically stabilize all on-site roads as soon as feasible.
- Minimize at all time the area disturbed by clearing, grading, earthmoving, or excavation operations.

B. The Construction Contractor shall select the construction equipment used on site based on low-emission factors and high energy efficiency. The Construction Contractor shall ensure that construction grading plans include a statement that all construction equipment will be tuned and maintained in accordance with the manufacturer's specifications. In addition, all trucks shall not idle continuously for more than 5 minutes at any one time.

C. The Construction Contractor shall utilize electric or alternative-fuel-powered equipment in lieu of gasoline- or diesel-powered engines where feasible.

D. The Construction Contractor shall ensure that construction grading plans include a statement that work crews will shut off equipment not in use. During smog season (May through October), the overall length of the construction period will be extended, thereby decreasing the size of the area prepared each day, to minimize vehicles and equipment operating at the same time.

E. The Construction Contractor shall time the construction activities so as to not interfere with peak-hour traffic and minimize obstruction of through traffic lanes adjacent to the site; if necessary, a flagperson shall be retained to maintain safety adjacent to existing roadways.

F. The Construction Contractor shall support and encourage ridesharing and transit incentives for the construction crew.

5.6.2 Global Climate Change Impacts

Mitigation Measure GCC-1. To the extent feasible and to the satisfaction of the City, the following measures shall be incorporated into the design and construction of the project (including specific building projects):

Construction and Materials.

- Use locally produced and/or manufactured building materials for at least 10 percent of the construction materials used for the project; and
- Recycle/reuse at least 50 percent of the demolished construction material (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard); and
- Use "Green Building Materials," such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way for at least 10 percent of the project.

Energy Efficiency Measures.

- Design all project buildings to exceed California Building Code's Title 24 energy standard, including, but not limited to any combination of the following:
  - Increase insulation such that heat transfer and thermal bridging is minimized;
  - Limit air leakage through the structure or within the heating and cooling distribution system to minimize energy consumption; and

  - Incorporate ENERGY STAR or better rated windows, space heating and cooling equipment, light fixtures, appliances or other applicable electrical equipment.
- Provide a landscape and development plan for the project that takes advantage of shade, prevailing winds, and landscaping;
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings;
- Install light-colored "cool" roofs and cool pavements;
- Install energy-efficient heating and cooling systems, appliances, equipment, and control systems; and
- Install solar or light-emitting diodes (LEDs) for outdoor lighting.

Water Conservation and Efficiency Measures.

- Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include the following, plus other innovative measures that might be appropriate:
  - Create water-efficient landscapes within the development;
  - Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls;
  - Use reclaimed water for landscape irrigation within the project. Install the infrastructure to deliver and use reclaimed water;
  - Design buildings to be water-efficient. Install water-efficient fixtures and appliances, including low-flow faucets, dual-flush toilets, and waterless urinals; and
  - Restrict watering methods (e.g., prohibit systems that apply water to nonvegetated surfaces) and control runoff.

Solid Waste Measures.

- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas; and
- Provide employee education about reducing waste and available recycling services.

In addition, the project would also be subject to all applicable regulatory requirements, which would also reduce the GHG emissions of the project. After implementation of application of regulatory requirements, the project would implement appropriate GHG reduction strategies and would not conflict with or impede implementation of reduction goals identified in AB 32, the Governor's Executive Order S-3-05, and other strategies to help reduce GHGs to the level proposed by the Governor. The control measures listed in Measure GCC-1 would further reduce the project's GHG emissions and therefore the project's contribution to cumulative GHG emissions.

5.7 CUMULATIVE IMPACTS

The project would contribute criteria pollutants to the area during temporary project construction. A number of individual projects in the area may be under construction simultaneously with the proposed project. Depending on construction schedules and actual implementation of projects in the area, generation of fugitive dust and pollutant emissions during construction could result in substantial short-term increases in air pollutants. However, each project would be required to comply with the SCAQMD's standard construction measures. Therefore, the proposed project would result in a significant short-term cumulative impact.

The project's long-term operational emissions would be significant and unavoidable and thus would have a significant long-term cumulative impact.

5.8 IMPACTS TO THE PROPOSED PROJECT FROM GLOBAL CLIMATE CHANGE

Local temperatures could increase in time as a result of GCC, with or without the project. This increase in temperature could lead to other climate effects including, but not limited to, increased flooding due to increased precipitation and runoff. At present, the extent of climate change impacts is uncertain, and more extensive monitoring of runoff is necessary for greater understanding of changes in hydrologic patterns. Studies indicate that increased temperatures could result in a greater portion of peak streamflows occurring earlier in the spring, with decreases in late spring and early summer. These changes could have implications for water supply, flood management, and ecosystem health. In addition, there is a potential for sea level rising due to global warming. However, based on the location and nature of the project, the proposed project is not expected to be significantly affected by GCC.

6.0 REFERENCES

California Air Resources Board website: http://www.arb.ca.gov.

California Air Resources Board. *Climate Change Scoping Plan*, December 2008.

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South Coast Air Quality Management District. *CEQA Air Quality Handbook*. 1993.

South Coast Air Quality Management District. *Final Localized Significance Threshold Methodology*. June 2003, Revised July 2008.

South Coast Air Quality Management District. *Final – Methodology to Calculate Particulate Matter* $(PM)_{2.5}$ *and* $PM_{2.5}$ *Significance Thresholds*. October 2006.

South Coast Air Quality Management District. *Rule 701*. June 13, 1997.

United States Environmental Protection Agency, Air Quality Data, Web site: www.epa.gov/air/data/monvals.html.

Western Regional Climate Center website: http://www.wrcc.dri.edu.

APPENDIX A

URBEMIS 2007 MODEL PRINTOUTS

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 1-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 1

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.46	60.15	77.02	0.12	206.41	2.96	209.38	43.11	2.73	45.83	13,181.70
2012 TOTALS (lbs/day mitigated)	7.46	60.15	77.02	0.12	80.51	2.96	83.47	16.82	2.73	19.54	13,181.70
2013 TOTALS (lbs/day unmitigated)	315.43	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03
2013 TOTALS (lbs/day mitigated)	283.91	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	36.25	6.51	5.84	0.00	0.02	0.02	8,266.10
TOTALS (lbs/day, mitigated)	36.25	6.51	5.84	0.00	0.02	0.02	8,266.10
Percent Reduction	0.00	0.00	0.00	#######	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	46.07	62.63	571.57	0.68	111.56	21.70	66,673.18
TOTALS (lbs/day, mitigated)	45.91	62.38	569.29	0.68	111.12	21.62	66,407.23
Percent Reduction	0.35	0.40	0.40	0.00	0.39	0.37	0.40

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	82.32	69.14	577.41	0.68	111.58	21.72	74,939.28
TOTALS (lbs/day, mitigated)	82.16	68.89	575.13	0.68	111.14	21.64	74,673.33
Percent Reduction	0.19	0.36	0.39	0.00	0.39	0.37	0.35

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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 3/26/2012-6/20/2012 Active Days: 63	7.46	**60.15**	34.43	0.00	**206.41**	**2.96**	**209.38**	**43.11**	**2.73**	**45.83**	6,370.62
Mass Grading 03/24/2012-06/20/2012	7.46	60.15	34.43	0.00	206.41	2.96	209.38	43.11	2.73	45.83	6,370.62
Mass Grading Dust	0.00	0.00	0.00	0.00	206.40	0.00	206.40	43.10	0.00	43.10	0.00
Mass Grading Off Road Diesel	7.39	60.03	32.39	0.00	0.00	2.96	2.96	0.00	2.72	2.72	6,090.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.78
Time Slice 6/25/2012-8/1/2012 Active Days: 28	3.74	29.68	17.37	0.00	206.41	1.54	207.95	43.11	1.42	44.53	3,162.91
Fine Grading 06/23/2012-08/01/2012	3.74	29.68	17.37	0.00	206.41	1.54	207.95	43.11	1.42	44.53	3,162.91
Fine Grading Dust	0.00	0.00	0.00	0.00	206.40	0.00	206.40	43.10	0.00	43.10	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	6.42	25.82	14.27	0.02	0.07	1.78	1.84	0.02	1.64	1.66	3,172.43
Asphalt 08/18/2012-08/29/2012	6.42	25.82	14.27	0.02	0.07	1.78	1.84	0.02	1.64	1.66	3,172.43
Paving Off-Gas	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.55	15.48	9.17	0.00	0.00	1.37	1.37	0.00	1.26	1.26	1,272.41
Paving On Road Diesel	0.83	10.28	3.97	0.02	0.06	0.41	0.46	0.02	0.37	0.39	1,744.59
Paving Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 9/3/2012-12/31/2012 Active Days: 86	6.60	39.11	**77.02**	**0.12**	0.48	2.10	2.59	0.17	1.92	2.09	**13,181.70**
Building 09/01/2012-04/24/2013	6.60	39.11	77.02	0.12	0.48	2.10	2.59	0.17	1.92	2.09	13,181.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.84	20.40	16.26	0.04	0.16	0.83	0.99	0.05	0.76	0.82	4,616.47
Building Worker Trips	1.50	2.84	49.77	0.07	0.32	0.19	0.51	0.12	0.16	0.27	6,818.90
Time Slice 1/1/2013-4/24/2013 Active Days: 82	6.03	35.51	71.87	**0.12**	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03
Building 09/01/2012-04/24/2013	6.03	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03

Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.68	18.03	14.95	0.04	0.16	0.73	0.89	0.05	0.67	0.72	4,616.61
Building Worker Trips	1.37	2.59	46.26	0.07	0.32	0.19	0.51	0.12	0.16	0.27	6,818.09
Time Slice 4/29/2013-5/22/2013 Active Days: 18	**315.43**	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50
Coating 04/27/2013-05/22/2013	315.43	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50
Architectural Coating	315.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.28	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50

Phase Assumptions

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 41.3

Maximum Daily Acreage Disturbed: 10.32

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 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

2 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: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 41.3

Maximum Daily Acreage Disturbed: 10.32

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

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

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

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

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description

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

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Phase: Paving 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 10.32

Off-Road Equipment:

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

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 7 hours per day

1 Generator Sets (49 hp) operating at a 0.74 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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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 3/26/2012-6/20/2012 Active Days: 63	7.46	**60.15**	34.43	0.00	80.51	**2.96**	83.47	16.82	**2.73**	19.54	6,370.62
Mass Grading 03/24/2012-06/20/2012	7.46	60.15	34.43	0.00	80.51	2.96	83.47	16.82	2.73	19.54	6,370.62
Mass Grading Dust	0.00	0.00	0.00	0.00	80.50	0.00	80.50	16.81	0.00	16.81	0.00
Mass Grading Off Road Diesel	7.39	60.03	32.39	0.00	0.00	2.96	2.96	0.00	2.72	2.72	6,090.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.78
Time Slice 6/25/2012-8/1/2012 Active Days: 28	3.74	29.68	17.37	0.00	80.50	1.54	82.05	16.81	1.42	18.23	3,162.91
Fine Grading 06/23/2012-08/01/2012	3.74	29.68	17.37	0.00	80.50	1.54	82.05	16.81	1.42	18.23	3,162.91
Fine Grading Dust	0.00	0.00	0.00	0.00	80.50	0.00	80.50	16.81	0.00	16.81	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Fine Grading Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	6.42	25.82	14.27	0.02	0.07	1.78	1.84	0.02	1.64	1.66	3,172.43
Asphalt 08/18/2012-08/29/2012	6.42	25.82	14.27	0.02	0.07	1.78	1.84	0.02	1.64	1.66	3,172.43
Paving Off-Gas	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.55	15.48	9.17	0.00	0.00	1.37	1.37	0.00	1.26	1.26	1,272.41
Paving On Road Diesel	0.83	10.28	3.97	0.02	0.06	0.41	0.46	0.02	0.37	0.39	1,744.59
Paving Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 9/3/2012-12/31/2012 Active Days: 86	6.60	39.11	**77.02**	**0.12**	0.48	2.10	2.59	0.17	1.92	2.09	**13,181.70**
Building 09/01/2012-04/24/2013	6.60	39.11	77.02	0.12	0.48	2.10	2.59	0.17	1.92	2.09	13,181.70
Building Off Road Diesel	3.26	15.87	11.00	0.00	0.00	1.08	1.08	0.00	1.00	1.00	1,746.33
Building Vendor Trips	1.84	20.40	16.26	0.04	0.16	0.83	0.99	0.05	0.76	0.82	4,616.47
Building Worker Trips	1.50	2.84	49.77	0.07	0.32	0.19	0.51	0.12	0.16	0.27	6,818.90
Time Slice 1/1/2013-4/24/2013 Active Days: 82	6.03	35.51	71.87	**0.12**	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03
Building 09/01/2012-04/24/2013	6.03	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03
Building Off Road Diesel	2.99	14.88	10.67	0.00	0.00	0.97	0.97	0.00	0.89	0.89	1,746.33
Building Vendor Trips	1.68	18.03	14.95	0.04	0.16	0.73	0.89	0.05	0.67	0.72	4,616.61
Building Worker Trips	1.37	2.59	46.26	0.07	0.32	0.19	0.51	0.12	0.16	0.27	6,818.09
Time Slice 4/29/2013-5/22/2013 Active Days: 18	283.91	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50
Coating 04/27/2013-05/22/2013	283.91	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50
Architectural Coating	283.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.28	0.53	9.37	0.01	0.07	0.04	0.10	0.02	0.03	0.06	1,381.50

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

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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: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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%

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	0.50	6.47	2.75	0.00	0.01	0.01	8,260.48
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	33.86						
Architectural Coatings	1.64						
TOTALS (lbs/day, unmitigated)	36.25	6.51	5.84	0.00	0.02	0.02	8,266.10

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.50	6.47	2.75	0.00	0.01	0.01	8,260.48
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	33.86						
Architectural Coatings	1.64						
TOTALS (lbs/day, mitigated)	36.25	6.51	5.84	0.00	0.02	0.02	8,266.10

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

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Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	29.64	37.52	348.75	0.41	66.93	13.03	40,136.86
Shopping Center	16.43	25.11	222.82	0.27	44.63	8.67	26,536.32
TOTALS (lbs/day, unmitigated)	46.07	62.63	571.57	0.68	111.56	21.70	66,673.18

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	29.52	37.34	347.10	0.41	66.62	12.97	39,947.08
Shopping Center	16.39	25.04	222.19	0.27	44.50	8.65	26,460.15
TOTALS (lbs/day, mitigated)	45.91	62.38	569.29	0.68	111.12	21.62	66,407.23

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

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Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 80 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	37.30	5.81	dwelling units	660.00	3,834.60	38,740.20
Shopping Center		720.00	acres	4.00	2,880.00	25,842.24
					6,714.60	64,582.44

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 1-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 1

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.46	60.15	77.02	0.12	206.41	2.96	209.38	43.11	2.73	45.83	13,181.70
2012 TOTALS (lbs/day mitigated)	7.46	60.15	77.02	0.12	80.51	2.96	83.47	16.82	2.73	19.54	13,181.70
2013 TOTALS (lbs/day unmitigated)	315.43	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03
2013 TOTALS (lbs/day mitigated)	283.91	35.51	71.87	0.12	0.48	1.89	2.37	0.17	1.72	1.89	13,181.03

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	36.21	10.12	4.30	0.02	0.31	0.30	12,919.30
TOTALS (lbs/day, mitigated)	36.21	10.12	4.30	0.02	0.31	0.30	12,919.30
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	49.83	75.42	546.50	0.57	111.56	21.70	60,363.52
TOTALS (lbs/day, mitigated)	49.64	75.13	544.32	0.56	111.12	21.62	60,122.70
Percent Reduction	0.38	0.38	0.40	1.75	0.39	0.37	0.40

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	86.04	85.54	550.80	0.59	111.87	22.00	73,282.82
TOTALS (lbs/day, mitigated)	85.85	85.25	548.62	0.58	111.43	21.92	73,042.00
Percent Reduction	0.22	0.34	0.40	1.69	0.39	0.36	0.33

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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	0.50	6.47	2.75	0.00	0.01	0.01	8,260.48
Hearth	0.21	3.65	1.55	0.02	0.30	0.29	4,658.82
Landscaping - No Winter Emissions							
Consumer Products	33.86						
Architectural Coatings	1.64						
TOTALS (lbs/day, unmitigated)	36.21	10.12	4.30	0.02	0.31	0.30	12,919.30

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.50	6.47	2.75	0.00	0.01	0.01	8,260.48
Hearth	0.21	3.65	1.55	0.02	0.30	0.29	4,658.82
Landscaping - No Winter Emissions							
Consumer Products	33.86						
Architectural Coatings	1.64						
TOTALS (lbs/day, mitigated)	36.21	10.12	4.30	0.02	0.31	0.30	12,919.30

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	30.94	45.20	332.41	0.34	66.93	13.03	36,351.97
Shopping Center	18.89	30.22	214.09	0.23	44.63	8.67	24,011.55
TOTALS (lbs/day, unmitigated)	49.83	75.42	546.50	0.57	111.56	21.70	60,363.52

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	30.81	44.99	330.84	0.34	66.62	12.97	36,180.08
Shopping Center	18.83	30.14	213.48	0.22	44.50	8.65	23,942.62
TOTALS (lbs/day, mitigated)	49.64	75.13	544.32	0.56	111.12	21.62	60,122.70

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

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Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 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	37.30	5.81	dwelling units	660.00	3,834.60	38,740.20
Shopping Center		720.00	acres	4.00	2,880.00	25,842.24
					6,714.60	64,582.44

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

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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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\YCA0901\Site 1-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 1

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.60	4.16	4.73	0.01	9.41	0.22	9.63	1.97	0.20	2.17	831.81
2012 TOTALS (tons/year mitigated)	0.60	4.16	4.73	0.01	3.68	0.22	3.90	0.77	0.20	0.97	831.81
Percent Reduction	0.00	0.00	0.00	0.00	60.86	0.00	59.50	60.76	0.00	55.23	0.00
2013 TOTALS (tons/year unmitigated)	3.09	1.46	3.03	0.00	0.02	0.08	0.10	0.01	0.07	0.08	552.86
2013 TOTALS (tons/year mitigated)	2.80	1.46	3.03	0.00	0.02	0.08	0.10	0.01	0.07	0.08	552.86
Percent Reduction	9.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	6.61	1.19	1.06	0.00	0.00	0.00	1,510.90
TOTALS (tons/year, mitigated)	6.61	1.19	1.06	0.00	0.00	0.00	1,510.90
Percent Reduction	0.00	0.00	0.00	#######	############	############	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	8.64	12.20	102.78	0.12	20.36	3.96	11,784.02
TOTALS (tons/year, mitigated)	8.61	12.16	102.38	0.12	20.28	3.95	11,737.01
Percent Reduction	0.35	0.33	0.39	0.00	0.39	0.25	0.40

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	15.25	13.39	103.84	0.12	20.36	3.96	13,294.92
TOTALS (tons/year, mitigated)	15.22	13.35	103.44	0.12	20.28	3.95	13,247.91
Percent Reduction	0.20	0.30	0.39	0.00	0.39	0.25	0.35

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
2012	0.60	4.16	4.73	0.01	9.41	0.22	9.63	1.97	0.20	2.17	831.81
Mass Grading 03/24/2012-06/20/2012	0.23	1.89	1.08	0.00	6.50	0.09	6.60	1.36	0.09	1.44	200.67
Mass Grading Dust	0.00	0.00	0.00	0.00	6.50	0.00	6.50	1.36	0.00	1.36	0.00
Mass Grading Off Road Diesel	0.23	1.89	1.02	0.00	0.00	0.09	0.09	0.00	0.09	0.09	191.86
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
Fine Grading 06/23/2012-08/01/2012	0.05	0.42	0.24	0.00	2.89	0.02	2.91	0.60	0.02	0.62	44.28
Fine Grading Dust	0.00	0.00	0.00	0.00	2.89	0.00	2.89	0.60	0.00	0.60	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.23	0.00	0.00	0.02	0.02	0.00	0.02	0.02	42.10
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.03	0.10	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.69
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.01	0.01	0.00	0.01	0.01	5.09
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.98
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Building 09/01/2012-04/24/2013	0.28	1.68	3.31	0.00	0.02	0.09	0.11	0.01	0.08	0.09	566.81
Building Off Road Diesel	0.14	0.68	0.47	0.00	0.00	0.05	0.05	0.00	0.04	0.04	75.09
Building Vendor Trips	0.08	0.88	0.70	0.00	0.01	0.04	0.04	0.00	0.03	0.04	198.51
Building Worker Trips	0.06	0.12	2.14	0.00	0.01	0.01	0.02	0.00	0.01	0.01	293.21
2013	3.09	1.46	3.03	0.00	0.02	0.08	0.10	0.01	0.07	0.08	552.86

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Building 09/01/2012-04/24/2013	0.25	1.46	2.95	0.00	0.02	0.08	0.10	0.01	0.07	0.08	540.42
Building Off Road Diesel	0.12	0.61	0.44	0.00	0.00	0.04	0.04	0.00	0.04	0.04	71.60
Building Vendor Trips	0.07	0.74	0.61	0.00	0.01	0.03	0.04	0.00	0.03	0.03	189.28
Building Worker Trips	0.06	0.11	1.90	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.54
Coating 04/27/2013-05/22/2013	2.84	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43
Architectural Coating	2.84	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	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43

Phase Assumptions

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description
Total Acres Disturbed: 41.3
Maximum Daily Acreage Disturbed: 10.32
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
1 Graders (174 hp) operating at a 0.61 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
2 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: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description
Total Acres Disturbed: 41.3
Maximum Daily Acreage Disturbed: 10.32
Fugitive Dust Level of Detail: Default
20 lbs per acre-day
On Road Truck Travel (VMT): 0
Off-Road Equipment:
3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day
2 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 8 hours per day
2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
2 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description
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

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Phase: Paving 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 10.32

Off-Road Equipment:

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

2 Rollers (95 hp) operating at a 0.56 load factor for 6 hours per day

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 7 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 7 hours per day

1 Generator Sets (49 hp) operating at a 0.74 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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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
2012	0.60	4.16	4.73	0.01	3.68	0.22	3.90	0.77	0.20	0.97	831.81
Mass Grading 03/24/2012-06/20/2012	0.23	1.89	1.08	0.00	2.54	0.09	2.63	0.53	0.09	0.62	200.67
Mass Grading Dust	0.00	0.00	0.00	0.00	2.54	0.00	2.54	0.53	0.00	0.53	0.00
Mass Grading Off Road Diesel	0.23	1.89	1.02	0.00	0.00	0.09	0.09	0.00	0.09	0.09	191.86
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
Fine Grading 06/23/2012-08/01/2012	0.05	0.42	0.24	0.00	1.13	0.02	1.15	0.24	0.02	0.26	44.28
Fine Grading Dust	0.00	0.00	0.00	0.00	1.13	0.00	1.13	0.24	0.00	0.24	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.23	0.00	0.00	0.02	0.02	0.00	0.02	0.02	42.10
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18

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Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.03	0.10	0.06	0.00	0.00	0.01	0.01	0.00	0.01	0.01	12.69
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.06	0.04	0.00	0.00	0.01	0.01	0.00	0.01	0.01	5.09
Paving On Road Diesel	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.98
Paving Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Building 09/01/2012-04/24/2013	0.28	1.68	3.31	0.00	0.02	0.09	0.11	0.01	0.08	0.09	566.81
Building Off Road Diesel	0.14	0.68	0.47	0.00	0.00	0.05	0.05	0.00	0.04	0.04	75.09
Building Vendor Trips	0.08	0.88	0.70	0.00	0.01	0.04	0.04	0.00	0.03	0.04	198.51
Building Worker Trips	0.06	0.12	2.14	0.00	0.01	0.01	0.02	0.00	0.01	0.01	293.21
2013	2.80	1.46	3.03	0.00	0.02	0.08	0.10	0.01	0.07	0.08	552.86
Building 09/01/2012-04/24/2013	0.25	1.46	2.95	0.00	0.02	0.08	0.10	0.01	0.07	0.08	540.42
Building Off Road Diesel	0.12	0.61	0.44	0.00	0.00	0.04	0.04	0.00	0.04	0.04	71.60
Building Vendor Trips	0.07	0.74	0.61	0.00	0.01	0.03	0.04	0.00	0.03	0.03	189.28
Building Worker Trips	0.06	0.11	1.90	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.54
Coating 04/27/2013-05/22/2013	2.56	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43
Architectural Coating	2.55	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	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

The following mitigation measures apply to Phase: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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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%

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	0.09	1.18	0.50	0.00	0.00	0.00	1,507.54
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	2.33
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	6.18						
Architectural Coatings	0.30						
TOTALS (tons/year, unmitigated)	6.61	1.19	1.06	0.00	0.00	0.00	1,510.90

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.09	1.18	0.50	0.00	0.00	0.00	1,507.54
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	2.33
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	6.18						
Architectural Coatings	0.30						
TOTALS (tons/year, mitigated)	6.61	1.19	1.06	0.00	0.00	0.00	1,510.90

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

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Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	5.49	7.31	62.65	0.07	12.22	2.38	7,094.73
Shopping Center	3.15	4.89	40.13	0.05	8.14	1.58	4,689.29
TOTALS (tons/year, unmitigated)	8.64	12.20	102.78	0.12	20.36	3.96	11,784.02

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	5.47	7.28	62.36	0.07	12.16	2.37	7,061.18
Shopping Center	3.14	4.88	40.02	0.05	8.12	1.58	4,675.83
TOTALS (tons/year, mitigated)	8.61	12.16	102.38	0.12	20.28	3.95	11,737.01

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

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Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 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	37.30	5.81	dwelling units	660.00	3,834.60	38,740.20
Shopping Center		720.00	acres	4.00	2,880.00	25,842.24
					6,714.60	64,582.44

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 2-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.46	60.15	84.05	0.13	135.01	2.96	137.98	28.20	2.73	30.92	14,769.79
2012 TOTALS (lbs/day mitigated)	7.46	60.15	84.05	0.13	52.66	2.96	55.63	11.00	2.73	13.73	14,769.79
2013 TOTALS (lbs/day unmitigated)	396.57	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10
2013 TOTALS (lbs/day mitigated)	356.94	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	33.96	6.00	5.63	0.00	0.02	0.02	7,615.27
TOTALS (lbs/day, mitigated)	33.96	6.00	5.63	0.00	0.02	0.02	7,615.27
Percent Reduction	0.00	0.00	0.00	########	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	60.18	84.78	766.92	0.92	150.92	29.36	90,047.21
TOTALS (lbs/day, mitigated)	59.98	84.48	764.13	0.92	150.37	29.25	89,720.02
Percent Reduction	0.33	0.35	0.36	0.00	0.36	0.37	0.36

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	94.14	90.78	772.55	0.92	150.94	29.38	97,662.48
TOTALS (lbs/day, mitigated)	93.94	90.48	769.76	0.92	150.39	29.27	97,335.29
Percent Reduction	0.21	0.33	0.36	0.00	0.36	0.37	0.34

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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 3/26/2012-6/20/2012 Active Days: 63	7.46	**60.15**	34.43	0.00	**135.01**	**2.96**	**137.98**	**28.20**	**2.73**	**30.92**	6,370.62
Mass Grading 03/24/2012-06/20/2012	7.46	60.15	34.43	0.00	135.01	2.96	137.98	28.20	2.73	30.92	6,370.62
Mass Grading Dust	0.00	0.00	0.00	0.00	135.00	0.00	135.00	28.19	0.00	28.19	0.00
Mass Grading Off Road Diesel	7.39	60.03	32.39	0.00	0.00	2.96	2.96	0.00	2.72	2.72	6,090.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.78
Time Slice 6/25/2012-8/1/2012 Active Days: 28	3.74	29.68	17.37	0.00	135.01	1.54	136.55	28.20	1.42	29.61	3,162.91
Fine Grading 06/23/2012-08/01/2012	3.74	29.68	17.37	0.00	135.01	1.54	136.55	28.20	1.42	29.61	3,162.91
Fine Grading Dust	0.00	0.00	0.00	0.00	135.00	0.00	135.00	28.19	0.00	28.19	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	4.79	20.31	12.51	0.01	0.05	1.44	1.49	0.02	1.32	1.34	2,521.69
Asphalt 08/18/2012-08/29/2012	4.79	20.31	12.51	0.01	0.05	1.44	1.49	0.02	1.32	1.34	2,521.69
Paving Off-Gas	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.23	13.48	8.10	0.00	0.00	1.17	1.17	0.00	1.07	1.07	1,131.92
Paving On Road Diesel	0.54	6.72	2.59	0.01	0.04	0.27	0.30	0.01	0.24	0.26	1,141.08
Paving Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 9/3/2012-12/31/2012 Active Days: 86	7.10	44.05	**84.05**	**0.13**	0.55	2.30	2.85	0.19	2.10	2.29	**14,769.79**
Building 09/01/2012-04/24/2013	7.10	44.05	84.05	0.13	0.55	2.30	2.85	0.19	2.10	2.29	14,769.79
Building Off Road Diesel	3.14	14.81	10.52	0.00	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	2.36	26.21	20.52	0.06	0.20	1.07	1.27	0.07	0.98	1.05	5,885.27
Building Worker Trips	1.60	3.03	53.01	0.08	0.34	0.20	0.54	0.12	0.17	0.29	7,263.33
Time Slice 1/1/2013-4/24/2013 Active Days: 82	6.48	39.84	78.33	**0.13**	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10
Building 09/01/2012-04/24/2013	6.48	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10

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Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	2.15	23.17	18.86	0.06	0.20	0.94	1.14	0.07	0.86	0.93	5,885.44
Building Worker Trips	1.46	2.76	49.27	0.08	0.34	0.20	0.54	0.12	0.17	0.29	7,262.46
Time Slice 4/29/2013-5/22/2013 Active Days: 18	**396.57**	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41
Coating 04/27/2013-05/22/2013	396.57	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41
Architectural Coating	396.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.29	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41

Phase Assumptions

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 27

Maximum Daily Acreage Disturbed: 6.75

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 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

2 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: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 27

Maximum Daily Acreage Disturbed: 6.75

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

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

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

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

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description

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

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Phase: Paving 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 6.75

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 7 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 7 hours per day

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 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

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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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 3/26/2012-6/20/2012 Active Days: 63	7.46	**60.15**	34.43	0.00	52.66	**2.96**	55.63	11.00	**2.73**	13.73	6,370.62
Mass Grading 03/24/2012-06/20/2012	7.46	60.15	34.43	0.00	52.66	2.96	55.63	11.00	2.73	13.73	6,370.62
Mass Grading Dust	0.00	0.00	0.00	0.00	52.65	0.00	52.65	11.00	0.00	11.00	0.00
Mass Grading Off Road Diesel	7.39	60.03	32.39	0.00	0.00	2.96	2.96	0.00	2.72	2.72	6,090.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.06	0.12	2.04	0.00	0.01	0.01	0.02	0.00	0.01	0.01	279.78
Time Slice 6/25/2012-8/1/2012 Active Days: 28	3.74	29.68	17.37	0.00	52.66	1.54	54.20	11.00	1.42	12.42	3,162.91
Fine Grading 06/23/2012-08/01/2012	3.74	29.68	17.37	0.00	52.66	1.54	54.20	11.00	1.42	12.42	3,162.91
Fine Grading Dust	0.00	0.00	0.00	0.00	52.65	0.00	52.65	11.00	0.00	11.00	0.00
Fine Grading Off Road Diesel	3.71	29.61	16.24	0.00	0.00	1.54	1.54	0.00	1.42	1.42	3,007.48

Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.06	1.13	0.00	0.01	0.00	0.01	0.00	0.00	0.01	155.43
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	4.79	20.31	12.51	0.01	0.05	1.44	1.49	0.02	1.32	1.34	2,521.69
Asphalt 08/18/2012-08/29/2012	4.79	20.31	12.51	0.01	0.05	1.44	1.49	0.02	1.32	1.34	2,521.69
Paving Off-Gas	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.23	13.48	8.10	0.00	0.00	1.17	1.17	0.00	1.07	1.07	1,131.92
Paving On Road Diesel	0.54	6.72	2.59	0.01	0.04	0.27	0.30	0.01	0.24	0.26	1,141.08
Paving Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 9/3/2012-12/31/2012 Active Days: 86	7.10	44.05	**84.05**	**0.13**	0.55	2.30	2.85	0.19	2.10	2.29	**14,769.79**
Building 09/01/2012-04/24/2013	7.10	44.05	84.05	0.13	0.55	2.30	2.85	0.19	2.10	2.29	14,769.79
Building Off Road Diesel	3.14	14.81	10.52	0.00	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	2.36	26.21	20.52	0.06	0.20	1.07	1.27	0.07	0.98	1.05	5,885.27
Building Worker Trips	1.60	3.03	53.01	0.08	0.34	0.20	0.54	0.12	0.17	0.29	7,263.33
Time Slice 1/1/2013-4/24/2013 Active Days: 82	6.48	39.84	78.33	**0.13**	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10
Building 09/01/2012-04/24/2013	6.48	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	2.15	23.17	18.86	0.06	0.20	0.94	1.14	0.07	0.86	0.93	5,885.44
Building Worker Trips	1.46	2.76	49.27	0.08	0.34	0.20	0.54	0.12	0.17	0.29	7,262.46
Time Slice 4/29/2013-5/22/2013 Active Days: 18	356.94	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41
Coating 04/27/2013-05/22/2013	356.94	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41
Architectural Coating	356.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.29	0.54	9.68	0.01	0.07	0.04	0.11	0.02	0.03	0.06	1,426.41

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

The following mitigation measures apply to Phase: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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%

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	0.46	5.96	2.54	0.00	0.01	0.01	7,609.65
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	31.19						
Architectural Coatings	2.06						
TOTALS (lbs/day, unmitigated)	33.96	6.00	5.63	0.00	0.02	0.02	7,615.27

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.46	5.96	2.54	0.00	0.01	0.01	7,609.65
Hearth - No Summer Emissions							
Landscape	0.25	0.04	3.09	0.00	0.01	0.01	5.62
Consumer Products	31.19						
Architectural Coatings	2.06						
TOTALS (lbs/day, mitigated)	33.96	6.00	5.63	0.00	0.02	0.02	7,615.27

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

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Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	27.31	34.56	321.27	0.38	61.66	12.01	36,974.57
Shopping Center	32.87	50.22	445.65	0.54	89.26	17.35	53,072.64
TOTALS (lbs/day, unmitigated)	60.18	84.78	766.92	0.92	150.92	29.36	90,047.21

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	27.20	34.40	319.76	0.38	61.37	11.95	36,799.73
Shopping Center	32.78	50.08	444.37	0.54	89.00	17.30	52,920.29
TOTALS (lbs/day, mitigated)	59.98	84.48	764.13	0.92	150.37	29.25	89,720.02

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

3/9/2010 02:30:25 PM

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 80 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	19.00	5.81	dwelling units	608.00	3,532.48	35,687.94
Shopping Center		720.00	acres	8.00	5,760.00	51,684.48
					9,292.48	87,372.42

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 2-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.46	60.15	84.05	0.13	135.01	2.96	137.98	28.20	2.73	30.92	14,769.79
2012 TOTALS (lbs/day mitigated)	7.46	60.15	84.05	0.13	52.66	2.96	55.63	11.00	2.73	13.73	14,769.79
2013 TOTALS (lbs/day unmitigated)	396.57	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10
2013 TOTALS (lbs/day mitigated)	356.94	39.84	78.33	0.13	0.55	2.07	2.61	0.19	1.88	2.07	14,769.10

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	33.91	9.32	3.97	0.02	0.28	0.28	11,901.41
TOTALS (lbs/day, mitigated)	33.91	9.32	3.97	0.02	0.28	0.28	11,901.41
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	66.28	102.09	734.41	0.77	150.92	29.36	81,510.98
TOTALS (lbs/day, mitigated)	66.04	101.71	731.73	0.76	150.37	29.25	81,214.77
Percent Reduction	0.36	0.37	0.36	1.30	0.36	0.37	0.36

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	100.19	111.41	738.38	0.79	151.20	29.64	93,412.39
TOTALS (lbs/day, mitigated)	99.95	111.03	735.70	0.78	150.65	29.53	93,116.18
Percent Reduction	0.24	0.34	0.36	1.27	0.36	0.37	0.32

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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	0.46	5.96	2.54	0.00	0.01	0.01	7,609.65
Hearth	0.20	3.36	1.43	0.02	0.27	0.27	4,291.76
Landscaping - No Winter Emissions							
Consumer Products	31.19						
Architectural Coatings	2.06						
TOTALS (lbs/day, unmitigated)	33.91	9.32	3.97	0.02	0.28	0.28	11,901.41

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.46	5.96	2.54	0.00	0.01	0.01	7,609.65
Hearth	0.20	3.36	1.43	0.02	0.27	0.27	4,291.76
Landscaping - No Winter Emissions							
Consumer Products	31.19						
Architectural Coatings	2.06						
TOTALS (lbs/day, mitigated)	33.91	9.32	3.97	0.02	0.28	0.28	11,901.41

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	28.51	41.64	306.22	0.32	61.66	12.01	33,487.88
Shopping Center	37.77	60.45	428.19	0.45	89.26	17.35	48,023.10
TOTALS (lbs/day, unmitigated)	66.28	102.09	734.41	0.77	150.92	29.36	81,510.98

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	28.38	41.44	304.77	0.31	61.37	11.95	33,329.53
Shopping Center	37.66	60.27	426.96	0.45	89.00	17.30	47,885.24
TOTALS (lbs/day, mitigated)	66.04	101.71	731.73	0.76	150.37	29.25	81,214.77

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

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Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 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	19.00	5.81	dwelling units	608.00	3,532.48	35,687.94
Shopping Center		720.00	acres	8.00	5,760.00	51,684.48
					9,292.48	87,372.42

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.9	0.0	88.9	11.1

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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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\YCA0901\Site 2-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.62	4.35	5.03	0.01	6.17	0.22	6.39	1.29	0.20	1.50	897.50
2012 TOTALS (tons/year mitigated)	0.62	4.35	5.03	0.01	2.42	0.22	2.64	0.51	0.20	0.71	897.50
Percent Reduction	0.00	0.00	0.00	0.00	60.76	0.00	58.64	60.60	0.00	52.33	0.00
2013 TOTALS (tons/year unmitigated)	3.83	1.64	3.30	0.01	0.02	0.09	0.11	0.01	0.08	0.09	618.37
2013 TOTALS (tons/year mitigated)	3.48	1.64	3.30	0.01	0.02	0.09	0.11	0.01	0.08	0.09	618.37
Percent Reduction	9.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	6.19	1.10	1.02	0.00	0.00	0.00	1,391.94
TOTALS (tons/year, mitigated)	6.19	1.10	1.02	0.00	0.00	0.00	1,391.94
Percent Reduction	0.00	0.00	0.00	########	############	#############	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	11.36	16.53	137.99	0.16	27.54	5.36	15,914.33
TOTALS (tons/year, mitigated)	11.32	16.47	137.48	0.15	27.44	5.34	15,856.50
Percent Reduction	0.35	0.36	0.37	6.25	0.36	0.37	0.36

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	17.55	17.63	139.01	0.16	27.54	5.36	17,306.27
TOTALS (tons/year, mitigated)	17.51	17.57	138.50	0.15	27.44	5.34	17,248.44
Percent Reduction	0.23	0.34	0.37	6.25	0.36	0.37	0.33

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
2012	0.62	4.35	5.03	0.01	6.17	0.22	6.39	1.29	0.20	1.50	897.50
Mass Grading 03/24/2012-06/20/2012	0.23	1.89	1.08	0.00	4.25	0.09	4.35	0.89	0.09	0.97	200.67
Mass Grading Dust	0.00	0.00	0.00	0.00	4.25	0.00	4.25	0.89	0.00	0.89	0.00
Mass Grading Off Road Diesel	0.23	1.89	1.02	0.00	0.00	0.09	0.09	0.00	0.09	0.09	191.86
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
Fine Grading 06/23/2012-08/01/2012	0.05	0.42	0.24	0.00	1.89	0.02	1.91	0.39	0.02	0.41	44.28
Fine Grading Dust	0.00	0.00	0.00	0.00	1.89	0.00	1.89	0.39	0.00	0.39	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.23	0.00	0.00	0.02	0.02	0.00	0.02	0.02	42.10
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.02	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	10.09
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.53
Paving On Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.56
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
Building 09/01/2012-04/24/2013	0.31	1.89	3.61	0.01	0.02	0.10	0.12	0.01	0.09	0.10	635.10
Building Off Road Diesel	0.13	0.64	0.45	0.00	0.00	0.04	0.04	0.00	0.04	0.04	69.71
Building Vendor Trips	0.10	1.13	0.88	0.00	0.01	0.05	0.05	0.00	0.04	0.05	253.07
Building Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.01	0.01	0.01	312.32
2013	3.83	1.64	3.30	0.01	0.02	0.09	0.11	0.01	0.08	0.09	618.37

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Building 09/01/2012-04/24/2013	0.27	1.63	3.21	0.01	0.02	0.08	0.11	0.01	0.08	0.08	605.53
Building Off Road Diesel	0.12	0.57	0.42	0.00	0.00	0.04	0.04	0.00	0.04	0.04	66.47
Building Vendor Trips	0.09	0.95	0.77	0.00	0.01	0.04	0.05	0.00	0.04	0.04	241.30
Building Worker Trips	0.06	0.11	2.02	0.00	0.01	0.01	0.02	0.01	0.01	0.01	297.76
Coating 04/27/2013-05/22/2013	3.57	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84
Architectural Coating	3.57	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	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84

Phase Assumptions

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 27

Maximum Daily Acreage Disturbed: 6.75

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 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

2 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: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 27

Maximum Daily Acreage Disturbed: 6.75

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

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

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

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

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description

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

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Phase: Paving 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 6.75

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 7 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 7 hours per day

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 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

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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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
2012	0.62	4.35	5.03	0.01	2.42	0.22	2.64	0.51	0.20	0.71	897.50
Mass Grading 03/24/2012-06/20/2012	0.23	1.89	1.08	0.00	1.66	0.09	1.75	0.35	0.09	0.43	200.67
Mass Grading Dust	0.00	0.00	0.00	0.00	1.66	0.00	1.66	0.35	0.00	0.35	0.00
Mass Grading Off Road Diesel	0.23	1.89	1.02	0.00	0.00	0.09	0.09	0.00	0.09	0.09	191.86
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.81
Fine Grading 06/23/2012-08/01/2012	0.05	0.42	0.24	0.00	0.74	0.02	0.76	0.15	0.02	0.17	44.28
Fine Grading Dust	0.00	0.00	0.00	0.00	0.74	0.00	0.74	0.15	0.00	0.15	0.00
Fine Grading Off Road Diesel	0.05	0.41	0.23	0.00	0.00	0.02	0.02	0.00	0.02	0.02	42.10
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.18
Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.02	0.08	0.05	0.00	0.00	0.01	0.01	0.00	0.01	0.01	10.09
Paving Off-Gas	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.01	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.53
Paving On Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.56
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
Building 09/01/2012-04/24/2013	0.31	1.89	3.61	0.01	0.02	0.10	0.12	0.01	0.09	0.10	635.10
Building Off Road Diesel	0.13	0.64	0.45	0.00	0.00	0.04	0.04	0.00	0.04	0.04	69.71
Building Vendor Trips	0.10	1.13	0.88	0.00	0.01	0.05	0.05	0.00	0.04	0.05	253.07
Building Worker Trips	0.07	0.13	2.28	0.00	0.01	0.01	0.02	0.01	0.01	0.01	312.32
2013	3.48	1.64	3.30	0.01	0.02	0.09	0.11	0.01	0.08	0.09	618.37
Building 09/01/2012-04/24/2013	0.27	1.63	3.21	0.01	0.02	0.08	0.11	0.01	0.08	0.08	605.53
Building Off Road Diesel	0.12	0.57	0.42	0.00	0.00	0.04	0.04	0.00	0.04	0.04	66.47
Building Vendor Trips	0.09	0.95	0.77	0.00	0.01	0.04	0.05	0.00	0.04	0.04	241.30
Building Worker Trips	0.06	0.11	2.02	0.00	0.01	0.01	0.02	0.01	0.01	0.01	297.76
Coating 04/27/2013-05/22/2013	3.21	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84
Architectural Coating	3.21	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	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.84

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

The following mitigation measures apply to Phase: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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%

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	0.08	1.09	0.46	0.00	0.00	0.00	1,388.76
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	2.15
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	5.69						
Architectural Coatings	0.38						
TOTALS (tons/year, unmitigated)	6.19	1.10	1.02	0.00	0.00	0.00	1,391.94

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.08	1.09	0.46	0.00	0.00	0.00	1,388.76
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	2.15
Landscape	0.04	0.01	0.56	0.00	0.00	0.00	1.03
Consumer Products	5.69						
Architectural Coatings	0.38						
TOTALS (tons/year, mitigated)	6.19	1.10	1.02	0.00	0.00	0.00	1,391.94

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

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Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	5.06	6.74	57.72	0.07	11.25	2.19	6,535.75
Shopping Center	6.30	9.79	80.27	0.09	16.29	3.17	9,378.58
TOTALS (tons/year, unmitigated)	11.36	16.53	137.99	0.16	27.54	5.36	15,914.33

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	5.04	6.71	57.44	0.06	11.20	2.18	6,504.85
Shopping Center	6.28	9.76	80.04	0.09	16.24	3.16	9,351.65
TOTALS (tons/year, mitigated)	11.32	16.47	137.48	0.15	27.44	5.34	15,856.50

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

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subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Non-Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 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	19.00	5.81	dwelling units	608.00	3,532.48	35,687.94
Shopping Center		720.00	acres	8.00	5,760.00	51,684.48
					9,292.48	87,372.42

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)						
Shopping Center				2.0	1.0	97.0

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 3-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 3

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.03	57.42	36.82	0.04	50.01	2.72	52.74	10.45	2.51	12.95	6,053.01
2012 TOTALS (lbs/day mitigated)	7.03	57.42	36.82	0.04	19.51	2.72	22.24	4.08	2.51	6.58	6,053.01
2013 TOTALS (lbs/day unmitigated)	105.30	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
2013 TOTALS (lbs/day mitigated)	94.78	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	17.33	3.16	2.89	0.00	0.02	0.02	4,007.89
TOTALS (lbs/day, mitigated)	17.33	3.16	2.89	0.00	0.02	0.02	4,007.89
Percent Reduction	0.00	0.00	0.00	########	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	14.69	18.66	173.46	0.20	33.29	6.48	19,962.72
TOTALS (lbs/day, mitigated)	14.63	18.57	172.66	0.20	33.14	6.45	19,870.70
Percent Reduction	0.41	0.48	0.46	0.00	0.45	0.46	0.46

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	32.02	21.82	176.35	0.20	33.31	6.50	23,970.61
TOTALS (lbs/day, mitigated)	31.96	21.73	175.55	0.20	33.16	6.47	23,878.59
Percent Reduction	0.19	0.41	0.45	0.00	0.45	0.46	0.38

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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 3/8/2012-3/23/2012 Active Days: 12	1.76	16.18	9.01	0.02	11.40	0.87	12.27	2.38	0.80	3.18	2,414.05
Demolition 03/08/2012-03/23/2012	1.76	16.18	9.01	0.02	11.40	0.87	12.27	2.38	0.80	3.18	2,414.05
Fugitive Dust	0.00	0.00	0.00	0.00	11.34	0.00	11.34	2.36	0.00	2.36	0.00
Demo Off Road Diesel	0.98	6.77	4.49	0.00	0.00	0.49	0.49	0.00	0.45	0.45	700.30
Demo On Road Diesel	0.75	9.36	3.61	0.01	0.05	0.37	0.42	0.02	0.34	0.36	1,589.40
Demo Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 3/26/2012-6/20/2012 Active Days: 63	7.03	**57.42**	32.23	0.00	**50.01**	**2.72**	**52.74**	**10.45**	**2.51**	**12.95**	**6,053.01**
Mass Grading 03/24/2012-06/20/2012	7.03	57.42	32.23	0.00	50.01	2.72	52.74	10.45	2.51	12.95	6,053.01
Mass Grading Dust	0.00	0.00	0.00	0.00	50.00	0.00	50.00	10.44	0.00	10.44	0.00
Mass Grading Off Road Diesel	6.97	57.31	30.42	0.00	0.00	2.72	2.72	0.00	2.50	2.50	5,804.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 6/25/2012-8/1/2012 Active Days: 28	2.72	22.00	12.42	0.00	50.01	1.08	51.08	10.44	0.99	11.43	2,371.66
Fine Grading 06/23/2012-08/01/2012	2.72	22.00	12.42	0.00	50.01	1.08	51.08	10.44	0.99	11.43	2,371.66
Fine Grading Dust	0.00	0.00	0.00	0.00	50.00	0.00	50.00	10.44	0.00	10.44	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	3.32	16.94	11.77	0.01	0.03	1.35	1.37	0.01	1.24	1.25	1,943.35
Asphalt 08/18/2012-08/29/2012	3.32	16.94	11.77	0.01	0.03	1.35	1.37	0.01	1.24	1.25	1,943.35
Paving Off-Gas	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.20	2.49	0.96	0.00	0.01	0.10	0.11	0.00	0.09	0.09	422.62
Paving Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 9/3/2012-12/31/2012 Active Days: 86	4.36	22.56	**36.82**	**0.04**	0.19	1.38	1.57	0.07	1.27	1.33	5,990.70

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Building 09/01/2012-04/24/2013	4.36	22.56	36.82	0.04	0.19	1.38	1.57	0.07	1.27	1.33	5,990.70
Building Off Road Diesel	3.14	14.81	10.52	0.00	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	0.60	6.55	5.39	0.01	0.05	0.27	0.32	0.02	0.25	0.26	1,504.57
Building Worker Trips	0.63	1.19	20.91	0.03	0.14	0.08	0.21	0.05	0.07	0.11	2,864.93
Time Slice 1/1/2013-4/24/2013 Active Days: 82	3.99	20.79	34.60	**0.04**	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
Building 09/01/2012-04/24/2013	3.99	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	0.54	5.79	4.96	0.01	0.05	0.24	0.29	0.02	0.22	0.23	1,504.62
Building Worker Trips	0.57	1.09	19.43	0.03	0.14	0.08	0.21	0.05	0.07	0.11	2,864.59
Time Slice 4/29/2013-5/22/2013 Active Days: 18	**105.30**	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72
Coating 04/27/2013-05/22/2013	105.30	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72
Architectural Coating	105.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.12	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72

Phase Assumptions

Phase: Demolition 3/8/2012 - 3/23/2012 - Default Demolition Description

Building Volume Total (cubic feet): 4800000

Building Volume Daily (cubic feet): 27000

On Road Truck Travel (VMT): 375

Off-Road Equipment:

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

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

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 10

Maximum Daily Acreage Disturbed: 2.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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

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Phase: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 10

Maximum Daily Acreage Disturbed: 2.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

2 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 7 hours per day

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

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description

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 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 2.5

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 7 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 7 hours per day

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

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 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

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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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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 3/8/2012-3/23/2012 Active Days: 12	1.76	16.18	9.01	0.02	11.40	0.87	12.27	2.38	0.80	3.18	2,414.05
Demolition 03/08/2012-03/23/2012	1.76	16.18	9.01	0.02	11.40	0.87	12.27	2.38	0.80	3.18	2,414.05
Fugitive Dust	0.00	0.00	0.00	0.00	11.34	0.00	11.34	2.36	0.00	2.36	0.00
Demo Off Road Diesel	0.98	6.77	4.49	0.00	0.00	0.49	0.49	0.00	0.45	0.45	700.30
Demo On Road Diesel	0.75	9.36	3.61	0.01	0.05	0.37	0.42	0.02	0.34	0.36	1,589.40
Demo Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 3/26/2012-6/20/2012 Active Days: 63	7.03	**57.42**	32.23	0.00	19.51	**2.72**	22.24	4.08	**2.51**	6.58	**6,053.01**
Mass Grading 03/24/2012-06/20/2012	7.03	57.42	32.23	0.00	19.51	2.72	22.24	4.08	2.51	6.58	6,053.01
Mass Grading Dust	0.00	0.00	0.00	0.00	19.50	0.00	19.50	4.07	0.00	4.07	0.00
Mass Grading Off Road Diesel	6.97	57.31	30.42	0.00	0.00	2.72	2.72	0.00	2.50	2.50	5,804.32
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 6/25/2012-8/1/2012 Active Days: 28	2.72	22.00	12.42	0.00	19.51	1.08	20.58	4.07	0.99	5.06	2,371.66
Fine Grading 06/23/2012-08/01/2012	2.72	22.00	12.42	0.00	19.51	1.08	20.58	4.07	0.99	5.06	2,371.66
Fine Grading Dust	0.00	0.00	0.00	0.00	19.50	0.00	19.50	4.07	0.00	4.07	0.00
Fine Grading Off Road Diesel	2.69	21.95	11.51	0.00	0.00	1.07	1.07	0.00	0.99	0.99	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/6/2012-8/15/2012 Active Days: 8	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching 08/04/2012-08/15/2012	1.83	15.29	8.92	0.00	0.01	0.74	0.74	0.00	0.68	0.68	1,838.98
Trenching Off Road Diesel	1.80	15.24	8.01	0.00	0.00	0.73	0.73	0.00	0.67	0.67	1,714.64
Trenching Worker Trips	0.03	0.05	0.91	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.35
Time Slice 8/20/2012-8/29/2012 Active Days: 8	3.32	16.94	11.77	0.01	0.03	1.35	1.37	0.01	1.24	1.25	1,943.35
Asphalt 08/18/2012-08/29/2012	3.32	16.94	11.77	0.01	0.03	1.35	1.37	0.01	1.24	1.25	1,943.35
Paving Off-Gas	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.34	14.35	8.99	0.00	0.00	1.24	1.24	0.00	1.14	1.14	1,272.04
Paving On Road Diesel	0.20	2.49	0.96	0.00	0.01	0.10	0.11	0.00	0.09	0.09	422.62

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Paving Worker Trips	0.05	0.10	1.82	0.00	0.01	0.01	0.02	0.00	0.01	0.01	248.69
Time Slice 9/3/2012-12/31/2012 Active Days: 86	4.36	22.56	**36.82**	**0.04**	0.19	1.38	1.57	0.07	1.27	1.33	5,990.70
Building 09/01/2012-04/24/2013	4.36	22.56	36.82	0.04	0.19	1.38	1.57	0.07	1.27	1.33	5,990.70
Building Off Road Diesel	3.14	14.81	10.52	0.00	0.00	1.04	1.04	0.00	0.95	0.95	1,621.20
Building Vendor Trips	0.60	6.55	5.39	0.01	0.05	0.27	0.32	0.02	0.25	0.26	1,504.57
Building Worker Trips	0.63	1.19	20.91	0.03	0.14	0.08	0.21	0.05	0.07	0.11	2,864.93
Time Slice 1/1/2013-4/24/2013 Active Days: 82	3.99	20.79	34.60	**0.04**	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
Building 09/01/2012-04/24/2013	3.99	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
Building Off Road Diesel	2.88	13.91	10.20	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,621.20
Building Vendor Trips	0.54	5.79	4.96	0.01	0.05	0.24	0.29	0.02	0.22	0.23	1,504.62
Building Worker Trips	0.57	1.09	19.43	0.03	0.14	0.08	0.21	0.05	0.07	0.11	2,864.59
Time Slice 4/29/2013-5/22/2013 Active Days: 18	94.78	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72
Coating 04/27/2013-05/22/2013	94.78	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72
Architectural Coating	94.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.12	0.23	4.08	0.01	0.03	0.02	0.04	0.01	0.01	0.02	600.72

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

The following mitigation measures apply to Phase: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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%

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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	0.24	3.14	1.34	0.00	0.01	0.01	4,005.08
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	16.42						
Architectural Coatings	0.55						
TOTALS (lbs/day, unmitigated)	17.33	3.16	2.89	0.00	0.02	0.02	4,007.89

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.24	3.14	1.34	0.00	0.01	0.01	4,005.08
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	16.42						
Architectural Coatings	0.55						
TOTALS (lbs/day, mitigated)	17.33	3.16	2.89	0.00	0.02	0.02	4,007.89

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	14.69	18.66	173.46	0.20	33.29	6.48	19,962.72
TOTALS (lbs/day, unmitigated)	14.69	18.66	173.46	0.20	33.29	6.48	19,962.72

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	14.63	18.57	172.66	0.20	33.14	6.45	19,870.70
TOTALS (lbs/day, mitigated)	14.63	18.57	172.66	0.20	33.14	6.45	19,870.70

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

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Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	10.00	5.96	dwelling units	320.00	1,907.20	19,268.06
					1,907.20	19,268.06

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: P:\YCA0901\Site 3-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 3

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (lbs/day unmitigated)	7.03	57.42	36.82	0.04	50.01	2.72	52.74	10.45	2.51	12.95	6,053.01
2012 TOTALS (lbs/day mitigated)	7.03	57.42	36.82	0.04	19.51	2.72	22.24	4.08	2.51	6.58	6,053.01
2013 TOTALS (lbs/day unmitigated)	105.30	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41
2013 TOTALS (lbs/day mitigated)	94.78	20.79	34.60	0.04	0.19	1.24	1.43	0.07	1.14	1.20	5,990.41

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	17.31	4.91	2.09	0.01	0.15	0.15	6,263.90
TOTALS (lbs/day, mitigated)	17.31	4.91	2.09	0.01	0.15	0.15	6,263.90
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	15.37	22.48	165.33	0.17	33.29	6.48	18,080.24
TOTALS (lbs/day, mitigated)	15.30	22.38	164.57	0.17	33.14	6.45	17,996.90
Percent Reduction	0.46	0.44	0.46	0.00	0.45	0.46	0.46

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (lbs/day, unmitigated)	32.68	27.39	167.42	0.18	33.44	6.63	24,344.14
TOTALS (lbs/day, mitigated)	32.61	27.29	166.66	0.18	33.29	6.60	24,260.80
Percent Reduction	0.21	0.37	0.45	0.00	0.45	0.45	0.34

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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	0.24	3.14	1.34	0.00	0.01	0.01	4,005.08
Hearth	0.10	1.77	0.75	0.01	0.14	0.14	2,258.82
Landscaping - No Winter Emissions							
Consumer Products	16.42						
Architectural Coatings	0.55						
TOTALS (lbs/day, unmitigated)	17.31	4.91	2.09	0.01	0.15	0.15	6,263.90

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.24	3.14	1.34	0.00	0.01	0.01	4,005.08
Hearth	0.10	1.77	0.75	0.01	0.14	0.14	2,258.82
Landscaping - No Winter Emissions							
Consumer Products	16.42						
Architectural Coatings	0.55						
TOTALS (lbs/day, mitigated)	17.31	4.91	2.09	0.01	0.15	0.15	6,263.90

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	15.37	22.48	165.33	0.17	33.29	6.48	18,080.24
TOTALS (lbs/day, unmitigated)	15.37	22.48	165.33	0.17	33.29	6.48	18,080.24

Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Mitigated

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Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	15.30	22.38	164.57	0.17	33.14	6.45	17,996.90
TOTALS (lbs/day, mitigated)	15.30	22.38	164.57	0.17	33.14	6.45	17,996.90

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 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	10.00	5.96	dwelling units	320.00	1,907.20	19,268.06
					1,907.20	19,268.06

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)

Operational Changes to Defaults

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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: P:\YCA0901\Site 3-2012.urb924

Project Name: City of Yucaipa Housing Element Implementation Project - Site 3

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:

CONSTRUCTION EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10	PM2.5 Dust	PM2.5 Exhaust	PM2.5	CO2
2012 TOTALS (tons/year unmitigated)	0.48	3.31	2.91	0.00	2.35	0.17	2.53	0.49	0.16	0.65	511.09
2012 TOTALS (tons/year mitigated)	0.48	3.31	2.91	0.00	0.96	0.17	1.14	0.20	0.16	0.36	511.09
Percent Reduction	0.00	0.00	0.00	0.00	59.00	0.00	54.94	58.85	0.00	44.44	0.00
2013 TOTALS (tons/year unmitigated)	1.11	0.85	1.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	251.01
2013 TOTALS (tons/year mitigated)	1.02	0.85	1.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	251.01
Percent Reduction	8.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	3.16	0.57	0.52	0.00	0.00	0.00	732.57
TOTALS (tons/year, mitigated)	3.16	0.57	0.52	0.00	0.00	0.00	732.57
Percent Reduction	0.00	0.00	0.00	########	############	#############	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	2.72	3.64	31.16	0.04	6.08	1.18	3,528.68
TOTALS (tons/year, mitigated)	2.71	3.62	31.02	0.04	6.05	1.18	3,512.41
Percent Reduction	0.37	0.55	0.45	0.00	0.49	0.00	0.46

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
TOTALS (tons/year, unmitigated)	5.88	4.21	31.68	0.04	6.08	1.18	4,261.25
TOTALS (tons/year, mitigated)	5.87	4.19	31.54	0.04	6.05	1.18	4,244.98
Percent Reduction	0.17	0.48	0.44	0.00	0.49	0.00	0.38

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
2012	0.48	3.31	2.91	0.00	2.35	0.17	2.53	0.49	0.16	0.65	511.09
Demolition 03/08/2012-03/23/2012	0.01	0.10	0.05	0.00	0.07	0.01	0.07	0.01	0.00	0.02	14.48
Fugitive Dust	0.00	0.00	0.00	0.00	1.01	0.00	1.01	0.21	0.00	0.21	0.00
Demo Off Road Diesel	0.01	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20
Demo On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.54
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Mass Grading 03/24/2012-06/20/2012	0.22	1.81	1.02	0.00	1.58	0.09	1.66	0.33	0.08	0.41	190.67
Mass Grading Dust	0.00	0.00	0.00	0.00	1.58	0.00	1.58	0.33	0.00	0.33	0.00
Mass Grading Off Road Diesel	0.22	1.81	0.96	0.00	0.00	0.09	0.09	0.00	0.08	0.08	182.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.83
Fine Grading 06/23/2012-08/01/2012	0.04	0.31	0.17	0.00	0.70	0.02	0.72	0.15	0.01	0.16	33.20
Fine Grading Dust	0.00	0.00	0.00	0.00	0.70	0.00	0.70	0.15	0.00	0.15	0.00
Fine Grading Off Road Diesel	0.04	0.31	0.16	0.00	0.00	0.02	0.02	0.00	0.01	0.01	31.46
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74
Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.01	0.07	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	7.77
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	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.09
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99

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Building 09/01/2012-04/24/2013	0.19	0.97	1.58	0.00	0.01	0.06	0.07	0.00	0.05	0.06	257.60
Building Off Road Diesel	0.13	0.64	0.45	0.00	0.00	0.04	0.04	0.00	0.04	0.04	69.71
Building Vendor Trips	0.03	0.28	0.23	0.00	0.00	0.01	0.01	0.00	0.01	0.01	64.70
Building Worker Trips	0.03	0.05	0.90	0.00	0.01	0.00	0.01	0.00	0.00	0.00	123.19
2013	1.11	0.85	1.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	251.01
Building 09/01/2012-04/24/2013	0.16	0.85	1.42	0.00	0.01	0.05	0.06	0.00	0.05	0.05	245.61
Building Off Road Diesel	0.12	0.57	0.42	0.00	0.00	0.04	0.04	0.00	0.04	0.04	66.47
Building Vendor Trips	0.02	0.24	0.20	0.00	0.00	0.01	0.01	0.00	0.01	0.01	61.69
Building Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.00	117.45
Coating 04/27/2013-05/22/2013	0.95	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.41
Architectural Coating	0.95	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	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.41

Phase Assumptions

Phase: Demolition 3/8/2012 - 3/23/2012 - Default Demolition Description

Building Volume Total (cubic feet): 4800000

Building Volume Daily (cubic feet): 27000

On Road Truck Travel (VMT): 375

Off-Road Equipment:

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

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

2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine Site Grading/Excavation Description

Total Acres Disturbed: 10

Maximum Daily Acreage Disturbed: 2.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

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

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 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

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Phase: Mass Grading 3/24/2012 - 6/20/2012 - Default Mass Site Grading/Excavation Description

Total Acres Disturbed: 10

Maximum Daily Acreage Disturbed: 2.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

3 Graders (174 hp) operating at a 0.61 load factor for 8 hours per day

2 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 7 hours per day

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

Phase: Trenching 8/4/2012 - 8/15/2012 - Default Trenching Description

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 8/18/2012 - 8/29/2012 - Default Paving Description

Acres to be Paved: 2.5

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 7 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 7 hours per day

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

Phase: Building Construction 9/1/2012 - 4/24/2013 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 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

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

Phase: Architectural Coating 4/27/2013 - 5/22/2013 - 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

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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
2012	0.48	3.31	2.91	0.00	0.96	0.17	1.14	0.20	0.16	0.36	511.09
Demolition 03/08/2012-03/23/2012	0.01	0.10	0.05	0.00	0.07	0.01	0.07	0.01	0.00	0.02	14.48
Fugitive Dust	0.00	0.00	0.00	0.00	1.01	0.00	1.01	0.21	0.00	0.21	0.00
Demo Off Road Diesel	0.01	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20
Demo On Road Diesel	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.54
Demo Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Mass Grading 03/24/2012-06/20/2012	0.22	1.81	1.02	0.00	0.61	0.09	0.70	0.13	0.08	0.21	190.67
Mass Grading Dust	0.00	0.00	0.00	0.00	0.61	0.00	0.61	0.13	0.00	0.13	0.00
Mass Grading Off Road Diesel	0.22	1.81	0.96	0.00	0.00	0.09	0.09	0.00	0.08	0.08	182.84
Mass Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mass Grading Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.83
Fine Grading 06/23/2012-08/01/2012	0.04	0.31	0.17	0.00	0.27	0.02	0.29	0.06	0.01	0.07	33.20
Fine Grading Dust	0.00	0.00	0.00	0.00	0.27	0.00	0.27	0.06	0.00	0.06	0.00
Fine Grading Off Road Diesel	0.04	0.31	0.16	0.00	0.00	0.02	0.02	0.00	0.01	0.01	31.46
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74
Trenching 08/04/2012-08/15/2012	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.36
Trenching Off Road Diesel	0.01	0.06	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.86
Trenching Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Asphalt 08/18/2012-08/29/2012	0.01	0.07	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	7.77
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	0.01	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.09
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69
Paving Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
Building 09/01/2012-04/24/2013	0.19	0.97	1.58	0.00	0.01	0.06	0.07	0.00	0.05	0.06	257.60
Building Off Road Diesel	0.13	0.64	0.45	0.00	0.00	0.04	0.04	0.00	0.04	0.04	69.71
Building Vendor Trips	0.03	0.28	0.23	0.00	0.00	0.01	0.01	0.00	0.01	0.01	64.70
Building Worker Trips	0.03	0.05	0.90	0.00	0.01	0.00	0.01	0.00	0.00	0.00	123.19

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2013	1.02	0.85	1.46	0.00	0.01	0.05	0.06	0.00	0.05	0.05	251.01
Building 09/01/2012-04/24/2013	0.16	0.85	1.42	0.00	0.01	0.05	0.06	0.00	0.05	0.05	245.61
Building Off Road Diesel	0.12	0.57	0.42	0.00	0.00	0.04	0.04	0.00	0.04	0.04	66.47
Building Vendor Trips	0.02	0.24	0.20	0.00	0.00	0.01	0.01	0.00	0.01	0.01	61.69
Building Worker Trips	0.02	0.04	0.80	0.00	0.01	0.00	0.01	0.00	0.00	0.00	117.45
Coating 04/27/2013-05/22/2013	0.85	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.41
Architectural Coating	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.41

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 6/23/2012 - 8/1/2012 - Default Fine 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%

The following mitigation measures apply to Phase: Mass Grading 3/24/2012 - 6/20/2012 - 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%

The following mitigation measures apply to Phase: Architectural Coating 4/27/2013 - 5/22/2013 - Default Architectural Coating Description

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

ROG: 10%

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

ROG: 10%

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%

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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	0.57	0.24	0.00	0.00	0.00	730.93
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	1.13
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	3.00						
Architectural Coatings	0.10						
TOTALS (tons/year, unmitigated)	3.16	0.57	0.52	0.00	0.00	0.00	732.57

Area Source Mitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOx	CO	SO2	PM10	PM2.5	CO2
Natural Gas	0.04	0.57	0.24	0.00	0.00	0.00	730.93
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	1.13
Landscape	0.02	0.00	0.28	0.00	0.00	0.00	0.51
Consumer Products	3.00						
Architectural Coatings	0.10						
TOTALS (tons/year, mitigated)	3.16	0.57	0.52	0.00	0.00	0.00	732.57

Area Source Mitigation Measures Selected

Mitigation Description	Percent Reduction

Area Source Changes to Defaults

Percentage of residences with wood stoves changed from 10% to 0%

Percentage of residences with wood fireplaces changed from 5% to 0%

Percentage of residences with natural gas fireplaces changed from 85% to 100%

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	2.72	3.64	31.16	0.04	6.08	1.18	3,528.68
TOTALS (tons/year, unmitigated)	2.72	3.64	31.16	0.04	6.08	1.18	3,528.68

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Operational Mitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Mitigated

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
Condo/townhouse general	2.71	3.62	31.02	0.04	6.05	1.18	3,512.41
TOTALS (tons/year, mitigated)	2.71	3.62	31.02	0.04	6.05	1.18	3,512.41

Operational Mitigation Options Selected

Residential Mitigation Measures

Residential Mix of Uses Mitigation

NOTE this mitigation measure INCREASES Trips by 1.71%

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The number of housing units within a 1/2 mile radius of the project, plus the

number of residential units included in the project are 1000.

The employment for the study area (within a 1/2 mile radius of the project) is 85.

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)))

Note that the above percent is applied to a baseline of 9.57 and that product is

subtracted from the Unmitigated Trips

Inputs Selected:

The Presence of Local-Serving Retail checkbox was selected.

Nonresidential Mitigation Measures

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2012 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

3/9/2010 02:32:00 PM

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Condo/townhouse general	10.00	5.96	dwelling units	320.00	1,907.20	19,268.06
					1,907.20	19,268.06

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	51.5	0.6	99.2	0.2
Light Truck < 3750 lbs	7.3	1.4	95.9	2.7
Light Truck 3751-5750 lbs	23.0	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	0.5	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	2.8	60.7	39.3	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)

Operational Changes to Defaults

APPENDIX B

CALINE4 MODEL PRINTOUTS

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

EXISTING BASELINE CONDITIONS

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 16th Str NBA	0	-150	0	0	AG	16	6.2	.0	10.0
B. 16th Str NBD	0	0	0	150	AG	0	3.4	.0	10.0
C. 16th Str NBL	2	-150	0	0	AG	85	6.7	.0	10.0
D. 16th Str SBA	0	150	0	0	AG	0	3.4	.0	10.0
E. 16th Str SBD	0	0	0	-150	AG	91	3.9	.0	10.0
F. 16th Str SBL	-2	150	0	0	AG	0	3.4	.0	10.0
G. Sand Can EBA	-150	-4	0	-4	AG	477	4.8	.0	10.0
H. Sand Can EBD	0	-4	150	-4	AG	411	3.3	.0	10.0
I. Sand Can EBL	-150	-2	0	0	AG	0	3.2	.0	10.0
J. Sand Can WBA	150	7	0	7	AG	296	4.7	.0	10.0
K. Sand Can WBD	0	7	-150	7	AG	381	3.3	.0	10.0
L. Sand Can WBL	150	5	0	0	AG	9	6.7	.0	10.0
M. 16th St NBAX	0	-750	0	-150	AG	101	3.4	.0	10.0
N. 16th St NBDX	0	150	0	750	AG	0	3.4	.0	10.0
O. 16th St SBAX	0	750	0	150	AG	0	3.4	.0	10.0
P. 16th St SBDX	0	-150	0	-750	AG	91	3.4	.0	10.0
Q. Sand Ca EBAX	-750	-4	-150	-4	AG	477	3.2	.0	10.0
R. Sand Ca EBDX	150	-4	750	-4	AG	411	3.2	.0	10.0
S. Sand Ca WBAX	750	7	150	7	AG	305	3.2	.0	10.0
T. Sand Ca WBDX	-150	7	-750	7	AG	381	3.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.6	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	262.	.4	.0	.0	.0	.0	.0	.0	.1	.0
3. SW	277.	.5	.0	.0	.0	.0	.0	.0	.4	.0
4. NE	263.	.4	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.5	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	83.	.6	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.3	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	179.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	182.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Campus D NBA	0	-150	0	0	AG	0	3.4	.0	10.0
B. Campus D NBD	0	0	0	150	AG	225	4.0	.0	10.0
C. Campus D NBL	2	-150	0	0	AG	0	3.4	.0	10.0
D. Campus D SBA	-5	150	-5	0	AG	13	6.2	.0	10.0
E. Campus D SBD	-5	0	-5	-150	AG	0	3.4	.0	10.0
F. Campus D SBL	-5	150	0	0	AG	137	6.7	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	399	4.7	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	536	3.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	12	6.7	.0	10.0
J. Sand Can WBA	150	5	0	5	AG	505	4.8	.0	13.5
K. Sand Can WBD	0	5	-150	5	AG	305	3.3	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	3.2	.0	10.0
M. Campus NBAX	0	-750	0	-150	AG	0	3.4	.0	10.0
N. Campus NBDX	0	150	0	750	AG	225	3.4	.0	10.0
O. Campus SBAX	-5	750	-5	150	AG	150	3.4	.0	10.0
P. Campus SBDX	-5	-150	-5	-750	AG	0	3.4	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	411	3.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	536	3.2	.0	10.0
S. Sand Ca WBAX	750	5	150	5	AG	505	3.2	.0	13.5
T. Sand Ca WBDX	-150	5	-750	5	AG	305	3.2	.0	10.0

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.6	.0	.1	.0	.0	.0	.1	.0	.1
2. NW	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	83.	.5	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	98.	.5	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.5	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.6	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.4	.0	.0	.0	.0	.0	.2	.0	.0
11. SW mdblk	3.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.3	.0	.2	.0	.0	.0	.1	.0	.0
13. ES blk	277.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	1.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Chapman NBA	0	-150	0	0	AG	0	3.4	.0	10.0
B. Chapman NBD	0	0	0	150	AG	213	4.0	.0	10.0
C. Chapman NBL	2	-150	0	0	AG	0	3.4	.0	10.0
D. Chapman SBA	-5	150	-5	0	AG	153	6.2	.0	10.0
E. Chapman SBD	-5	0	-5	-150	AG	0	3.4	.0	10.0
F. Chapman SBL	-5	150	0	0	AG	24	6.7	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	365	4.7	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	389	3.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	171	6.7	.0	10.0
J. Sand Can WBA	150	4	0	4	AG	394	4.7	.0	10.0
K. Sand Can WBD	0	4	-150	4	AG	505	3.3	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	3.2	.0	10.0
M. Chapman NBAX	0	-750	0	-150	AG	0	3.4	.0	10.0
N. Chapman NBDX	0	150	0	750	AG	213	3.4	.0	10.0
O. Chapman SBAX	-5	750	-5	150	AG	177	3.4	.0	10.0
P. Chapman SBDX	-5	-150	-5	-750	AG	0	3.4	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	536	3.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	389	3.2	.0	10.0
S. Sand Ca WBAX	750	4	150	4	AG	394	3.2	.0	10.0
T. Sand Ca WBDX	-150	4	-750	4	AG	505	3.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	10	1.8
3. SW	-12	-14	1.8
4. NE	7	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.6	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.6	.0	.0	.0	.0	.0	.0	.3	.0
4. NE	262.	.7	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.7	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	2.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	191.	.4	.0	.1	.0	.1	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.1	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tennesse NBA	0	-150	0	0	AG	0	3.4	.0	10.0
B. Tennesse NBD	0	0	0	150	AG	38	3.9	.0	10.0
C. Tennesse NBL	2	-150	0	0	AG	0	3.4	.0	10.0
D. Tennesse SBA	0	150	0	0	AG	1	6.2	.0	10.0
E. Tennesse SBD	0	0	0	-150	AG	0	3.4	.0	10.0
F. Tennesse SBL	-2	150	0	0	AG	27	6.7	.0	10.0
G. Yucaipa EBA	-150	-4	0	-4	AG	1082	5.3	.0	10.0
H. Yucaipa EBD	0	-4	150	-4	AG	1109	3.4	.0	10.0
I. Yucaipa EBL	-150	-2	0	0	AG	0	3.2	.0	10.0
J. Yucaipa WBA	150	5	0	5	AG	646	4.9	.0	13.5
K. Yucaipa WBD	0	5	-150	5	AG	609	3.3	.0	10.0
L. Yucaipa WBL	150	2	0	0	AG	0	3.2	.0	10.0
M. Tenness NBAX	0	-750	0	-150	AG	0	3.4	.0	10.0
N. Tenness NBDX	0	150	0	750	AG	38	3.4	.0	10.0
O. Tenness SBAX	0	750	0	150	AG	28	3.4	.0	10.0
P. Tenness SBDX	0	-150	0	-750	AG	0	3.4	.0	10.0
Q. Yucaipa EBAX	-750	-4	-150	-4	AG	1082	3.2	.0	10.0
R. Yucaipa EBDX	150	-4	750	-4	AG	1109	3.2	.0	10.0
S. Yucaipa WBAX	750	5	150	5	AG	646	3.2	.0	13.5
T. Yucaipa WBDX	-150	5	-750	5	AG	609	3.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	12	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	1.1	.0	.0	.0	.0	.0	.0	.8	.0
2. NW	97.	.9	.0	.0	.0	.0	.0	.0	.0	.2
3. SW	278.	1.1	.0	.0	.0	.0	.0	.0	.8	.0
4. NE	98.	.8	.0	.0	.0	.0	.0	.0	.0	.2
5. ES mdblk	277.	1.0	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	97.	.8	.0	.0	.0	.0	.0	.0	.3	.0
7. WS mdblk	83.	1.2	.0	.0	.0	.0	.0	.0	.8	.0
8. EN mdblk	263.	.9	.0	.0	.0	.0	.0	.0	.1	.2
9. SE mdblk	358.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	1.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.8	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	184.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.5	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.4	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
5. ES mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 14th Str NBA	5	-150	5	0	AG	175	6.2	.0	11.8
B. 14th Str NBD	5	0	5	150	AG	350	3.9	.0	10.0
C. 14th Str NBL	2	-150	0	0	AG	35	6.7	.0	10.0
D. 14th Str SBA	-7	150	-7	0	AG	223	6.4	.0	10.0
E. 14th Str SBD	-7	0	-7	-150	AG	250	4.0	.0	10.0
F. 14th Str SBL	-5	150	0	0	AG	177	6.7	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	980	5.1	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	1156	3.4	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	91	6.7	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	689	4.9	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	658	3.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	44	6.7	.0	10.0
M. 14th St NBAX	5	-750	5	-150	AG	210	3.4	.0	11.8
N. 14th St NBDX	5	150	5	750	AG	350	3.4	.0	10.0
O. 14th St SBAX	-7	750	-7	150	AG	400	3.4	.0	10.0
P. 14th St SBDX	-7	-150	-7	-750	AG	250	3.4	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	1071	3.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	1156	3.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	733	3.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	658	3.2	.0	10.0

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	13	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.2	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	98.	1.1	.0	.0	.0	.1	.0	.0	.0	.2
3. SW	82.	1.1	.0	.0	.0	.0	.0	.0	.1	.5
4. NE	260.	1.0	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	277.	1.0	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	97.	.9	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	82.	1.2	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	262.	1.0	.0	.0	.0	.0	.0	.0	.1	.1
9. SE mdblk	354.	.6	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.2	.0	.2	.0	.0
11. SW mdblk	6.	.5	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	188.	.6	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.9	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.9	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.4
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.4	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	652	6.9	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	670	4.4	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	72	6.7	.0	10.0
D. Oak Glen SBA	-9	150	-9	0	AG	383	6.2	.0	13.5
E. Oak Glen SBD	-9	0	-9	-150	AG	514	4.0	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	124	6.7	.0	10.0
G. Yucaipa EBA	-150	-12	0	-12	AG	951	4.9	.0	13.5
H. Yucaipa EBD	0	-12	150	-12	AG	1323	3.4	.0	11.8
I. Yucaipa EBL	-150	-9	0	0	AG	309	6.7	.0	10.0
J. Yucaipa WBA	150	12	0	12	AG	662	4.8	.0	13.5
K. Yucaipa WBD	0	12	-150	12	AG	896	3.3	.0	11.8
L. Yucaipa WBL	150	9	0	0	AG	250	6.7	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	724	3.4	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	670	3.4	.0	10.0
O. Oak Gle SBAX	-9	750	-9	150	AG	507	3.4	.0	13.5
P. Oak Gle SBDX	-9	-150	-9	-750	AG	514	3.4	.0	10.0
Q. Yucaipa EBAX	-750	-12	-150	-12	AG	1260	3.2	.0	13.5
R. Yucaipa EBDX	150	-12	750	-12	AG	1323	3.2	.0	11.8
S. Yucaipa WBAX	750	12	150	12	AG	912	3.2	.0	13.5
T. Yucaipa WBDX	-150	12	-750	12	AG	896	3.2	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-20	1.8
2. NW	-17	20	1.8
3. SW	-15	-21	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-20	1.8
6. WN mdblk	-150	20	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-20	1.8
14. WN blk	-600	20	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.5	.3	.0	.0	.0	.0	.0	.6	.1
2. NW	98.	1.2	.0	.1	.0	.2	.0	.0	.0	.0
3. SW	80.	1.3	.2	.0	.0	.0	.1	.0	.2	.5
4. NE	187.	1.3	.5	.1	.0	.0	.0	.0	.0	.1
5. ES mdblk	278.	1.2	.0	.0	.0	.0	.0	.0	.0	.6
6. WN mdblk	98.	1.0	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	81.	1.3	.0	.0	.0	.0	.0	.0	.7	.0
8. EN mdblk	261.	1.1	.0	.0	.0	.0	.0	.0	.1	.0
9. SE mdblk	352.	1.2	.7	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.9	.1	.0	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.9	.2	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	1.0	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	277.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.9	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.9	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.8	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.7	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	.0	.4	.1	.1	.0	.0	.0	.0	.0	.2	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.5	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.7	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.5
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.6	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.5	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.4	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	2	-150	2	0	AG	94	6.2	.0	10.0
B. Californ NBD	2	0	2	150	AG	93	3.9	.0	10.0
C. Californ NBL	2	-150	0	0	AG	116	6.7	.0	10.0
D. Californ SBA	-2	150	-2	0	AG	61	6.2	.0	10.0
E. Californ SBD	-2	0	-2	-150	AG	197	3.9	.0	10.0
F. Californ SBL	-2	150	0	0	AG	4	6.7	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	665	4.9	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	580	3.3	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	41	6.7	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	339	4.7	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	481	3.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	31	6.7	.0	10.0
M. Califor NBAX	2	-750	2	-150	AG	210	3.4	.0	10.0
N. Califor NBDX	2	150	2	750	AG	93	3.4	.0	10.0
O. Califor SBAX	-2	750	-2	150	AG	65	3.4	.0	10.0
P. Califor SBDX	-2	-150	-2	-750	AG	197	3.4	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	706	3.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	580	3.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	370	3.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	481	3.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-8	14	1.8
3. SW	-8	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.8	.0	.0	.0	.0	.0	.0	.5	.0
2. NW	174.	.6	.0	.0	.1	.0	.1	.0	.1	.0
3. SW	278.	.7	.0	.0	.0	.0	.0	.0	.5	.0
4. NE	262.	.6	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.3
6. WN mdblk	98.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	.8	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.5	.1	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	177.	.3	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.4	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	185.	.3	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	954	5.2	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	793	3.5	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	18	6.7	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	401	4.9	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	513	3.5	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	80	6.7	.0	10.0
G. Avenue E EBA	-150	-7	0	-7	AG	160	6.2	.0	10.0
H. Avenue E EBD	0	-7	150	-7	AG	501	6.7	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	35	6.7	.0	10.0
J. Avenue E WBA	150	7	0	7	AG	185	6.2	.0	10.0
K. Avenue E WBD	0	7	-150	7	AG	157	3.9	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	131	6.7	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	972	3.4	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	793	3.4	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	481	3.4	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	513	3.4	.0	10.0
Q. Avenue EBAX	-750	-7	-150	-7	AG	195	3.4	.0	10.0
R. Avenue EBDX	150	-7	750	-7	AG	501	3.4	.0	10.0
S. Avenue WBAX	750	7	150	7	AG	316	3.4	.0	10.0
T. Avenue WBDX	-150	7	-750	7	AG	157	3.4	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	1.1	.2	.3	.0	.1	.0	.0	.0	.2
2. NW	98.	.8	.0	.1	.0	.1	.0	.0	.0	.2
3. SW	82.	1.0	.2	.0	.0	.0	.1	.0	.0	.4
4. NE	187.	1.2	.6	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.1
7. WS mdblk	85.	.5	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	259.	.7	.0	.0	.0	.0	.0	.0	.0	.2
9. SE mdblk	353.	1.1	.7	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.8	.1	.1	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.8	.2	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.8	.0	.4	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.7	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.6	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 5th Stre NBA	2	-150	2	0	AG	271	5.4	.0	10.0
B. 5th Stre NBD	2	0	2	150	AG	340	3.7	.0	10.0
C. 5th Stre NBL	2	-150	0	0	AG	38	6.7	.0	10.0
D. 5th Stre SBA	-2	150	-2	0	AG	331	5.5	.0	10.0
E. 5th Stre SBD	-2	0	-2	-150	AG	362	3.7	.0	10.0
F. 5th Stre SBL	-2	150	0	0	AG	53	6.7	.0	10.0
G. Avenue E EBA	-150	-2	0	-2	AG	281	5.4	.0	10.0
H. Avenue E EBD	0	-2	150	-2	AG	320	3.7	.0	10.0
I. Avenue E EBL	-150	-2	0	0	AG	60	6.7	.0	10.0
J. Avenue E WBA	150	2	0	2	AG	231	5.4	.0	10.0
K. Avenue E WBD	0	2	-150	2	AG	285	3.6	.0	10.0
L. Avenue E WBL	150	2	0	0	AG	42	6.7	.0	10.0
M. 5th Str NBAX	2	-750	2	-150	AG	309	3.4	.0	10.0
N. 5th Str NBDX	2	150	2	750	AG	340	3.4	.0	10.0
O. 5th Str SBAX	-2	750	-2	150	AG	384	3.4	.0	10.0
P. 5th Str SBDX	-2	-150	-2	-750	AG	362	3.4	.0	10.0
Q. Avenue EBAX	-750	-2	-150	-2	AG	341	3.4	.0	10.0
R. Avenue EBDX	150	-2	750	-2	AG	320	3.4	.0	10.0
S. Avenue WBAX	750	2	150	2	AG	273	3.4	.0	10.0
T. Avenue WBDX	-150	2	-750	2	AG	285	3.4	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	8	8	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	8	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	8	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	8	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	8	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.7	.0	.2	.0	.2	.0	.0	.0	.0
2. NW	173.	.7	.2	.0	.0	.0	.2	.0	.0	.0
3. SW	6.	.8	.0	.1	.0	.3	.0	.0	.1	.0
4. NE	263.	.7	.0	.0	.0	.1	.0	.0	.2	.0
5. ES mdblk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	96.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	84.	.6	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	354.	.6	.2	.0	.0	.0	.1	.0	.0	.0
10. NW mdblk	174.	.7	.0	.1	.0	.3	.0	.0	.0	.0
11. SW mdblk	6.	.6	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	186.	.6	.0	.2	.0	.2	.0	.0	.0	.0
13. ES blk	275.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	7	-150	7	0	AG	231	4.9	.0	10.0
B. Californ NBD	7	0	7	150	AG	256	3.5	.0	10.0
C. Californ NBL	5	-150	0	0	AG	59	6.7	.0	10.0
D. Californ SBA	-7	150	-7	0	AG	256	4.8	.0	10.0
E. Californ SBD	-7	0	-7	-150	AG	284	3.5	.0	10.0
F. Californ SBL	-5	150	0	0	AG	27	6.7	.0	10.0
G. Avenue E EBA	-150	-5	0	-5	AG	169	6.2	.0	10.0
H. Avenue E EBD	0	-5	150	-5	AG	192	3.9	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	65	6.7	.0	10.0
J. Avenue E WBA	150	5	0	5	AG	110	6.2	.0	10.0
K. Avenue E WBD	0	5	-150	5	AG	216	4.0	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	31	6.7	.0	10.0
M. Califor NBAX	7	-750	7	-150	AG	290	3.4	.0	10.0
N. Califor NBDX	7	150	7	750	AG	256	3.4	.0	10.0
O. Califor SBAX	-7	750	-7	150	AG	283	3.4	.0	10.0
P. Califor SBDX	-7	-150	-7	-750	AG	284	3.4	.0	10.0
Q. Avenue EBAX	-750	-5	-150	-5	AG	234	3.4	.0	10.0
R. Avenue EBDX	150	-5	750	-5	AG	192	3.4	.0	10.0
S. Avenue WBAX	750	5	150	5	AG	141	3.4	.0	10.0
T. Avenue WBDX	-150	5	-750	5	AG	216	3.4	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-12	1.8
2. NW	-14	12	1.8
3. SW	-14	-12	1.8
4. NE	14	12	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	12	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.5	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	172.	.5	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	7.	.5	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	262.	.5	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.4	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	7.	.4	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.4	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	5	-150	5	0	AG	1104	5.3	.0	13.5
B. Oak Glen NBD	5	0	5	150	AG	1031	3.4	.0	10.0
C. Oak Glen NBL	2	-150	0	0	AG	0	3.2	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	552	4.8	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	593	3.3	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	8	6.7	.0	10.0
G. Colorado EBA	-150	0	0	0	AG	0	3.4	.0	10.0
H. Colorado EBD	0	0	150	0	AG	86	3.9	.0	10.0
I. Colorado EBL	-150	-2	0	0	AG	0	3.4	.0	10.0
J. Colorado WBA	150	0	0	0	AG	5	6.2	.0	10.0
K. Colorado WBD	0	0	-150	0	AG	0	3.4	.0	10.0
L. Colorado WBL	150	2	0	0	AG	41	6.7	.0	10.0
M. Oak Gle NBAX	5	-750	5	-150	AG	1104	3.2	.0	13.5
N. Oak Gle NBDX	5	150	5	750	AG	1031	3.2	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	560	3.2	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	593	3.2	.0	10.0
Q. Colorad EBAX	-750	0	-150	0	AG	0	3.4	.0	10.0
R. Colorad EBDX	150	0	750	0	AG	86	3.4	.0	10.0
S. Colorad WBAX	750	0	150	0	AG	46	3.4	.0	10.0
T. Colorad WBDX	-150	0	-750	0	AG	0	3.4	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-7	1.8
2. NW	-14	7	1.8
3. SW	-14	-7	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	1.0	.8	.0	.0	.0	.0	.0	.0	.0
2. NW	172.	.8	.3	.0	.0	.0	.3	.0	.0	.0
3. SW	171.	.7	.3	.0	.0	.0	.3	.0	.0	.0
4. NE	186.	1.2	.9	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	92.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	1.1	.8	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.8	.1	.1	.0	.4	.0	.0	.0	.0
11. SW mdblk	8.	.8	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.9	.1	.5	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.8	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.7	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.8	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: Existing-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.6	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.3	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

OPENING YEAR (2014) WITHOUT PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 16th Str NBA	0	-150	0	0	AG	17	4.1	.0	10.0
B. 16th Str NBD	0	0	0	150	AG	0	2.3	.0	10.0
C. 16th Str NBL	2	-150	0	0	AG	90	4.4	.0	10.0
D. 16th Str SBA	0	150	0	0	AG	0	2.3	.0	10.0
E. 16th Str SBD	0	0	0	-150	AG	97	2.6	.0	10.0
F. 16th Str SBL	-2	150	0	0	AG	0	2.3	.0	10.0
G. Sand Can EBA	-150	-4	0	-4	AG	506	3.2	.0	10.0
H. Sand Can EBD	0	-4	150	-4	AG	436	2.3	.0	10.0
I. Sand Can EBL	-150	-2	0	0	AG	0	2.2	.0	10.0
J. Sand Can WBA	150	7	0	7	AG	314	3.2	.0	10.0
K. Sand Can WBD	0	7	-150	7	AG	404	2.3	.0	10.0
L. Sand Can WBL	150	5	0	0	AG	10	4.4	.0	10.0
M. 16th St NBAX	0	-750	0	-150	AG	107	2.3	.0	10.0
N. 16th St NBDX	0	150	0	750	AG	0	2.3	.0	10.0
O. 16th St SBAX	0	750	0	150	AG	0	2.3	.0	10.0
P. 16th St SBDX	0	-150	0	-750	AG	97	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-4	-150	-4	AG	506	2.2	.0	10.0
R. Sand Ca EBDX	150	-4	750	-4	AG	436	2.2	.0	10.0
S. Sand Ca WBAX	750	7	150	7	AG	323	2.2	.0	10.0
T. Sand Ca WBDX	-150	7	-750	7	AG	404	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.4	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	277.	.4	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	182.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Campus D NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Campus D NBD	0	0	0	150	AG	239	2.7	.0	10.0
C. Campus D NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Campus D SBA	-5	150	-5	0	AG	14	4.1	.0	10.0
E. Campus D SBD	-5	0	-5	-150	AG	0	2.3	.0	10.0
F. Campus D SBL	-5	150	0	0	AG	145	4.4	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	423	3.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	568	2.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	13	4.4	.0	10.0
J. Sand Can WBA	150	5	0	5	AG	535	3.2	.0	13.5
K. Sand Can WBD	0	5	-150	5	AG	323	2.2	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Campus NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Campus NBDX	0	150	0	750	AG	239	2.3	.0	10.0
O. Campus SBAX	-5	750	-5	150	AG	159	2.3	.0	10.0
P. Campus SBDX	-5	-150	-5	-750	AG	0	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	436	2.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	568	2.2	.0	10.0
S. Sand Ca WBAX	750	5	150	5	AG	535	2.2	.0	13.5
T. Sand Ca WBDX	-150	5	-750	5	AG	323	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	83.	.4	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.2	.0	.0	.0	.0	.0	.1	.0	.0
11. SW mdblk	3.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.2	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Chapman NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Chapman NBD	0	0	0	150	AG	226	2.7	.0	10.0
C. Chapman NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Chapman SBA	-5	150	-5	0	AG	162	4.1	.0	10.0
E. Chapman SBD	-5	0	-5	-150	AG	0	2.3	.0	10.0
F. Chapman SBL	-5	150	0	0	AG	25	4.4	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	387	3.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	412	2.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	181	4.4	.0	10.0
J. Sand Can WBA	150	4	0	4	AG	418	3.2	.0	10.0
K. Sand Can WBD	0	4	-150	4	AG	535	2.3	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Chapman NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Chapman NBDX	0	150	0	750	AG	226	2.3	.0	10.0
O. Chapman SBAX	-5	750	-5	150	AG	188	2.3	.0	10.0
P. Chapman SBDX	-5	-150	-5	-750	AG	0	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	568	2.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	412	2.2	.0	10.0
S. Sand Ca WBAX	750	4	150	4	AG	418	2.2	.0	10.0
T. Sand Ca WBDX	-150	4	-750	4	AG	535	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	10	1.8
3. SW	-12	-14	1.8
4. NE	7	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.4	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.4	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	262.	.5	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.5	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	2.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	191.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tennesse NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Tennesse NBD	0	0	0	150	AG	40	2.6	.0	10.0
C. Tennesse NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Tennesse SBA	0	150	0	0	AG	1	4.1	.0	10.0
E. Tennesse SBD	0	0	0	-150	AG	0	2.3	.0	10.0
F. Tennesse SBL	-2	150	0	0	AG	29	4.4	.0	10.0
G. Yucaipa EBA	-150	-4	0	-4	AG	1147	3.5	.0	10.0
H. Yucaipa EBD	0	-4	150	-4	AG	1176	2.3	.0	10.0
I. Yucaipa EBL	-150	-2	0	0	AG	0	2.2	.0	10.0
J. Yucaipa WBA	150	5	0	5	AG	685	3.3	.0	13.5
K. Yucaipa WBD	0	5	-150	5	AG	646	2.3	.0	10.0
L. Yucaipa WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Tenness NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Tenness NBDX	0	150	0	750	AG	40	2.3	.0	10.0
O. Tenness SBAX	0	750	0	150	AG	30	2.3	.0	10.0
P. Tenness SBDX	0	-150	0	-750	AG	0	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-4	-150	-4	AG	1147	2.2	.0	10.0
R. Yucaipa EBDX	150	-4	750	-4	AG	1176	2.2	.0	10.0
S. Yucaipa WBAX	750	5	150	5	AG	685	2.2	.0	13.5
T. Yucaipa WBDX	-150	5	-750	5	AG	646	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	12	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.8	.0	.0	.0	.0	.0	.0	.5	.0
2. NW	97.	.6	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	278.	.8	.0	.0	.0	.0	.0	.0	.6	.0
4. NE	98.	.6	.0	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	97.	.6	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	83.	.8	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	358.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	1.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.6	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.5	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	184.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 14th Str NBA	5	-150	5	0	AG	186	4.1	.0	11.8
B. 14th Str NBD	5	0	5	150	AG	371	2.6	.0	10.0
C. 14th Str NBL	2	-150	0	0	AG	37	4.4	.0	10.0
D. 14th Str SBA	-7	150	-7	0	AG	236	4.2	.0	10.0
E. 14th Str SBD	-7	0	-7	-150	AG	265	2.7	.0	10.0
F. 14th Str SBL	-5	150	0	0	AG	188	4.4	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	1039	3.5	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	1225	2.4	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	97	4.4	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	730	3.3	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	698	2.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	47	4.4	.0	10.0
M. 14th St NBAX	5	-750	5	-150	AG	223	2.3	.0	11.8
N. 14th St NBDX	5	150	5	750	AG	371	2.3	.0	10.0
O. 14th St SBAX	-7	750	-7	150	AG	424	2.3	.0	10.0
P. 14th St SBDX	-7	-150	-7	-750	AG	265	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	1135	2.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	1225	2.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	777	2.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	698	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	13	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.8	.0	.0	.0	.0	.0	.0	.5	.0
2. NW	98.	.8	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	82.	.8	.0	.0	.0	.0	.0	.0	.1	.4
4. NE	260.	.7	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	98.	.6	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	.9	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	262.	.7	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	354.	.4	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.5	.0	.0	.0	.2	.0	.1	.0	.0
11. SW mdblk	6.	.4	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	188.	.4	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.6	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	691	4.5	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	710	3.0	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	76	4.4	.0	10.0
D. Oak Glen SBA	-9	150	-9	0	AG	406	4.2	.0	13.5
E. Oak Glen SBD	-9	0	-9	-150	AG	545	2.7	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	131	4.4	.0	10.0
G. Yucaipa EBA	-150	-12	0	-12	AG	1008	3.3	.0	13.5
H. Yucaipa EBD	0	-12	150	-12	AG	1402	2.3	.0	11.8
I. Yucaipa EBL	-150	-9	0	0	AG	328	4.4	.0	10.0
J. Yucaipa WBA	150	12	0	12	AG	702	3.2	.0	13.5
K. Yucaipa WBD	0	12	-150	12	AG	950	2.3	.0	11.8
L. Yucaipa WBL	150	9	0	0	AG	265	4.4	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	767	2.3	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	710	2.3	.0	10.0
O. Oak Gle SBAX	-9	750	-9	150	AG	537	2.3	.0	13.5
P. Oak Gle SBDX	-9	-150	-9	-750	AG	545	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-12	-150	-12	AG	1336	2.2	.0	13.5
R. Yucaipa EBDX	150	-12	750	-12	AG	1402	2.2	.0	11.8
S. Yucaipa WBAX	750	12	150	12	AG	967	2.2	.0	13.5
T. Yucaipa WBDX	-150	12	-750	12	AG	950	2.2	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-20	1.8
2. NW	-17	20	1.8
3. SW	-15	-21	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-20	1.8
6. WN mdblk	-150	20	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-20	1.8
14. WN blk	-600	20	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.1	.2	.0	.0	.0	.0	.0	.4	.0
2. NW	98.	.9	.0	.0	.0	.1	.0	.0	.0	.0
3. SW	80.	.9	.1	.0	.0	.0	.1	.0	.1	.3
4. NE	187.	.9	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.7	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.9	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	261.	.8	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.8	.5	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.6	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.7	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.5	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 671. (M)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 10. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	2	-150	2	0	AG	100	4.1	.0	10.0
B. Californ NBD	2	0	2	150	AG	99	2.6	.0	10.0
C. Californ NBL	2	-150	0	0	AG	123	4.4	.0	10.0
D. Californ SBA	-2	150	-2	0	AG	65	4.1	.0	10.0
E. Californ SBD	-2	0	-2	-150	AG	209	2.7	.0	10.0
F. Californ SBL	-2	150	0	0	AG	4	4.4	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	705	3.3	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	615	2.3	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	44	4.4	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	359	3.2	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	510	2.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	33	4.4	.0	10.0
M. Califor NBAX	2	-750	2	-150	AG	223	2.3	.0	10.0
N. Califor NBDX	2	150	2	750	AG	99	2.3	.0	10.0
O. Califor SBAX	-2	750	-2	150	AG	69	2.3	.0	10.0
P. Califor SBDX	-2	-150	-2	-750	AG	209	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	748	2.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	615	2.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	392	2.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	510	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-8	14	1.8
3. SW	-8	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.6	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.5	.0	.0	.0	.0	.0	.0	.4	.0
4. NE	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.6	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.3	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	184.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1011	3.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	841	2.5	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	19	4.4	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	425	3.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	544	2.4	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	85	4.4	.0	10.0
G. Avenue E EBA	-150	-7	0	-7	AG	170	4.1	.0	10.0
H. Avenue E EBD	0	-7	150	-7	AG	531	4.4	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	37	4.4	.0	10.0
J. Avenue E WBA	150	7	0	7	AG	196	4.1	.0	10.0
K. Avenue E WBD	0	7	-150	7	AG	166	2.6	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	139	4.4	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	1030	2.3	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	841	2.3	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	510	2.3	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	544	2.3	.0	10.0
Q. Avenue EBAX	-750	-7	-150	-7	AG	207	2.3	.0	10.0
R. Avenue EBDX	150	-7	750	-7	AG	531	2.3	.0	10.0
S. Avenue WBAX	750	7	150	7	AG	335	2.3	.0	10.0
T. Avenue WBDX	-150	7	-750	7	AG	166	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	.8	.1	.3	.0	.0	.0	.0	.0	.2
2. NW	98.	.6	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	82.	.7	.1	.0	.0	.0	.0	.0	.0	.3
4. NE	187.	.9	.4	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	259.	.5	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	353.	.8	.5	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.6	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	8.	.5	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	186.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 5th Stre NBA	2	-150	2	0	AG	287	3.6	.0	10.0
B. 5th Stre NBD	2	0	2	150	AG	360	2.5	.0	10.0
C. 5th Stre NBL	2	-150	0	0	AG	40	4.4	.0	10.0
D. 5th Stre SBA	-2	150	-2	0	AG	351	3.7	.0	10.0
E. 5th Stre SBD	-2	0	-2	-150	AG	384	2.5	.0	10.0
F. 5th Stre SBL	-2	150	0	0	AG	56	4.4	.0	10.0
G. Avenue E EBA	-150	-2	0	-2	AG	298	3.6	.0	10.0
H. Avenue E EBD	0	-2	150	-2	AG	339	2.5	.0	10.0
I. Avenue E EBL	-150	-2	0	0	AG	64	4.4	.0	10.0
J. Avenue E WBA	150	2	0	2	AG	245	3.6	.0	10.0
K. Avenue E WBD	0	2	-150	2	AG	302	2.5	.0	10.0
L. Avenue E WBL	150	2	0	0	AG	45	4.4	.0	10.0
M. 5th Str NBAX	2	-750	2	-150	AG	328	2.3	.0	10.0
N. 5th Str NBDX	2	150	2	750	AG	360	2.3	.0	10.0
O. 5th Str SBAX	-2	750	-2	150	AG	407	2.3	.0	10.0
P. 5th Str SBDX	-2	-150	-2	-750	AG	384	2.3	.0	10.0
Q. Avenue EBAX	-750	-2	-150	-2	AG	362	2.3	.0	10.0
R. Avenue EBDX	150	-2	750	-2	AG	339	2.3	.0	10.0
S. Avenue WBAX	750	2	150	2	AG	289	2.3	.0	10.0
T. Avenue WBDX	-150	2	-750	2	AG	302	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	8	8	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	8	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	8	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	8	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	8	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.5	.0	.1	.0	.1	.0	.0	.0	.0
2. NW	173.	.5	.1	.0	.0	.0	.1	.0	.0	.0
3. SW	6.	.5	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	263.	.5	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.4	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.5	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	6.	.4	.1	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	186.	.4	.0	.1	.0	.1	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	7	-150	7	0	AG	245	3.3	.0	10.0
B. Californ NBD	7	0	7	150	AG	271	2.4	.0	10.0
C. Californ NBL	5	-150	0	0	AG	63	4.4	.0	10.0
D. Californ SBA	-7	150	-7	0	AG	271	3.3	.0	10.0
E. Californ SBD	-7	0	-7	-150	AG	301	2.4	.0	10.0
F. Californ SBL	-5	150	0	0	AG	29	4.4	.0	10.0
G. Avenue E EBA	-150	-5	0	-5	AG	179	4.1	.0	10.0
H. Avenue E EBD	0	-5	150	-5	AG	204	2.7	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	69	4.4	.0	10.0
J. Avenue E WBA	150	5	0	5	AG	117	4.1	.0	10.0
K. Avenue E WBD	0	5	-150	5	AG	229	2.7	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	33	4.4	.0	10.0
M. Califor NBAX	7	-750	7	-150	AG	307	2.3	.0	10.0
N. Califor NBDX	7	150	7	750	AG	271	2.3	.0	10.0
O. Califor SBAX	-7	750	-7	150	AG	300	2.3	.0	10.0
P. Califor SBDX	-7	-150	-7	-750	AG	301	2.3	.0	10.0
Q. Avenue EBAX	-750	-5	-150	-5	AG	248	2.3	.0	10.0
R. Avenue EBDX	150	-5	750	-5	AG	204	2.3	.0	10.0
S. Avenue WBAX	750	5	150	5	AG	150	2.3	.0	10.0
T. Avenue WBDX	-150	5	-750	5	AG	229	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-12	1.8
2. NW	-14	12	1.8
3. SW	-14	-12	1.8
4. NE	14	12	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	12	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.4	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	172.	.3	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	7.	.3	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.3	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.3	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	7.	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	187.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	5	-150	5	0	AG	1170	3.5	.0	13.5
B. Oak Glen NBD	5	0	5	150	AG	1093	2.3	.0	10.0
C. Oak Glen NBL	2	-150	0	0	AG	0	2.2	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	585	3.2	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	629	2.3	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	9	4.4	.0	10.0
G. Colorado EBA	-150	0	0	0	AG	0	2.3	.0	10.0
H. Colorado EBD	0	0	150	0	AG	91	2.6	.0	10.0
I. Colorado EBL	-150	-2	0	0	AG	0	2.3	.0	10.0
J. Colorado WBA	150	0	0	0	AG	5	4.1	.0	10.0
K. Colorado WBD	0	0	-150	0	AG	0	2.3	.0	10.0
L. Colorado WBL	150	2	0	0	AG	44	4.4	.0	10.0
M. Oak Gle NBAX	5	-750	5	-150	AG	1170	2.2	.0	13.5
N. Oak Gle NBDX	5	150	5	750	AG	1093	2.2	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	594	2.2	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	629	2.2	.0	10.0
Q. Colorad EBAX	-750	0	-150	0	AG	0	2.3	.0	10.0
R. Colorad EBDX	150	0	750	0	AG	91	2.3	.0	10.0
S. Colorad WBAX	750	0	150	0	AG	49	2.3	.0	10.0
T. Colorad WBDX	-150	0	-750	0	AG	0	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-7	1.8
2. NW	-14	7	1.8
3. SW	-14	-7	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	.7	.5	.0	.0	.0	.0	.0	.0	.0
2. NW	172.	.5	.2	.0	.0	.0	.2	.0	.0	.0
3. SW	172.	.5	.2	.0	.0	.0	.2	.0	.0	.0
4. NE	186.	.8	.6	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	92.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.1	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.8	.6	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.6	.1	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.6	.2	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	186.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.6	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

OPENING YEAR (2014) WITH PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 16th Str NBA	0	-150	0	0	AG	70	4.1	.0	10.0
B. 16th Str NBD	0	0	0	150	AG	0	2.3	.0	10.0
C. 16th Str NBL	2	-150	0	0	AG	115	4.4	.0	10.0
D. 16th Str SBA	0	150	0	0	AG	0	2.3	.0	10.0
E. 16th Str SBD	0	0	0	-150	AG	171	2.6	.0	10.0
F. 16th Str SBL	-2	150	0	0	AG	0	2.3	.0	10.0
G. Sand Can EBA	-150	-4	0	-4	AG	589	3.2	.0	10.0
H. Sand Can EBD	0	-4	150	-4	AG	540	2.3	.0	10.0
I. Sand Can EBL	-150	-2	0	0	AG	0	2.2	.0	10.0
J. Sand Can WBA	150	7	0	7	AG	352	3.2	.0	10.0
K. Sand Can WBD	0	7	-150	7	AG	467	2.3	.0	10.0
L. Sand Can WBL	150	5	0	0	AG	52	4.4	.0	10.0
M. 16th St NBAX	0	-750	0	-150	AG	185	2.3	.0	10.0
N. 16th St NBDX	0	150	0	750	AG	0	2.3	.0	10.0
O. 16th St SBAX	0	750	0	150	AG	0	2.3	.0	10.0
P. 16th St SBDX	0	-150	0	-750	AG	171	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-4	-150	-4	AG	589	2.2	.0	10.0
R. Sand Ca EBDX	150	-4	750	-4	AG	540	2.2	.0	10.0
S. Sand Ca WBAX	750	7	150	7	AG	403	2.2	.0	10.0
T. Sand Ca WBDX	-150	7	-750	7	AG	467	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.5	.0	.0	.0	.0	.0	.0	.3	.0
2. NW	175.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	83.	.4	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	185.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.5	.0	.0	.0	.0	.0	.0	.3	.0
8. EN mdblk	263.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.3	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	179.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.3	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	181.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Campus D NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Campus D NBD	0	0	0	150	AG	239	2.7	.0	10.0
C. Campus D NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Campus D SBA	-5	150	-5	0	AG	14	4.1	.0	10.0
E. Campus D SBD	-5	0	-5	-150	AG	0	2.3	.0	10.0
F. Campus D SBL	-5	150	0	0	AG	145	4.4	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	492	3.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	637	2.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	13	4.4	.0	10.0
J. Sand Can WBA	150	5	0	5	AG	612	3.3	.0	13.5
K. Sand Can WBD	0	5	-150	5	AG	400	2.3	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Campus NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Campus NBDX	0	150	0	750	AG	239	2.3	.0	10.0
O. Campus SBAX	-5	750	-5	150	AG	159	2.3	.0	10.0
P. Campus SBDX	-5	-150	-5	-750	AG	0	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	505	2.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	637	2.2	.0	10.0
S. Sand Ca WBAX	750	5	150	5	AG	612	2.2	.0	13.5
T. Sand Ca WBDX	-150	5	-750	5	AG	400	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	354.	.4	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	96.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.4	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.3	.0	.0	.0	.0	.0	.1	.0	.0
11. SW mdblk	3.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.2	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Chapman NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Chapman NBD	0	0	0	150	AG	230	2.7	.0	10.0
C. Chapman NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Chapman SBA	-5	150	-5	0	AG	167	4.1	.0	10.0
E. Chapman SBD	-5	0	-5	-150	AG	0	2.3	.0	10.0
F. Chapman SBL	-5	150	0	0	AG	25	4.4	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	452	3.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	477	2.3	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	185	4.4	.0	10.0
J. Sand Can WBA	150	4	0	4	AG	489	3.2	.0	10.0
K. Sand Can WBD	0	4	-150	4	AG	611	2.3	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Chapman NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Chapman NBDX	0	150	0	750	AG	230	2.3	.0	10.0
O. Chapman SBAX	-5	750	-5	150	AG	193	2.3	.0	10.0
P. Chapman SBDX	-5	-150	-5	-750	AG	0	2.3	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	637	2.2	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	477	2.2	.0	10.0
S. Sand Ca WBAX	750	4	150	4	AG	489	2.2	.0	10.0
T. Sand Ca WBDX	-150	4	-750	4	AG	611	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	10	1.8
3. SW	-12	-14	1.8
4. NE	7	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.5	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	262.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.5	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.5	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.3	.0	.0	.0	.1	.0	.0	.0	.0
11. SW mdblk	2.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	191.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.4	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tennesse NBA	0	-150	0	0	AG	0	2.3	.0	10.0
B. Tennesse NBD	0	0	0	150	AG	67	2.6	.0	10.0
C. Tennesse NBL	2	-150	0	0	AG	0	2.3	.0	10.0
D. Tennesse SBA	0	150	0	0	AG	1	4.1	.0	10.0
E. Tennesse SBD	0	0	0	-150	AG	0	2.3	.0	10.0
F. Tennesse SBL	-2	150	0	0	AG	50	4.4	.0	10.0
G. Yucaipa EBA	-150	-4	0	-4	AG	1235	3.7	.0	10.0
H. Yucaipa EBD	0	-4	150	-4	AG	1285	2.4	.0	10.0
I. Yucaipa EBL	-150	-2	0	0	AG	0	2.2	.0	10.0
J. Yucaipa WBA	150	5	0	5	AG	779	3.3	.0	13.5
K. Yucaipa WBD	0	5	-150	5	AG	713	2.3	.0	10.0
L. Yucaipa WBL	150	2	0	0	AG	0	2.2	.0	10.0
M. Tenness NBAX	0	-750	0	-150	AG	0	2.3	.0	10.0
N. Tenness NBDX	0	150	0	750	AG	67	2.3	.0	10.0
O. Tenness SBAX	0	750	0	150	AG	51	2.3	.0	10.0
P. Tenness SBDX	0	-150	0	-750	AG	0	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-4	-150	-4	AG	1235	2.2	.0	10.0
R. Yucaipa EBDX	150	-4	750	-4	AG	1285	2.2	.0	10.0
S. Yucaipa WBAX	750	5	150	5	AG	779	2.2	.0	13.5
T. Yucaipa WBDX	-150	5	-750	5	AG	713	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	12	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.9	.0	.0	.0	.0	.0	.0	.6	.0
2. NW	97.	.7	.0	.0	.0	.0	.0	.0	.0	.2
3. SW	278.	.9	.0	.0	.0	.0	.0	.0	.7	.0
4. NE	98.	.6	.0	.0	.0	.0	.0	.0	.0	.1
5. ES mdblk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	97.	.7	.0	.0	.0	.0	.0	.0	.2	.0
7. WS mdblk	83.	.9	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	263.	.7	.0	.0	.0	.0	.0	.0	.1	.1
9. SE mdblk	358.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	1.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	176.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.2	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 14th Str NBA	5	-150	5	0	AG	231	4.1	.0	11.8
B. 14th Str NBD	5	0	5	150	AG	458	2.7	.0	10.0
C. 14th Str NBL	2	-150	0	0	AG	88	4.4	.0	10.0
D. 14th Str SBA	-7	150	-7	0	AG	274	4.2	.0	10.0
E. 14th Str SBD	-7	0	-7	-150	AG	345	3.0	.0	10.0
F. 14th Str SBL	-5	150	0	0	AG	228	4.4	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	1164	3.5	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	1348	2.4	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	97	4.4	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	869	3.4	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	846	2.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	47	4.4	.0	10.0
M. 14th St NBAX	5	-750	5	-150	AG	319	2.3	.0	11.8
N. 14th St NBDX	5	150	5	750	AG	458	2.3	.0	10.0
O. 14th St SBAX	-7	750	-7	150	AG	502	2.3	.0	10.0
P. 14th St SBDX	-7	-150	-7	-750	AG	345	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	1260	2.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	1348	2.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	916	2.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	846	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	13	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.0	.0	.0	.0	.0	.0	.0	.5	.0
2. NW	98.	.9	.0	.0	.0	.0	.0	.0	.0	.1
3. SW	82.	.9	.0	.0	.0	.0	.0	.0	.1	.4
4. NE	260.	.8	.0	.0	.0	.0	.0	.0	.2	.0
5. ES mdblk	278.	.8	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.7	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	82.	1.0	.0	.0	.0	.0	.0	.0	.6	.0
8. EN mdblk	262.	.8	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	353.	.5	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.6	.0	.0	.0	.2	.0	.1	.0	.0
11. SW mdblk	6.	.5	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	188.	.5	.0	.2	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.7	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.6	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.3
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	743	4.5	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	743	3.0	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	76	4.4	.0	10.0
D. Oak Glen SBA	-9	150	-9	0	AG	450	4.2	.0	13.5
E. Oak Glen SBD	-9	0	-9	-150	AG	617	3.0	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	131	4.4	.0	10.0
G. Yucaipa EBA	-150	-12	0	-12	AG	1082	3.3	.0	13.5
H. Yucaipa EBD	0	-12	150	-12	AG	1512	2.3	.0	11.8
I. Yucaipa EBL	-150	-9	0	0	AG	345	4.4	.0	10.0
J. Yucaipa WBA	150	12	0	12	AG	783	3.2	.0	13.5
K. Yucaipa WBD	0	12	-150	12	AG	1052	2.3	.0	11.8
L. Yucaipa WBL	150	9	0	0	AG	314	4.4	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	819	2.3	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	743	2.3	.0	10.0
O. Oak Gle SBAX	-9	750	-9	150	AG	581	2.3	.0	13.5
P. Oak Gle SBDX	-9	-150	-9	-750	AG	617	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-12	-150	-12	AG	1427	2.2	.0	13.5
R. Yucaipa EBDX	150	-12	750	-12	AG	1512	2.2	.0	11.8
S. Yucaipa WBAX	750	12	150	12	AG	1097	2.2	.0	13.5
T. Yucaipa WBDX	-150	12	-750	12	AG	1052	2.2	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-20	1.8
2. NW	-17	20	1.8
3. SW	-15	-21	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-20	1.8
6. WN mdblk	-150	20	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-20	1.8
14. WN blk	-600	20	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	1.1	.2	.0	.0	.0	.0	.0	.4	.0
2. NW	98.	.9	.0	.0	.0	.1	.0	.0	.0	.0
3. SW	80.	1.0	.1	.0	.0	.0	.1	.0	.1	.4
4. NE	188.	1.0	.4	.1	.0	.0	.0	.0	.0	.1
5. ES mdblk	278.	.9	.0	.0	.0	.0	.0	.0	.0	.5
6. WN mdblk	98.	.8	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	1.0	.0	.0	.0	.0	.0	.0	.5	.0
8. EN mdblk	261.	.8	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.9	.5	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.7	.1	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	187.	.7	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.8	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.7	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.7	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.7	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.3	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.4	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.4
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0	.0	.1
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	2	-150	2	0	AG	102	4.1	.0	10.0
B. Californ NBD	2	0	2	150	AG	100	2.6	.0	10.0
C. Californ NBL	2	-150	0	0	AG	142	4.4	.0	10.0
D. Californ SBA	-2	150	-2	0	AG	67	4.1	.0	10.0
E. Californ SBD	-2	0	-2	-150	AG	239	2.7	.0	10.0
F. Californ SBL	-2	150	0	0	AG	4	4.4	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	760	3.3	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	644	2.3	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	44	4.4	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	396	3.2	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	566	2.3	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	34	4.4	.0	10.0
M. Califor NBAX	2	-750	2	-150	AG	244	2.3	.0	10.0
N. Califor NBDX	2	150	2	750	AG	100	2.3	.0	10.0
O. Califor SBAX	-2	750	-2	150	AG	71	2.3	.0	10.0
P. Califor SBDX	-2	-150	-2	-750	AG	239	2.3	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	803	2.2	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	644	2.2	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	430	2.2	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	566	2.2	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-8	14	1.8
3. SW	-8	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.6	.0	.0	.0	.0	.0	.0	.4	.0
2. NW	174.	.5	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.6	.0	.0	.0	.0	.0	.0	.4	.0
4. NE	262.	.5	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.5	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.6	.0	.0	.0	.0	.0	.0	.4	.0
8. EN mdblk	263.	.5	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.4	.0	.0	.1	.0	.0	.0	.0	.0
10. NW mdblk	177.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	184.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.5	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1085	3.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	897	2.5	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	43	4.4	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	504	3.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	682	2.4	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	85	4.4	.0	10.0
G. Avenue E EBA	-150	-7	0	-7	AG	209	4.2	.0	10.0
H. Avenue E EBD	0	-7	150	-7	AG	553	4.4	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	37	4.4	.0	10.0
J. Avenue E WBA	150	7	0	7	AG	201	4.2	.0	10.0
K. Avenue E WBD	0	7	-150	7	AG	195	2.6	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	163	4.4	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	1128	2.3	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	897	2.3	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	589	2.3	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	682	2.3	.0	10.0
Q. Avenue EBAX	-750	-7	-150	-7	AG	246	2.3	.0	10.0
R. Avenue EBDX	150	-7	750	-7	AG	553	2.3	.0	10.0
S. Avenue WBAX	750	7	150	7	AG	364	2.3	.0	10.0
T. Avenue WBDX	-150	7	-750	7	AG	195	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	.8	.1	.3	.0	.0	.0	.0	.0	.2
2. NW	172.	.6	.2	.0	.0	.0	.2	.0	.0	.0
3. SW	82.	.8	.1	.0	.0	.0	.1	.0	.0	.3
4. NE	187.	.9	.5	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.6	.0	.0	.0	.0	.0	.0	.0	.4
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	259.	.5	.0	.0	.0	.0	.0	.0	.0	.1
9. SE mdblk	352.	.9	.6	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.7	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.6	.1	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.6	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.5	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.5	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.5	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.4	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 5th Stre NBA	2	-150	2	0	AG	287	3.6	.0	10.0
B. 5th Stre NBD	2	0	2	150	AG	362	2.5	.0	10.0
C. 5th Stre NBL	2	-150	0	0	AG	40	4.4	.0	10.0
D. 5th Stre SBA	-2	150	-2	0	AG	351	3.7	.0	10.0
E. 5th Stre SBD	-2	0	-2	-150	AG	384	2.5	.0	10.0
F. 5th Stre SBL	-2	150	0	0	AG	60	4.4	.0	10.0
G. Avenue E EBA	-150	-2	0	-2	AG	309	3.7	.0	10.0
H. Avenue E EBD	0	-2	150	-2	AG	354	2.5	.0	10.0
I. Avenue E EBL	-150	-2	0	0	AG	64	4.4	.0	10.0
J. Avenue E WBA	150	2	0	2	AG	261	3.6	.0	10.0
K. Avenue E WBD	0	2	-150	2	AG	316	2.5	.0	10.0
L. Avenue E WBL	150	2	0	0	AG	45	4.4	.0	10.0
M. 5th Str NBAX	2	-750	2	-150	AG	328	2.3	.0	10.0
N. 5th Str NBDX	2	150	2	750	AG	362	2.3	.0	10.0
O. 5th Str SBAX	-2	750	-2	150	AG	411	2.3	.0	10.0
P. 5th Str SBDX	-2	-150	-2	-750	AG	384	2.3	.0	10.0
Q. Avenue EBAX	-750	-2	-150	-2	AG	373	2.3	.0	10.0
R. Avenue EBDX	150	-2	750	-2	AG	354	2.3	.0	10.0
S. Avenue WBAX	750	2	150	2	AG	305	2.3	.0	10.0
T. Avenue WBDX	-150	2	-750	2	AG	316	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	8	8	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	8	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	8	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	8	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	8	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.5	.0	.1	.0	.1	.0	.0	.0	.0
2. NW	173.	.5	.1	.0	.0	.0	.1	.0	.0	.0
3. SW	6.	.6	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	263.	.5	.0	.0	.0	.0	.0	.0	.1	.0
5. ES mdblk	276.	.4	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	96.	.4	.0	.0	.0	.0	.0	.0	.1	.0
7. WS mdblk	84.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.4	.2	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.5	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	6.	.4	.1	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	186.	.4	.0	.1	.0	.1	.0	.0	.0	.0
13. ES blk	275.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.4	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	7	-150	7	0	AG	265	3.3	.0	10.0
B. Californ NBD	7	0	7	150	AG	283	2.4	.0	10.0
C. Californ NBL	5	-150	0	0	AG	70	4.4	.0	10.0
D. Californ SBA	-7	150	-7	0	AG	297	3.3	.0	10.0
E. Californ SBD	-7	0	-7	-150	AG	359	2.4	.0	10.0
F. Californ SBL	-5	150	0	0	AG	29	4.4	.0	10.0
G. Avenue E EBA	-150	-5	0	-5	AG	197	4.1	.0	10.0
H. Avenue E EBD	0	-5	150	-5	AG	215	2.7	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	69	4.4	.0	10.0
J. Avenue E WBA	150	5	0	5	AG	121	4.1	.0	10.0
K. Avenue E WBD	0	5	-150	5	AG	240	2.7	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	50	4.4	.0	10.0
M. Califor NBAX	7	-750	7	-150	AG	334	2.3	.0	10.0
N. Califor NBDX	7	150	7	750	AG	283	2.3	.0	10.0
O. Califor SBAX	-7	750	-7	150	AG	326	2.3	.0	10.0
P. Califor SBDX	-7	-150	-7	-750	AG	359	2.3	.0	10.0
Q. Avenue EBAX	-750	-5	-150	-5	AG	266	2.3	.0	10.0
R. Avenue EBDX	150	-5	750	-5	AG	215	2.3	.0	10.0
S. Avenue WBAX	750	5	150	5	AG	171	2.3	.0	10.0
T. Avenue WBDX	-150	5	-750	5	AG	240	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-12	1.8
2. NW	-14	12	1.8
3. SW	-14	-12	1.8
4. NE	14	12	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	12	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.4	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	172.	.4	.0	.0	.0	.0	.1	.0	.0	.0
3. SW	7.	.4	.0	.0	.0	.1	.0	.0	.0	.0
4. NE	187.	.4	.1	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.3	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.3	.1	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.3	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	7.	.3	.0	.0	.0	.0	.1	.0	.0	.0
12. NE mdblk	187.	.3	.0	.1	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.3	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	5	-150	5	0	AG	1408	4.1	.0	13.5
B. Oak Glen NBD	5	0	5	150	AG	1350	2.4	.0	10.0
C. Oak Glen NBL	2	-150	0	0	AG	0	2.2	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	747	3.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	796	2.3	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	25	4.4	.0	10.0
G. Colorado EBA	-150	0	0	0	AG	0	2.3	.0	10.0
H. Colorado EBD	0	0	150	0	AG	111	2.6	.0	10.0
I. Colorado EBL	-150	-2	0	0	AG	0	2.3	.0	10.0
J. Colorado WBA	150	0	0	0	AG	28	4.1	.0	10.0
K. Colorado WBD	0	0	-150	0	AG	0	2.3	.0	10.0
L. Colorado WBL	150	2	0	0	AG	49	4.4	.0	10.0
M. Oak Gle NBAX	5	-750	5	-150	AG	1408	2.2	.0	13.5
N. Oak Gle NBDX	5	150	5	750	AG	1350	2.2	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	772	2.2	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	796	2.2	.0	10.0
Q. Colorad EBAX	-750	0	-150	0	AG	0	2.3	.0	10.0
R. Colorad EBDX	150	0	750	0	AG	111	2.3	.0	10.0
S. Colorad WBAX	750	0	150	0	AG	77	2.3	.0	10.0
T. Colorad WBDX	-150	0	-750	0	AG	0	2.3	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-7	1.8
2. NW	-14	7	1.8
3. SW	-14	-7	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	188.	1.0	.8	.0	.0	.0	.0	.0	.0	.0
2. NW	171.	.7	.3	.0	.0	.0	.3	.0	.0	.0
3. SW	171.	.7	.3	.0	.0	.0	.3	.0	.0	.0
4. NE	186.	1.1	.8	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	92.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	1.0	.8	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.8	.1	.1	.0	.4	.0	.0	.0	.0
11. SW mdblk	9.	.7	.3	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	186.	.8	.1	.4	.0	.0	.0	.0	.0	.0
13. ES blk	274.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	93.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.7	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.6	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.6	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.7	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2014wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.5	.0	.0	.1	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.2	.3	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0	.0

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

FUTURE YEAR (2035) WITHOUT PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 16th Str NBA	0	-150	0	0	AG	27	1.4	.0	10.0
B. 16th Str NBD	0	0	0	150	AG	0	.9	.0	10.0
C. 16th Str NBL	2	-150	0	0	AG	188	1.6	.0	10.0
D. 16th Str SBA	0	150	0	0	AG	0	.9	.0	10.0
E. 16th Str SBD	0	0	0	-150	AG	229	1.0	.0	10.0
F. 16th Str SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Sand Can EBA	-150	-4	0	-4	AG	766	1.2	.0	10.0
H. Sand Can EBD	0	-4	150	-4	AG	582	.9	.0	10.0
I. Sand Can EBL	-150	-2	0	0	AG	0	.8	.0	10.0
J. Sand Can WBA	150	7	0	7	AG	435	1.2	.0	10.0
K. Sand Can WBD	0	7	-150	7	AG	623	.9	.0	10.0
L. Sand Can WBL	150	5	0	0	AG	18	1.5	.0	10.0
M. 16th St NBAX	0	-750	0	-150	AG	215	.9	.0	10.0
N. 16th St NBDX	0	150	0	750	AG	0	.9	.0	10.0
O. 16th St SBAX	0	750	0	150	AG	0	.9	.0	10.0
P. 16th St SBDX	0	-150	0	-750	AG	229	.9	.0	10.0
Q. Sand Ca EBAX	-750	-4	-150	-4	AG	766	.8	.0	10.0
R. Sand Ca EBDX	150	-4	750	-4	AG	582	.8	.0	10.0
S. Sand Ca WBAX	750	7	150	7	AG	453	.8	.0	10.0
T. Sand Ca WBDX	-150	7	-750	7	AG	623	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.2	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.2	.0	.0	.0	.0	.0	.0	.1	.0
4. NE	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	182.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Campus D NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Campus D NBD	0	0	0	150	AG	218	1.0	.0	10.0
C. Campus D NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Campus D SBA	-5	150	-5	0	AG	16	1.4	.0	10.0
E. Campus D SBD	-5	0	-5	-150	AG	0	.9	.0	10.0
F. Campus D SBL	-5	150	0	0	AG	129	1.6	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	567	1.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	696	.9	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	15	1.5	.0	10.0
J. Sand Can WBA	150	5	0	5	AG	640	1.2	.0	13.5
K. Sand Can WBD	0	5	-150	5	AG	453	.9	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Campus NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Campus NBDX	0	150	0	750	AG	218	.9	.0	10.0
O. Campus SBAX	-5	750	-5	150	AG	145	.9	.0	10.0
P. Campus SBDX	-5	-150	-5	-750	AG	0	.9	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	582	.8	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	696	.8	.0	10.0
S. Sand Ca WBAX	750	5	150	5	AG	640	.8	.0	13.5
T. Sand Ca WBDX	-150	5	-750	5	AG	453	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	3.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	1.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Chapman NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Chapman NBD	0	0	0	150	AG	334	1.1	.0	10.0
C. Chapman NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Chapman SBA	-5	150	-5	0	AG	159	1.4	.0	10.0
E. Chapman SBD	-5	0	-5	-150	AG	0	.9	.0	10.0
F. Chapman SBL	-5	150	0	0	AG	21	1.6	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	428	1.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	449	.9	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	268	1.6	.0	10.0
J. Sand Can WBA	150	4	0	4	AG	547	1.2	.0	10.0
K. Sand Can WBD	0	4	-150	4	AG	640	.9	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Chapman NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Chapman NBDX	0	150	0	750	AG	334	.9	.0	10.0
O. Chapman SBAX	-5	750	-5	150	AG	180	.9	.0	10.0
P. Chapman SBDX	-5	-150	-5	-750	AG	0	.9	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	696	.8	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	449	.8	.0	10.0
S. Sand Ca WBAX	750	4	150	4	AG	547	.8	.0	10.0
T. Sand Ca WBDX	-150	4	-750	4	AG	640	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	10	1.8
3. SW	-12	-14	1.8
4. NE	7	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	261.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	191.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tennesse NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Tennesse NBD	0	0	0	150	AG	42	1.0	.0	10.0
C. Tennesse NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Tennesse SBA	0	150	0	0	AG	1	1.4	.0	10.0
E. Tennesse SBD	0	0	0	-150	AG	0	.9	.0	10.0
F. Tennesse SBL	-2	150	0	0	AG	30	1.6	.0	10.0
G. Yucaipa EBA	-150	-4	0	-4	AG	1234	1.3	.0	10.0
H. Yucaipa EBD	0	-4	150	-4	AG	1264	.9	.0	10.0
I. Yucaipa EBL	-150	-2	0	0	AG	0	.8	.0	10.0
J. Yucaipa WBA	150	5	0	5	AG	1084	1.3	.0	13.5
K. Yucaipa WBD	0	5	-150	5	AG	1043	.9	.0	10.0
L. Yucaipa WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Tenness NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Tenness NBDX	0	150	0	750	AG	42	.9	.0	10.0
O. Tenness SBAX	0	750	0	150	AG	31	.9	.0	10.0
P. Tenness SBDX	0	-150	0	-750	AG	0	.9	.0	10.0
Q. Yucaipa EBAX	-750	-4	-150	-4	AG	1234	.8	.0	10.0
R. Yucaipa EBDX	150	-4	750	-4	AG	1264	.8	.0	10.0
S. Yucaipa WBAX	750	5	150	5	AG	1084	.8	.0	13.5
T. Yucaipa WBDX	-150	5	-750	5	AG	1043	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	12	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.3	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.3	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	176.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	1.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	184.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 14th Str NBA	5	-150	5	0	AG	288	1.4	.0	11.8
B. 14th Str NBD	5	0	5	150	AG	489	1.0	.0	10.0
C. 14th Str NBL	2	-150	0	0	AG	59	1.6	.0	10.0
D. 14th Str SBA	-7	150	-7	0	AG	258	1.5	.0	10.0
E. 14th Str SBD	-7	0	-7	-150	AG	339	1.1	.0	10.0
F. 14th Str SBL	-5	150	0	0	AG	178	1.6	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	1144	1.3	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	1335	.9	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	88	1.5	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	1161	1.3	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	1101	.9	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	88	1.5	.0	10.0
M. 14th St NBAX	5	-750	5	-150	AG	347	.9	.0	11.8
N. 14th St NBDX	5	150	5	750	AG	489	.9	.0	10.0
O. 14th St SBAX	-7	750	-7	150	AG	436	.9	.0	10.0
P. 14th St SBDX	-7	-150	-7	-750	AG	339	.9	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	1232	.8	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	1335	.8	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	1249	.8	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	1101	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	13	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.4	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	81.	.4	.0	.0	.0	.0	.0	.0	.0	.1
4. NE	260.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1502	1.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	1411	1.6	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	156	1.6	.0	10.0
D. Oak Glen SBA	-9	150	-9	0	AG	1104	1.6	.0	13.5
E. Oak Glen SBD	-9	0	-9	-150	AG	1053	1.6	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	272	1.6	.0	10.0
G. Yucaipa EBA	-150	-12	0	-12	AG	917	1.2	.0	13.5
H. Yucaipa EBD	0	-12	150	-12	AG	1659	.9	.0	11.8
I. Yucaipa EBL	-150	-9	0	0	AG	436	1.6	.0	10.0
J. Yucaipa WBA	150	12	0	12	AG	753	1.2	.0	13.5
K. Yucaipa WBD	0	12	-150	12	AG	1350	.9	.0	11.8
L. Yucaipa WBL	150	9	0	0	AG	333	1.5	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	1658	.9	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	1411	.9	.0	10.0
O. Oak Gle SBAX	-9	750	-9	150	AG	1376	.9	.0	13.5
P. Oak Gle SBDX	-9	-150	-9	-750	AG	1053	.9	.0	10.0
Q. Yucaipa EBAX	-750	-12	-150	-12	AG	1353	.8	.0	13.5
R. Yucaipa EBDX	150	-12	750	-12	AG	1659	.8	.0	11.8
S. Yucaipa WBAX	750	12	150	12	AG	1086	.8	.0	13.5
T. Yucaipa WBDX	-150	12	-750	12	AG	1350	.8	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-20	1.8
2. NW	-17	20	1.8
3. SW	-15	-21	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-20	1.8
6. WN mdblk	-150	20	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-20	1.8
14. WN blk	-600	20	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	.7	.1	.2	.0	.0	.0	.0	.0	.1
2. NW	170.	.5	.0	.0	.0	.0	.2	.0	.0	.0
3. SW	9.	.6	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	189.	.6	.2	.1	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	261.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.5	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	8.	.5	.0	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	188.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	2	-150	2	0	AG	66	1.4	.0	10.0
B. Californ NBD	2	0	2	150	AG	87	1.0	.0	10.0
C. Californ NBL	2	-150	0	0	AG	81	1.6	.0	10.0
D. Californ SBA	-2	150	-2	0	AG	56	1.4	.0	10.0
E. Californ SBD	-2	0	-2	-150	AG	114	1.0	.0	10.0
F. Californ SBL	-2	150	0	0	AG	5	1.6	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	881	1.2	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	839	.9	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	52	1.5	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	338	1.2	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	453	.9	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	14	1.5	.0	10.0
M. Califor NBAX	2	-750	2	-150	AG	147	.9	.0	10.0
N. Califor NBDX	2	150	2	750	AG	87	.9	.0	10.0
O. Califor SBAX	-2	750	-2	150	AG	61	.9	.0	10.0
P. Califor SBDX	-2	-150	-2	-750	AG	114	.9	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	933	.8	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	839	.8	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	352	.8	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	453	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-8	14	1.8
3. SW	-8	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.2	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.2	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.2	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1923	1.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	1775	1.1	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	53	1.6	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	1054	1.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	1208	1.0	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	76	1.6	.0	10.0
G. Avenue E EBA	-150	-7	0	-7	AG	231	1.5	.0	10.0
H. Avenue E EBD	0	-7	150	-7	AG	593	1.6	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	94	1.6	.0	10.0
J. Avenue E WBA	150	7	0	7	AG	172	1.4	.0	10.0
K. Avenue E WBD	0	7	-150	7	AG	199	1.0	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	172	1.6	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	1976	.9	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	1775	.9	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	1130	.9	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	1208	.9	.0	10.0
Q. Avenue EBAX	-750	-7	-150	-7	AG	325	.9	.0	10.0
R. Avenue EBDX	150	-7	750	-7	AG	593	.9	.0	10.0
S. Avenue WBAX	750	7	150	7	AG	344	.9	.0	10.0
T. Avenue WBDX	-150	7	-750	7	AG	199	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	.5	.1	.2	.0	.0	.0	.0	.0	.0
2. NW	170.	.4	.1	.0	.0	.0	.1	.0	.0	.0
3. SW	82.	.4	.1	.0	.0	.0	.0	.0	.0	.1
4. NE	188.	.6	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	259.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.4	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	9.	.4	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.4	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 5th Stre NBA	2	-150	2	0	AG	285	1.3	.0	10.0
B. 5th Stre NBD	2	0	2	150	AG	358	1.0	.0	10.0
C. 5th Stre NBL	2	-150	0	0	AG	27	1.6	.0	10.0
D. 5th Stre SBA	-2	150	-2	0	AG	323	1.3	.0	10.0
E. 5th Stre SBD	-2	0	-2	-150	AG	345	1.0	.0	10.0
F. 5th Stre SBL	-2	150	0	0	AG	103	1.6	.0	10.0
G. Avenue E EBA	-150	-2	0	-2	AG	362	1.3	.0	10.0
H. Avenue E EBD	0	-2	150	-2	AG	477	1.0	.0	10.0
I. Avenue E EBL	-150	-2	0	0	AG	54	1.6	.0	10.0
J. Avenue E WBA	150	2	0	2	AG	274	1.3	.0	10.0
K. Avenue E WBD	0	2	-150	2	AG	295	.9	.0	10.0
L. Avenue E WBL	150	2	0	0	AG	47	1.6	.0	10.0
M. 5th Str NBAX	2	-750	2	-150	AG	312	.9	.0	10.0
N. 5th Str NBDX	2	150	2	750	AG	358	.9	.0	10.0
O. 5th Str SBAX	-2	750	-2	150	AG	426	.9	.0	10.0
P. 5th Str SBDX	-2	-150	-2	-750	AG	345	.9	.0	10.0
Q. Avenue EBAX	-750	-2	-150	-2	AG	416	.9	.0	10.0
R. Avenue EBDX	150	-2	750	-2	AG	477	.9	.0	10.0
S. Avenue WBAX	750	2	150	2	AG	321	.9	.0	10.0
T. Avenue WBDX	-150	2	-750	2	AG	295	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	8	8	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	8	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	8	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	8	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	8	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	7	-150	7	0	AG	227	1.2	.0	10.0
B. Californ NBD	7	0	7	150	AG	186	.9	.0	10.0
C. Californ NBL	5	-150	0	0	AG	71	1.6	.0	10.0
D. Californ SBA	-7	150	-7	0	AG	128	1.2	.0	10.0
E. Californ SBD	-7	0	-7	-150	AG	229	.9	.0	10.0
F. Californ SBL	-5	150	0	0	AG	20	1.6	.0	10.0
G. Avenue E EBA	-150	-5	0	-5	AG	313	1.6	.0	10.0
H. Avenue E EBD	0	-5	150	-5	AG	358	1.1	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	49	1.6	.0	10.0
J. Avenue E WBA	150	5	0	5	AG	163	1.4	.0	10.0
K. Avenue E WBD	0	5	-150	5	AG	247	1.0	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	49	1.6	.0	10.0
M. Califor NBAX	7	-750	7	-150	AG	298	.9	.0	10.0
N. Califor NBDX	7	150	7	750	AG	186	.9	.0	10.0
O. Califor SBAX	-7	750	-7	150	AG	148	.9	.0	10.0
P. Califor SBDX	-7	-150	-7	-750	AG	229	.9	.0	10.0
Q. Avenue EBAX	-750	-5	-150	-5	AG	362	.9	.0	10.0
R. Avenue EBDX	150	-5	750	-5	AG	358	.9	.0	10.0
S. Avenue WBAX	750	5	150	5	AG	212	.9	.0	10.0
T. Avenue WBDX	-150	5	-750	5	AG	247	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-12	1.8
2. NW	-14	12	1.8
3. SW	-14	-12	1.8
4. NE	14	12	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	12	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	172.	.1	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.1	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	262.	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	5	-150	5	0	AG	2174	1.6	.0	13.5
B. Oak Glen NBD	5	0	5	150	AG	2041	1.2	.0	10.0
C. Oak Glen NBL	2	-150	0	0	AG	0	.8	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	1224	1.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	1345	.9	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	29	1.5	.0	10.0
G. Colorado EBA	-150	0	0	0	AG	0	.9	.0	10.0
H. Colorado EBD	0	0	150	0	AG	185	1.0	.0	10.0
I. Colorado EBL	-150	-2	0	0	AG	0	.9	.0	10.0
J. Colorado WBA	150	0	0	0	AG	23	1.4	.0	10.0
K. Colorado WBD	0	0	-150	0	AG	0	.9	.0	10.0
L. Colorado WBL	150	2	0	0	AG	121	1.6	.0	10.0
M. Oak Gle NBAX	5	-750	5	-150	AG	2174	.8	.0	13.5
N. Oak Gle NBDX	5	150	5	750	AG	2041	.8	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	1253	.8	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	1345	.8	.0	10.0
Q. Colorad EBAX	-750	0	-150	0	AG	0	.9	.0	10.0
R. Colorad EBDX	150	0	750	0	AG	185	.9	.0	10.0
S. Colorad WBAX	750	0	150	0	AG	144	.9	.0	10.0
T. Colorad WBDX	-150	0	-750	0	AG	0	.9	.0	10.0

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-7	1.8
2. NW	-14	7	1.8
3. SW	-14	-7	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	189.	.6	.4	.0	.0	.0	.0	.0	.0	.0
2. NW	170.	.4	.2	.0	.0	.0	.2	.0	.0	.0
3. SW	170.	.4	.2	.0	.0	.0	.2	.0	.0	.0
4. NE	187.	.6	.5	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	279.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.4	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	9.	.4	.2	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.5	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.3	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035nP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY CO HOT SPOT ANALYSIS

CALINE4 MODEL PRINTOUTS

FUTURE YEAR (2035) WITH PROJECT SCENARIO

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 16th Str NBA	0	-150	0	0	AG	80	1.4	.0	10.0
B. 16th Str NBD	0	0	0	150	AG	0	.9	.0	10.0
C. 16th Str NBL	2	-150	0	0	AG	213	1.6	.0	10.0
D. 16th Str SBA	0	150	0	0	AG	0	.9	.0	10.0
E. 16th Str SBD	0	0	0	-150	AG	303	1.1	.0	10.0
F. 16th Str SBL	-2	150	0	0	AG	0	.9	.0	10.0
G. Sand Can EBA	-150	-4	0	-4	AG	849	1.2	.0	10.0
H. Sand Can EBD	0	-4	150	-4	AG	686	.9	.0	10.0
I. Sand Can EBL	-150	-2	0	0	AG	0	.8	.0	10.0
J. Sand Can WBA	150	7	0	7	AG	473	1.2	.0	10.0
K. Sand Can WBD	0	7	-150	7	AG	686	.9	.0	10.0
L. Sand Can WBL	150	5	0	0	AG	60	1.5	.0	10.0
M. 16th St NBAX	0	-750	0	-150	AG	293	.9	.0	10.0
N. 16th St NBDX	0	150	0	750	AG	0	.9	.0	10.0
O. 16th St SBAX	0	750	0	150	AG	0	.9	.0	10.0
P. 16th St SBDX	0	-150	0	-750	AG	303	.9	.0	10.0
Q. Sand Ca EBAX	-750	-4	-150	-4	AG	849	.8	.0	10.0
R. Sand Ca EBDX	150	-4	750	-4	AG	686	.8	.0	10.0
S. Sand Ca WBAX	750	7	150	7	AG	533	.8	.0	10.0
T. Sand Ca WBDX	-150	7	-750	7	AG	686	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	14	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.3	.0	.0	.0	.0	.0	.0	.1	.0
2. NW	175.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	185.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	179.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	9.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	182.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	180.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	181.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-01 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Campus D NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Campus D NBD	0	0	0	150	AG	218	1.0	.0	10.0
C. Campus D NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Campus D SBA	-5	150	-5	0	AG	16	1.4	.0	10.0
E. Campus D SBD	-5	0	-5	-150	AG	0	.9	.0	10.0
F. Campus D SBL	-5	150	0	0	AG	129	1.6	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	636	1.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	765	.9	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	15	1.5	.0	10.0
J. Sand Can WBA	150	5	0	5	AG	717	1.2	.0	13.5
K. Sand Can WBD	0	5	-150	5	AG	530	.9	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Campus NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Campus NBDX	0	150	0	750	AG	218	.9	.0	10.0
O. Campus SBAX	-5	750	-5	150	AG	145	.9	.0	10.0
P. Campus SBDX	-5	-150	-5	-750	AG	0	.9	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	651	.8	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	765	.8	.0	10.0
S. Sand Ca WBAX	750	5	150	5	AG	717	.8	.0	13.5
T. Sand Ca WBDX	-150	5	-750	5	AG	530	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	12	1.8
3. SW	-12	-14	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	82.	.2	.0	.0	.0	.0	.0	.0	.0	.1
2. NW	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.1	.0
8. EN mdblk	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	169.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	3.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	189.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	1.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-02 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Chapman NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Chapman NBD	0	0	0	150	AG	338	1.1	.0	10.0
C. Chapman NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Chapman SBA	-5	150	-5	0	AG	164	1.4	.0	10.0
E. Chapman SBD	-5	0	-5	-150	AG	0	.9	.0	10.0
F. Chapman SBL	-5	150	0	0	AG	21	1.6	.0	10.0
G. Sand Can EBA	-150	-7	0	-7	AG	493	1.2	.0	10.0
H. Sand Can EBD	0	-7	150	-7	AG	514	.9	.0	10.0
I. Sand Can EBL	-150	-5	0	0	AG	272	1.6	.0	10.0
J. Sand Can WBA	150	4	0	4	AG	618	1.2	.0	10.0
K. Sand Can WBD	0	4	-150	4	AG	716	.9	.0	10.0
L. Sand Can WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Chapman NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Chapman NBDX	0	150	0	750	AG	338	.9	.0	10.0
O. Chapman SBAX	-5	750	-5	150	AG	185	.9	.0	10.0
P. Chapman SBDX	-5	-150	-5	-750	AG	0	.9	.0	10.0
Q. Sand Ca EBAX	-750	-7	-150	-7	AG	765	.8	.0	10.0
R. Sand Ca EBDX	150	-7	750	-7	AG	514	.8	.0	10.0
S. Sand Ca WBAX	750	4	150	4	AG	618	.8	.0	10.0
T. Sand Ca WBDX	-150	4	-750	4	AG	716	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-14	1.8
2. NW	-12	10	1.8
3. SW	-12	-14	1.8
4. NE	7	10	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	10	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	10	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-12	150	1.8
11. SW mdblk	-12	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	10	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	10	1.8
17. SE blk	7	-600	1.8
18. NW blk	-12	600	1.8
19. SW blk	-12	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	261.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	357.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	170.	.1	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	191.	.1	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	358.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-03 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Tennesse NBA	0	-150	0	0	AG	0	.9	.0	10.0
B. Tennesse NBD	0	0	0	150	AG	69	1.0	.0	10.0
C. Tennesse NBL	2	-150	0	0	AG	0	.9	.0	10.0
D. Tennesse SBA	0	150	0	0	AG	1	1.4	.0	10.0
E. Tennesse SBD	0	0	0	-150	AG	0	.9	.0	10.0
F. Tennesse SBL	-2	150	0	0	AG	51	1.6	.0	10.0
G. Yucaipa EBA	-150	-4	0	-4	AG	1322	1.3	.0	10.0
H. Yucaipa EBD	0	-4	150	-4	AG	1373	.9	.0	10.0
I. Yucaipa EBL	-150	-2	0	0	AG	0	.8	.0	10.0
J. Yucaipa WBA	150	5	0	5	AG	1178	1.3	.0	13.5
K. Yucaipa WBD	0	5	-150	5	AG	1110	.9	.0	10.0
L. Yucaipa WBL	150	2	0	0	AG	0	.8	.0	10.0
M. Tenness NBAX	0	-750	0	-150	AG	0	.9	.0	10.0
N. Tenness NBDX	0	150	0	750	AG	69	.9	.0	10.0
O. Tenness SBAX	0	750	0	150	AG	52	.9	.0	10.0
P. Tenness SBDX	0	-150	0	-750	AG	0	.9	.0	10.0
Q. Yucaipa EBAX	-750	-4	-150	-4	AG	1322	.8	.0	10.0
R. Yucaipa EBDX	150	-4	750	-4	AG	1373	.8	.0	10.0
S. Yucaipa WBAX	750	5	150	5	AG	1178	.8	.0	13.5
T. Yucaipa WBDX	-150	5	-750	5	AG	1110	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	7	-10	1.8
2. NW	-7	12	1.8
3. SW	-7	-10	1.8
4. NE	7	14	1.8
5. ES mdblk	150	-10	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-10	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	7	-150	1.8
10. NW mdblk	-7	150	1.8
11. SW mdblk	-7	-150	1.8
12. NE mdblk	7	150	1.8
13. ES blk	600	-10	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-10	1.8
16. EN blk	600	14	1.8
17. SE blk	7	-600	1.8
18. NW blk	-7	600	1.8
19. SW blk	-7	-600	1.8
20. NE blk	7	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.3	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	97.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.4	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.3	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	359.	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	2.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	188.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	360.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	175.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	1.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-04 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 14th Str NBA	5	-150	5	0	AG	333	1.4	.0	11.8
B. 14th Str NBD	5	0	5	150	AG	576	1.0	.0	10.0
C. 14th Str NBL	2	-150	0	0	AG	110	1.6	.0	10.0
D. 14th Str SBA	-7	150	-7	0	AG	296	1.5	.0	10.0
E. 14th Str SBD	-7	0	-7	-150	AG	419	1.4	.0	10.0
F. 14th Str SBL	-5	150	0	0	AG	218	1.6	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	1269	1.3	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	1458	1.0	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	88	1.5	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	1300	1.3	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	1249	.9	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	88	1.5	.0	10.0
M. 14th St NBAX	5	-750	5	-150	AG	443	.9	.0	11.8
N. 14th St NBDX	5	150	5	750	AG	576	.9	.0	10.0
O. 14th St SBAX	-7	750	-7	150	AG	514	.9	.0	10.0
P. 14th St SBDX	-7	-150	-7	-750	AG	419	.9	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	1357	.8	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	1458	.8	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	1388	.8	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	1249	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	13	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	12	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	13	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	13	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	278.	.4	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	81.	.4	.0	.0	.0	.0	.0	.0	.0	.2
4. NE	260.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	353.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	187.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.2	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-05 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1554	1.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	1444	1.6	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	156	1.6	.0	10.0
D. Oak Glen SBA	-9	150	-9	0	AG	1148	1.6	.0	13.5
E. Oak Glen SBD	-9	0	-9	-150	AG	1125	1.6	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	272	1.6	.0	10.0
G. Yucaipa EBA	-150	-12	0	-12	AG	991	1.2	.0	13.5
H. Yucaipa EBD	0	-12	150	-12	AG	1769	.9	.0	11.8
I. Yucaipa EBL	-150	-9	0	0	AG	453	1.6	.0	10.0
J. Yucaipa WBA	150	12	0	12	AG	834	1.2	.0	13.5
K. Yucaipa WBD	0	12	-150	12	AG	1452	.9	.0	11.8
L. Yucaipa WBL	150	9	0	0	AG	382	1.5	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	1710	.9	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	1444	.9	.0	10.0
O. Oak Gle SBAX	-9	750	-9	150	AG	1420	.9	.0	13.5
P. Oak Gle SBDX	-9	-150	-9	-750	AG	1125	.9	.0	10.0
Q. Yucaipa EBAX	-750	-12	-150	-12	AG	1444	.8	.0	13.5
R. Yucaipa EBDX	150	-12	750	-12	AG	1769	.8	.0	11.8
S. Yucaipa WBAX	750	12	150	12	AG	1216	.8	.0	13.5
T. Yucaipa WBDX	-150	12	-750	12	AG	1452	.8	.0	11.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-20	1.8
2. NW	-17	20	1.8
3. SW	-15	-21	1.8
4. NE	14	21	1.8
5. ES mdblk	150	-20	1.8
6. WN mdblk	-150	20	1.8
7. WS mdblk	-150	-21	1.8
8. EN mdblk	150	21	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-17	150	1.8
11. SW mdblk	-15	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-20	1.8
14. WN blk	-600	20	1.8
15. WS blk	-600	-21	1.8
16. EN blk	600	21	1.8
17. SE blk	14	-600	1.8
18. NW blk	-17	600	1.8
19. SW blk	-15	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	351.	.7	.1	.2	.0	.0	.0	.0	.0	.1
2. NW	170.	.6	.0	.0	.0	.0	.2	.0	.0	.0
3. SW	9.	.6	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	189.	.6	.2	.1	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.4	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	98.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	81.	.4	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	261.	.4	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.3	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	171.	.5	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	8.	.5	.0	.0	.0	.0	.3	.0	.0	.0
12. NE mdblk	188.	.6	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	277.	.3	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.3	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	83.	.3	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.3	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-06 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
17. SE blk	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	2	-150	2	0	AG	68	1.4	.0	10.0
B. Californ NBD	2	0	2	150	AG	88	1.0	.0	10.0
C. Californ NBL	2	-150	0	0	AG	100	1.6	.0	10.0
D. Californ SBA	-2	150	-2	0	AG	58	1.4	.0	10.0
E. Californ SBD	-2	0	-2	-150	AG	144	1.0	.0	10.0
F. Californ SBL	-2	150	0	0	AG	5	1.6	.0	10.0
G. Yucaipa EBA	-150	-7	0	-7	AG	936	1.2	.0	10.0
H. Yucaipa EBD	0	-7	150	-7	AG	868	.9	.0	10.0
I. Yucaipa EBL	-150	-5	0	0	AG	52	1.5	.0	10.0
J. Yucaipa WBA	150	7	0	7	AG	375	1.2	.0	10.0
K. Yucaipa WBD	0	7	-150	7	AG	509	.9	.0	10.0
L. Yucaipa WBL	150	5	0	0	AG	15	1.5	.0	10.0
M. Califor NBAX	2	-750	2	-150	AG	168	.9	.0	10.0
N. Califor NBDX	2	150	2	750	AG	88	.9	.0	10.0
O. Califor SBAX	-2	750	-2	150	AG	63	.9	.0	10.0
P. Califor SBDX	-2	-150	-2	-750	AG	144	.9	.0	10.0
Q. Yucaipa EBAX	-750	-7	-150	-7	AG	988	.8	.0	10.0
R. Yucaipa EBDX	150	-7	750	-7	AG	868	.8	.0	10.0
S. Yucaipa WBAX	750	7	150	7	AG	390	.8	.0	10.0
T. Yucaipa WBDX	-150	7	-750	7	AG	509	.8	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-14	1.8
2. NW	-8	14	1.8
3. SW	-8	-14	1.8
4. NE	8	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.3	.0	.0	.0	.0	.0	.0	.2	.0
2. NW	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	278.	.2	.0	.0	.0	.0	.0	.0	.2	.0
4. NE	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.1
6. WN mdblk	98.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	82.	.2	.0	.0	.0	.0	.0	.0	.2	.0
8. EN mdblk	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	7.	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	177.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	185.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-07 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	7	-150	7	0	AG	1997	1.6	.0	10.0
B. Oak Glen NBD	7	0	7	150	AG	1831	1.2	.0	10.0
C. Oak Glen NBL	5	-150	0	0	AG	77	1.6	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	1133	1.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	1346	1.0	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	76	1.6	.0	10.0
G. Avenue E EBA	-150	-7	0	-7	AG	270	1.5	.0	10.0
H. Avenue E EBD	0	-7	150	-7	AG	615	1.6	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	94	1.6	.0	10.0
J. Avenue E WBA	150	7	0	7	AG	177	1.4	.0	10.0
K. Avenue E WBD	0	7	-150	7	AG	228	1.0	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	196	1.6	.0	10.0
M. Oak Gle NBAX	7	-750	7	-150	AG	2074	.9	.0	10.0
N. Oak Gle NBDX	7	150	7	750	AG	1831	.9	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	1209	.9	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	1346	.9	.0	10.0
Q. Avenue EBAX	-750	-7	-150	-7	AG	364	.9	.0	10.0
R. Avenue EBDX	150	-7	750	-7	AG	615	.9	.0	10.0
S. Avenue WBAX	750	7	150	7	AG	373	.9	.0	10.0
T. Avenue WBDX	-150	7	-750	7	AG	228	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-14	1.8
2. NW	-14	14	1.8
3. SW	-14	-14	1.8
4. NE	14	14	1.8
5. ES mdblk	150	-14	1.8
6. WN mdblk	-150	14	1.8
7. WS mdblk	-150	-14	1.8
8. EN mdblk	150	14	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-14	1.8
14. WN blk	-600	14	1.8
15. WS blk	-600	-14	1.8
16. EN blk	600	14	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	350.	.6	.1	.2	.0	.0	.0	.0	.0	.0
2. NW	170.	.4	.1	.0	.0	.0	.2	.0	.0	.0
3. SW	8.	.4	.0	.0	.0	.2	.0	.0	.0	.0
4. NE	188.	.6	.3	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.3	.0	.0	.0	.0	.0	.0	.0	.2
6. WN mdblk	97.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	85.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	259.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.4	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.4	.0	.0	.0	.2	.0	.0	.0	.0
11. SW mdblk	9.	.4	.1	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.5	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	85.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-08 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. 5th Stre NBA	2	-150	2	0	AG	285	1.3	.0	10.0
B. 5th Stre NBD	2	0	2	150	AG	360	1.0	.0	10.0
C. 5th Stre NBL	2	-150	0	0	AG	27	1.6	.0	10.0
D. 5th Stre SBA	-2	150	-2	0	AG	323	1.3	.0	10.0
E. 5th Stre SBD	-2	0	-2	-150	AG	345	1.0	.0	10.0
F. 5th Stre SBL	-2	150	0	0	AG	107	1.6	.0	10.0
G. Avenue E EBA	-150	-2	0	-2	AG	373	1.3	.0	10.0
H. Avenue E EBD	0	-2	150	-2	AG	492	1.0	.0	10.0
I. Avenue E EBL	-150	-2	0	0	AG	54	1.6	.0	10.0
J. Avenue E WBA	150	2	0	2	AG	290	1.3	.0	10.0
K. Avenue E WBD	0	2	-150	2	AG	309	1.0	.0	10.0
L. Avenue E WBL	150	2	0	0	AG	47	1.6	.0	10.0
M. 5th Str NBAX	2	-750	2	-150	AG	312	.9	.0	10.0
N. 5th Str NBDX	2	150	2	750	AG	360	.9	.0	10.0
O. 5th Str SBAX	-2	750	-2	150	AG	430	.9	.0	10.0
P. 5th Str SBDX	-2	-150	-2	-750	AG	345	.9	.0	10.0
Q. Avenue EBAX	-750	-2	-150	-2	AG	427	.9	.0	10.0
R. Avenue EBDX	150	-2	750	-2	AG	492	.9	.0	10.0
S. Avenue WBAX	750	2	150	2	AG	337	.9	.0	10.0
T. Avenue WBDX	-150	2	-750	2	AG	309	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	8	-8	1.8
2. NW	-8	8	1.8
3. SW	-8	-8	1.8
4. NE	8	8	1.8
5. ES mdblk	150	-8	1.8
6. WN mdblk	-150	8	1.8
7. WS mdblk	-150	-8	1.8
8. EN mdblk	150	8	1.8
9. SE mdblk	8	-150	1.8
10. NW mdblk	-8	150	1.8
11. SW mdblk	-8	-150	1.8
12. NE mdblk	8	150	1.8
13. ES blk	600	-8	1.8
14. WN blk	-600	8	1.8
15. WS blk	-600	-8	1.8
16. EN blk	600	8	1.8
17. SE blk	8	-600	1.8
18. NW blk	-8	600	1.8
19. SW blk	-8	-600	1.8
20. NE blk	8	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	353.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	264.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	173.	.2	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	6.	.2	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.2	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	95.	.1	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	355.	.1	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.1	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	5.	.1	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.1	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-09 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Californ NBA	7	-150	7	0	AG	247	1.2	.0	10.0
B. Californ NBD	7	0	7	150	AG	198	.9	.0	10.0
C. Californ NBL	5	-150	0	0	AG	78	1.6	.0	10.0
D. Californ SBA	-7	150	-7	0	AG	154	1.2	.0	10.0
E. Californ SBD	-7	0	-7	-150	AG	287	.9	.0	10.0
F. Californ SBL	-5	150	0	0	AG	20	1.6	.0	10.0
G. Avenue E EBA	-150	-5	0	-5	AG	331	1.6	.0	10.0
H. Avenue E EBD	0	-5	150	-5	AG	369	1.1	.0	10.0
I. Avenue E EBL	-150	-5	0	0	AG	49	1.6	.0	10.0
J. Avenue E WBA	150	5	0	5	AG	167	1.4	.0	10.0
K. Avenue E WBD	0	5	-150	5	AG	258	1.0	.0	10.0
L. Avenue E WBL	150	5	0	0	AG	66	1.6	.0	10.0
M. Califor NBAX	7	-750	7	-150	AG	325	.9	.0	10.0
N. Califor NBDX	7	150	7	750	AG	198	.9	.0	10.0
O. Califor SBAX	-7	750	-7	150	AG	174	.9	.0	10.0
P. Califor SBDX	-7	-150	-7	-750	AG	287	.9	.0	10.0
Q. Avenue EBAX	-750	-5	-150	-5	AG	380	.9	.0	10.0
R. Avenue EBDX	150	-5	750	-5	AG	369	.9	.0	10.0
S. Avenue WBAX	750	5	150	5	AG	233	.9	.0	10.0
T. Avenue WBDX	-150	5	-750	5	AG	258	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-12	1.8
2. NW	-14	12	1.8
3. SW	-14	-12	1.8
4. NE	14	12	1.8
5. ES mdblk	150	-12	1.8
6. WN mdblk	-150	12	1.8
7. WS mdblk	-150	-12	1.8
8. EN mdblk	150	12	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	14	150	1.8
13. ES blk	600	-12	1.8
14. WN blk	-600	12	1.8
15. WS blk	-600	-12	1.8
16. EN blk	600	12	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	14	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	277.	.2	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	172.	.1	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	82.	.2	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	187.	.1	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	97.	.1	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	83.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	263.	.1	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.1	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	8.	.1	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	276.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	96.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	84.	.1	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	264.	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	354.	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	174.	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	6.	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	186.	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-10 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	671. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	.0 PPM		
SIGTH=	10. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Oak Glen NBA	5	-150	5	0	AG	2412	1.6	.0	13.5
B. Oak Glen NBD	5	0	5	150	AG	2298	1.2	.0	10.0
C. Oak Glen NBL	2	-150	0	0	AG	0	.8	.0	10.0
D. Oak Glen SBA	-7	150	-7	0	AG	1386	1.3	.0	10.0
E. Oak Glen SBD	-7	0	-7	-150	AG	1512	1.0	.0	10.0
F. Oak Glen SBL	-5	150	0	0	AG	45	1.5	.0	10.0
G. Colorado EBA	-150	0	0	0	AG	0	.9	.0	10.0
H. Colorado EBD	0	0	150	0	AG	205	1.0	.0	10.0
I. Colorado EBL	-150	-2	0	0	AG	0	.9	.0	10.0
J. Colorado WBA	150	0	0	0	AG	46	1.4	.0	10.0
K. Colorado WBD	0	0	-150	0	AG	0	.9	.0	10.0
L. Colorado WBL	150	2	0	0	AG	126	1.6	.0	10.0
M. Oak Gle NBAX	5	-750	5	-150	AG	2412	.8	.0	13.5
N. Oak Gle NBDX	5	150	5	750	AG	2298	.8	.0	10.0
O. Oak Gle SBAX	-7	750	-7	150	AG	1431	.8	.0	10.0
P. Oak Gle SBDX	-7	-150	-7	-750	AG	1512	.8	.0	10.0
Q. Colorad EBAX	-750	0	-150	0	AG	0	.9	.0	10.0
R. Colorad EBDX	150	0	750	0	AG	205	.9	.0	10.0
S. Colorad WBAX	750	0	150	0	AG	172	.9	.0	10.0
T. Colorad WBDX	-150	0	-750	0	AG	0	.9	.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. SE	14	-7	1.8
2. NW	-14	7	1.8
3. SW	-14	-7	1.8
4. NE	12	7	1.8
5. ES mdblk	150	-7	1.8
6. WN mdblk	-150	7	1.8
7. WS mdblk	-150	-7	1.8
8. EN mdblk	150	7	1.8
9. SE mdblk	14	-150	1.8
10. NW mdblk	-14	150	1.8
11. SW mdblk	-14	-150	1.8
12. NE mdblk	12	150	1.8
13. ES blk	600	-7	1.8
14. WN blk	-600	7	1.8
15. WS blk	-600	-7	1.8
16. EN blk	600	7	1.8
17. SE blk	14	-600	1.8
18. NW blk	-14	600	1.8
19. SW blk	-14	-600	1.8
20. NE blk	12	600	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 3

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. SE	189.	.6	.5	.0	.0	.0	.0	.0	.0	.0
2. NW	170.	.4	.2	.0	.0	.0	.2	.0	.0	.0
3. SW	170.	.4	.2	.0	.0	.0	.2	.0	.0	.0
4. NE	187.	.7	.5	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	278.	.1	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	89.	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	262.	.2	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	352.	.6	.5	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	172.	.5	.0	.0	.0	.3	.0	.0	.0	.0
11. SW mdblk	9.	.5	.2	.0	.0	.0	.2	.0	.0	.0
12. NE mdblk	187.	.5	.0	.3	.0	.0	.0	.0	.0	.0
13. ES blk	275.	.1	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	92.	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	91.	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	265.	.1	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	353.	.4	.0	.0	.0	.0	.0	.0	.0	.0
18. NW blk	173.	.3	.0	.0	.0	.0	.0	.0	.0	.0
19. SW blk	7.	.4	.0	.0	.0	.0	.0	.0	.0	.0
20. NE blk	187.	.4	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 4

JOB: Yucaipa Housing Element Implementation P
RUN: 2035wP-11 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. SE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. NW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. ES mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. WN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. WS mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. EN mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9. SE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10. NW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11. SW mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12. NE mdblk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
13. ES blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14. WN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15. WS blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
16. EN blk	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17. SE blk	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0	.0
18. NW blk	.0	.0	.0	.0	.0	.1	.2	.0	.0	.0	.0	.0
19. SW blk	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0	.0	.0
20. NE blk	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0

APPENDIX C

GLOBAL CLIMATE CHANGE WORKSHEETS

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY GLOBAL CLIMATE CHANGE ANALYSIS

WORKSHEETS FOR SITE 1

Greenhouse Gas Emissions Worksheet

Project Parameters		
	2014	
Vehicles (trips/day)	6,715	
Electricity used (MWh/year)	7,200	MWh = Megawatt hour
(mscf/year)	34	mscf = million standard cubic feet
tons/year)	843.53741	

Emission Source	Total (metric tons/yr)				Percent of Total
	CO_2	CH_4	N_2O	CO_2e	
Vehicles (1)	11,000	0.38	0.87	11,000	69%
Electricity Production	2,000	0.022	0.012	2,000	13%
Natural Gas Combustion(1)	1,400	0.035	0.034	1,400	9.0%
Solid Waste	--	--	--	1,100	7.0%
Other Area Sources(2)	0.93	--	--	0.93	1.0%
Total Annual Emissions	14,000	0.44	0.92	16,000	99.0%

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

(1) CO_2 emissions for Vehicles and Natural Gas from URBEMIS 2007 outputs, if available.

(2) Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 outputs.

tons/metric ton
1.1025

U.S. or Metric?
○ Tons ◉ Metric Tons

Emission Source	Total CO2e (Tg/yr)
Vehicles	0.011
Electricity Production	0.002
Natural Gas Combustion	0.0014
Solid Waste	0.0011
Total (CO_2e)	0.016
% of SCAG 2004 total	0.0091
% of State 2004 total	0.0033

1,000,000 tonne/Tg

Year of data	Comparison Area GHG Usage		
2004	SCAG	176.79	(Tg/yr)
2004	State	480	(Tg/yr)

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents. The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2007, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	25
Nitrous Oxide	120	298
HFC-23	264	14800
HFC-134a	14.6	1430
HFC-152a	1.5	124
PFC: Tetrafluoromethane (CF_4)	50000	7390
PFC: Hexafluoromethane (C_2F_6)	10000	12200
Sulfur Hexafluoride (SF_6)	3200	22800

Electricity Emissions Worksheet

Commercial Electricity Usage (2003 data):

Commercial Building Type	Electricity Consumption per Building by Building Type	Electricity Consumption per Square Foot by Building Type	Project Info (either # of bldgs or total sf, not both)		Annual Electricity Consumption
	thousand kWH	kWh	# of bldgs	total sf	MWh
All Buildings	226	**14**			0
Mercantile	327	**17.8**			0
Enclosed and Strip Malls	718	**21.1**		66667	1,407
Retail (Other than Mall)	139	14.3			0
Education	283	**10.7**			0
Food Sales	276	49.4			0
Food Service	213	**31.8**			0
Health Care (All)	564	**20.1**			0
Inpatient Health	6,628	27.5			0
Outpatient Health	168	16.1			0
Lodging	483	**11.9**			0
Office	256	**14.6**			0
Other	510	22.5			0
Public Assembly	179	12.5			0
Public Order and Safety	237	15.3			0
Religious Worship	49	4.9			0
Service	73	**8**			0
Vacant	42	2.4			0
Warehouse and Storage	154	**5.9**			0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C14A - Bold valu

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption MWh
Single Family	9,926	7,622	10,656		0
Apartments (2-4 Units)			7,176	660	4,736
Apartments (5 or more Units)			6,204		0
Mobile Home			12,469		0
Total Residential (kWh)					4,736

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 2001 Residential Energy Consumption Survey.

	CO_2			CH_4	N_2O
Electricity production emission factors for CA	lb/kWh 0.61	short tons/MWh 0.303	tons/MWh 0.275	lb/MWh 0.0067	lb/MWh 0.0037
U.S. Average	1.34	0.668	0.606	0.0111	0.0192

Source: Energy Information Administration, Updated State-and Regional-level Greenhouse Gas Emission Factors for Electricity (March 2002), http://www.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/e-supdoc.pdf. (http://www.eia.doe.gov/oiaf/1605/ee-factors.html accessed 4/14/2008)

Water Usage Emissions Worksheet

Select the appropriate location: Project Location in California: ○ Northern ◉ Southern

	kWh/MG	
Water Supply and Conveyance	2,117	9,727
Water Treatment	111	111
Water Distribution	1,272	1,272
Wastewater Treatment	1,911	1,911
Totals	5,411	13,021

Refining Estimates of Water-Related Energy Use In California, CEC, Dec. 2006

3.26E+05 gallons/acre-feet

Project total usage 250.2 acre-feet/year

Water Supply and Conveyance	7.93E+05	kWh/year
Water Treatment	9.05E+03	kWh/year
Water Distribution	1.04E+05	kWh/year
Wastewater Treatment	1.56E+05	kWh/year
Total	1.06E+06	kWh/year

Water usage calculator

Number of Residences	660	Total Gallons Per Day	223,420
Estimated people per residence(1)	2.87	Gallons Per Year	81,548,300
Gallons/Resident/Day(2)	100	Total Acre-feet Per Year	250.22
Total Gallons Per Day	189,420		
Gallons Per Year	69,138,300		
Acre-feet Per Year	212		

(1) United States Census. California County QuickFacts. Available at http://quickfacts.census.gov/qfd/states/06000.html. Accessed January 2009.

(2) Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California* . November 2003. Page 5 (http://www.pacinst.org/reports/urban_usage/)

Estimated Number of Employees(1)	250
Gallons/Employee/Day(2)	136
Total Gallons Per Day	34,000
Gallons Per Year	12,410,000
Acre-feet Per Year	38

(1) Specific employee data was not available at the time of this analysis. Employee numbers by type (office, retail) were estimated based on percentage of building types within the project.

(2) Pacific Institute.2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California.* November.

Solid Waste Emissions Worksheet

Total Square Footage - Office	0	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0108	
Office Waste (Dry Short Tons/Year)	0	
Total Square Footage - Retail	66667	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0024	
Retail Waste (Dry Short Tons/Year)	160.0008	
Total Residences	660	
Disposal Rate (dry short tons/unit/year)[2]	1.17	
Residential Waste (Dry Short Tons/Year)	772.2	
Total Square Footage - Industrial	0	
Disposal Rate (lbs/1000 sq. ft./day)[3]	62.5	
Industrial Waste (Dry Short Tons/Year)	0	
Total Square Footage - Institutional		
Disposal Rate (lbs/sq. ft./day)[4]	0.007	
Institutional Waste (Dry Short Tons/Year	0	
Total Waste (Dry Short Tons/Year)	930	
CO_2e Tonnes/Year	1100	
Dry Short Tons/Wet Short Tons of MSW	0.84	
MTCE/Wet Short Ton of MSW [6]	0.272	1 metric ton
Tonnes of CO_2e/Wet Short Ton of MSW	1.007	0.27

(1) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

(2) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Residential Developments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Residential.htm

(3) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Industrial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Industrial.htm.

(4) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm.

(5) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-4. September.

(6) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-6. September.

Natural Gas Emissions Worksheet

Commercial Natural Gas Usage (2003 data):

Commercial Building Type	Natural Gas Consumption per Building by Building Type	Natural Gas Consumption per Square Foot by Building Type	Project Info (enter values on Electricity worksheet)		Annual Natural Gas Consumption
	thousand cf	cf	# of bldgs	total sf	thousand cf
All Buildings	782	**29.2**	0	0	0
Mercantile	653	**19.7**	0	0	0
Enclosed and Strip Malls	1142	33.4	0	66667	2,227
Retail (Other than Mall)	362	**11.4**	0	0	0
Education	1223	**34.8**	0	0	0
Food Sales	383	50.2	0	0	0
Food Service	870	141.2	0	0	0
Health Care (All)	3283	**68.7**	0	0	0
Inpatient Health	28,222	109.8	0	0	0
Outpatient Health	574	50.2	0	0	0
Lodging	2432	**31.5**	0	0	0
Office	535	**14.2**	0	0	0
Other	1885	67.6	0	0	0
Public Assembly	678	36.4	0	0	0
Public Order and Safety	771	43.7	0	0	0
Religious Worship	362	30.3	0	0	0
Service	481	54.1	0	0	0
Vacant	557	23	0	0	0
Warehouse and Storage	687	23.4	0	0	0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C24A - Bold value

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption thousand cf
Single Family	67	48	70	0	0
Apartments (2-4 Units)(1)		48		660	31,680
Apartments (5 or more Units)			28	0	0
Mobile Home			58	0	0
Total Natural Gas Usage					31,680

(1) Single family natural gas consumption was used to represent 2-4 Unit Apartments, as the total U.S. number (70 thousand cf) would exceed the Pacific region single-family home consumption rates. Single-family and 2-4 Unit Apartments have consistent total U.S. consumption rates, so it is reasonable that regional rates would be consistent as well.

Source: Table CE1-12c. Total Energy Consumption in U.S. Households by West Census Region, 2001 (http://www.eia.doe.gov/emeu/recs/recs

	CO_2	CH_4	N_2O
Natural gas combustion	lb/10^6 scf	lb/10^6 scf	lb/10^6 scf
	120,000	2.3	2.2

Source: EPA AP-42 Vol I Chapter 1.4, Table 1.4-2

Vehicle Emissions Worksheet

avg. speed=	40	(mph)	avg trip length=	10	(miles)
2014		**CO_2**	**CH_4**	**N_2O**	**Fleet %**
LDA	CAT	289.863	0.013	0.032	61.3%
LDA	DSL	356.788	0.005	0.001	0.5%
LDT	CAT	364.187	0.019	0.042	34.3%
LDT	DSL	348.128	0.0035	0.002	0.4%
HDT	CAT	467.995	0.05	0.088	1.8%
HDT	DSL	930.226	0.0094	0.005	1.7%
Composite		330.027	0.016	0.036	100.0%

Notes:

CO_2 and CH_4 from EMFAC2007

N_2O from EPA *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles* , November 2004, Table 28.

Fleet percentages from URBEMIS2007

	From URBEMIS2007		
	Vehicle Categories	Fleet %	Diesel %
LDA	Light Auto	51.6	0.4
	Light Truck < 3750 lbs	7.4	4.1
LDT	Light Truck 3751-5750 lbs	22.9	0
	Med Truck 5751-8500 lbs	10.6	0
HDT	Lite-Heavy Truck 8501-10,000 lbs	1.6	18.8
	Lite-Heavy Truck 10,001-14,000 lbs	0.5	40
	Med-Heavy Truck 14,001-33,000 lbs	0.9	77.8
	Heavy-Heavy Truck 33,001-60,000 lbs	0.5	100
LDT	Other Bus	0.1	100
	Urban Bus	0.1	100
LDA	Motorcycle	2.8	0
LDT	School Bus	0.1	100
	Motor Home	0.9	11.1
		100	

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY GLOBAL CLIMATE CHANGE ANALYSIS

WORKSHEETS FOR SITE 2

Greenhouse Gas Emissions Worksheet

Project Parameters		
	2014	
Vehicles (trips/day)	9,292	
Electricity used (MWh/year)	8,300	MWh = Megawatt hour
(mscf/year)	34	mscf = million standard cubic feet
tons/year)	907.02948	

Emission Source	Total (metric tons/yr)				Percent of Total
	CO_2	CH_4	N_2O	CO_2e	
Vehicles (1)	15,000	0.53	1.2	15,000	75%
Electricity Production	2,300	0.025	0.014	2,300	12%
Natural Gas Combustion(1)	1,300	0.035	0.034	1,300	7.0%
Solid Waste	--	--	--	1,200	6.0%
Other Area Sources(2)	0.93	--	--	0.93	1.0%
Total Annual Emissions	19,000	0.59	1.2	20,000	101.0%

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

(1) CO_2 emissions for Vehicles and Natural Gas from URBEMIS 2007 outputs, if available.

(2) Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 outputs.

tons/metric ton
1.1025

U.S. or Metric?
○ Tons ◉ Metric Tons

Emission Source	Total CO2e (Tg/yr)
Vehicles	0.015
Electricity Production	0.0023
Natural Gas Combustion	0.0013
Solid Waste	0.0012
Total (CO_2e)	0.02
% of SCAG 2004 total	0.011
% of State 2004 total	0.0042

1,000,000 tonne/Tg

Year of data	Comparison Area GHG Usage		
2004	SCAG	176.79	(Tg/yr)
2004	State	480	(Tg/yr)

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents. The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2007, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	25
Nitrous Oxide	120	298
HFC-23	264	14800
HFC-134a	14.6	1430
HFC-152a	1.5	124
PFC: Tetrafluoromethane (CF_4)	50000	7390
PFC: Hexafluoromethane (C_2F_6)	10000	12200
Sulfur Hexafluoride (SF_6)	3200	22800

Electricity Emissions Worksheet

Commercial Electricity Usage (2003 data):

Commercial Building Type	Electricity Consumption per Building by Building Type	Electricity Consumption per Square Foot by Building Type	Project Info (either # of bldgs or total sf, not both)		Annual Electricity Consumption
	thousand kWH	kWh	# of bldgs	total sf	MWh
All Buildings	226	**14**			0
Mercantile	327	**17.8**			0
Enclosed and Strip Malls	718	**21.1**		133333	2,813
Retail (Other than Mall)	139	14.3			0
Education	283	**10.7**			0
Food Sales	276	49.4			0
Food Service	213	**31.8**			0
Health Care (All)	564	**20.1**			0
Inpatient Health	6,628	27.5			0
Outpatient Health	168	16.1			0
Lodging	483	**11.9**			0
Office	256	**14.6**			0
Other	510	22.5			0
Public Assembly	179	12.5			0
Public Order and Safety	237	15.3			0
Religious Worship	49	4.9			0
Service	73	**8**			0
Vacant	42	2.4			0
Warehouse and Storage	154	**5.9**			0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C14A - Bold valu

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption MWh
Single Family	9,926	7,622	10,656		0
Apartments (2-4 Units)			7,176	608	4,363
Apartments (5 or more Units)			6,204		0
Mobile Home			12,469		0
Total Residential (kWh)					4,363

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 2001 Residential Energy Consumption Survey.

	CO_2			CH_4	N_2O
Electricity production emission factors for CA	lb/kWh 0.61	short tons/MWh 0.303	tons/MWh 0.275	lb/MWh 0.0067	lb/MWh 0.0037
U.S. Average	1.34	0.668	0.606	0.0111	0.0192

Source: Energy Information Administration, Updated State-and Regional-level Greenhouse Gas Emission Factors for Electricity (March 2002), http://www.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/e-supdoc.pdf. (http://www.eia.doe.gov/oiaf/1605/ee-factors.html accessed 4/14/2008)

Water Usage Emissions Worksheet

Select the appropriate location: Project Location in California: ○ Northern ◉ Southern

	kWh/MG	
Water Supply and Conveyance	2,117	9,727
Water Treatment	111	111
Water Distribution	1,272	1,272
Wastewater Treatment	1,911	1,911
Totals	5,411	13,021

Refining Estimates of Water-Related Energy Use In California, CEC, Dec. 2006

3.26E+05 gallons/acre-feet

Project total usage 271.6 acre-feet/year

Water Supply and Conveyance	8.61E+05	kWh/year
Water Treatment	9.82E+03	kWh/year
Water Distribution	1.13E+05	kWh/year
Wastewater Treatment	1.69E+05	kWh/year
Total	1.15E+06	kWh/year

Water usage calculator

Number of Residences	608	Total Gallons Per Day	242,496
Estimated people per residence(1)	2.87	Gallons Per Year	88,511,040
Gallons/Resident/Day(2)	100	Total Acre-feet Per Year	271.59
Total Gallons Per Day	174,496		
Gallons Per Year	63,691,040		
Acre-feet Per Year	195		

(1) United States Census. California County QuickFacts. Available at http://quickfacts.census.gov/qfd/states/06000.html. Accessed January 2009.

(2) Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California* . November 2003. Page 5 (http://www.pacinst.org/reports/urban_usage/)

Estimated Number of Employees(1)	500
Gallons/Employee/Day(2)	136
Total Gallons Per Day	68,000
Gallons Per Year	24,820,000
Acre-feet Per Year	76

(1) Specific employee data was not available at the time of this analysis. Employee numbers by type (office, retail) were estimated based on percentage of building types within the project.

(2) Pacific Institute.2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California.* November.

Solid Waste Emissions Worksheet

Total Square Footage - Office	0	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0108	
Office Waste (Dry Short Tons/Year)	0	
Total Square Footage - Retail	133333	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0024	
Retail Waste (Dry Short Tons/Year)	319.9992	
Total Residences	608	
Disposal Rate (dry short tons/unit/year)[2]	1.17	
Residential Waste (Dry Short Tons/Year)	711.36	
Total Square Footage - Industrial	0	
Disposal Rate (lbs/1000 sq. ft./day)[3]	62.5	
Industrial Waste (Dry Short Tons/Year)	0	
Total Square Footage - Institutional		
Disposal Rate (lbs/sq. ft./day)[4]	0.007	
Institutional Waste (Dry Short Tons/Year	0	
Total Waste (Dry Short Tons/Year)	1000	
CO_2e Tonnes/Year	1200	
Dry Short Tons/Wet Short Tons of MSW	0.84	
MTCE/Wet Short Ton of MSW [6]	0.272	1 metric ton
Tonnes of CO_2e/Wet Short Ton of MSW	1.007	0.27

(1) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

(2) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Residential Developments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Residential.htm

(3) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Industrial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Industrial.htm.

(4) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm.

(5) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-4. September.

(6) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-6. September.

Natural Gas Emissions Worksheet

Commercial Natural Gas Usage (2003 data):

Commercial Building Type	Natural Gas Consumption per Building by Building Type	Natural Gas Consumption per Square Foot by Building Type	Project Info (enter values on Electricity worksheet)		Annual Natural Gas Consumption
	thousand cf	cf	# of bldgs	total sf	thousand cf
All Buildings	782	**29.2**	0	0	0
Mercantile	653	**19.7**	0	0	0
Enclosed and Strip Malls	1142	33.4	0	133333	4,453
Retail (Other than Mall)	362	**11.4**	0	0	0
Education	1223	**34.8**	0	0	0
Food Sales	383	50.2	0	0	0
Food Service	870	141.2	0	0	0
Health Care (All)	3283	**68.7**	0	0	0
Inpatient Health	28,222	109.8	0	0	0
Outpatient Health	574	50.2	0	0	0
Lodging	2432	**31.5**	0	0	0
Office	535	**14.2**	0	0	0
Other	1885	67.6	0	0	0
Public Assembly	678	36.4	0	0	0
Public Order and Safety	771	43.7	0	0	0
Religious Worship	362	30.3	0	0	0
Service	481	54.1	0	0	0
Vacant	557	23	0	0	0
Warehouse and Storage	687	23.4	0	0	0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C24A - Bold value

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption thousand cf
Single Family	67	48	70	0	0
Apartments (2-4 Units)(1)		48		608	29,184
Apartments (5 or more Units)			28	0	0
Mobile Home			58	0	0
Total Natural Gas Usage					29,184

(1) Single family natural gas consumption was used to represent 2-4 Unit Apartments, as the total U.S. number (70 thousand cf) would exceed the Pacific region single-family home consumption rates. Single-family and 2-4 Unit Apartments have consistent total U.S. consumption rates, so it is reasonable that regional rates would be consistent as well.

Source: Table CE1-12c. Total Energy Consumption in U.S. Households by West Census Region, 2001 (http://www.eia.doe.gov/emeu/recs/recs

	CO_2	CH_4	N_2O
Natural gas combustion	lb/10^6 scf	lb/10^6 scf	lb/10^6 scf
	120,000	2.3	2.2

Source: EPA AP-42 Vol I Chapter 1.4, Table 1.4-2

Vehicle Emissions Worksheet

avg. speed=	40	(mph)	avg trip length=	10	(miles)
2014		**CO_2**	**CH_4**	**N_2O**	**Fleet %**
LDA	CAT	289.863	0.013	0.032	61.3%
LDA	DSL	356.788	0.005	0.001	0.5%
LDT	CAT	364.187	0.019	0.042	34.3%
LDT	DSL	348.128	0.0035	0.002	0.4%
HDT	CAT	467.995	0.05	0.088	1.8%
HDT	DSL	930.226	0.0094	0.005	1.7%
Composite		330.027	0.016	0.036	100.0%

Notes:

CO_2 and CH_4 from EMFAC2007

N_2O from EPA *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles* , November 2004, Table 28.

Fleet percentages from URBEMIS2007

	From URBEMIS2007		
	Vehicle Categories	Fleet %	Diesel %
LDA	Light Auto	51.6	0.4
	Light Truck < 3750 lbs	7.4	4.1
LDT	Light Truck 3751-5750 lbs	22.9	0
	Med Truck 5751-8500 lbs	10.6	0
HDT	Lite-Heavy Truck 8501-10,000 lbs	1.6	18.8
	Lite-Heavy Truck 10,001-14,000 lbs	0.5	40
	Med-Heavy Truck 14,001-33,000 lbs	0.9	77.8
	Heavy-Heavy Truck 33,001-60,000 lbs	0.5	100
LDT	Other Bus	0.1	100
	Urban Bus	0.1	100
LDA	Motorcycle	2.8	0
LDT	School Bus	0.1	100
	Motor Home	0.9	11.1
		100	

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY GLOBAL CLIMATE CHANGE ANALYSIS

WORKSHEETS FOR SITE 3

Greenhouse Gas Emissions Worksheet

Project Parameters	
	2014
Vehicles (trips/day)	1,859
Electricity used (MWh/year)	2,700
(mscf/year)	15
tons/year)	335.60091

MWh = Megawatt hour
mscf = million standard cubic feet

Emission Source	Total (metric tons/yr)				Percent of Total
	CO_2	CH_4	N_2O	CO_2e	
Vehicles (1)	3,300	0.11	0.24	3,400	65%
Electricity Production	750	0.0082	0.0045	750	15%
Natural Gas Combustion(1)	660	0.016	0.015	660	13%
Solid Waste	--	--	--	440	9.0%
Other Area Sources(2)	0.47	--	--	0.47	1.0%
Total Annual Emissions	4,700	0.13	0.26	5,300	103.0%

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

(1) CO_2 emissions for Vehicles and Natural Gas from URBEMIS 2007 outputs, if available.

(2) Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 outputs.

tons/metric ton
1.1025

U.S. or Metric?
○ Tons ◉ Metric Tons

Emission Source	Total CO2e (Tg/yr)
Vehicles	0.0034
Electricity Production	0.00075
Natural Gas Combustion	0.00066
Solid Waste	0.00044
Total (CO_2e)	0.0053
% of SCAG 2004 total	0.003
% of State 2004 total	0.0011

1,000,000 tonne/Tg

Year of data	Comparison Area GHG Usage		
2004	SCAG	176.79	(Tg/yr)
2004	State	480	(Tg/yr)

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents. The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2007, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	25
Nitrous Oxide	120	298
HFC-23	264	14800
HFC-134a	14.6	1430
HFC-152a	1.5	124
PFC: Tetrafluoromethane (CF_4)	50000	7390
PFC: Hexafluoromethane (C_2F_6)	10000	12200
Sulfur Hexafluoride (SF_6)	3200	22800

Electricity Emissions Worksheet

Commercial Electricity Usage (2003 data):

Commercial Building Type	Electricity Consumption per Building by Building Type	Electricity Consumption per Square Foot by Building Type	Project Info (either # of bldgs or total sf, not both)		Annual Electricity Consumption
	thousand kWH	kWh	# of bldgs	total sf	MWh
All Buildings	226	**14**			0
Mercantile	327	**17.8**			0
Enclosed and Strip Malls	718	**21.1**			0
Retail (Other than Mall)	139	14.3			0
Education	283	**10.7**			0
Food Sales	276	49.4			0
Food Service	213	**31.8**			0
Health Care (All)	564	**20.1**			0
Inpatient Health	6,628	27.5			0
Outpatient Health	168	16.1			0
Lodging	483	**11.9**			0
Office	256	**14.6**			0
Other	510	22.5			0
Public Assembly	179	12.5			0
Public Order and Safety	237	15.3			0
Religious Worship	49	4.9			0
Service	73	**8**			0
Vacant	42	2.4			0
Warehouse and Storage	154	**5.9**			0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C14A - Bold valu

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption MWh
Single Family	9,926	7,622	10,656		0
Apartments (2-4 Units)			7,176	320	2,296
Apartments (5 or more Units)			6,204		0
Mobile Home			12,469		0
Total Residential (kWh)					2,296

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 2001 Residential Energy Consumption Survey.

	CO_2			CH_4	N_2O
Electricity production emission factors for CA	lb/kWh 0.61	short tons/MWh 0.303	tons/MWh 0.275	lb/MWh 0.0067	lb/MWh 0.0037
U.S. Average	1.34	0.668	0.606	0.0111	0.0192

Source: Energy Information Administration, Updated State-and Regional-level Greenhouse Gas Emission Factors for Electricity (March 2002), http://www.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/e-supdoc.pdf. (http://www.eia.doe.gov/oiaf/1605/ee-factors.html accessed 4/14/2008)

Water Usage Emissions Worksheet

Select the appropriate location: Project Location in California: ○ Northern ◉ Southern

	kWh/MG	
Water Supply and Conveyance	2,117	9,727
Water Treatment	111	111
Water Distribution	1,272	1,272
Wastewater Treatment	1,911	1,911
Totals	5,411	13,021

Refining Estimates of Water-Related Energy Use In California, CEC, Dec. 2006

3.26E+05 gallons/acre-feet

Project total usage 102.9 acre-feet/year

Water Supply and Conveyance	3.26E+05	kWh/year
Water Treatment	3.72E+03	kWh/year
Water Distribution	4.26E+04	kWh/year
Wastewater Treatment	6.41E+04	kWh/year
Total	4.36E+05	kWh/year

Water usage calculator

Number of Residences	320	Total Gallons Per Day	91,840
Estimated people per residence(1)	2.87	Gallons Per Year	33,521,600
Gallons/Resident/Day(2)	100	Total Acre-feet Per Year	102.86
Total Gallons Per Day	91,840		
Gallons Per Year	33,521,600		
Acre-feet Per Year	103		

(1) United States Census. California County QuickFacts. Available at http://quickfacts.census.gov/qfd/states/06000.html. Accessed January 2009.

(2) Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California* . November 2003. Page 5 (http://www.pacinst.org/reports/urban_usage/)

Estimated Number of Employees(1)	
Gallons/Employee/Day(2)	136
Total Gallons Per Day	0
Gallons Per Year	0
Acre-feet Per Year	0

(1) Specific employee data was not available at the time of this analysis. Employee numbers by type (office, retail) were estimated based on percentage of building types within the project.

(2) Pacific Institute.2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California.* November.

Solid Waste Emissions Worksheet

Total Square Footage - Office	0	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0108	
Office Waste (Dry Short Tons/Year)	0	
Total Square Footage - Retail	0	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0024	
Retail Waste (Dry Short Tons/Year)	0	
Total Residences	320	
Disposal Rate (dry short tons/unit/year)[2]	1.17	
Residential Waste (Dry Short Tons/Year)	374.4	
Total Square Footage - Industrial	0	
Disposal Rate (lbs/1000 sq. ft./day)[3]	62.5	
Industrial Waste (Dry Short Tons/Year)	0	
Total Square Footage - Institutional		
Disposal Rate (lbs/sq. ft./day)[4]	0.007	
Institutional Waste (Dry Short Tons/Year	0	
Total Waste (Dry Short Tons/Year)	370	
CO_2e Tonnes/Year	440	
Dry Short Tons/Wet Short Tons of MSW	0.84	
MTCE/Wet Short Ton of MSW [6]	0.272	1 metric ton
Tonnes of CO_2e/Wet Short Ton of MSW	1.007	0.27

(1) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

(2) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Residential Developments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Residential.htm

(3) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Industrial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Industrial.htm.

(4) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm.

(5) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-4. September.

(6) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-6. September.

Natural Gas Emissions Worksheet

Commercial Natural Gas Usage (2003 data):

Commercial Building Type	Natural Gas Consumption per Building by Building Type	Natural Gas Consumption per Square Foot by Building Type	Project Info (enter values on Electricity worksheet)		Annual Natural Gas Consumption
	thousand cf	cf	# of bldgs	total sf	thousand cf
All Buildings	782	**29.2**	0	0	0
Mercantile	653	**19.7**	0	0	0
Enclosed and Strip Malls	1142	33.4	0	0	0
Retail (Other than Mall)	362	**11.4**	0	0	0
Education	1223	**34.8**	0	0	0
Food Sales	383	50.2	0	0	0
Food Service	870	141.2	0	0	0
Health Care (All)	3283	**68.7**	0	0	0
Inpatient Health	28,222	109.8	0	0	0
Outpatient Health	574	50.2	0	0	0
Lodging	2432	**31.5**	0	0	0
Office	535	**14.2**	0	0	0
Other	1885	67.6	0	0	0
Public Assembly	678	36.4	0	0	0
Public Order and Safety	771	43.7	0	0	0
Religious Worship	362	30.3	0	0	0
Service	481	54.1	0	0	0
Vacant	557	23	0	0	0
Warehouse and Storage	687	23.4	0	0	0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C24A - Bold value

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption thousand cf
Single Family	67	48	70	0	0
Apartments (2-4 Units)(1)		48		320	15,360
Apartments (5 or more Units)			28	0	0
Mobile Home			58	0	0
Total Natural Gas Usage					15,360

(1) Single family natural gas consumption was used to represent 2-4 Unit Apartments, as the total U.S. number (70 thousand cf) would exceed the Pacific region single-family home consumption rates. Single-family and 2-4 Unit Apartments have consistent total U.S. consumption rates, so it is reasonable that regional rates would be consistent as well.

Source: Table CE1-12c. Total Energy Consumption in U.S. Households by West Census Region, 2001 (http://www.eia.doe.gov/emeu/recs/recs

	CO_2	CH_4	N_2O
Natural gas combustion	lb/10^6 scf	lb/10^6 scf	lb/10^6 scf
	120,000	2.3	2.2

Source: EPA AP-42 Vol I Chapter 1.4, Table 1.4-2

Vehicle Emissions Worksheet

avg. speed=	40	(mph)	avg trip length=	10	(miles)
2014		**CO_2**	**CH_4**	**N_2O**	**Fleet %**
LDA	CAT	289.863	0.013	0.032	61.3%
LDA	DSL	356.788	0.005	0.001	0.5%
LDT	CAT	364.187	0.019	0.042	34.3%
LDT	DSL	348.128	0.0035	0.002	0.4%
HDT	CAT	467.995	0.05	0.088	1.8%
HDT	DSL	930.226	0.0094	0.005	1.7%
Composite		330.027	0.016	0.036	100.0%

Notes:

CO_2 and CH_4 from EMFAC2007

N_2O from EPA *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles* , November 2004, Table 28.

Fleet percentages from URBEMIS2007

	From URBEMIS2007		
	Vehicle Categories	Fleet %	Diesel %
LDA	Light Auto	51.6	0.4
	Light Truck < 3750 lbs	7.4	4.1
LDT	Light Truck 3751-5750 lbs	22.9	0
	Med Truck 5751-8500 lbs	10.6	0
HDT	Lite-Heavy Truck 8501-10,000 lbs	1.6	18.8
	Lite-Heavy Truck 10,001-14,000 lbs	0.5	40
	Med-Heavy Truck 14,001-33,000 lbs	0.9	77.8
	Heavy-Heavy Truck 33,001-60,000 lbs	0.5	100
LDT	Other Bus	0.1	100
	Urban Bus	0.1	100
LDA	Motorcycle	2.8	0
LDT	School Bus	0.1	100
	Motor Home	0.9	11.1
		100	

YUCAIPA HOUSING ELEMENT IMPLEMENTATION PLAN

AIR QUALITY GLOBAL CLIMATE CHANGE ANALYSIS

WORKSHEETS FOR ALL SITES COMBINED

Greenhouse Gas Emissions Worksheet

Project Parameters		
	2014	
Vehicles (trips/day)	17,866	
Electricity used (MWh/year)	18,000	MWh = Megawatt hour
(mscf/year)	83	mscf = million standard cubic feet
tons/year)	2,086	

Emission Source	Total (metric tons/yr)				Percent of Total
	CO_2	CH_4	N_2O	CO_2e	
Vehicles (1)	29,000	1.0	2.3	30,000	74%
Electricity Production	5,000	0.055	0.03	5,000	13%
Natural Gas Combustion(1)	3,300	0.087	0.083	3,300	9.0%
Solid Waste	--	--	--	2,800	7.0%
Other Area Sources(2)	2.3	--	--	2.3	1.0%
Total Annual Emissions	37,000	1.1	2.4	41,000	104.0%

Note: Numbers in table may not appear to add up correctly due to rounding of all numbers to two significant digits.

(1) CO_2 emissions for Vehicles and Natural Gas from URBEMIS 2007 outputs, if available.

(2) Includes CO_2 emissions for hearth combustion and landscaping equipment from URBEMIS 2007 outputs.

tons/metric ton
1.1025

U.S. or Metric?
○ Tons ◉ Metric Tons

Emission Source	Total CO2e (Tg/yr)
Vehicles	0.03
Electricity Production	0.005
Natural Gas Combustion	0.0033
Solid Waste	0.0028
Total (CO_2e)	0.041
% of SCAG 2004 total	0.023
% of State 2004 total	0.0085

1,000,000 tonne/Tg

Year of data	Comparison Area GHG Usage		
2004	SCAG	176.79	(Tg/yr)
2004	State	480	(Tg/yr)

Global warming potentials (GWPs) are used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The GWP provides a construct for converting emissions of various gases into a common measure, which allows climate analysts to aggregate the radiative impacts of various GHGs into a uniform measure denominated in carbon or CO_2 equivalents. The generally accepted authority on GWPs is the Intergovernmental Panel on Climate Change (IPCC). In 2007, the IPCC updated its estimates of GWPs for key GHGs. The table below lists the GWPs to calculate carbon dioxide equivalents (CO_2e)

Global Warming Potential

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100 year time horizon)
Carbon Dioxide	50-200	1
Methane	12 ± 3	25
Nitrous Oxide	120	298
HFC-23	264	14800
HFC-134a	14.6	1430
HFC-152a	1.5	124
PFC: Tetrafluoromethane (CF_4)	50000	7390
PFC: Hexafluoromethane (C_2F_6)	10000	12200
Sulfur Hexafluoride (SF_6)	3200	22800

Electricity Emissions Worksheet

Commercial Electricity Usage (2003 data):

Commercial Building Type	Electricity Consumption per Building by Building Type	Electricity Consumption per Square Foot by Building Type	Project Info (either # of bldgs or total sf, not both)		Annual Electricity Consumption
	thousand kWH	kWh	# of bldgs	total sf	MWh
All Buildings	226	**14**			0
Mercantile	327	**17.8**			0
Enclosed and Strip Malls	718	**21.1**		200000	4,220
Retail (Other than Mall)	139	14.3			0
Education	283	**10.7**			0
Food Sales	276	49.4			0
Food Service	213	**31.8**			0
Health Care (All)	564	**20.1**			0
Inpatient Health	6,628	27.5			0
Outpatient Health	168	16.1			0
Lodging	483	**11.9**			0
Office	256	**14.6**			0
Other	510	22.5			0
Public Assembly	179	12.5			0
Public Order and Safety	237	15.3			0
Religious Worship	49	4.9			0
Service	73	**8**			0
Vacant	42	2.4			0
Warehouse and Storage	154	**5.9**			0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C14A - Bold valu

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption MWh
Single Family	9,926	7,622	10,656		0
Apartments (2-4 Units)			7,176	1588	11,395
Apartments (5 or more Units)			6,204		0
Mobile Home			12,469		0
Total Residential (kWh)					11,395

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-457 A-G of the 2001 Residential Energy Consumption Survey.

	CO_2			CH_4	N_2O
Electricity production emission factors for CA	lb/kWh 0.61	short tons/MWh 0.303	tons/MWh 0.275	lb/MWh 0.0067	lb/MWh 0.0037
U.S. Average	1.34	0.668	0.606	0.0111	0.0192

Source: Energy Information Administration, Updated State-and Regional-level Greenhouse Gas Emission Factors for Electricity (March 2002), http://www.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/e-supdoc.pdf. (http://www.eia.doe.gov/oiaf/1605/ee-factors.html accessed 4/14/2008)

Water Usage Emissions Worksheet

Select the appropriate location: Project Location in California: ○ Northern ◉ Southern

	kWh/MG	
Water Supply and Conveyance	2,117	9,727
Water Treatment	111	111
Water Distribution	1,272	1,272
Wastewater Treatment	1,911	1,911
Totals	5,411	13,021

Refining Estimates of Water-Related Energy Use In California, CEC, Dec. 2006

3.26E+05 gallons/acre-feet

Project total usage 624.7 acre-feet/year

Water Supply and Conveyance	1.98E+06	kWh/year
Water Treatment	2.26E+04	kWh/year
Water Distribution	2.59E+05	kWh/year
Wastewater Treatment	3.89E+05	kWh/year
Total	2.65E+06	kWh/year

Water usage calculator

Number of Residences	1588	Total Gallons Per Day	557,756
Estimated people per residence(1)	2.87	Gallons Per Year	203,580,940
Gallons/Resident/Day(2)	100	Total Acre-feet Per Year	624.67
Total Gallons Per Day	455,756		
Gallons Per Year	166,350,940		
Acre-feet Per Year	510		

(1) United States Census. California County QuickFacts. Available at http://quickfacts.census.gov/qfd/states/06000.html. Accessed January 2009.

(2) Pacific Institute. *Waste Not, Want Not: The Potential for Urban Water Conservation in California* . November 2003. Page 5 (http://www.pacinst.org/reports/urban_usage/)

Estimated Number of Employees(1)	750
Gallons/Employee/Day(2)	136
Total Gallons Per Day	102,000
Gallons Per Year	37,230,000
Acre-feet Per Year	114

(1) Specific employee data was not available at the time of this analysis. Employee numbers by type (office, retail) were estimated based on percentage of building types within the project.

(2) Pacific Institute.2003. *Waste Not, Want Not: The Potential for Urban Water Conservation in California.* November.

Solid Waste Emissions Worksheet

Total Square Footage - Office	0	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0108	
Office Waste (Dry Short Tons/Year)	0	
Total Square Footage - Retail	200000	
Disposal Rate (dry short tons/sq. ft./year)[1]	0.0024	
Retail Waste (Dry Short Tons/Year)	480	
Total Residences	1588	
Disposal Rate (dry short tons/unit/year)[2]	1.17	
Residential Waste (Dry Short Tons/Year)	1857.96	
Total Square Footage - Industrial	0	
Disposal Rate (lbs/1000 sq. ft./day)[3]	62.5	
Industrial Waste (Dry Short Tons/Year)	0	
Total Square Footage - Institutional		
Disposal Rate (lbs/sq. ft./day)[4]	0.007	
Institutional Waste (Dry Short Tons/Year	0	
Total Waste (Dry Short Tons/Year)	2300	
CO_2e Tonnes/Year	2800	
Dry Short Tons/Wet Short Tons of MSW	0.84	
MTCE/Wet Short Ton of MSW [6]	0.272	1 metric ton
Tonnes of CO_2e/Wet Short Ton of MSW	1.007	0.27

(1) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.

(2) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Residential Developments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Residential.htm

(3) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Industrial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Industrial.htm.

(4) California Integrated Waste Management Board, 2009. Estimated Solid Waste Generation Rates for Commercial Establishments. Available at http://www.ciwmb.ca.gov/wastechar/wastegenrates/Institution.htm.

(5) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-4. September.

(6) U.S. Environmental Protection Agency. 2006. *Solid Waste Management and Greenhouse Gases: A Life-Cycle Assessment of Emissions and Sinks*, Exhibit 6-6. September.

Natural Gas Emissions Worksheet

Commercial Natural Gas Usage (2003 data):

Commercial Building Type	Natural Gas Consumption per Building by Building Type	Natural Gas Consumption per Square Foot by Building Type	Project Info (enter values on Electricity worksheet)		Annual Natural Gas Consumption
	thousand cf	cf	# of bldgs	total sf	thousand cf
All Buildings	782	**29.2**	0	0	0
Mercantile	653	**19.7**	0	0	0
Enclosed and Strip Malls	1142	33.4	0	200000	6,680
Retail (Other than Mall)	362	**11.4**	0	0	0
Education	1223	**34.8**	0	0	0
Food Sales	383	50.2	0	0	0
Food Service	870	141.2	0	0	0
Health Care (All)	3283	**68.7**	0	0	0
Inpatient Health	28,222	109.8	0	0	0
Outpatient Health	574	50.2	0	0	0
Lodging	2432	**31.5**	0	0	0
Office	535	**14.2**	0	0	0
Other	1885	67.6	0	0	0
Public Assembly	678	36.4	0	0	0
Public Order and Safety	771	43.7	0	0	0
Religious Worship	362	30.3	0	0	0
Service	481	54.1	0	0	0
Vacant	557	23	0	0	0
Warehouse and Storage	687	23.4	0	0	0

Note: Health Care (All) includes both "Inpatient Health" and "Outpatient Health".

Source: Energy Information Administration, www.eia.doe.gov/emeu/cbecs/cbecs2003/detailed_tables_2003/detailed_tables_2003.html, Table C24A - Bold value

Residential Energy Usage (2001 data):

	Mountain	Pacific	Total US.	Project Info # of units	Annual Consumption thousand cf
Single Family	67	48	70	0	0
Apartments (2-4 Units)(1)		48		1588	76,224
Apartments (5 or more Units)			28	0	0
Mobile Home			58	0	0
Total Natural Gas Usage					76,224

(1) Single family natural gas consumption was used to represent 2-4 Unit Apartments, as the total U.S. number (70 thousand cf) would exceed the Pacific region single-family home consumption rates. Single-family and 2-4 Unit Apartments have consistent total U.S. consumption rates, so it is reasonable that regional rates would be consistent as well.

Source: Table CE1-12c. Total Energy Consumption in U.S. Households by West Census Region, 2001 (http://www.eia.doe.gov/emeu/recs/recs

	CO_2	CH_4	N_2O
Natural gas combustion	lb/10^6 scf	lb/10^6 scf	lb/10^6 scf
	120,000	2.3	2.2

Source: EPA AP-42 Vol I Chapter 1.4, Table 1.4-2

Vehicle Emissions Worksheet

avg. speed=	40	(mph)	avg trip length=	10	(miles)
2014		**CO_2**	**CH_4**	**N_2O**	**Fleet %**
LDA	CAT	289.863	0.013	0.032	61.3%
LDA	DSL	356.788	0.005	0.001	0.5%
LDT	CAT	364.187	0.019	0.042	34.3%
LDT	DSL	348.128	0.0035	0.002	0.4%
HDT	CAT	467.995	0.05	0.088	1.8%
HDT	DSL	930.226	0.0094	0.005	1.7%
Composite		330.027	0.016	0.036	100.0%

Notes:

CO_2 and CH_4 from EMFAC2007

N_2O from EPA *Update of Methane and Nitrous Oxide Emission Factors for On-Highway Vehicles* , November 2004, Table 28.

Fleet percentages from URBEMIS2007

	From URBEMIS2007		
	Vehicle Categories	Fleet %	Diesel %
LDA	Light Auto	51.6	0.4
	Light Truck < 3750 lbs	7.4	4.1
LDT	Light Truck 3751-5750 lbs	22.9	0
	Med Truck 5751-8500 lbs	10.6	0
HDT	Lite-Heavy Truck 8501-10,000 lbs	1.6	18.8
	Lite-Heavy Truck 10,001-14,000 lbs	0.5	40
	Med-Heavy Truck 14,001-33,000 lbs	0.9	77.8
	Heavy-Heavy Truck 33,001-60,000 lbs	0.5	100
LDT	Other Bus	0.1	100
	Urban Bus	0.1	100
LDA	Motorcycle	2.8	0
LDT	School Bus	0.1	100
	Motor Home	0.9	11.1
		100	

SITE SPECIFIC CO TABLES

Yucaipa Housing Element Implementation Project
Supplemental Air Quality Analysis

The CO Hotspots analysis in the Air Quality Technical Report only assessed the air quality impacts from the traffic of all three sites operating together. The following tables show the CO Hotspots results for each individual site implemented alone. Note that very near a site these individual analyses are nearly identical to the combined analysis shown in the Air Quality Technical Report, and that further away there are subtle differences due to the combined affects from all three sites.

Tables A and D list the CO concentrations at 4 of the intersections analyzed in the Traffic Impact Study most affected by Site 1 traffic for the 2014 and 2035 operating years, respectively. As shown in Tables A and D, the intersections analyzed for the daily peak hour would experience project-related increases in 1-hour and 8-hour CO concentrations all at 0.2 ppm or less, and all CO concentrations would be below the respective 1-hour and 8-hour federal and State standards.

Similarly, Tables B and E show that 6 of the intersections analyzed in the Traffic Impact Study most affected by Site 2 traffic for the 2014 and 2035 operating years, respectively, would have less than significant air quality impacts.

Lastly, Tables C and F show that 3 of the intersections analyzed in the Traffic Impact Study most affected by Site 3 traffic for the 2014 and 2035 operating years, respectively, would have less than significant air quality impacts.

Because no CO hot spots would occur, none of the individual sites would have a significant impact on local air quality for CO, and no mitigation measures would be required.

Table A: 2014 Site 1 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
Oak Glen Road and Yucaipa Boulevard	14 / 14	4.2 / 4.2	0.0	2.9 / 2.9	0.0	No	No
	17 / 15	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	15 / 14	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	14 / 17	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No
Oak Glen Road and Avenue E	14 / 14	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 3.9	0.0	2.7 / 2.7	0.0	No	No
	14 / 14	3.8 / 3.9	0.1	2.6 / 2.7	0.1	No	No
5th Street and Avenue E	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
Oak Glen Road and Colorado Street	7 / 7	3.9 / 4.2	0.3	2.7 / 2.9	0.2	No	No
	14 / 7	3.9 / 4.1	0.2	2.7 / 2.8	0.1	No	No
	7 / 14	3.8 / 4.1	0.3	2.6 / 2.8	0.2	No	No
	14 / 14	3.7 / 3.9	0.2	2.5 / 2.7	0.2	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table B: 2014 Site 2 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
16th Street and Sand Canyon Road	7 / 7	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	7 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	10 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 7	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
Campus Drive East and Sand Canyon Road	12 / 12	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	7 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	12 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
Chapman Heights Road and Sand Canyon Road	7 / 7	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No
	14 / 7	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	7 / 10	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
	10 / 12	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
Tennessee Street and Yucaipa Boulevard	7 / 7	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	7 / 7	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	10 / 10	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	10 / 10	3.8 / 3.9	0.1	2.6 / 2.7	0.1	No	No
14th Street and Yucaipa Boulevard	14 / 13	4.0 / 4.1	0.1	2.7 / 2.8	0.1	No	No
	13 / 14	3.9 / 4.1	0.2	2.7 / 2.8	0.1	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
	14 / 14	3.9 / 4.0	0.1	2.7 / 2.7	0.0	No	No
Oak Glen Road and Yucaipa Boulevard	14 / 14	4.2 / 4.2	0.0	2.9 / 2.9	0.0	No	No
	17 / 17	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No
	15 / 15	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No
	14 / 14	4.0 / 4.0	0.0	2.7 / 2.7	0.0	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table C: 2014 Site 3 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
California Street and Yucaipa Boulevard	8 / 8	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
5th Street and Avenue E	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
	8 / 8	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No
California Street and Avenue E	12 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	12 / 12	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table D: 2035 Site 1 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
Oak Glen Road and Yucaipa Boulevard	14 / 14	3.8 / 3.8	0.0	2.6 / 2.6	0.0	No	No
	15 / 17	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 15	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
Oak Glen Road and Avenue E	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.6 / 3.7	0.1	2.5 / 2.5	0.0	No	No
	14 / 14	3.5 / 3.6	0.1	2.4 / 2.5	0.1	No	No
5th Street and Avenue E	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Oak Glen Road and Colorado Street	7 / 7	3.7 / 3.8	0.1	2.5 / 2.6	0.1	No	No
	7 / 7	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	12 / 14	3.6 / 3.6	0.0	2.5 / 2.5	0.0	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table E: 2035 Site 2 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
16th Street and Sand Canyon Road	7 / 7	3.3 / 3.4	0.1	2.2 / 2.3	0.1	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Campus Drive East and Sand Canyon Road	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Chapman Heights Road and Sand Canyon Road	7 / 7	3.3 / 3.4	0.1	2.2 / 2.3	0.1	No	No
	10 / 7	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 10	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	7 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
Tennessee Street and Yucaipa Boulevard	10 / 7	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	7 / 7	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	7 / 10	3.4 / 3.5	0.1	2.3 / 2.4	0.1	No	No
	7 / 7	3.4 / 3.4	0.0	2.3 / 2.3	0.0	No	No
14th Street and Yucaipa Boulevard	13 / 13	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 14	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 14	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
	14 / 12	3.5 / 3.5	0.0	2.4 / 2.4	0.0	No	No
Oak Glen Road and Yucaipa Boulevard	14 / 14	3.8 / 3.8	0.0	2.6 / 2.6	0.0	No	No
	15 / 17	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 15	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No
	14 / 14	3.7 / 3.7	0.0	2.5 / 2.5	0.0	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million

Table F: 2035 Site 3 CO Concentrations Without and With Project Traffic

Intersection	Distance from Road Centerline to Maximum CO Concentration Without/With Project (meters)	Without/With Project One-Hour CO Concentration (ppm)	Project Related One-Hour CO Concentration Increase (ppm)	Without/With Project Eight-Hour CO Concentration (ppm)	Project Related Eight-Hour CO Concentration Increase (ppm)	Exceeds State Standards	
						1-Hr (20 ppm)	8-Hr (9 ppm)
California Street and Yucaipa Boulevard	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
5th Street and Avenue E	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	8 / 8	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
California Street and Avenue E	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.3 / 3.3	0.0	2.2 / 2.2	0.0	No	No
	12 / 12	3.2 / 3.3	0.1	2.2 / 2.2	0.0	No	No
	12 / 12	3.2 / 3.2	0.0	2.2 / 2.2	0.0	No	No

Source: LSA Associates, Inc., March 2010.
Includes ambient one-hour concentration of 3.1 ppm and ambient eight-hour concentration of 2.1 ppm. Measured at the 24302 4th St., San Bernardino, CA AQ Station in San Bernardino County.
CO = carbon monoxide
Hr = hour
ppm = parts per million